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ABSTRACT

This four-volume student text is intended for use in training Air Force diet therapy specialists. The first volume, a study guide and workbook for self-directed instruction, covers nutrition, food processing and preparation, therapeutic diets, security precautions in medical food service, procedures for ordering equipment and supplies, food standards, Air Force accountability, sanitation inspections, evaluation of medical food service diner surveys, and patient tray service duties. Addressed in the second volume are medical food service management, production, and service. The third volume presents more advanced information on nutrition and diet therapy, and the fourth volume is a workbook that is intended for use throughout the entire course. Each of the first three volumes includes instructional text, exercises, answers to the exercises, and a bibliography. (MN)

DIET THERAPY SPECIALIST

TECHNICAL TRAINING

School of Health Care Sciences, USAF
Department of Biomedical Sciences
Sheppard Air Force Base, Texas 76311

Technical Training

Diet Therapy Specialist

SELF DIRECTED INSTRUCTION

August 1984

SCHOOL OF HEALTH CARE SCIENCES, USAF
Department of Biomedical Sciences
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Designed For ATC Course Use

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DO NOT USE ON THE JOB

Department of Biomedical Sciences
School of Health Care Sciences, USAF
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August 1984

SELF DIRECTED INSTRUCTION

OBJECTIVES

1. Identify facts concerning principles of nutrition IAW PC J3ABR92630 000-I-2b(1) through 2b (7).
2. Identify facts concerning the USAF Medical Service with 80% accuracy.
3. Specify procedures used to process nourishments with 80% accuracy.
4. Determine the procedures used in preparing foods for therapeutic diets with 80% accuracy.
5. Specify the procedures used in preparing cooked therapeutic inflight meals with 80% accuracy.
6. Identify facts concerning diet consultations with 80% accuracy.
7. Identify facts concerning security precautions used in medical foodservice with 75% accuracy.
8. Identify facts concerning the ordering and turn in of equipment and supplies with 80% accuracy.
9. Identify facts concerning AFOSH standards with 80% accuracy.
10. Identify facts concerning Air Force Accountability with 80% accuracy.
11. Determine the procedures to follow when conducting a sanitation inspection with 80% accuracy.
12. Determine the procedures used when inspecting medical foodservice personnel for proper sanitation standards with 80% accuracy.
13. Identify facts concerning the evaluation of medical foodservice diner surveys with 80% accuracy.
14. Placed in a hospital setting perform patient tray service duties with no more than 8 instructor assists

BASIC FOUR FOOD GROUPS

INTRODUCTION

As a Diet Therapy Specialist, you will be expected to be knowledgable in the science of nutrition. You will be called upon to answer many questions concerning the nutrient content of various foods. In addition to knowing how many calories there are in the food, you should be able to determine why the food is important to the body and know the specific nutrients contained in the food. This will be especially important when, at a later time, you start planning therapeutic diets. To effectively plan therapeutic diets, you must first be familiar with the science of nutrition, which is the basis for all therapeutic diets. In this SW and during class discussion, you will be introduced to the Basic Four Food Groups and shown how to use them when planning or evaluating diets. You will also learn about metabolism and the factors involved in determining total calorie and nutrient requirements of the body.

INFORMATION

The term "diet" may be defined in several ways. When an individual talks of his diet, any of the following definitions would be correct:

1. The amount of food and drink a person consumes daily.
2. Special limited food and drink a person consumes daily.
3. A prescription of food.

The foods you need to consume each day can be divided into the Basic Four Food Groups: Group I - Milk; Group II - Meat; Group III - Breads and Cereals; and Group IV - Vegetables and Fruits. The Basic Diet starts with the minimum number of servings for an adult from each of these four food groups. It will

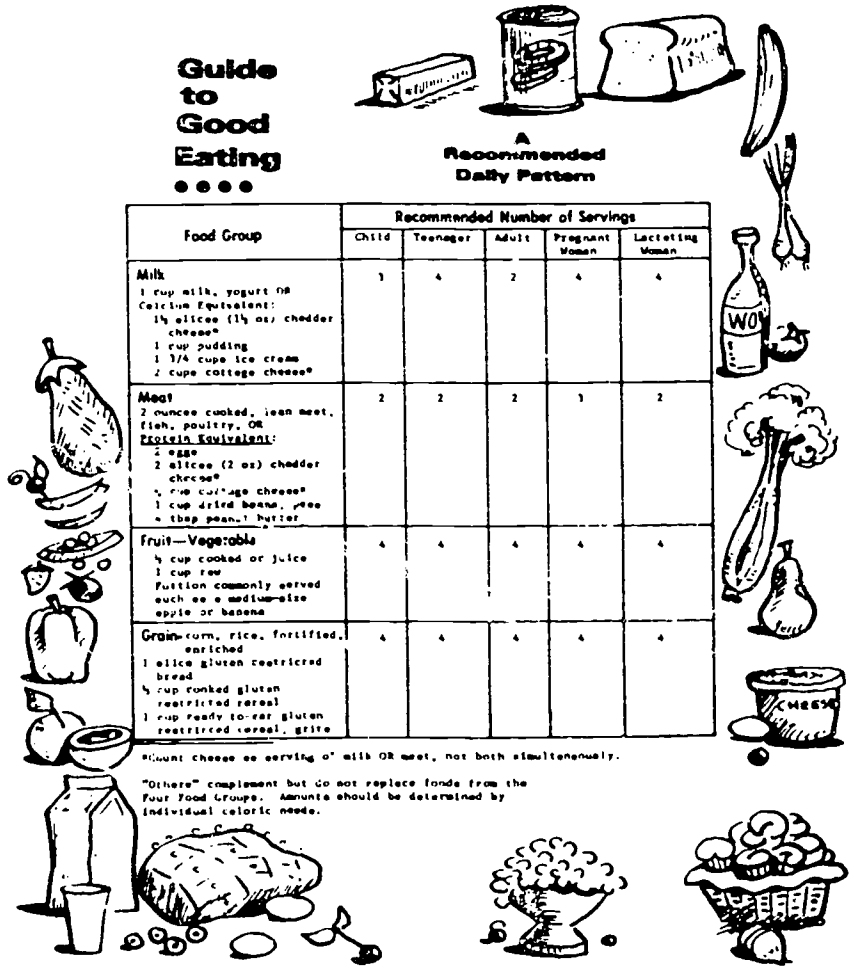
This supersedes SWJ3ABR92630 000-1thru 11, March 1984

supply the adult with approximately one half the caloric allowance, all the protein, vitamin A, riboflavin, ascorbic acid and calcium needed. Almost all the thiamin and niacin allowances are provided but the iron supply is about half that needed by the female adult. Other foods are added, as necessary, to meet the caloric requirement, to meet unknown requirements, and to add palatability. These may be more of the same foods listed above, or "others". We must stress that omitting any food group from the diet for prolonged periods of time may cause harm to the body, unless the nutrients provided by that group are replaced. Remember the Basic Four is only the foundation for an adequate diet. (See Figure I)

BASIC NUTRITION

Basic Nutrition is defined as the science of foods, the nutrients and other substances therein; their action, interaction, and balance in relationship to health and disease; the process by which the human body ingests, digests, absorbs, transports, and utilizes nutrients and disposes of their end products.

The following guide lists the Basic Four Food Groups by categories:



Guide to Good Eating

A Recommended Daily Pattern

Food Group	Recommended Number of Servings				
	Child	Teenager	Adult	Pregnant Woman	Lactating Woman
Milk 1 cup milk, yogurt OR Calcium Equivalent: 1½ slices (1½ oz) cheddar cheese* 1 cup pudding 1 3/4 cups ice cream 2 cups cottage cheese*	3	4	2	4	4
Meat 2 ounces cooked, lean meat, fish, poultry, OR Protein Equivalent: 1 egg* 2 slices (2 oz) cheddar cheese* ½ cup cottage cheese* 1 cup dried beans, peas 4 tbsp peanut butter	2	2	2	3	2
Fruit—Vegetable ½ cup cooked or juice 1 cup raw Portion commonly served such as a medium-size apple or banana	4	4	4	4	4
Grain—corn, rice, fortified, enriched 1 slice gluten restricted bread ½ cup cooked gluten restricted cereal 1 cup ready-to-eat gluten restricted cereal, grits	4	4	4	4	4

*Count cheese as serving of milk OR meat, not both simultaneously.

"Others" complement but do not replace foods from the Four Food Groups. Amounts should be determined by individual caloric needs.

Figure 1

Following the guide to good eating for adults will supply approximately 1200 calories. The "others" group consists of foods and condiments such as: Butter, corn oil, salad dressing, catsup, cakes, pies, etc., that complement the Basic Four Food Groups. This group will supply additional calories. Amounts will be determined by individual caloric needs.

ENERGY

Energy is defined as the capacity for doing work. Just as a car requires gasoline to run, in the same sense, your body requires fuel to produce energy. The automobile can run effectively on one grade of gasoline, but your body requires a variety of nutrients to run at top efficiency. Our energy must come from food.

Energy is required by the body for:

° Muscular Activity

° Maintaining Temperature

° Digestion and absorption of food.

Some of the body's functions are performed automatically, and an individual cannot voluntarily control them. Most of the time we aren't aware that these functions are being performed. Some examples of "involuntary" work are:

Pulsations of the heart

° Breathing

° Work of the glands

° Muscle tone

° Regulation of body temperature

You may have some doubts about breathing being an involuntary action. It is agreed that you can voluntarily stop and start your breathing for a time, but normally, breathing is done without conscious effort on your part.

All other activities performed daily are known as "voluntary" actions. These activities increase the body's need for fuel. The more strenuous the activity, the more fuel the body requires. The following list shows how calorie requirements vary with the type of activity performed:

TYPE OF ACTIVITY	CALORIES PER HOUR
Sedentary: Reading, watching television, typing	80 to 100
Light: Dishes, ironing, walking slowly, washing	110 to 160
Moderate: Making beds, sweeping, light carpentry work	170 to 240
Vigorous: [illegible] golfing, heavy scrubbing	250 to 350
[illegible] tennis, playing football	[illegible] and more

[illegible] and absorption can also be classified as involuntary functions of the body. They are not included in the first group of vital functions because as the body performs these functions, the need for fuel is further increased.

BASAL METABOLIC RATE

The amount of energy required to carry on the involuntary work of the body and to maintain the body temperature is called the Basal Metabolic Rate (BMR). It is important to remember that only the involuntary body functions are included when calculating the BMR. This is the energy required to just keep you alive. The basal metabolic rate is always measured while the patient is at rest.

FACTORS INFLUENCING THE BASAL METABOLIC RATE

Remember that each individual is different. Therefore, even under the most highly controlled conditions, variations occur from person to person. The following paragraphs explain the factors which influence an individual's BMR.

Surface Area

Heat radiates from the surface of the skin. The heat loss is always proportional to the surface area exposed, so as the surface skin area increases, so will the heat radiation. Let us compare two persons of the same weight. One individual is tall and thin; the other, short and fat. The tall, thin person will have more skin surface area; therefore, his basal metabolism will be higher.

Sex and Body Composition

An individual with a large proportion of highly developed active muscle tissue (an athlete for example) will have a higher basal metabolic rate than a person with deposits of inactive fatty tissue. Generally, athletes have a 5 percent higher basal metabolism than nonatheletes. Women normally do not develop muscles to the extent that men do, so they will have more inactive fatty tissue. (This does not necessarily mean that they are overweight). A woman's basal metabolic rate is generally 6 to 10 percent lower than that of a man.

Age

During the period of rapid growth (childhood and adolescence), a high basal metabolic rate will be measured because much energy is stored and then expended during growth. Basal metabolism is at its highest level between the ages of 1 and 2 when growth is most rapid. A gradual decline occurs from 2 to 5 years of age until puberty and adolescence when the BMR increases. After 25 years of age, the metabolic rate gradually declines with each decade (10 years).

Endocrine Glands

The secretion of the thyroid gland, thyroxine, exerts a marked influence on basal metabolism. In case of an overactive thyroid the basal metabolism will be speeded up. You probably noticed that when you are afraid or excited, your heart beats faster than normal and you may perspire. This is due to an increased excretion of epinephrine (adrenaline) from the adrenal glands. Naturally, this increased excreation will increase metabolism. Disturbances of the pituitary gland may also effect the BMR of an individual.

State of Nutrition

Undernourished individuals normally have a lower BMR than individuals on well-balanced diets due to a decrease quantity of active body tissues. However, in some undernourished individuals, the BMR is increased due to more active lean tissue. If severe under-nutrition occurs, the BMR will decrease due to the destruction of body tissue.

Sleep

The BMR is about 10 percent lower during sleep than in the waking state. However, this percentage varies widely for different individuals, depending upon the amount of motion while asleep.

Body Temperature

For each degree Fahrenheit the body temperature is elevated, the basal metabolism is increased by 7 percent.

FACTORS INFLUENCING THE TOTAL ENERGY REQUIREMENT

Thus far, you have seen the factors affecting the involuntary work of the body. These are not to be confused with the factors which influence the total energy requirement of the individual. In addition to the calories needed to supply energy to cover the BMR, calories must be added to cover the following factors if an energy balance is to be maintained.

Activity

Next to basal metabolism, activity accounts for the largest energy expenditure. People who are very active may have energy requirements for activities that exceed the energy requirements for basal metabolism. Naturally, the more vigorous the activity, the more energy will be required.

Mental Effort

Energy requirements for nervous activity are a significant part of the BMR. However, excessive mental activity does not appreciably increase total energy requirements. Any increase in energy requirements would be due to the accompanying restlessness and tenseness rather than the mental effort itself.

Food

All foods stimulate metabolism but not all foods have the same effect on metabolism. This stimulus is called the specific dynamic action of food. Carbohydrate or fat increases the heat production by about 5 percent of the total calories consumed. If the food intake is composed solely of protein, the increase may be as much as 30 percent. This specific dynamic action effect of food is not due to the energy needed for digestion of food since nutrient substances injected into a vein still cause this effect. The mechanism of specific dynamic action is still not completely understood, but for a liberal mixed diet, about 10 percent of total energy requirements for basal metabolism and muscular activity should be added to cover SDA.

Maintenance of Body Temperature

Body temperature is controlled by the amount of blood brought to the surface of the skin. When the surrounding temperature is low, heat is lost from the body surface at a faster rate. Energy requirements are usually increased in extreme heat or cold because the body either perspires or shivers to adjust to the surrounding temperature. Especially when exposed to cold temperatures, the body will do additional voluntary and involuntary work to maintain normal temperatures. This increased activity results in increased energy requirements.

MEASURING ENERGY

Energy requirements of the body are measured and stated in terms of calories. Calories, a unit of energy, are supplied by the burning (oxidation) of nutrients in the body. The large calorie (or kilocalorie) is defined as the amount of heat required to raise the temperature of 1 Kg of water 1° Centigrade. This is the calorie we refer to when planning diets. The large calorie is 1000 times as large as the small calorie; the small calorie is a unit used in physics; the large calorie is used in nutrition.

Some nutrients can be referred to as energy producers. These nutrients are protein, carbohydrate and fat. They are the forms of fuel used by the body and like gasoline, differ in fuel values. If one gram of each of these "fuels" in their pure form was burned by the body, the calorie yields would be:

Carbohydrate = 4 calories

Protein = 4 calories

Fat = 9 calories

Memorize these calorie values; you will use them daily in your work as a Diet Therapy Specialist, and you will use them later in this course when you calculate diets. For example, a diet containing 65 grams carbohydrate, 93 grams protein, and 54 grams fat would yield 1118 calories. This is the way you do the calculations:

65 grams Carbohydrate X 4 calories/gram	= 260 calories
93 grams Protein X 4 calories/gram	= 372 calories
54 grams Fat X 9 calorie/gram	= 486 calories
TOTAL	1118 calories

INTRODUCTION

You have already learned that as a Diet Therapy Specialist you will be calculating and preparing both normal and therapeutic diets. You will frequently receive a diet order where one or more of the nutrients is to be limited or perhaps given in larger than usual amounts. It is obvious, then, that you MUST know the food sources of these nutrients, and you will need to know how the nutrients function in the body. This unit of instruction is designed to familiarize you with this information.

INFORMATION

NUTRIENTS

Food is defined as: Any edible substance, including both liquid and solid material, which is utilized to maintain and build body tissues, regulate body processes, and supply energy and heat for the body.

We all know that food tastes good and satisfies our appetite when we are hungry but did you ever wonder what your body is doing with the food after you swallowed it? Certainly there must be some fantastic processing operation that takes place inside the body in order for it to take the food and drink we consume and turn it into forms readily usable by the body. These usable forms of food, called nutrients, perform some highly specialized functions in the body. The foods we eat are broken down within the body and used for the following general functions:

1. Furnish heat and energy (calories)

2. Build and repair tissues

3. Regulate body processes

Each nutrient performs many functions. For example, specific vitamins and minerals must be present in sufficient quantities for oxidation (burning) of carbohydrate (CHO), protein, and fat to produce heat and energy. Vitamin D and phosphorus must be present in the diet for calcium to be utilized in building bone and teeth tissues in the body.

The list of specific functions could go on and on but for now, you need to know the general classes of nutrients: carbohydrates, proteins, fats, vitamins, minerals, and water. Now we shall proceed to the discussion of the individual nutrients.

CLASSIFICATION OF FOODS INTO NUTRIENTS

Protein

Every animal, including man, must have an adequate supply of protein to provide for growth and maintenance of body tissue. Protein is the fundamental structural element (of the protoplasm) of every body cell. It is the principle source of nitrogen in the diet. Since proteins are the principle constituents of the active tissues of the body and the body is dependent upon food proteins for these indispensable substances, the quality and quantity of protein in the daily diet are of prime importance.

Definition of Protein: A group name to designate the principle nitrogen-bearing parts of all plant and animal tissue.

Chemical Composition of Protein: Proteins are extremely complex, organic compounds containing the elements carbon, hydrogen, oxygen, nitrogen, and with few exceptions, sulfur. Most proteins also contain phosphorus, and some specialized proteins contain iron, iodine, copper and other inorganic elements. Proteins are made up of simpler substances calle mino acids. There are 20 or more different amino acids which may be combined in many ways to produce a different protein. Eight of these amino acids are called "essential" for adults (9 are essential for children), meaning that the body cannot synthesize them in adequate amounts to meet the needs of the body. The "nonessential" amino acids are the remaining 12 or more which the human body can manufacture if appropriate materials are present.

Classification of Proteins: Proteins are divided into three categories according to food sources:

a. Complete Proteins: Contain all essential amino acids in sufficient quantities for sustaining life and promoting a normal rate of growth. Eggs, meat, poultry, cheese, and milk are examples of complete proteins.

b. Partially Complete Proteins: Will maintain life, but lacks sufficient amounts of some amino acids to promote growth. Grains, cereal, and legumes are examples of partially complete proteins.

c. Incomplete Proteins: Are incapable of replacing or building tissue and hence cannot support life, let alone promote growth. Corn and gelatin are examples of incomplete proteins.

Functions of Proteins:

a. Supply the materials required for repairing wornout body tissues and building new body tissues during periods of growth.

b. Proteins compose the main solid matter of muscles, organs, and endocrine glands.

c. Blood proteins combine to form hemoglobin and plasma.

d. Provide the basic materials for enzymes, antibodies and hormones.

e. Provide energy if not enough CHO and fat is consumed to fill the body's needs.

Protein Composition of the Body: Proteins are found in almost every part of the human body. The outer layer of skin, the hair and fingernails all consist of insoluble protein. Lean muscle, the heart, and liver contain 17-21 percent protein which is the most abundant constituent. Also, blood contains protein hemoglobin in its red cells and several soluble proteins in its plasma.

Deficiencies: A deficiency of protein in the United States is rare. However, in portions of the country where knowledge of good nutrition is limited due to lack of income or education, miscarriages and premature births occur more frequently. In at least sixty underdeveloped countries of the world, a protein deficiency disease, known as Kwashiorkor, is a major health problem. This disease occurs most frequently in infants when the mother's milk is taken away and the diet of the people is given the child. This diet is often severely lacking in protein.

Allowances: The minimum daily protein requirement is now set at 0.8 gram per kilogram of body weight. However, this requirement may be raised or lowered due to several factors which dictate the daily protein requirements for each individual. These are:

a. Body size

b. Quality of protein consumed.

c. Adequacy of caloric intake

d. Previous state of nutrition

e. Efficiency of digestion

f. Physiologic needs during growth, pregnancy, and illness.

Carbohydrates

Carbohydrates are the major source of energy for all the people of the world. In America, 40 to 50 percent of the diet is composed of carbohydrate, though in other parts of the world, the percentage is greater. The reason for this relatively large consumption is that CHO is the most economical source of energy, being present in cereal grains, root vegetables, pastry products, and fruits. These foods are usually the least expensive foods to buy.

Definition - Carbohydrates are simple sugars or substances which can be reduced to simple sugar by hydrolysis. Hydrolysis is the decomposition of a substance by the addition of water.

Chemical Composition of Carbohydrates - Carbohydrates are composed of carbon, hydrogen, and oxygen. These elements are shown in the abbreviation for carbohydrate: CHO.

Classification - There are three general classifications of carbohydrates with three subdivisions under each classification. These are:

a. Monosaccharides - Group name for the simplest sugars. These contain only one sugar group per molecule (MONO = one) and cannot be hydrolyzed to a simpler form.

(1) Glucose - dextrose, corn sugar

(2) Fructose - fruit sugar

(3) Galactose - results from hydrolysis of milk sugar.

b. Disaccharides - These sugars yield two molecules (di = two) of the same or different monosaccharides by hydrolysis.

(1) Sucrose - table sugar

(2) Maltose - malt sugar

(3) Lactose - milk sugar

c. Polysaccharides - Complex carbohydrates formed by large numbers of monosaccharide units. (poly = many)

(1) Starch - form in which plants store carbohydrates

(2) Glycogen - animal starch

(3) Cellulose - skin of fruits and vegetables

Functions - Carbohydrates perform four main functions in the body:

a. To furnish energy necessary to carry on the work of the body.

b. To "spare" protein.

c. To prevent acidosis (or ketosis) during fat breakdown.

d. To provide bulk for the proper functioning of the intestines.

Carbohydrate Composition of the Body - Most CHO is used immediately as energy. The lung and nerve cells of the body depend entirely upon CHO for energy as they cannot utilize protein and fat. Excess monosaccharides in the diet are converted by the liver, into glycogen, and then stored as glycogen in liver and muscle cells. If excess quantities of CHO are consumed, the CHO is converted to fat and stored.

Sources - There are many sources of carbohydrate. The following list contains only a few of the most common.

a. Sugars, syrups, jellies, and jams

b. Flour, cereal, crackers

c. Fruits, vegetables, potatoes, sweet potatoes

d. Milk

e. Bread, cakes, pies and pastries

Deficiency - a decreased intake of carbohydrate may result in an energy deficiency. As a result, the body burns proteins and fats to make up the energy deficit.

Allowance - There is no precise allowance for carbohydrate, but the normal adult requires approximately 500 calories per day from carbohydrate sources.

Fats

Fats are the most concentrated form of energy in our food supply. The term "lipid" is the correct one for this group of nutrients but both terms (fats or lipids) may be used to identify the fats and oils found in food. Fats have long been prized in mans struggle for food. The properous individual would share his with others less fortunate than himself. The fatted calf was always slain for the feast. Fats are still important in the diet as they provide approximately 40 to 45 percent of the daily calories in the American diet.

Definition - Fats are organic compounds composed of carbon, hydrogen and oxygen formed by the union of fatty acids with a organic alcohol, glycerol.

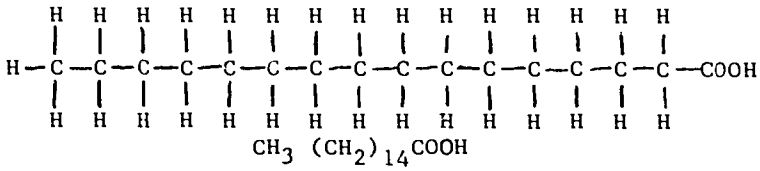
Chemical Composition of Fats - Fats are organic compounds composed of carbon, hydrogen, and oxygen. Unlike carbohydrates and proteins, they contain a much lower ration of oxygen to carbon and hydrogen and have a few added molecules of other elements. The decreased oxygen ratio increases their fuel value. The physical characteristics and stability of the fat are determined by the degree of saturation of the carbon atoms by hydrogen atoms.

Classification - The fats themselves are classified by the fatty acid portions of the fat molecule into two categories:

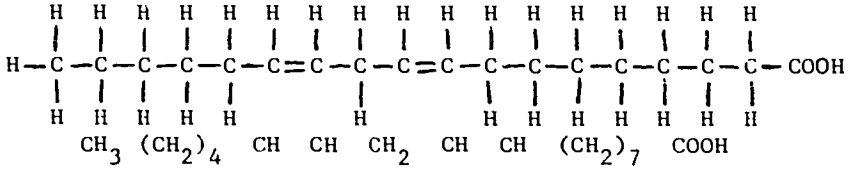
a. Saturated - have no double bonds between the carbon atoms. They contain as much hydrogen as the carbon atoms are capable of holding.

b. Unsaturated - have one or more double bonds between the carbon atoms so that they are capable of holding more hydrogen atoms.

A saturated fatty acid - palmitic acid



An unsaturated fatty acid - linoleic acid



These classifications are especially important when diet therapy personnel are planning and preparing fat-controlled, cholesterol restricted diets. In these diets, the type of fat (saturated, such as butter, bacon, or unsaturated, such as vegetable oil) is very important.

Functions - Fats have many varied functions in the body. The following are the most important functions:

a. Provides 40 to 45 percent of the body's energy requirement.

b. Provides padding for vital organs and nerves, and absorbs shock from the outer surface of the body.

c. Serves as a "sparer" of protein.

d. Serves as insulation by preventing loss of heat from the body surface area.

e. Serves as a carrier of fat-soluble vitamins.

f. Delays emptying time of the stomach, thus retarding hunger.

g. Enhances the palatability of the diet.

h. Acts as a lubricant to promote good elimination of waste material from the gastrointestinal tract.

Fat Composition of the Body - Body fat represents the primary form of stored energy in the body. Fats consumed in the diet are converted to fatty acids and glycerol during digestion. Some of the glycerol is converted to glucose and metabolized in the same way. Some may be converted to glycogen or stored in adipose tissue as a future energy source.

Sources - Sources of fat in the diet fall into two main categories - visible and invisible

a. Visible fats are those foods which are composed almost entirely of fat. Some examples are butter, margarine, lard, cream, oil and shortening.

b. Invisible fat are those fats which are in the diet because they are included in other foods but are not necessarily visible. These include such items as poultry, fish, dairy products, well-marbled meats, eggs, pastries, and cheese.

Deficiencies - Lack of fats causes the loss of fat-soluble vitamins A,D,E, and K. Also, [illegible] percent of the normal calorie intake would be lost if fats were omitted from the diet.

Allowances - No daily allowance for fats has been established since fats are added to the diet to bring the calorie intake up to the desired level. However, it is recommended that polyunsaturated fats be substituted for the more saturated fats.

Vitamins

Interest in vitamins was aroused early in history when it was discovered that some elements in food played important roles in deficiency diseases such as scurvy, pellagra, and beriberi. It was not known what these elements were but physicians did know that certain foods had to be included in the diet or the individual would develop the disease. It wasn't until 1915 that the first vitamins were actually discovered and 1926 before these vitamins were isolated.

Vitamins are often called "accessory food factors" because they do not supply calories nor contribute to body mass. Generally, the body cannot synthesize vitamins. This means that vitamins must be supplied in the diet. (See figure 2)

Definition - The name given to a group of unrelated organic compounds needed only in minute quantities in the diet but which are essential for some specific metabolic reactions within the cells and are necessary for normal growth and maintenance of health.

Classification - Vitamins are divided into two classes.

a. Fat-Soluble Vitamins: Vitamins A,D,E, and K are in this class. They are soluble in fat and in fat-solvents. Excessive amounts of these vitamins in the diet will be stored so it is not absolutely necessary to receive them in the diet every day.

b. Water-Soluble Vitamins: The B-Complex vitamins and Vitamin C (ascorbic acid) fall into this category. The main vitamins in the B-Complex group with which we are concerned are riboflavin (B_2), thiamine (B_1) and niacin. These vitamins are soluble in water. The body stores a minimal of the dietary excesses and excretes the remainder in the urine. Therefore, adequate amounts of these vitamins must be included in the diet daily.

Functions - The body used vitamins to:

a. Promote growth

b. Protect against disease

c. Resist infection

d. Utilize nutrients

Toxicity - With the present popularity of "health foods" and vitamin pills, the danger of an overdose of vitamins is ever present. The harmful side effects of excessive amounts are found mainly with the fat-soluble vitamins A,D, and K, and the water-soluble vitamin, thiamine.

VITAMIN	FOOD SOURCES	EFFECT OF DEFICIENCY	DAILY ALLOWANCE*
A	Fish liver oils, butter, liver, cream, whole milk, cheese, egg yolk, fortified margarine	Night blindness Infection of the upper respiratory tract	Adult - 1,000 RE man 800 RE woman
D	Fish liver oils, fortified milk, activated sterols, exposure to sunlight	Rickets in children Ostemalacia in adults Tetanic convulsions in infants	C 5mcg Adults 10mcg Infants
E	Wheat germ oil, green leafy vegetables, legumes, nuts, egg yolk, vegetable oils	Deficiency not likely but when it occurs, the first sign is increased hemolysis of red blood cells resulting in anemia	10 mg for adult male 8 mg for adult female
K	Green leafy vegetables (esp. spinach, cabbage, kale and lettuce), wheat bran, soybeans, oil, cheese, liver, egg yolk	Prolonged clotting time of the blood	Not known
Ascorbic Acid (Vitamin C)	Citrus fruits, tomatoes, strawberries, cantaloupe, cabbage, broccoli, potatoes	Scurvy Stunted growth Subcutaneous hemorrhages	60 mg for adults
Thiamine (Vitamin B_1)	Pork, liver, whole grain cereals and bread, soybeans, peanuts, legumes, egg yolks	Beriberi, fatigue, lack of appetite, emotional instability, cardiac failure, impairment of central nervous system	0.5 mg per 1000 calories or 1.4 mg for adult male 1.0 mg for adult female
Riboflavin (Vitamin B_2)	Milk, cheese, eggs, liver, kidneys, heart, green leafy vegetables	Cheilosis, retarded growth, blurred vision, scaly skin, burning and itching eyes	1.2 mg for adult female 1.6 mg for adult male
Niacin	Lean meat, fish, poultry, cereals, breads, green vegetables, brewer's yeast	Pellagra Dermatitis	13 mg for adult female 18 mg for adult male
Vitamin B-6	Fish, poultry, meats	Depression, confusion, convulsions	2.0 mg for adult male 2.2 mg for adult female
Folacin	Liver, leafy vegetables, fruit, yeast	Impaired cell division, alterations of protein synthesis	400 mcg for adults
Vitamin B-12	Meat, eggs, dairy products	Pernicious anemia (Rare)	3.0 mcg for adults
Biotin	Liver, kidney, egg yolk and some vegetables	Anorexia, nausea, vomiting glossitis, pallor, mental depression, dermatitis	Not known
Pantothenic Acid	Meat, whole grain cereals	Unknown in humans	4.7 mg

*1980

Figure 2

Minerals

Although mineral elements constitute only a small portion of the body tissues (4 percent), they are essential both as structural components and in many vital processes. Some form hard tissues such as bones and teeth; some are in fluids and soft tissue. (See figure 3)

Definition of Minerals: Minerals are those elements wnich remain largely as ash when plant or animal tissues are burned by the body.

Chemical Composition of Minerals: When referring to minerals in nutrition we refer to the elements in their simple, inorganic form. For example, when referring to a sodium restricted diet, we are referring to a sodium restricted diet, we are referring to the sodium ion (Na^+), not to table salt, (NaCL).

Classification of Minerals: Of all the minerals in the diet, 17 have been proven essential for good nutritional status. Many others have been found in minute quantities in ash but their functions are not known. None of the minerals are present in any large amount. This is reflected by the three classifications of minerals.

a. Macro-nutrients - present in quantities larger than 0.005 percent body weight. These minerals are: Calcium, phosphorus, potassium, sulfur, sodium, chlorine and magnesium.

b. Micro-nutrients - present in quantities smaller than 0.005 percent body weight. These minerals are: Iron, zinc, selenium, manganese, copper, iodine, molybdenum, cobalt, flourine, and chromium.

c. Trace elements - present in quantities too small to measure. Their functions are not known. These minerals are: strontium, bromine, vanadium, gold, silver, nickle, tin, aluminum, bismuth, arsenic, and boron.

MINERAL	FUNCTION	FOOD SOURCES	DEFICIENCY	ALLOWANCE*
Calcium	Builds bones and teeth, heart rhythm	Milk, cheese, greens	Rickets, poorly developed bones and teeth	0.8 gms for adult
Phosphorus	Buffer Salts Metabolism of CHO Essential for utilization of calcium in bones and teeth	Milk, Cheese, Egg yolk	Not likely	0.8 gms for adult
Potassium	Intracellular fluid balance, CHO and Protein metabolism	Meat, Oranges, Milk, Cereals	Rare	Unknown
Sulfur	Insulin Hair and nail growth	Eggs, Cheese, Milk	Unknown	Diet adequate in protein
Sodium	Water balance Osmotic pressure Nerve irritability	Table salt, cured meats and foods	Not likely	0.5 mgs for adult
Chlorine	Acid-base balance	Meat, Milk, Eggs, Table salt	Unknown	Unknown
Magnesium	Bone and teeth growth	Cereals, nuts vegetables	Unknown	300 mg for females 350 mg for males
Iron	Part of hemoglobin and myoglobin, Transport of oxygen from lungs to tissues	Liver, Meat, Egg yolk, green leafy	Anemia, Fatigue	Men - 10 mg Women - 18 mg
Manganese	Thyroxine formation	Nuts, unrefined grains	Unknown	Unknown
Copper	Oxidation of fatty acids	Liver, Shellfish	Anemia (rare in man)	2-3 mg for adults
Iodine	Part of thyroxine	Iodized salt Seafood	Goiter	150 mcg for adults
Zinc	Helps enzymes function, protein synthesis	Meat, Liver, Eggs and Seafood	Loss of appetite, Decreased taste acuity	15 mg

*1980

Figure 3

Fiber

Fiber is the chief constituent of wood, stalks, and leaves of plants, and of the outer covering of seeds. Fiber is the framework of the plant.

No enzyme secreted in the human intestine can digest fiber. This is actually it's major asset because this undigested fiber furnishes the bulk necessary for efficient and normal peristaltic action of the intestine.

Definition of Fiber: The skin, seeds and structural parts of plant foods and the connective tissue fibers of meats.

Chemical Composition of Fiber: Fiber (or cellulose), mistakenly called residue, is no more than an indigestible carbohydrate composed of carbon, hydrogen and oxygen. No enzymes in the human digestive system are strong enough to digest this cellulose.

Classification: Fibers are classified as four types.

a. Cellulose - provides indigestible "bulk" which promotes efficient intestinal action.

b. Hemicellulose - absorbs water to form a gel and increases bulk, which gives a laxative property.

c. Lignins - gives body or smooth consistency.

d. Connective tissue of meat - provides bulk.

Functions: By absorbing water, fiber adds bulk to the diet. This process aids in peristalsis, the wave-like contractions of muscles, which causes the food to move through the intestinal tract.

Sources: Fiber is found in most fruits and vegetables in the pulp, skins, stalk, and leaves; also in meats, legumes, nuts and whole grain cereals.

Deficiency: The addition of fiber to the diet may relieve the symptoms of atonic constipation, also called "lazy bowel" constipation.

Water

Water is more essential to life than food. An individual can go weeks without food, but only days without water. If a loss of 20 percent of water from the body occurs at anytime, death will be imminent. Water is so important that it ranks second only to oxygen in sustaining life.

Water is an essential component of blood, lymph and the secretions of the body. It is not changed in any way by the digestive juices, but it is a necessary constituent of them and of every cell of the body.

Moisture is necessary for the functioning of every organ of the body. Water is the universal medium in which the various chemical changes of the body take place. As a carrier, it aids in digestion, absorption, circulation and excretion. It is essential in the regulation of the body temperature, and it plays an important part in the mechanical functions, such as lubrication of joints and movement of the various organs in the abdominal cavity.

Definition of Water: A chemical compound containing hydrogen and oxygen.

Chemical Compositon of Water: Chemical formula is H_2O.

Functions: Water is a solvent in which all chemical changes that occur in the cells of the body take place. It serves as a transport for all products of digestion because blood, which is actually 90 percent water, carries nutrients to the cells. Water regulates the body temperature through evaporation of moisture from the skin and lungs.

Sources: The sources of water to the body are:

a. Water as such

b. Water contained in foods, beverages, soups, etc.

c. Water formed by oxidation of foodstuffs in the body.

Daily Allowance: 6 to 8 cups of water daily are sufficient under normal conditions. Any water taken in excess of body needs will be eliminated by the kidneys.

INTRODUCTION

Now that you have completed the basic cooks course at Lowry Air Force Base, you are ready to apply the techniques you learned to the more specialized field of dietetics. Dietetics involves the use of food in prevention and treatment of illn s and disease. First we will discuss some general information that you as an Air Force member and a diet therapist need to know. We will start with the mission and organization of the USAF Medical Service and how you, as a Diet Therapy Specialist will contribute to the Air Force mission.

MEDICAL FOOD SERVICE ADMINISTRATION
MISSION, ORGANIZATION, PERSONNEL AND TRAINING
United States Air Force Medical Service

INFORMATION

The mission of the Air Force Medical Service is to maintain the highest degree of combat readiness and effectiveness of personnel in the Air Force. It must provide the Air Force combat forces, wherever they are located, with medical support units and systems which are responsive immediately to combat situations. Within the limits of its resources, it must provide as complete medical care as possible to members of the military service and their dependents; operate hospitals, including some with designated specialized treatment capabilities at certain locations; provide professional education and training program for officers of the Medical Service; and conduct research in aerospace medicine and health sciences. The specific objective of the Medical Service is to keep Air Force personnel mentally and physically fit and ready for duty. Therefore, its program includes careful selection of personnel, both physically and mentally; and effective preventive medicine program; a vigorous program of clinical research; a positive aircrew and missile crew effectiveness program; and a preventive dentistry program.

Let's take a look at the different offices in the "medical chain of command."

Office of the Surgeon General: The Surgeon General is a staff officer who works for the USAF Chief of Staff. The Surgeon General is not in the direct line of the chain of command and, therefore, does not have command authority. The Surgeon General has the authority of a Lieutenant General. The way he/she supervises the USAF Medical Service is the same way any staff officer influences policy. The Surgeon General writes policy statements which direct the Medical Service and is delegated authority to sign these statements by the Chief of Staff. The Chief of Staff then implements these policies.

Major Command Surgeon: From the Office of the Surgeon General, the next level down in the Air Force medical chain of command is the major air command headquarters. The major command surgeon is advisor to the major commander on medical service matters and is responsible to the major commander. The senior dietitian assigned at a MAJCOM HQ is frequently utilized in the office of the Command Surgeon as a consultant in nutrition and medical food service management.

The command surgeon is responsible not only to the Surgeon General for the Medical Service of the command and for carrying out the policies of the Surgeon General, but is also responsible to the commander of the air command. Since each of the major air commands will have a different part to play in the fulfillment of the Air Force mission, the organization of the surgeon's office will depend to a great extent upon the part to be played.

The Surgeon of each major air command must furnish to lower echelons the policies which they will follow in implementing the policies and plans of the Surgeon General.

Director of Base Medical Service (DBMS): The Director of Base Medical Service has a dual capacity. As wing or base surgeon, he/she supervises all activities within the base and, as commanding officer of the medical facility, is directly responsible to the wing or base commander for all matters pertaining to the command and administration of the medical facilit

Normally, the senior medical officer present for duty with the base hospital or dispensary unit will be the director of base medical services and hospital commander. As such, he/she will be a member of the staff of the base commander for the management of base medical resources. The base medical resources include all the personnel, funds, material, and properties of all elements of the medical service which provide care and treatment for patients. All personnel, assigned or attached, required to carry out the mission of the base medical services, without regard to their organizational assignment, will be under the supervision of the DBMS. At tactical wing or division bases, the Director of Base Medical Services may act as medical advisor on the staff of the wing or division commander. The commander of the base medical unit may also be the DBMS.

Hospital Administrator: The primary duty of the administrator is to supervise and coordinate all administration which is required to deliver proper health care to authorized personnel. The administrator has a responsibility to relieve the commander of unnecessary administrative burdens so that the commander may devote maximum time to the supervision of patient care activities. In this regard, the administrator is expected to act for, and in behalf of, the commander on all matters which pertain to his/her area of competence. In larger facilities, the magnitude of administrative tasks may require the appointment of associate administrators.

Administrative Office: In general, this office manages all policies regarding paperwork throughout the medical facility. It is responsible for providing adequate, efficient, and economical administrative systems and controls which contribute to the effectiveness of the medical unit. This office is responsible for providing the following services:

Publishing

a. Publications development

b. Forms development

c. Publications and forms distribution

d. Administrative orders

e. Publications Reference Library

Reproduction

a. Duplicating equipment

b. Printing authorization

c. Printing procurement

d. Copying services

Medical Squadron and Patient Squadron Sections

Each base madical unit will contain a medical squadron and a patient squadron section as integral parts of the organization. These sections provide command supervision over duty airmen and patients. Medical Service Corps officers are appointed on orders as commander of these sections. Under title 10, United States Code, Section Number 815, Article 15, Uniform Code of Military Justice, the commander of a medical or patient squadron section will exercise the same authority as an Air Force squadron commander to impose nonjudicial punishment on permanent-party airmen and airmen attached for administration. Breaches of discipline by officers and warrant officers attached for administration to a medical or a patient squadron section will be referred by the section commander to the base medical unit commander for appropriate action. For command functions the medical and patient squadron commanders will operate directly under the control of the medical unit commander. In larger medical units, it may be desirable for the medical and patient squadron sections to be separate. However, in smaller units they may be combined. Specifically, the major functions are:

The Medical Squadron Section exercises command jurisdiction over duty airmen, assigned and attached, and supervision over their housing, feeding, unit supply, pay, and welfare; and supervises and conducts military training programs.

The Patient Squadron Section exercises command jurisdiction over airmen patients, assigned and attached, and supervision over their pay, leave, and welfare. When warranted by the administrative workload, the patient squadron section may be a separate organizational entity. In a smaller facility, such administrative tasks will be performed in the Registrar's Office. In such instances, the Registrar will normally have the additional duty of Patient Squadron Section Commander.

Registrar

The following activities are functions of the registrar element: Admission and disposition of patients, administrative control of beds, medical board administration, information desk, clinical records maintenance, operation of stenographic service for medical staff physicians, outpatient records maintenance, appointment section, and CHAMPUS guidance.

Plant Management

When a Medical Service Corps Officer is appointed primary responsibility as Plant Manager, he/she will have the title of Assistant Administrator for Plant Management. The Plant Manager will formulate technical plans, develop working details and direct a program for physical maintenance, repair, and improvement of the medical facilities.

Types of USAF Medical Facilities: Primarily we have either a fixed or nonfixed medical treatment facility. The following definitions should aid you in understanding the difference.

Fixed Medical Treatment Facility

Physical plant and equipment established as a hospital or clinic to provide base level or specialized medical service to a relatively fixed military population. Medical treatment facilities will not normally be designated as a clinic unless the staffing document authorizes at least one medical officer.

Nonfixed Medical Treatment Facility

Physical plant and equipment established as a hospital or clinic to provide medical support to combat tactical units.

Classifications of Fixed USAF Medical Facilities

Clinic: A medical treatment facility primarily intended to provide outpatient medical service for non-hospital-type ambulatory patients. Examination and treatment of emergency cases are the type services rendered. A clinic also performs certain nontherapeutic services or functions related to the health of the personnel served such as physical examinations, immunizations, medical administration, and other preventive medical and sanitary measures necessary to support a primary military mission. A clinic has the necessary supporting services to perform its assigned mission. It is normally equipped with less than 25 beds. (See figure 4)

Hospital: A medical treatment facility appropriately staffed and equipped to provide outpatient service, inpatient care including diagnostic and therapeutic services, and the necessary supporting services to perform the assigned mission. (See figure 4)

Regional Hospitals: Regional hospitals are designated as such by the Surgeon General, USAF, and appropriately staffed and equipped to provide:

1. Medical and dental care for authorized personnel.

2. Specialized clinical and consultative support for medical facilities within the region, as reflected in the semiannual summary of specialties available, issued by HQ USAF/SGHXM.

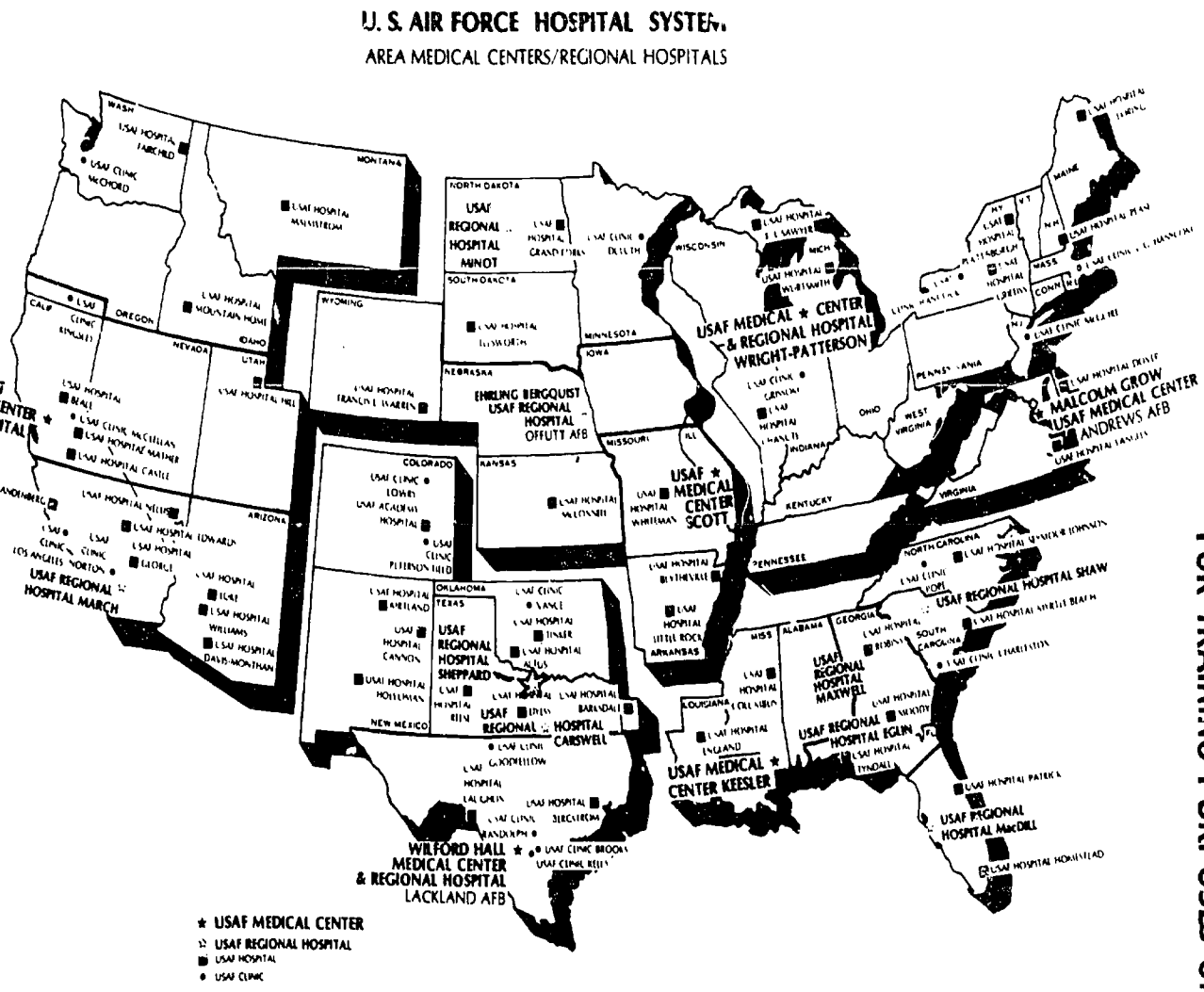
3. Physical evaluation board referral service.

A regional hospital is responsible for providing consultant services and specialized clinical support for a specific portion of an area. It receives patients directly from base medical facilities in its region, where appropriate, and from other regions approved for transfer by the area MRO of the area medical center. A regional hospital provides a medical education program for base medical facilities within its region under the provisions of AFR 169-5. (See figure 4)

Area Medical Centers: An area medical center is a larger hospital designated by the Surgeon General, USAF and appropriately staffed and equipped to provide:

1. Medical and dental care for authorized personnel.

2. The widest range of specialized and consultative support for all medical facilities within the area, as outlined in the consolidated mission statements for area medical centers published by HQ USAF/SGH. (See figure 4).



FOR TRAINING PURPOSES ONLY

ap of US Air Force Hospital System, Area Medical Centers, Regional Hospitals, Hospitals and Clinics.

Functions of the Medical Food Service

As a Diet Therapy Specialist, you are an important, integral part of the medical food service department. You will be expected to assist in maintaining your department at the highest degree possible. The important role you play necessitates your understanding of the entire function and operation of your department. Your attitude toward your job is MOST important. Certain duties must be accomplished in order to have a smoothly operating medical food service department. These are:

1. Operate kitchen and dining hall and ward food service for patients and duty personnel.

2. Prepare regular and therapeutic diet menus and determine food requirements.

3. Supervise the procurement, storage, preparation, and serving of food.

4. Collect monies received for meals served on a cash basis.

Medical Food Service Personnel

The Dietitian: A dietitian is defined as one who has followed a prescribed academic program, received a baccalaureate degree, and completed an approved dietetic internship and/or qualifying experience.

The dietitian is the manager of a medical food service department. The AFSC is listed as 9216. The dietitian works with the administrative and therapeutic aspects of food service. Dietitians assigned to a medical food service have certain speciality summaries, qualifications, and responsibilities.

Medical Food Service Officer: A Medical Food Service Officer has overall responsibility for the medical food service operation. Most of the time the senior dietitian will assume the job as the Medical Food Service Officer (MFSO). However, when a dietitian is not assigned the responsibility is delegated to another qualified individual.

Only a dietitian or other suitable officer is authorized to be Medical Food Service Officer.

Anytime two or more dietitians are assigned, the ranking or senior dietitian will assume the responsibilities of the MFSO.

If there is no dietitian assigned, an MSC officer is appointed as Medical Service Officer by the Director of Base Medical Services.

Regardless of who is assigned as the MFSO, he/she will be appointed by the Director of Base Medical Services (DBMS).

Diet Therapy Superintendent or Manager (AFSC 92690/00 - SMSgt/CMSgt). Upon promotion to Senior Master Sergeant, if no vacancy exists in the medical structure, Diet Therapy personnel could be utilized in Food Services based on their dual qualification. (While in Medical Food Service they will carry a 92690/00 AFSC, but if placed in Food Service will carry the 62290/00 AFSC). Duties of the food service superintendent and manager are:

1. Planning and organizing food service activities.

2. Directing food service activities.

3. Conducting on-the-job training for food service personnel.

4. Inspecting and evaluating food service activities.

5. Performing technical food service functions.

Diet Therapy Supervisor (AFSC 92670 - SSgt/MSgt) - The Diet Therapy Supervisor is an essential part of any medical food service organization. The majority of the smaller USAF hospitals do not have an authorization for a dietitian. In these instances, the Diet Therapy Supervisor must assume and be able to accomplish many of the same duties of a dietitian, excluding the responsibilities of the Medical Food Service Officer.

Diet Therapy Specialist (AFSC 92630/50 - Amn/SSgt) - The Diet Therapy Specialist is a most important member of the medical food service organization. Most of the therapeutic food preparation and the distribution of diets to patients will be his/her responsibility. He/she is also responsible for receiving, storing, and issuing subsistence items and supplies in most Air Force hospitals and will perform accounting and other administrative duties.

Cook (AFSC 622X0) - A cook is responsible for preparing, cooking, and serving food in consolidated, organizational, and field dining halls, as well as in troop and flight kitchens and in Air Force hospitals.

Dual Channel OJT programs are two-fold wherein an airman gains Career Knowledge (Job Knowledge) Training through the self-study CDC Course of STS study references and Job Proficiency Training by actual performance on the job. Upon satisfying these requirements, together with other criteria such as time in training, recommendations of the supervisor, etc., an airman is qualified to move to the next skill level.

TRAINING

Formal Training Courses

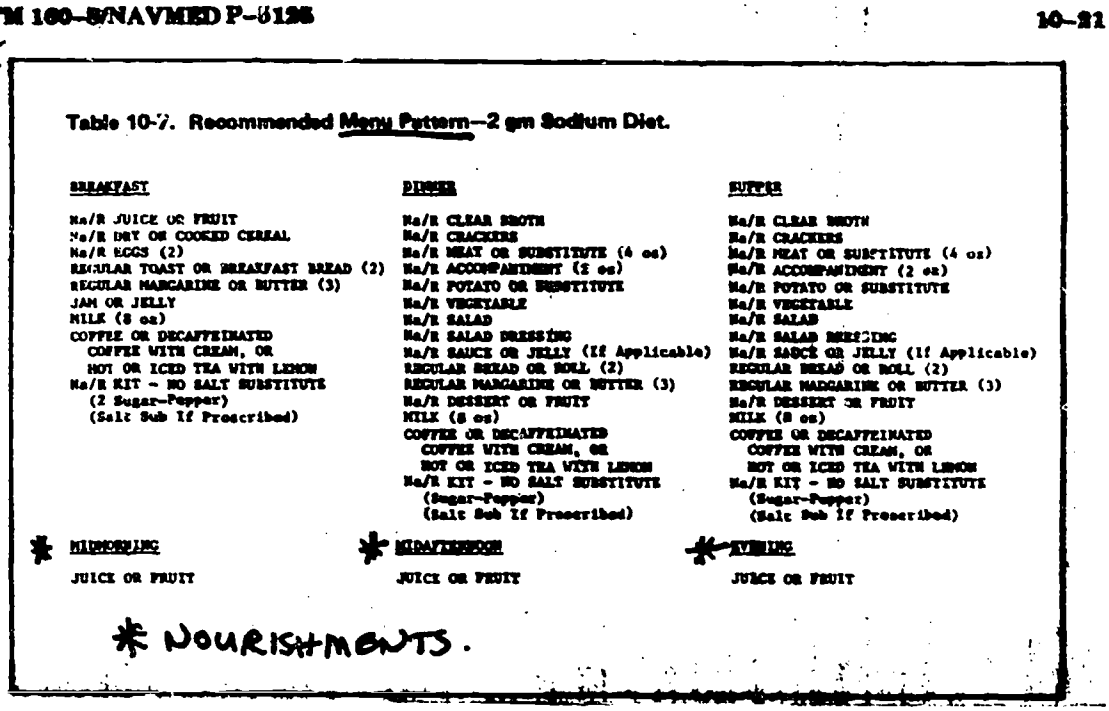
Two formal training courses are available to personnel in the Diet Therapy Career Field. One is the course in which you are currently enrolled. Course J3ABR92630 000, Diet Therapy Specialist Course, provides Basic Airmen with the knowledge to function at the apprentice level as a Diet Therapy Specialist. Part of the training includes the 8-week 4 day long Diet Therapy Specialist Course, G3AZR62230 000, conducted at Lowry AFB, Colorado. The J3ABR92630 000 course awards the 92630 AFSC.

The Diet Therapy Supervisor Course, J3AZR92670 000 is an advanced course in diet therapy for personnel who possess the 92670 AFSC. It is designed for personnel in supervisory positions. This course does not award an AFSC.

NOURISHMENTS

Nourishments are any type of food given between regularly scheduled meals or feedings. It is the responsibility of Diet Therapists to prepare nourishments and deliver them to the wards. Nursing service then delivers them to the patients.

Nourishments are an integral part of most of the diets used in our hospitals. The menu patterns in Diet Manual will indicate whether a patient on a particular diet will recieve a nourishment. A sample menu pattern follows. (See figure 5).



AFM 160-8/NAVMED P-5126 10-21

Table 10-7. Recommended Menu Pattern—2 gm Sodium Diet.

BREAKFAST	DINNER	SUPPER
No/R JUICE OR FRUIT	No/R CLEAR BROTH	No/R CLEAR BROTH
No/R DRY OR COOKED CEREAL	No/R CRACKERS	No/R CRACKERS
No/R EGGS (2)	No/R MEAT OR SUBSTITUTE (4 oz)	No/R MEAT OR SUBSTITUTE (4 oz)
REGULAR TOAST OR BREAKFAST BREAD (2)	No/R ACCOMPANIMENT (2 oz)	No/R ACCOMPANIMENT (2 oz)
REGULAR MARGARINE OR BUTTER (3)	No/R POTATO OR SUBSTITUTE	No/R POTATO OR SUBSTITUTE
JAM OR JELLY	No/R VEGETABLE	No/R VEGETABLE
MILK (8 oz)	No/R SALAD	No/R SALAD
COFFEE OR DECAFFEINATED COFFEE WITH CREAM, OR HOT OR ICED TEA WITH LEMON	No/R SALAD DRESSING	No/R SALAD DRESSING
No/R KIT - NO SALT SUBSTITUTE (2 Sugar-Pepper) (Salt Sub If Prescribed)	No/R SAUCE OR JELLY (If Applicable)	No/R SAUCE OR JELLY (If Applicable)
	REGULAR BREAD OR ROLL (2)	REGULAR BREAD OR ROLL (2)
	REGULAR MARGARINE OR BUTTER (3)	REGULAR MARGARINE OR BUTTER (3)
	No/R DESSERT OR FRUIT	No/R DESSERT OR FRUIT
	MILK (8 oz)	MILK (8 oz)
	COFFEE OR DECAFFEINATED COFFEE WITH CREAM, OR HOT OR ICED TEA WITH LEMON	COFFEE OR DECAFFEINATED COFFEE WITH CREAM, OR HOT OR ICED TEA WITH LEMON
	No/R KIT - NO SALT SUBSTITUTE (Sugar-Pepper) (Salt Sub If Prescribed)	No/R KIT - NO SALT SUBSTITUTE (Sugar-Pepper) (Salt Sub If Prescribed)
* MIDMORNING	* MIDAFTERNOON	* EVENING
JUICE OR FRUIT	JUICE OR FRUIT	JUICE OR FRUIT

* NOURISHMENTS.

Figure 5

27

As you can see from the previous example, the nourishment was already planned into the meal pattern. It is not necessary for anyone to special order the nourishment. It is your responsibility as a Diet Therapist to know what diets have nourishments. Attachment 6 of the Diet Manual lists all the diets that receive nourishments. Additionally, the menu pattern indicates such diets.

When a patient is to be given a nourishment, the Diet Therapist will complete AF 2579, Nourishment Cards. The person preparing the nourishments uses the Nourishment Kardex daily to prepare all the nourishments for the hospital. An example of an individual Nourishment Card is shown below.(See figure 6)

AF FORM MAR 74 2579 NOURISHMENT

1000	1430	2030
MILKSHAKE	MILKSHAKE	MILKSHAKE
HI PRO DRINK	HI PRO DRINK	HI PRO DRINK
EGGNOG	EGGNOG	EGGNOG
8oz MILK	4oz MILK	4oz MILK
FRUIT JUICE	FRUIT JUICE	SKIM MILK
DIET COLA	DIET COLA	FRUIT JUICE
BLAND CEREAL, HOT	DIET GELATIN	DIET COLA
BLAND CEREAL, DRY	CUSTARD	BLAND DESSERT
	BLAND DESSERT	CRACKERS, BUTTER
	CRACKERS, BUTTER	SANDWICH -

NURSING UNIT: ICU | NAME: POWELL | DIET: BLAND

Figure 6

Procedures For Preparing Individual Nourishments

STEP 1 Compare AF Form 1094, Diet Order, with AF Form 2579 and make changes as necessary. The changes being done at this step would only involve annotating the diet, room number, or patients name. For example, you just received your AF Form 1094, Diet Order, for the lunch meal, you notice that Mrs. Smith's diet has changed from a 1500 cal Diabetic diet to an 1800 cal Diabetic diet. Her nourishment requirements also changed, therefore, you will need to pull her AF Form 2579 and make a new one to reflect her changing needs. Also if Mr. Brown's name is no longer found on AF Form 1094, you would remove his AF Form 2579, Nourishment.

STEP 2 Use AFM 160-8 Attachment #6 to see what type of nourishments are given, the times they are given, and how much is given. All of this information is then transferred to AF Form 2579.

STEP 3 Now that the AF Form 2579 is updated you must make labels for each patient. A separate label is required for each individual snack. The labels MUST include:

a. Patients name
b. Room and Bed number
c. Time nourishments are to be served
d. Ward Number
e. Diet Order
f. Date prepared

STEP 4 The fourth step is to order food items from the storeroom.

STEP 5 After receiving the food items, you must then weigh and portion all food items.

STEP 6 Wrap nourishments.

STEP 7 Once the nourishments are wrapped, the labels are placed on the wrapped nourishments.

STEP 8 The final step is to either store the nourishments or deliver it to the wards.

Bulk Nourishments, Hospital wards usually have a continuing requirement for bulk nourishments. These nourishments may include milk, crackers, juice, and bread. They are usually kept on the ward and are made available to patients as ward personnel see fit. Bulk nourishments are ordered on AF 2568, Nourishment Request as shown on page 25. (See figure 7).

NOURISHMENT REQUEST

INPATIENT UNIT	DATE	ACCOMPLISHED BY
IC4	27 JULY 83	Mrs Smith

INSTRUCTIONS

1. Please check the refrigerator before requesting bulk nourishments for regular diet patients, forced fluids or medications.
2. The patient will receive standard nourishment for the diet according to AFM 160-8, Diet Manual. If a health care practitioner feels that a certain patient needs a nourishment which is not already included in the diet order, it may be requested for the individual patient using the reverse side of this form.

NOURISHMENTS	UNIT	AMOUNTS	NOURISHMENTS	UNIT	AMOUNTS
WHITE MILK	½ PT	5	FRUITADE	QT (8 SERV)	
CHOCOLATE MILK	½ PT	2	SANKA		4 PKGS
SKIM MILK	½ PT	3			
ORANGE JUICE	QT (8 SERV)	1			
APPLE JUICE	CAN (11 SERV)	1			

GUIDE FOR ORDERING BULK NOURISHMENTS

ORANGE JUICE: DIABETIC PATIENTS - 4 OZ FOR EACH DIABETIC
MILK: HALF THE PATIENT CENSUS FROM AF FORM 1094, DIET ORDER.
GINGERALE: IN QUANTITY ORDERED BY HEALTH CARE PRACTITIONER FOR CLEAR LIQUID DIETS.

AF FORM MAR 79 2568 PREVIOUS EDITION WILL BE USED.

Figure 7

There are times, however, when a health care provider will want to include nourishments that are not already planned as a part of a meal pattern, he or she will anotate the nourishment request on the reverse side of the AF Form 2568. (See figure 8)

INDIVIDUAL NOURISHMENTS *(As Prescribed)*

ROOM	BED	NAME	DIET	MIDMORNING	MIDAFTERNOON	EVENING
419	2b	POWELL	BLAND	4oz MILK	4oz MILK	4oz MILK
418	1a	CHARRON	SOFT →	½C PUDDING		4oz MILK
				4oz JUICE		

U.S. G.P.O. 1979-620-241/3007

Figure 8

Procedures for processing bulk nourishments

STEP 1 Upon receipt of AF Form 2568, Nourishment Request, you must first identify the ward ordering the nourishments.

STEP 2 Compare the AF Form 1094 against the amount ordered on AF Form 2568. This is done by counting the number of diabetics on the AF Form 1094, counting the total number of patients on the ward, and counting the number of liquid diets. After you have counted all of these various diets, use the guide listed on the front of AF Form 2568 (Figure 6) to determine how much the nursing unit should have ordered and make corrections as necessary to the AF Form 2568.

STEP 3 Check the back side of AF Form 2568 to determine if any individual nourishments have been ordered. (If so process these as you would individual nourishments).

STEP 4 Order the necessary food items from the storeroom, i.e. Koolaid, crackers, etc.

STEP 5 Once you receive the subsistence, you would then assemble the bulk nourishments.

STEP 6 Deliver and inventory ward pantries. When you are inventorying ward pantries there are a number of tasks to be done. They are as follows:

a. Remove outdated milk from the refrigerator.
b. Remove any unused, outdated, individual nourishments.
c. Check quantity of items on hand in refrigerator, (if the ward ordered one orange juice and they had a can already in the refrigerator do not leave the can of orange juice you had brought to the ward. The reason for not leaving it is simple. If all they needed was one can, and they have one can of orange juice, why leave another one?
d. Rotate foods as required.

STEP 7 The final step after delivery and completion of step 6, is to return all undelivered items to the kitchen.

INTRODUCTION

Some patients in the hospital require a modification of the regular diet. The reasons vary and so will the modification. You, as a diet therapist will be required to prepare therapeutic foods for these patients. As you begin to prepare these foods, use progressive cooking techniques to ensure the patient receives a flavorful, nutritious meal. As you read on you will learn the procedures to follow when completing this important aspect of medical foodservice.

PREPARING AND COOKING FOR THERAPEUTIC DIETS

INFORMATION

An easy method to prepare food is to boil or bake all the meat or vegetables without any seasonings. This method of preparation enables personnel to serve the food to any and all diets ordered for a particular meal. This may sound like the best method to you when you have a large number of diets to serve. BUT WAIT FOR A MINUT AND PLAY "SUPPOSE"! Suppose that you, or a member of your family, are admitted to the hospital. The physician orders a therapeutic diet for you or the member of your family and the first tray arrives. The food all tastes the same - no flavor. Vegetables are a bit soft and the meat is tender but tasteless, no seasoning has been added because "all of the patients on diets receive the same food. "How would you feel?" Would you sit there and complain bitterly to anyone and everyone who comes near? Consider that this is a legitimate complaint from many of our patients on therapeutic diets. This method of food preparation is a short cut that is a disservice to the patient. This is not what we are "hired" to do. This practice indicates poor job performance and irresponsibility on the part of any diet therapist who practices it.

Let's Learn Right!!!

Because of the variety of diets ordered at each meal in any hospital, the diet cook may have to prepare each food in several ways. For instance, green beans for calorie and fat-restricted diets would be prepared without fat, but would be seasoned with salt and maybe other flavorings. Those for sodium-restricted diets could be seasoned with fat but without salt.

The following procedures will aid you in preparing the right amounts of food that yield good quality:

STEP 1: Obtain AF Form 2495 or 2496 therapeutic worksheet (Depending on meal being served) from diet clerk for a tally of the number of therapeutic foods to prepare. Also, obtain AF Form 2486, Diet Worksheet, for any special food items to prepare. FOR EXAMPLE: A patient on a therapeutic diet is to receive mashed potatoes for dinner. According to the patients Diet Record (AF Form 1741) the patient dislikes mashed potatoes, but likes baked potatoes. The baked potato is considered a special food item because it does not appear on the therapeutic menu for that meal.

STEP 2: Locate therapeutic recipes for each therapeutic food. In Medical Foodservice we use therapeutic recipes for 4 reasons; to increase the variety of foods to be offered to patients; to ensure the accuracy of the diet (nutrient analysis and portion size); increase palatability of the diet; and finally make the facilities keep a special file of therapeutic recipes on-hand. Additionally, facilities have attachments 4 and 5 of AFM 160-8, Diet Manual for reference to therapeutic recipes. The recipes in these attachments should be housed in a separate binder and located in the food preparation area for easy access for cooks and diet workers.

STEP 3: Determine the amount of foods needed for preparation from the therapeutic recipes and obtain them from the storeroom. Therapeutic recipes are in the same basic format as standardized recipes for regular foods. That is, they will list the required ingredients for a given amount of servings, procedures and the cooking time required. If the number of servings you need doesn't match that of the therapeutic recipe, you must adjust the recipe to your needs. Your shift leader or diet therapy supervisor can help you in adjusting the recipe yield.

STEP 4: Determine the time needed for preparation. As you begin to prepare the foods it is important to remember that therapeutic foods are cooked in small quantities using progressive cooking techniques. When we "Cook Progressively", we plan the preparation so that we will have the required quantity of food ready as close to the actual serving time as possible.

Suppose that the patient tray assembly line was to start at 1115 for the lunch meal. You are responsible for cooking a particular therapeutic recipe that takes 2 hours to cook. additionally, you have to account for the pre-preparation time (i.e. gathering ingredients, cooking utensils, dicing or chopping meat, cleaning vegetables, ets.). For our examples, let's assume it will take 3/4 hour for pre-preparation. You must also allow time for placing the food on the PTS line, you allow approximately 15 minutes for this. Adding the pre-preparation, cooking, and set-up time, you have 3 hours. You must subtract this from the actual serving time. In our example you would need to begin preparation of this item at 0815 hours.

STEP 5: Cook foods for therapeutic diets using progressive cooking techniques. In medical foodservice, there are many pieces of equipment that lend themselves well to small batch(progressive) cookery. Trunion kettles, small steam-jacketed kettles, are ideal for small amounts of food. Additionally, equipment such as microwaves and convection ovens enable us to decrease cooking time.

In the past, there was a tendency to feed patients something different than what was being served in the main dining room. It was easier to prepare plain meat for a bland diet than it was to cook bland spaghetti. With the advent of a wide variety of therapeutic recipes this should no longer be the case. Service of palatable, life-pleasing, therapeutic foods will enhance the image of our facilities and, more importantly, contribute to optimum patient care.

STEP 6: Preportion therapeutic meat items. Preportioning is done to sort out different portion sizes of meat. You can get this information from your therapeutic worksheet. Some diets ordered require meats to be served in 2 oz, 3 oz, or even 4 oz servings. When you assemble the PTS line be sure to label the meat portion size.

Progressive Cooking Techniques

Progressive cookery is used in Medical Food Service to ensure that:

a. Food nutrients are conserved.
b. Fresh food is available continually.
c. The bulk of the food is available when needed.
d. Available manpower is used to the best advantage.
e. Leftovers are reduced to a minimum.

During your preparation of therapeutic foods, progressive cookery techniques must be used. The following procedures will aid you in developing good progressive cooking techniques.

STEP 1 Determine time required to prepare, cook, and place food on PTS line. This information is taken from the therapeutic recipe.

STEP 2 Subtract the time required to prepare, cook, and place food on PTS line from the serving time.

STEP 3 Cook food in Trunion kettle or jet steamer or other equipment suitable for small batch cooking.

INTRODUCTION

Throughout the continental United States and overseas, a unique system exists for transferring military patients from one hospital to another or from a hospital in one country to a hospital in another country. This system is called aeromedical evacuation.

It is the policy of the Department of Defense that in both peace and war, the movement of patients of the Armed Forces be accomplished by airlift whenever airlift is available, when conditions are suitable for aeromedical evacuation and when the movement by air is not medically contraindicated.

Generally, all three branches of the military services are charged with the responsibility for some aspect of the aeromedical evacuation process. Specific responsibility at any particular time depends primarily on geographical location and the nature of the requirement.

This world-wide aeromedical evacuation system if it were to be seen on a world map, with the flight paths lined out, would appear as a series of wheels with receiving centers occupying the position of the hub and transferring agency feeding lines acting as spokes to complete the wheel.

The aeromedical evacuation service also provides the United States with an unique national resource which is available whenever and wherever needed. It is used for assisting U.S. civilians in emergencies when no other means of suitable patient transportation is available.

In short and unofficially you could say the mission of aeromedical evacuation is "to move all patients from a point where they are not receiving adequate definitive care to a point where they can receive that care by means of airlift, while providing them with adequate supportive care en route."

COOKED THERAPEUTIC INFLIGHT MEALS (CTIMS)

INFORMATION

The following terms are used several times during the discussion to follow and are defined here for your convenience. You will become considerably more familiar with them if you are assigned to a hospital which supports the aeromedical evacuation system.

Aeromedical Evacuation - The movement of patients under supervision to and between medical treatment facilities by air transportation. Abbreviated: A/E

Aeromedical Evacuation Control Center (AECC) - The control facility established by the commander of an airlift force. This center operates in conjunction with airlift control center (ALCC) and coordinates overall medical capability with airlift control elements (ALCE) for effective use of airlift capability. The center also assigns medical missions to appropriate aeromedical evacuation elements in the system and monitors patient movement activities.

Aeromedical Evacuation Systems - Patient Movement Systems established by the Air Force to accomplish the movement of patients by aircraft. Major components are:

a. Centralized control of patient movement by air transport

b. Specialized medical attendants and equipment for inflight medical care

c. Facilities on, or in the vicinity of, airstrips and air bases for the limited medical care of patients entering, enroute, or leaving the system

d. Communications with destination and enroute medical facilities concerning patient airlift.

Air Evacuation

Air evacuation was first used by the military during the Franco-Prussian War. In 1870-1871, during the siege of Paris, 160 patients were successfully evacuated by balloon.

During World War I (1914-1918) aeromedical evacuation was used to a limited degree. In most cases the patient was wedged into the narrow cockpit of the open plane and had to be kept in a sitting position.

In 1918 a JN-4 "Jenny" was converted into an airplane ambulance. Its practical use began the first aeromedical evacuation of patients in the United States.

During the last two and one-half years of World War II approximately 1,172,000 sick and wounded were transported by the Army-Air Force in all theaters of operation. Cargo aircraft of all types (C-46s, C-47s, C-54s, and c-121s) were used to transport battle casualties.

Air evacuation of patients during the Korean Conflict succeeded famously. Helicopters lifted the wounded from near the front lines to airstrips in the rear areas. Physicians, nurses and medical technicians cared for these patients aboard troop carrier planes carrying them from Korea to Japan. Military Air Transport Service planes and medical teams hurried them home across the Pacific. During the Korean conflict 95 percent of all medical evacuations were by air.

The largest and most notable evacuation occurred in December 1950 when American Marines, fighting in bitter, below-zero weather in North Korea, were surrounded by Communist Chinese. In a hazardous five-day airlift, C-47s evacuated 4,689 casualties over enemy lines to medical care and safety.

The Surgeon General credited air evacuation with being a major cause of the low death rate among American soldiers during the Korean Conflict. Deaths fell for 4.5 per 100 injured men who reached aid station in World War II, to 2 per 100 in Korea. The increased use of blood and its derivatives and new drug therapy were other chief causes for this improvement.

The aeromedical Evacuation system operates the world's safest air transport service - its record speaks for itself. Furthermore, there is no safer means available of transporting patients - either in the air or on the surface. Both of these statements are true but we are speaking in generalities. Whether air evacuation is safe for a particular patient depends on the patient's condition and other factors. Thus, the selection of patients for air evacuation is an extremely important step and is the responsibility of the originating facility.

Aeromedical Staging Unit - a medical unit operating transient patient beds located on, or in the vicinity of an enplanning and deplanning air base or airstrip, that provides for the reception, administration, processing, ground transportation, feeding and limited medical care for patients entering, enroute, or leaving an aeromedical system.

Domestic Aeromedical Evacuation System - A portion of the total aeromedical evacuation system which provides aeromedical evacuation of patients from aeromedical staging facilities at aerial ports to hospitals of final destination and between medical treatment facilities within the United States.

Aeromedical Evacuation Coordinating Officer - An officer of an originating, intransit, or destination medical facility who coordinates aeromedical evacuation activities of the facility.

Originating Medical Facility - The medical facility that initially transfers a patient to another medical facility.

Destination Medical Facility - The medical facility to which the patient is being transferred.

Emergency Aeromedical Evacuation - The airlift of patients who must be moved immediately and who must normally be given an urgent priority for air movement to save life or limb or to prevent complications of a serious disease.

Intransit Aeromedical Evacuation Facility - A medical facility on or in the immediate vicinity of an airfield, which is staffed and equipped to provide for the reception and dispatch, ground transportation, limited medical care, food service, and administrative processing for patients awaiting aeromedical evacuation or intransit in the aeromedical evacuation system. Although the term is reserved for those facilities which are specifically designated for this purpose, it should be understood that many of our other facilities are called upon from time to time to provide medical care and other support to patients enroute to other facilities whenever it becomes necessary for them to remain over night (RON) at a location where an intransit aeromedical evacuation facility is not established.

The above terms should help you as a diet therapy specialist to be more familiar with some of the terminology used in the aeromedical evacuation system.

As you have probably assumed by now some of the flights are very long and patients aboard the aircraft must be furnished adequate nourishment. All of the patients however will not be on regular diets, therefore, therapeutic diets must be provided.

Patients traveling through the aeromedical evacuation system obviously have special requirements imposed if they are on a therapeutic diet of any type. A liberal policy toward therapeutic diets is recommended since most patients spend a relatively short period of time in transit. Food service facilities on aircraft are limited and food items selected for inclusion in inflight meals must be of a nonperishable nature.

Cooked Therapeutic Inflight Meals

CTIM - CTIM stands for Cooked Therapeutic Inflight Meals. These have been developed to provide a hot meal for patients on therapeutic diets while inflight. A CTIM contains chilled, bite size meat or sauteed chicken, a fresh or canned potato or potato substitute, and a canned vegetable. The CTIM is refrigerated, never frozen. It is served with all necessary supplements for a completely accurate diet. CTIMs are partially cooked and refrigerated, with the final cooking completed aboard the aircraft in the galley.

In the CTIM system all therapeutic diets are planned around four basic dinner and supper minus and one breakfast menu. See Figure 9. Selected locations around the globe routinely provide these meals for worldwide aeromedical evacuation flights. See Figure 10 and 11. The use of four basic dinner menus allows the menu for locations to differ, insuring that patients do not receive the same meal on a continuing flight.

There are many advantages to preparing and loading all the CTIMs at selected locations. Among these are:

a. Uniformity of meals

b. Higher standards of quality

c. More accurate control of therapeutic diets

d. Higher patient morale

e. Ease in serving and lower cost for consolidation and preparation.

CTIM meals are always made to order on an as-needed basis. They are never prepared in advance and frozen. A dietitian is assigned periodically as an aircrew member to observe and evaluate the inflight meal service and the quality of the CTIM meals aboard C-9 and C-141 aircraft.

For the CTIM system to function properly accurate diet orders must be received in advance. A minimum of four hours notice prior to departure is recommended although, circumstances may warrant less notification time. This involves close coordination between the origination medical facility of ASF, AECC and the designated enroute medical facility. MAC (Military Airlift Command) manual 164-1 describes complete procedures for the planning, serving and calculating of Cooked Therapeutic Inflight Meals. This manual contains a Diet Ordering Guide which is used throughout all ASFs and AECCs to achieve standard diet orders.

Basic Menus

BREAKFAST

Menu 1

Orange Juice or
Tomato Juice

Cheese Omelet

Dinner Roll or
Bread

DINNER AND SUPPER

Menu 2

Pineapple Juice

Chic ith Tomato
M. rinara Sauce

Whole Potatoes

Canned Peas

Canned Apricots

Menu 3

Apple Juice

Broiled Steak with
Jellied Consomme

Mashed Potatoes

Canned Green Beans

Canned Pears

Menu 4

Grape Juice

Sauteed Chicken in white
Wine Sauce

Baked Potato

Canned Carrots

Canned Peaches

Menu 5

Apricot Nectar

Broiled Steak with Red
Wine Sauce

Rice

Canned Wax Beans

Canned Applesauce

Figure 9

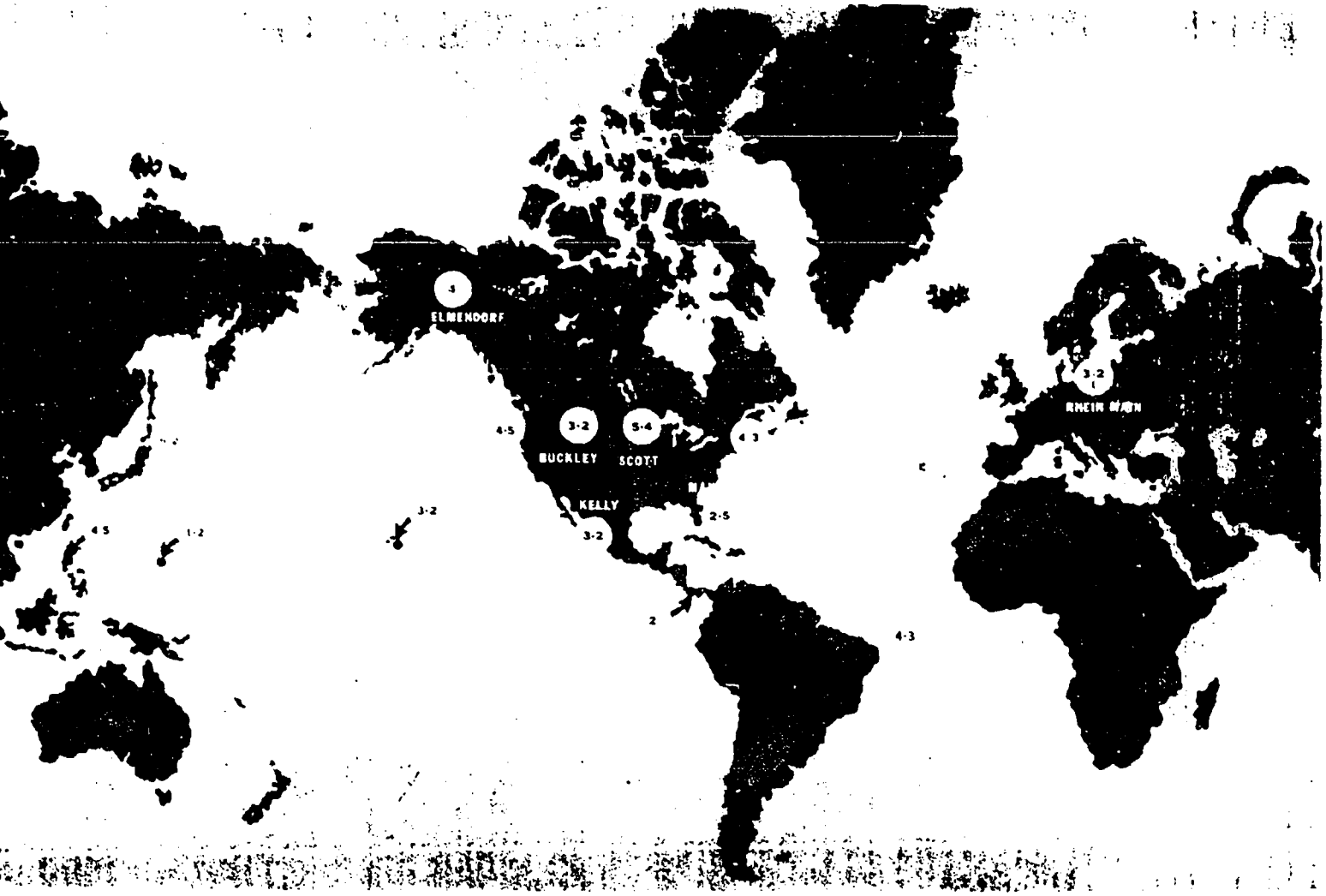


Figure 10

CTIM SUPPORT SYSTEM

NLOAD BASE	MEDICAL FACILITY PROVIDING CTIM
. SCOTT AFB, ILLINOIS . TRAVIS AFB, CALIFORNIA . BUCKLEY AFB, COLORADO . KELLY AFB, TEXAS . MAXWELL AFB, ALABAMA . ANDREWS AFB, MARYLAND . HOWARD AB, PANAMA	USAF MEDICAL CENTER SCOTT DAVID GRANT USAF MEDICAL CENTER FITZSIMMONS GENERAL HOPSITAL (ARMY) WILFORD HALL USAF MEDICAL CENTER USAF REGIONAL HOSPITAL MALCOLM GROW USAF MEDICAL CENTER GORGAS HOSPITAL (PUBLIC HEALTH)
3. HICKAM AFB, HAWAII). ANDERSEN AB, GUAM). CLARK AB, PHILIPPINE ISLANDS . YOKOTA AB, JAPAN 2. ELMENDORF AFB, ALASKA	TRIPLER GENERAL HOSPITAL (ARMY) AGANA NAVAL HOSPITAL USAF HOSPITAL CLARK USAF HOSPITAL TACHIKAWA USAF HOSPITAL ELMENDORF
3. RHEIN MAIN AB, GERMANY	USAF HOSPITAL WIESBADEN 97th GENERAL HOSPITAL (ARMY) - FRANKFURT

Figure 3E
34

Medical Food Service Responsibilities

Upon notification from AECC or ASF, the diet therapy specialist completes MAC Form 449, CTIM Telephone Diet Order, in duplicate. See Figure 12. Diet orders are recorded for patients enplanning at enroute stops as well as ASF patients. Other information includes:

Patient's name

Date of flight

Flight number

Time required

Meal required

Name of person calling

Name of person receiving the call

Accounting credit date

The original copy of MAC Form 449 is forwarded to MSA so that credit is received for meals prepared. A second copy of the form is filed in the food service activity for informational purposes.

CTIM TELEPHONE DIET ORDER
(For C-9 and C-141 Flights)

1. AECC/ASF – Prepare single copy each flight.
2. Medical Food Service – Prepare in duplicate each flight.

		PERSON CALLING	DATE	TIME	PERSON RECEIVING CALL
FLIGHT NUMBER	TIME ORDER REQUIRED	ASF			
		AECC			

MEAL (Check one) B	D	S	PATIENT'S NAME	DIET ORDER	STATION PATIENT ENPLANED

PICKUP TIME	CHECKED BY (Signature)	ACCOUNTING CREDIT DATE

MAC FORM NOV 70 449

Figure 12

CTIM MEAL PATTERNS - One of the difficulties encountered in planning therapeutic diets for the A/E system is the variation in the diet manuals used through the federal service agencies. Because of special considerations that must be made for patients being moved through such an aeromedical system and because the equipment available for use aboard aircraft is somewhat limited, special meal patterns were developed for the CTIM system.

The five basic menus were designed to establish these meal patterns (Figure 9). The patterns are standard and do not vary; only menu items change. These are shown in many pages of attachments in MAC Manual 164-1, which prescribes and defines use and preparation of CTIMs in detail. Errors in therapeutic inflight meals can be eliminated with these standardized patterns.

CTIM Checklists

Detailed CTIM checklists (See Figure 13) for all possible therapeutic inflight meals are provided as attachments in MAC Manual 164-1. When a diet order is received, the diet therapy specialist selects the correct checklist to fit the requirements of the therapeutic diet ordered. These checklists follow the meal patterns, and are planned for one breakfast and four dinner/supper meals. The checklist specifies actual food items, exact portion sizes and packaging procedures, and can be used by food service personnel as exact menus in preparing the meals at a specific location. If a between meal feeding is required, it is included on the checklist and is prepared at the same time as the meal. In addition, the checklist provides the medical technician aboard the aircraft with guidance in tray assembly and in serving allowed nourishments and condiments.

After the correct checklists have been pulled, MAC Form 450 (See Figure 14) is prepared in duplicate. Using the MAC Form 449 (CTIM Telephone Diet Order), fill in the appropriate blocks of the MAC Form 450 listed below the Form 450 page 38.

HIGH CALORIE, HIGH PROTEIN — CTIM CHECKLIST 104-1

BLAND MODIFICATION - (Use Bland III CTIM Checklist No. 101-4)

MENU 2

PACKAGING

A bite-size precooked Frozen Meal is to be ordered with other Regular Diets from Inflight Kitchen. ONLY the Between Meal Supplement is prepared by Medical Food Service.

BETWEEN MEAL FEEDING

Roast Beef	2 oz	Plastic wrap
Lettuce Leaf	1	Plastic wrap
Tomato Slices	2 ea	Plastic wrap
Bread	2 sl	Plastic wrap
Salad Dressing	1 pkg	Indiv pkg
Mustard	1 pkg	Indiv pkg
Milk	8 oz	Indiv ctn
Plastic Knife	1	Plastic wrap
Napkin	1	Plastic wrap

Wrap together and label "Between Meal Feeding."

CREW INFORMATION

ALLOWED: Coffee, Tea, Milk, Juice, Ice Cream, Salt, Pepper, Sugar

FAT RESTRICTED — CTIM CHECKLIST 105-1

BLAND MODIFICATION - Substitute Grape Juice for Pineapple Juice. Use Meat Drippings for Jellied ConsommeSubstitute Gelatin for Tossed Salad. Omit Salad Dressing. Add 2 pkg Decaffeinated Coffee. Use Bland Tray Kit. No Pepper.

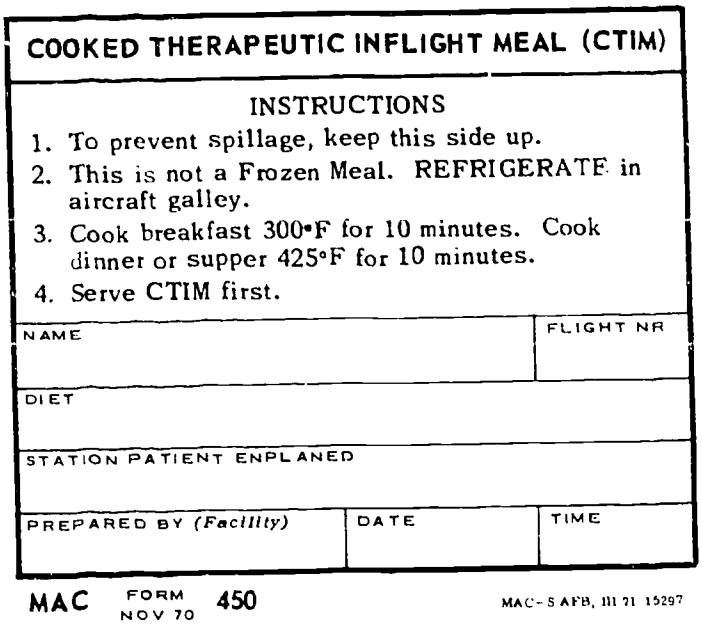
MENU 2

		PACKAGING
Pineapple Juice	6 oz	Indiv can
F/R Chicken	3 oz	
F/R Tomato Marinara Sauce	2 oz	3 Compartment tray
F/R Whole Potatoes	3 oz	
F/R Peas	3 oz	
Tossed Salad	3 oz	Indiv cntr
Salad Dressing	2 pkg	Indiv pkg
Bread	1 sl	Plastic wrap
Jelly	1 pkg	Indiv pkg
Cnd Apricots	4/2	Indiv cntr
Skim Milk	8 oz	Indiv ctn
Regular Tray Kit	1	Indiv pkg
Plastic Silverware	1 set	Plastic wrap

CREW INFORMATION

ALLOWED: Coffee, Tea, Skim Milk, Juice, Salt, Pepper, Sugar
NOT ALLOWED: Whole Milk, Ice Cream, Butter

Figure 13



COOKED THERAPEUTIC INFLIGHT MEAL (CTIM)

INSTRUCTIONS

1. To prevent spillage, keep this side up.
2. This is not a Frozen Meal. REFRIGERATE in aircraft galley.
3. Cook breakfast 300°F for 10 minutes. Cook dinner or supper 425°F for 10 minutes.
4. Serve CTIM first.

NAME	FLIGHT NR
DIET	
STATION PATIENT ENPLANED	
PREPARED BY *(Facility)*	DATE / TIME

MAC FORM NOV 70 450

MAC-5 AFB, III 71 15297

Figure 14

1. Patient's name and grade
2. Flight NR
3. Diet order
4 Station Patient enplaned
5. Facility preparing the meal
6. Date and hour preparation

When more than one inflight meal is being prepared, each meal should be packaged separately and clearly labeled. A checklist should be included to indicate:

1. The contents of each meal and any between meal feedings

2. Unusual meal patterns

3. Special instructions

4. Other pertinent information, attached to DD Form 602, Patient Evacuation Tag

5. Items requiring refrigeration (such as flavored dessert gelatins for clear liquid diets (should be packaged separately and labeled "Refrigerate".

6. The patient's name and grade should appear on each label.

7. All food items, unless commercially proportioned, should be wrapped to maintain freshness and to prevent spoilage.

Preparation of Therapeutic Inflight Meals

Meals are made to order on an as needed basis. When a diet order is received, the cook or other designated personnel selects the correct checklist. If the correct checklist is unavailable, the dietitian or designated representative should be contacted for clarification or calculation. During the preparation of the food according to the standardized recipes, steak and chicken are cut into bite-size pieces following the proper checklist. The hot food is portioned into a three compartment tray. The pre-portioned sauce is heated and poured over the bite-size meat. Meats are always bite-size so that the patient does not have to use a knife to cut the meat. This is difficult if the patient has one arm in a cast or must remain flat on his back enroute. The three compartment tray containing hot foods is covered using a foil lid or aluminum foil and marked with patient's name and type of diet using a felt tip marker. The covered tray is then placed in a CTIM box and a completed MAC Form 450 is placed on top of the CTIM box. Accessory items such as supplement feedings and cold foods are assembled and packaged in Flight lunch box. See Figure 15. A second gummed label, MAC Form 450, is attached to the top of the flight lunch box. Once prepared, the meal is immediately refrigerated to 40° F or less but not frozen. Final cooking is to be completed aboard the aircraft. The checklist is placed in the completed flight lunch box for the information of the medical crew and patient.

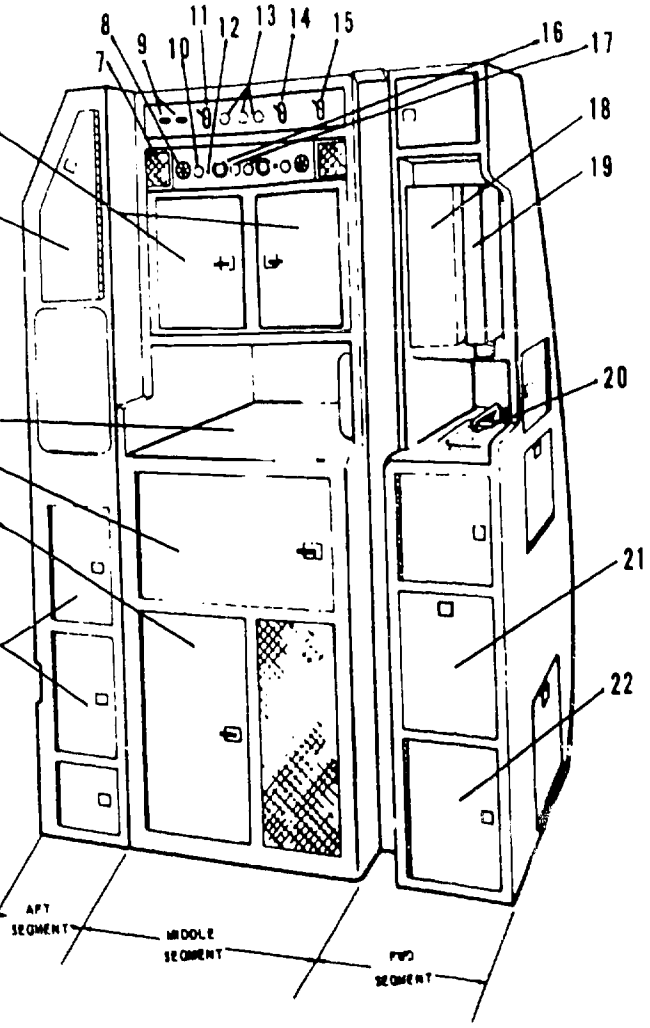
CTIM meals will be served to patients on therapeutic diets aboard the C-141 or the C-9 aeromedical evacuation aircraft. Figures 16 and 17 show the C-9 and the C-141 galley. When it is time for the meals to be used, they are heated in the galley ovens to the temperature indicated on the instructions indicated on MAC Form 450 and assembled using crew information on checklist. Figure 18 shows completely assembled meal.

Packaging materials for use with the CTIM meals include paper cups with lids, aluminum foil, plastic wrap and plastic bags. Inflight meal boxes and other containers and expendable items may be obtained through normal supply channels. Whenever possible prepackaged food items should be used, such as individual cans of ready-to-eat soup, fruit juice, and packages of mustard, mayonnaise, catsup, milk, etc.

CTIM Assembly

Figure 15

C-9 GALLEY

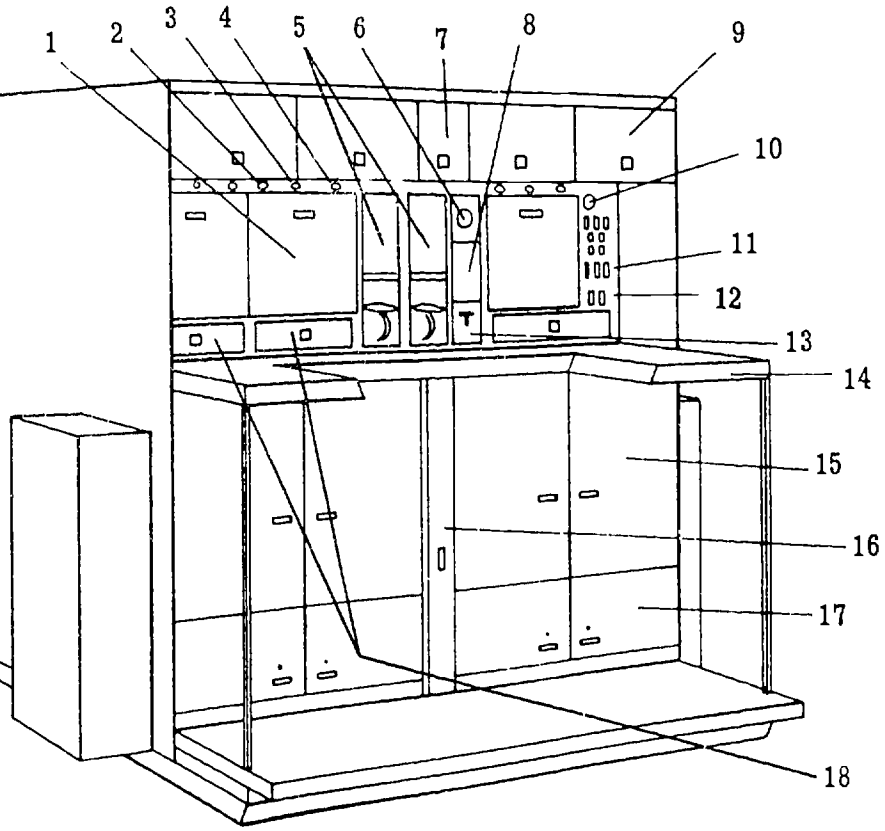


GALLEY NO. 2

1. UTILITY TRAYS
2. FREEZER ELECTRICAL
3. REFRIGERATOR ELECTRICAL
4. WORK SURFACE
5. LITTER TRAY HOLDERS
6. CONVECTION OVEN ASSEMBLY
7. VENT
8. TIMER
9. OVEN 1 AND 2 CIRCUIT BREAKERS
10. OVEN ON LIGHT
11. ON AND OFF SWITCH
12. RESET BUTTON
13. COFFEE UNIT
14. WATER HEATER ON AND OFF
15. WORK LIGHT ON AND OFF SWITCH
16. TEMPERATURE SELECTOR
17. OVEN READY LIGHT
18. AUTOMATIC COFFEE MAKER AND HOT WATER DISPENSER
19. CUP DISPENSER
20. GALLEY SINK
21. INSULATED ICE CUBE DRAWER
22. TRAYS, FOOD SERVICE DRAWER STORAGE

MM 184-1

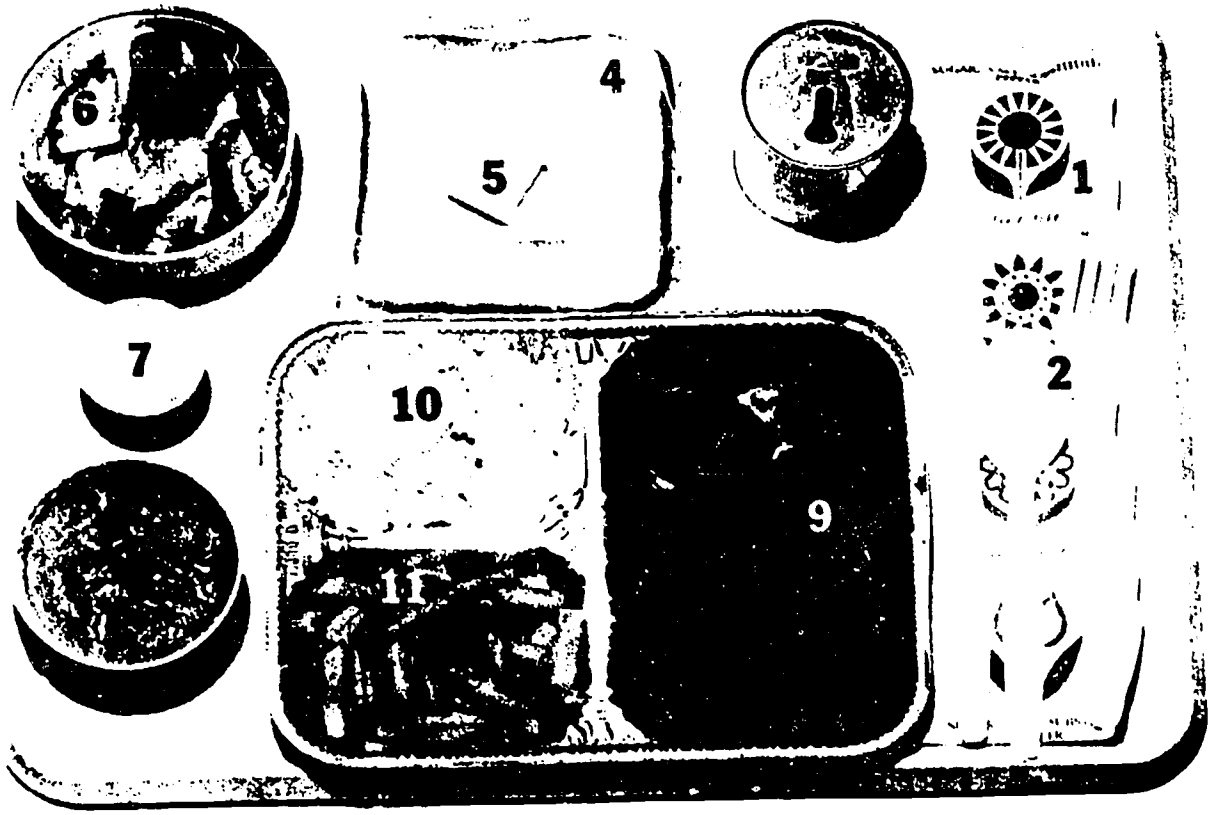
C-141 GALLEY



1. Whirlwind Oven Assembly
2. Oven Temperature Selector
3. Oven Power Light
4. Oven Timer
5. Coffee Brewer Assembly
6. Cup Dispenser
7. Storage Cabinet
8. Cup Food Warmer
9. Trays, Food Service (20)
10. Hot Cup Timer
11. Oven Power Control Buttons
12. Coffee Brewer Control Buttons
13. Water Tap
14. Galley Tray Table
15. Refrigerator Non-mechanical, dry ice
16. Storage Cabinet, Galley Tray Table
17. Freezer Non-mechanical, dry ice
18. Storage Drawers

The following regulations pertain to therapeutic inflight meals:

1. AFM 146-2, Flight Feeding Manual
2. AFM 160-8, Diet Manual
3. AFM 161-1, Flight Surgeons Manual
4. AFR 146-15, Flight Feeding
5. MAC 164-1, Aeromedical Evacuation - Cooked Therapeutic Inflight Meals (CTIM)



1. TRAY KIT
2. PLASTIC SILVERWARE
3. JUICE - 6 OZ. CAN
4. BREAD - 1 SLICE
5. BUTTER - 1 PAT
6. SALAD - ½ CUP
7. SALAD DRESSING - 1 OZ.
8. DESSERT - APPLESAUCE (½ CUP)
9. MEAT - BITE-SIZE STEAK IN WINE SAUCE
10. RICE - 3 OZ.
11. WAX BEANS - 3 OZ.

CTIM Tray set-up

Figure 18

INTRODUCTION

The Medical Team is composed of many specialists. The dietitian, the diet therapy supervisor, and diet therapy specialists are very much a part of this team. Each member of the team has a role to play and yours is extremely important. Doctors and nurses look to the dietitian and diet therapy personnel as the experts in the nutritional care of the patients. Modern medical care in the Air Force depends on every person properly performing their function in an efficient, consistent manner because only in this way can the patients receive the type of medical support to which they are entitled.

The attitude and conduct of individuals working in a Medical Food Service facility are just as important as the attitude and conduct of a physician or any of the medical staff. We must always keep in mind that we are working for some very important people....the patients. Very often the conduct of an individual affiliated with patient care can change the mood and affect the recovery time of the patient. This section is designed to familiarize you with principles of conduct you need to develop in your professional relationships with patients and hospital staff.

INFORMATION

MEDICAL ETHICS

Codes of ethics are considered to be moral laws. They are guiding principles that help a person to decide between right and wrong. The medical profession has a fine code of ethics that has helped to make it one of the most respected of all professions. This code is binding on all physicians. Medical airmen, including Diet Therapy Personnel, regardless of position, must assist and support physicians at all times; therefore, the airmen, too, are to abide by such principles. For that reason, key principles of the medical profession's code, as they affect medical airmen are listed below.

Service to humanity is the first consideration:

The medical airman also works for the common good of mankind. They help patients regardless of their country, party, rank, or religion. The spirit of service must be the controlling factor in their performance of duty.

Persons working in a hospital should have a desire to help people and be able to work well with all types of people. The supervisor sets the tone in the department by promoting the attitude that patients are individuals and not just another necessary nuisance or an extra job to be tolerated. A supervisor should instill in subordinates that service entails more giving than receiving, especially when working with sick persons. As a professional, you should be interested not only in the welfare of your patient but in the Air Force Community as a whole.

Conduct must be in accordance with the ideals of the medical profession:

Medical airmen also should be of good character, modest, and sober. They should conduct themselves with propriety and do their whole duty without hesitation. They must not try to evade laws or regulations or to assist others in evading them. Medical airmen must uphold the honor and dignity of their position and do nothing to detract from this honor and dignity.

A diet therapy specialist should maintain high standards of conduct just as is expected of a physician, nurse, or dietitian. In the small USAF hospital where no dietitian is assigned, the diet therapy specialist may be asked to assist with community groups and activities. They must demonstrate a high degree of integrity and high standards of professional skill.

The patient must not be neglected:

Medical airmen have great responsibility toward patients. When patients need assistance proper care will be given as quickly as possible. The patient will not be ignored nor made to wait longer than is absolutely necessary.

One duty assigned the diet specialist is to help with the production and service of diets to patients. Many times the patient rejects food for one reason or another. There is an unfortunate tendency for food service personnel to mark the patient off as a pest and ignore any future requests of this patient. All people find it easier to ignore or put off problems than to resolve them. Patients are not to be put off or given second best because it's easier. This applies to food served them, too. If a menu item is a few servings short and you don't have enough to serve in both the wards and dining room, remember that the patients come first. They will receive the scheduled food while other food is prepared for the cafeteria line. In dealing with diet instructions, remember that you aren't the only busy person. You may have other things to do but temporarily lay them aside and help the patient. The patient is the reason you

have a job. Always give your best.

Medical personnel must be capable, honest, courteous, and follower's of the Golden Rule:

Courtesy in a medical situation is a continuing problem. Medical airmen occasionally are required to give directions, instructions, and sometimes orders to personnel of all ranks. It is easy for them to develop an overbearing attitude under such conditions. The antagonism created by arrogant, overbearing personnel is a matter of genuine concern to a medical commander. Hospital personnel must guard against such tendencies.

When talking with patients on the telephone, remember that they are sick and need all of the help you can give them. Observe carefully the rules of telephone courtesy.

In all you do, exhibit professional skill and be sure you know what you are talking about. Don't try to impress others with what you know by using a lot of big words to cover up your ignorance. If you are unable to answer a question, be honest and admit you don't know but add that you will find out the information. Always be courteous, a pleasant person who treats others with respect and fairness will be respected in turn by others. Much more can be accomplished if you remember this.

Medical personnel should neither minimize nor exaggerate the gravity of a patient's condition:

The patient's illness should never be discussed with the patient or any other individual who is not directly involved in treating the patient. If patients persist with questions concerning their illness, refer them to the physician for the answers.

The fears of patients in a hospital cannot be exaggerated. They are afraid that something will be done to them without warning. They may fear dying, suffering, an operation, disability, or disfigurement. Much of this fear can be allayed by medical airmen if they take every opportunity to help patients to adjust readily to hospitalization. Everyone to whom the patient speaks should convey by attitude, manner, and speech their interest in the patient's needs. Good patient relationships reduce nervous tension. This, in turn, reduces emotional reactions that can seriously affect the patient's well-being. Just how to answer a patient's questions always presents a serious problem to a conscientious medical airman. They are anxious to be helpful and to alleviate the fears of the patients, but sometimes they are uncertain just what to tell them. The following should serve as a guide:

a. The medical airman should not reveal to the patient what is known about the state of the patient's illness; that is the right and duty of the patient's physician, and of the physician only.

b. If a medical airman has seen a patient's chart, the contents should not be revealed to the patient nor to anyone else.

c. If a patient persists in questioning a medical airman, the matter should be reported to the medical supervisors, since the doctor may wish to discuss this with the patient.

d. Medical airmen should not tell patients what they know about the general nature of a patient's disease, nor give hints as to other possible diagnoses. Anything the medical airman says may be taken as fact by an anxious patient.

e. In social visits and activities, medical airmen should avoid discussion of illnesses or medical problem.

f. Medical airmen should never try to impress others with their medical knowledge; a little knowledge is truly a dangerous thing.

The medical airman can allay a patient's anxiety in several ways. The patient can be assured that he/she has a fine physician who will study the case thoroughly and see that the best of care is given.

Personal Integrity

Personal integrity is defined as the quality of sound moral principles; uprightness, honesty, and sincerity. If someome has personal integrity, he/she has standards and actions that conform to a high moral standard. Another way of saying this is that they will always do what they know is correct, and are sincere in their efforts to never knowingly do something wrong - whether for personal gain or because it is easier to do it wrong than right.

Loyalty

Loyalty is achieved when the objectives of the hospital become those of the individual. We must give our loyalty and support to the organization and everyone with whom we associate. We must respect and adhere to the professional decisions of others. We must do our share on the Medical Team - no one can function alone. Loyalty should not be a conditional situation - but a circumstance of constancy.

Medical Conduct

Medical conduct is the manner in which personnel perform to achieve the medical objective of providing proper patient care. We must know what we can and cannot do as far as medical treatment is concerned, and also what we should and should not do. We must perform duties to the best of our ability since this affects the total care of the patient. Individuals working together to accomplish the same objectives must develop some form of working relationship. Good relationships can be built only through knowledge and respect for the other person's knowledge and ability and dedication to duty. Let us then look at the Diet Specialist's relationship with patients, hospital staff members, and auxilliary personnel.

THE PATIENT - One of the very first people you have a responsibility to is the patient. Remember that you would not have a job if you didn't have any patients to care for! The only way to care for patients is to have daily contact with them through ward rounds. It is necessary that you pay close attention to written orders and provide the correct diet to the best of your ability. You do no favors to patients by allowing them foods they are not supposed to have. If you notice they are not following their diet correctly you must inform the Diet Supervisor, Dietitian, Nurse or Physician of your observation. Attitude toward patients is a continuing problem in the hospital. Sometimes our duties tend to make us nervous and upset. Never take any of your emotions out on a patient. Always treat patients as individuals and guests with consideration and understanding. Be sure you never discuss a patient's medical condition or give any information about them to a unauthorized person. Remember that statements to the patient about their diagnosis, medical condition or prognosis are the responsibility of the physician. Don't take it upon yourself to think you are doing a patient a favor by telling them something you know regarding their health. Another point that cannot be stressed enough concerning patients is attitude. Working with people is a huge undertaking. Sometimes it seems that they can be annoying, nerve-wracking, and sometimes a complete nuisance. We must constantly check our attitude in dealing with patients. Remember, we are the representatives of the Hospital Commander, and our dealings with patients will reflect on him/her. So a constant attitude check is in order.

HOSPITAL STAFF PERSONNEL - In dealing with staff personnel, we not only mean doctors and nurses, but also ward personnel, administrative personnel, and our own medical food service personnel.

a. Physician: The physician is involved with the total welfare of the patient. This fact makes it essential to develop a working relationship between the physician, the dietitian, and diet therapy personnel. The physician does not have the time to teach each patient about nutrition and dietary treatment; therefore, he depends on the dietary department to support him in patient care. The physician diagnoses the patient's illness and prescribes treatment, including the prescription of a diet. But it is you who takes this prescription and translates it into a nutritionally correct, appetizing, palatable and attractive meal and delivers it to the patient.

b. Nurse: The nurse performs the definitive care of the patient and carries out medical aspects of treatment. However, they cannot be expected to handle complex nutritional problems alone. Nurses are invaluable because they can readily observe the patient's food habits, their illness, and their cultural background, all of which may affect the acceptance or rejection of the food served them. This interchanging of ideas and information can only be achieved by cooperation of all departments, pointing out the need for initiating a cordial relationship at the earliest possible time.

c. Ward Personnel: The primary duty of ward personnel is to provide nursing care for patients. However, they also assist medical food service personnel in the delivery of patients food trays. Good rapport should be maintained with ward personnel because they can inform you of much pertinent information regarding patients eating habits.

d. Administrative Personnel: You really wouldn't think that we would be working at all with administrative personnel, but in fact they perform some very important functions for us. Two of the most important functions are maintaining medical food service accounting records, and receiving money from cash meal sales. You know very well that we must keep constant contact with anyone dealing with the financial portion of our operation.

e. Medical Food Service Personnel: These are our people, and are therefore very important. Medical Food Service personnel includes everyone in the department from the dietitian to the mess attendants. All of us are an integral part of the operation...and we must work together closely. Also converting the physician's diet order into daily meal patterns which will comply with the nutritional and therapeutic needs of the patient.

The Dietitian is responsible for all operations within the department. Although this individual does not pay your salary, he or she should receive your full support and loyalty. In turn, the dietitian supports the diet therapy specialist. To work successfully with (or for) anyone, you should give them complete allegience. You must advise the dietitian concerning problems that you know of, hear rumors of, or anticipate.

From this, you can see that the diet therapy specialist's job is no small one. You must maintain a balance between management, patients and staff. To overlook one for the other will cause a rift in your organization. Never take either one for granted.

The following points should be remembered by anyone who wants to advance to be a supervisor:

(a) Work hard - Accept responsibility and don't pass the buck.

(b) Show initiative and ambition but work within the scope of your authority.

(c) Get along with your OIC and NCOIC. Ask them how you can improve yourself.

(d) Get along with other Airmen, NCOs, and Officers. Avoid embarrassing or putting them on the spot.

(e) Manage your personal life so that it doesn't reflect unfavorably upon the Air Force.

(f) Dress appropriately.

(g) Strive for emotional maturity.

(h) Set your goals realistically and prepare for the immediate job ahead.

Psychology of Serving Patients

Diet therapy is the use of food as an agent in effecting recovery from illness. When a person is ill, food is often unacceptable to him regardless of how well it has been prepared or how attractively it has been served. The food may be the patient's favorite, but he or she will say "it just doesn't taste good" when asked why they are not eating. There are physiological, psychological, and emotional factors governing food acceptance. Even some medications will affect how foods taste. You should be aware that these factors exist in order to better teach the patient('s) their new diet.

Some patients with whom you come in contact will have a physical inability to tolerate food. Often, following surgery, the patient can tolerate nothing but liquids or semi-liquid foods. This is usually a temporary condition but there are instances when a patient is unable to tolerate some foods, such as strong flavored vegetables, fried foods, or fresh fruits and/or vegetables at anytime. Inactivity often upsets the digestive system and the foods mentioned above may "form gas" or upset the patient's stomach.

Any individual, taken from his or her natural environment and placed in the unfamiliar environment of a hospital may experience many fears and anxieties. We should remember that the breadwinner of the family will be concerned for his or her family and how they are managing during his or her illness. Also, the patient who is usually in charge of the situation has suddenly become dependent upon others and is no longer self-sufficient. A mother will be concerned about her family and possibly her job, if she works outside the home. The hospital patients have lost their privacy and, in many cases feel a need to preserve their self-respect. These fears and anxieties may be expressed as anger at the food served (including those serving it), treatment received or the people caring for the patient. They may also be expressed as indifference (in actuality the patient may be very interested but wouldn't let you know it for fear of "losing face"), or by verbal attacks on everything and everyone in sight. Constant petty complaints may be a way of covering up feelings of insecurity in the face of the changes imposed in their routine schedule. Cardiac patients are often the most cantankerous because they will have to restrict their activities and eating habits for the remainder of their life. They may take their frustrations out on the nearest available person and that may be YOU.

Gaining patients' acceptance of the nutritional care plan may prove to be quite a challenge. Work with the patients in developing a variety of seasonings or substitutes to use when salt, pepper, or other such foods are not allowed on their diet. You may find that appealing to the individuals' pride will help them follow their diet. An example of this approach could be used with overweight persons. Any loss of weight is seen as an accomplishment which gives them an incentive to strive harder to achieve the goal of further weight loss.

Consider the patient's state of health when you go to the nursing unit for an interview. Nothing could be more discouraging to a patient who is depressed than for someone to come bouncing in with a cherry "Hi". Possibly the last thing the patient wants to see is a bright, cheery face. On the other hand, if the patient feels especially good it would be the wrong thing to enter his or her room with a gloomy expression on your face. This patient wants everyone to be happy. Strike a happy medium and strive to please the majority of patients. It is a good policy to enter any patient's room with a smile and pleasant appearance. Then, when you've had a chance to judge your patients and sum up their frame of mind, direct your talk and actions to suit their mood. With the patient who is happy and in good spirits, be happy. With the patient who is down in the dumps, be pleasant and reassuring. Perhaps you can offer something extra special from the menu to let them know that you care how they feel. REMEMBER that as a general rule, the more concerned you appear to the patient, the less the patient will ask or demand.

WARD ROUNDS AND VISITS - In order for diet therapy personnel to be able to serve the needs of patients, we must have frequent contact with the patient to be able to determine what these needs are and how we can help them. This is accomplished by frequent ward rounds and visits...the more frequent the better. We usually think of ward rounds as being a regular time set aside daily to proceed from ward to ward, from room to room from bed to bed to meet the people we are serving. Diet therapy personnel should try to schedule their ward rounds during or immediately after a patient has finished a meal. This makes it easier for the patient to associate who you are and what your job is. (Remember that the patient is visited by many, many people daily, from all sections of the hospital. It will take them awhile to remember who they are and where they work.) Ward visits are usually thought of as a time when a dietary representative may visit one or two patients individually for some particular purpose. Often times there is very little difference between a ward round or a ward visit. The purpose of both are the same....to serve the patient.

During ward rounds or visits you will attempt to gather information from the patient that will enable you to plan or serve the diet in a better manner. You should apply the psychology of serving patients, as explained previously in this Study Guide as you visit their bedsides, interviewing them for their dietary history, including foods liked and disliked, any food allergies they may have, and modified diets they have been on, the extent to which they understand the diet they are now following, etc.

A good interview does not just happen. The person who takes dietary histories and visits patients daily must be a person who recognizes and understands the needs and attitudes of the patient. This individual must continually utilize the traits of empathy and insight.

Empathy "The projection of one's own personality into the personality of another in order to understand them better. Empathy is walking a mile in another person's shoes." This trait is desirable and necessary to understand the problems and behavior of another person.

Insight - "The objective evaluation of information obtained from another individual during an interview." The interviewer must be careful not to evaluate another person's eating habits and attitudes by his/her own personal standards.

The interviewer should be one who has the ability to put the patient at ease by a warm, friendly manner. A relaxed manner and pleasant personality must be backed up by sincerity, honesty, and an interest in and love for, all kinds of people. Your own personal interest in the patient and how well you let them know this is a very important factor in determining your success as a counselor and interviewer. Being tactful and conscientious, in addition to possessing the ability to mask surprise and prejudice, is also desirable.

The interviewer must also be a good listener. While listening to what the patient is saying, you can often put insight to work and find that the things not being said are often more important than those said aloud.

INTRODUCTION

As you become more proficient in your understanding of therapeutic diets you may be tasked with performing patient interviews and diet consultations. For some of these patients, you won't just be teaching a diet but a life long discipline to which they must adjust, thus the importance of your thorough understanding of therapeutic diets. The following information explains the procedures and forms used to conduct patient interviews and diet consultations.

INFORMATION

PATIENT INTERVIEW AND DIET INSTRUCTION

In preparing for the interview an important consideration is where it will be held. A patient may be interviewed during your ward rounds and visits at anytime after they are admitted to the hospital and placed on a therapeutic diet. The sooner you interview the patient, the sooner you can start teaching the patient how to accept the new diet. However, the majority of your interviews and diet instructions will be on an out-patient basis. For all formal dietary consultations, whether it is for an in-patient or an out-patient, you must receive a SF 513, Consultation Sheet, signed by the physician, stating the diet the patient needs to receive instruction on. These out-patient diet instructions are usually held in the nutrition clinic or medical food service office.

There is a need for some privacy in dietary interviews, no matter how small the enclosure, so that neither the patient nor the therapist is distracted. When interviewing a patient bedside, there are some points to remember. Always bring your own paper and pencil with you. Never ask patients if you may borrow theirs - it shows that you hadn't planned your work to include these essentials. Make sure your paper has a hard back cover so you can write as you stand up. Never sit down by a patient's bed - always remain standing. Never lean on or touch anything in a patient's room. Don't come right up to the patient to talk to them. Stay at a discreet distance - for both your protection and the patient's.

The preliminaries are extremely important. More time may be spent in these seemingly unrelated excursions in which the patient is getting to know you and you to know the patient. If these are well done and the patient becomes relaxed and at ease with you, often the actual dietary teaching may be done more quickly. The communication during the interview will also give you and idea of the patient's intelligence level, ability to follow a diet, and perhaps more importantly, their attitude toward the diet.

A relaxed manner (sometimes hard to achieve when you are pushed for time) and a quiet, unhurried "willingness" to listen create a relaxed atmosphere. Too many interviewers tend to chatter to fill the vacuum. Empathy is a great help. The interviewer must have an unjudging attitude and at the same time appear to be interested in what the patient has to say.

Any dietary interview requires time. One of the greatest weaknesses in many attempted interviews is insufficient time to do a satisfactory job. It takes time for the patient to feel at ease with the interviewer.

If a patient seems too tired or for some other reason is unable to concentrate on the matter at hand, it is probably better to become acquainted and make a new appointment for a more suitable time.

The purpose of the interview is to obtain information from the patient that will aid you in teaching the diet during the consultation. Prior to obtaining this information it is advantageous to introduce yourself, make clear your role, then build a "bridge of rapport" - an understanding between you and the patient. Everyone has their own way of doing this. Sometimes general questions related to the patient concerning such items as height, weight, age, what he or she does, where he or she lives, and so on, will give some background and especially give you an opportunity to feel your way along with the patient, to get them to talk. Unessential comments given by the patient are often of more help than the answers to any specific questions you may ask. The more general inquiry gives the basis for conversation leading eventually into more specific questions related to food habits.

AF Form 1741, Diet Record, is used for all inpatients requiring diet modifications and for outpatients who will be eating meals in the hospital. The following information is recorded on this form (Figure 20)

1. Sex, age

2. Height, weight (taken during interview using your scales).

3. For active duty personnel, minimum, maximum, and standard weights will be obtained from RDA Adult Weight Standards. (See page 51).

4. Food likes and dislikes

5. Diagnosis and physician (from SF 513, Consultation Sheet or patient's medical records).

AF Form 2572, Nutritional Assessment, is completed by the patient prior to the diet consultation. This form provides valuable information for teaching the patient's diet (see figure 19). If the patient has been on a prescribed diet prior to the new one, it can be used to teach the patient through association. A typical meal pattern provided by the patient can reveal faulty eating habits and/or nutritional inadequacies. Either would require discussion of the Guide to Good Eating during the diet consultation.

If most of the patient's meals are eaten in restaurants you will need to provide suggestions during the consultation that will aid the patient in following the diet prescribed, or suggest that meals be eaten in the hospital. If another member of the family prepares most of the patient's meals you can suggest that they bring that person with them for the diet consultation. It is important for the person preparing the meals to understand the limitations of the diet as well as the patient.

Other information that will aid in giving the diet instruction is occupation and economic status of the patient. Knowing the patient's occupation and working hours will help you to plan an individualized meal pattern to fit the patient's needs. The more you can adapt the new diet ot the patient's lifestyle the easier it will be for the patient to follow the diet. Economic status is usually a touchy subject which patients will not be eager to discuss. However by using insight and tact during the interview you should be able to draw conclusions about this without actually asking the patient. This is important because some diets require the use of special foods that can be rather expensive. By keying in on the patient's economic status you can provide suitable alternatives without embarassing the patient.

WEIGHT STANDARDS FOR ADULT NUTRITIONAL STATUS ASSESSMENT

HEIGHT (inches)	MALE RDA IBW	MALE RDA RANGE	MALE AF MAX.	MALE SURVIV-ABILITY MAX.	FEMALE RDA IBW	FEMALE RDA RANGE	FEMALE AF MAX.	FEMALE SURVIV-ABILITY MAX.
58.0					102	91.8-122.4	126	126
58.5					105.3	92.9-123.9		128
59.0					104.5	94.1-125.4	128	130
59.5					105.8	95.2-126.9		131
60.0			153		107	96.3-128.4	130	133
60.5					108.5	97.7-130.2		135
61.0			155		110.0	99.0-132.0	132	136
61.5					111.5	100.4-133.8		138
62.0	123	110.7-147.6	158	171	113	101.7-135.6	134	140
62.5	124.8	112.3-149.7		173	114.8	103.3-137.7		142
63.0	126.5	113.9-151.8	160	176	116.5	104.9-139.8	136	144
63.5	128.3	115.4-153.9		178	118.3	106.4-141.9		147
64.0	130	117.0-156.0	164	180	120	108.0-144	139	149
64.5	131.5	118.4-157.8		183	122	109.8-146.4		151
65.0	133.0	119.7-159.6	169	185	124	111.6-148.8	144	154
65.5	134.5	121.1-161.4		187	126	113.4-151.2		156
66.0	136	122.4-163.2	174	189	128	115.2-153.6	148	159
66.5	138.5	124.7-166.2		192	130	117.0-156.0		161
67.0	140.5	126.5-168.6	179	195	132	118.8-158.4	152	164
67.5	142.8	128.5-171.3		198	134	120.6-160.8		166
68.0	145	130.5-174	184	201	136	122.4-163.2	156	167
68.5	147.3	132.5-176.7		205	138	124.2-165.6		171
69.0	149.5	134.6-179.4	189	208	140	126.0-168.0	161	174
69.5	151.8	136.6-182.1		211	142	127.8-170.4		176
70.0	154	138.6-184.8	194	214	144	129.6-172.8	165	179
70.5	156	140.4-187.2		217	146	131.4-175.2		181
71.0	158	142.2-189.6	199	220	148	133.2-177.6	169	184
71.5	160	144.0-192.0		222	150	135.0-180.0		186
72.0	162	145.8-194.4	205	225	152	136.8-182.4	174	188
72.5	164.3	147.8-197.1		228				
73.0	166.5	149.9-199.8	211	231			179	
73.5	168.8	151.9-202.5		235				
74.0	171	153.9-205.2	218	238			185	
74.5	173.5	156.2-208.2		241				
75.0	176	158.4-211.2	224	245			190	
75.5	178.5	160.7-214.2		248				
76.0	181	162.9-217.2	230	252			196	
77.0			236				201	
78.0			242				206	
79.0			248				211	
80.0			254				216	

NUTRITIONAL ASSESSMENT *(FOR DIET COUNSELING)*

(THIS FORM IS SUBJECT TO THE PRIVACY ACT OF 1974. USE BLANKET PAS-DD FORM 2005.)

(TO BE COMPLETED BY PATIENT AND RETURNED TO APPOINTMENT DESK, IF APPLICABLE)

NAME (Last, First, Middle Initial)	SEX	SOCIAL SECURITY NO.	HOME PHONE:
MURRAY, CINDY K.	F	000-YY-0000	OFFICE PHONE:

AGE	HEIGHT (without shoes)	CURRENT WEIGHT (with clothes)	HAVE YOU HAD A RECENT WEIGHT CHANGE? (If "yes", complete below)			CURRENT MEDICATIONS
			GAIN	LOSS	TIME PERIOD	
30	67"	163				

DIETARY ASSESSMENT

Using this form as a guide, indicate the SPECIFIC FOODS and AMOUNTS eaten on one typical day during the past week.

FOOD GROUPS	BREAKFAST	AMT	LUNCH	AMT	DINNER	AMT
MEAT, POULTRY, FISH, EGGS	over easy eggs	2	fried chicken	2 pieces		
MILK, CHEESE, ICE CREAM					cottage cheese	½ c.
CREAM, BUTTER, MARGARINE	butter	2	butter	4		
SALAD DRESSING	bacon	3			Italian	4 T
VEGETABLES, SALAD, LEGUMES			green beans	½ c	tossed salad	1 g
FRUITS, CITRUS	orange juice	1 c.			peaches	½ c.
POTATO, RICE, MACARONI			baked potato	1 lg		
BREAD	whole wheat	2	dinner roll	1	saltines	6
SUGAR, CANDY, DESSERTS	sugar	4	pecan pie	1 sl.	pudding	½ c.
BEVERAGES, ALCOHOL	coffee	2	water		iced tea	2
VITAMINS, SUPPLEMENTS						

AMOUNT OF ALCOHOLIC BEVERAGES CONSUMED

TYPE	WEEKLY	DAILY
WINE		
BEER		
MIXED DRINKS		

SNACKS

MIDMORNING	AMT	MIDAFTERNOON	AMT	EVENING	AMT
coffee	2	pepsi	12 oz	pepsi	12 oz
sugar	4			popcorn w/ butter	1 c.

DO YOUR EATING HABITS *(time and pattern)* CHANGE DUE TO WORKSHIFTS, WEEKENDS OR UNUSUAL ACTIVITIES? IF SO, INDICATE HOW THEY DIFFER FROM THE ABOVE PATTERN.

WHO PREPARES MOST OF YOUR MEALS?	FOR HOW MANY PEOPLE ARE MEALS PREPARED?	NUMBER OF MEALS EATEN AWAY FROM HOME PER WEEK	PHYSICAL ACTIVITIES
me	2	5	swimming + house work

IS THERE ANYTHING YOU WOULD LIKE TO HAVE CONSIDERED IN PLANNING YOUR DIET? *(Such as religious diet rules, nationality, food preferences, food allergies, etc.)*

PREVIOUS DIET HISTORY

A. HAVE YOU EVER HAD A DIET PRESCRIBED BY A PHYSICIAN?	B. GIVE THE NAME OR TYPE OF DIET PRESCRIBED AND WHEN IT WAS PRESCRIBED.	C. ARE YOU STILL ON THIS DIET?
☒ YES ☐ NO	1000 cal/R June 1977	☐ YES ☒ NO

(TO BE COMPLETED BY DIETITIAN)

EVALUATION OF NUTRITIONAL ADEQUACY BY SERVING

MINIMUM SERVINGS	SIZE OF ONE SERVING	EATEN	ADEQUATE YES	ADEQUATE NO
MILK 2 ADULTS 3 CHILDREN 4 TEENAGER 4 PREGNANCY 4 LACTATION	1 CUP MILK OR YOGURT 1 1/2 SLICE (1 1/2 OZ.) CHEESE 2 CUPS COTTAGE CHEESE 1 3/4 CUP ICE CREAM 1 CUP PUDDING 1 CUP COOKED GREENS	3/4		✓
MEAT 3 PREGNANCY 2 ALL OTHERS	2 OZ. COOKED MEAT, FISH, POULTRY OR CHEESE 2 EGGS, 1/2 CUP COTTAGE CHEESE 1 CUP DRIED PEAS OR BEANS, 4T PEANUT BUT.	2½	✓	
FRUITS VEGETABLES 4	1/2 CUP COOKED OR 1 CUP RAW DARK GREEN LEAFY, OR ORANGE 3-4 TIMES A WEEK: CITRUS DAILY	5	✓	
GRAINS 4	1 SLICE BREAD, 1 CUP COLD CEREAL, 1/2 CUP COOKED CEREAL, PASTA, GRITS	4	✓	

NUTRITIONAL ASSESSMENT ☐ ADEQUATE ☐ INADEQUATE

REMARKS

AF FORM 2572 MAR 79 PREVIOUS EDITION IS OBSOLETE.

Figure 19

DIAGNOSIS: Diabetes Mellitus

PHYSICIAN: Dr. Baird

HT: 67" (Circle one) M (F)

AGE: 30

WEIGHT / DATE

MAX/MIN (Standard)

ADMIT: 167

ADDITIONAL WEIGHTS

DIET/DRUG INTERACTION

DATE	Dietary Prog Notes/Diet Instructions	INIT
20JAN79	Pt. will be eating the dinner meal Mon-Fri	JS

RCRD	DATE	DIET ORDER	INIT
	20JAN79	1000 cal diab	JS

VISIT DATES	INIT	DIET WRITING INFORMATION: LIKES	DISLIKES
20JAN	JS	Spinach	Liver Beets Turnip greens

UNIT	BED	ROOM NO.	NAME	GRADE	DIET ORDER	Circle One: NPO	OTHER STATUS: HOLD	VSI	PASS	SI
OP			Cindy Murray	E-6	1000 cal diab					

AF FORM 1741 PREVOUS EDITION WILL BE USED. DIET RECORD MAY 83

Figure 20

The Diet Instruction

It is the responsibility of the physician to prescribe the diet, but it is usually the dietitian or the diet therapy supervisor who is responsible for actually instructing the patient on the diet. As you gain experience and expertise in this area, you too, will have this responsibility.

The Diet Instruction Evaluation Checklist, Figure 21, is used by the dietitian to rate the ability of Diet Therapists to give diet consultations. Before you will be allowed to give a diet instruction you must be evaluated and certified by your dietitian. If a dietitian is not assigned to the hospital where you work the command dietitian will accomplish this.

The purpose of the diet consultation is to teach the patient how to follow the prescribed diet. But all too often the patient is handed a list of foods and told "here is what you should eat" or "this is what the doctor ordered for you" with little or no regard for personal preferences or previous food habits. The diet instruction is for the patient's benefit and if you do not prepare for it you will be wasting the patient's time as well as your own.

In order to teach the diet effectively, you must know it thoroughly and be prepared to answer questions that the patient might have. Your understanding of the diet will enable you to teach the patient using terms that can be easily understood. Visual aids such as food models, posters, and filmstrips can be helpful in teaching the diet by increasing thepatient's understanding as well as helping to keep the instruction interesting and the patient attentive.

In teaching a patient a therapeutic diet, each disease has certain characteristics that will need emphasis. The diet must be adapted to the environmental factors learned during the interview and in a form that the patient can clearly understand. Following the instruction, it is helpful to give the patient a written copy of the diet plan for use after hospitalization. Several illustrative pamphlets are available from commercial sources at little or no cost. There are also official AF Pamphlets that correspond to most of the diets. These may be used by the patient following discharge from the hospital as a guide for following the diet.

You should follow a logical sequence for teaching the diet, asking the patient to summarize occasionally to assess his/her comprehension. An outline prepared prior to the instruction will help you keep in sequence and ensure that you cover the major characteristics of the diet. You should also have an individualized meal pattern prepared for the patient to keep, if necessary. Information obtained during the interview along with AF Form 2572, Nutritional Assessment, will be used to determine this.

Some patients will be required to come back on a weekly basis or just for a follow-up appointment. If this is necessary you should establish the next appointment at the end of the session. In any case you should always inform the patient of the diet clinic's phone numeber and who they can talk with in case questions arise after the consultation. The AF pamphlets previously mentioned provide a space in the front for recording the dietitian's name and phone number.

CONSULTATION SHEET, SF 513. The physician will request a diet instruction by initiating SF 513. Consultation Sheet, to the diet office. Upon completion of the diet instruction, you must complete the consultation section of the SF 513, Consultation Sheet, within 24 hours. This form records the information discussed during the interfiew and is a permanent part of the patient's medical file.

Figure 22, in this SW is an example of a properly completed SF 513 using the SOAP-SOAR method. The following explains what SOAP/SOAR means:

SOAR/SOAP METHOD OF CHARTING

1. Subjective (S): Concerns, perceptions, attitudes reported by the patient, family, or other source not directly verifiable.

2. Objective (O): Factual, verifiable information such as laboratory data, height and weight measurements, nutrient analysis, etc.

3. Assessment (A): Impression, interpretation, or judgement based on the analysis of factual data and reference materials.

4. R commendations (R): Course of action based on points made in the assessment.

5. Plan (P): Course of action r diet modifications and adjustments, patient education, progress evaluation, and continuing care.

A Consultation Sheet, SF Form 513, is required for patients attending group diet instructions as well as individual diet instructions. It is the responsibility of the person giving the instruction to complete all SF 513s and return them to the records section within 24 hours. If the patient attended a group instruction, it should be indicated on the SF Form 513 by the person giving the consultation.

Diet Consultation Record, AF Form 2576. The AF Form 2576, Diet Consultation Record, is used to keep a log of each diet instruction given to include the diet, patient's name, doctor ordering the diet, and the date given.

The census of diet instructions gives information to be included in the department history, for computing work loads, and as a guide to determine the number of copies of the various therapeutic diets to reproduce as handouts in diet instructions, (see figure 23).

Rating Factors	Yes	No	Not Applicable
1. Preparation			
A. Review the Patient's Medical Record.			
B. Obtain information from the physician if the diet order is ambiguous.			
C. Accurately interpret the diet order.			
D. Perform accurate calculations for non-routine diets.			
E. Prepare a tentative nutritional care plan.			
F. Gather the appropriate handout materials and instructional aids for the diet instruction.			
2.. The Interview			
A. Make proper introductions.			
B. Establish rapport and obtain the patient's confidence.			
C. Determine what information the physician discussed with the patient concerning his diet or condition.			
D. Obtain the patient's weight and height and record this information on SF 513, Consultation Sheet, if applicable.			
E. Obtain and review AF Form 2572, Nutritional Assessment. If not available, obtain an appropriate nutritional history.			
F. Apply information about food intake, activity patterns, and life style to the nutritional care plan.			
3. The Nutritional Care Plan			
A. Prepare and individualize a final nutritional care plan, if adjustment is necessary.			
B. Interpret the medical rationale in terms understandable to the patient.			
C. Define exchange and exchange lists in meaningful terms, if applicable.			
D. Use appropriate visual aids and instructional materials.			
E. Properly assess the patient's comprehension.			
F. Repeat and emphasize major points when applicable.			
G. Identify emotional, intellectual or social factors that would interfere with the patient's ability to adhere to the diet, and offer suitable adjustments.			
H. Take appropriate action where a diet is nutritionally inadequate.			
I. Effectively communicate the diet.			
4. Follow-up and Communication			
A. Establish dates or a time schedule for reading goals, if applicable.			
B. Inform the patient of the clinical dietitians' telephone number if there are questions. In specific cases, establish follow-up appointment.			
C. Make meaningful notes on SF 513, Consultation Sheet, using proper format.			

Figure 21 Diet Instruction Evaluation Checklist.

Standard Form 513
Rev August 1954
Bureau of the Budget
Circular A-52

GPO 948-10-61814-1 471-728

CLINICAL RECORD	CONSULTATION SHEET

REQUEST

TO:	FROM: (Requesting ward, unit, or activity)	DATE OF REQUEST
SGF/Dietitian	FSO	20 Jan 1979

REASON FOR REQUEST (Complaints and findings)

Instruct patient on 1000 Calorie weight reduction diet for Adult-Onset-Diabetes with calorie and CHO distribution 2/10, 3/10, 1/10, 3/10, 1/10 to include afternoon and evening snacks.

PROVISIONAL DIAGNOSIS

Insulin dependent Diabetes Mellitus 40 Units NPH

DOCTOR'S SIGNATURE	APPROVED	PLACE OF CONSULTATION	
Dr. Baird		☐ BEDSIDE ☒ ON CALL	☒ EMERGENCY ☐ ROUTINE

CONSULTATION REPORT

S: Patient states that she has never been on a diabetic diet, but was on a 1000 Calorie reduction diet previously. She does have a family history of diabetes.

O: 67" tall, 167 lbs, 30 years old

A: Ideal Body Weight is 135 pounds (Rule of 5 & 6's)
Caloric Assessment:

Basal calories -	135 X 10 =	1350
Moderate activity -	135 X 5 =	+675
Maintenance		2025
To Lose 2 lbs per week		-(1000)
		1025

She should lose approximately 1½-2 pounds per week on 1000 Calories. Analysis of AF Form 2572, Dietary Assessment, revealed inadequate intake of milk products and high intake of concentrated sweets and fats. Patient verbalizes knowledge of diabetic diet principles and 1000 Calorie diabetic meal plan.

P:
1. Instruct in 1000 Calorie diabetic diet with CHO distributed 23131/10.
2. Calculate an individualized daily food plan and record on AF Form 1741 in accordance with AFM 160-8/NAVMED P-5125.
3. Provide following hand-outs: individualized daily food plan and a sample menu, the Exchange List for Meal Planning booklet, the meat portion guide, Nutritional and Exchange Values for Fast Foods, and recommendations for planning Campbell products into Diabetic Exchanges.
4. Return for regular weight checks. Schedule for follow-up appointment, 27 Jan.
5. Provide dietitian's name and telephone number in case of questions.

(Continued on reverse side)

SIGNATURE AND TITLE	DATE	IDENTIFICATION NO.	ORGANIZATION
JAY SUGGS, 1 Lt, BSC, Dietitian	20 Jan 1979		

PATIENT'S IDENTIFICATION (For typed or written entries give: Name—last, first, middle, grade, date, hospital or medical facility)	REGISTER NO.	WARD NO.
Murray, Cindy K. Active Duty AF E-6 000-YY-0000 MG USAF MC		

CONSULTATION SHEET
Standard Form 513
513-104

Figure 22 Sample SOAP Method of Charting.

(THIS FORM IS AFFECTED BY THE PRIVACY ACT OF 1974

DIET CONSULTATION RECORD

DATE	NAME	ACT DY AF	ACT DY A	ACT DY N	ACT DY O	AD NON MIL	RET	DEPN AF	DEPN A	DEPN N	DEPN O	DEPN RET DECD	CIV	OTHER	SSAN	PHYSICIAN	DIET	GP	IND	TIME	INSTR INITIAL	PATIENT STATUS IN	PATIENT STATUS OUT	WEIGHT
9FEB84	Biddle	✓													0678	Poole	1000 Cal/R		✓	30	CKH		✓	220
9FEB84	REED	✓													1334	FERRER	F/C Chol/R		✓	25	CKH		✓	150
9FEB84	DONNELLY	✓													4418	HENDRICKS	FAT/C, NAS, Caffeine/R		✓	35	CKH		✓	185
9FEB84	POWELL	✓													1234	SPOCK	SOFT		✓	20	CKH		✓	165
9FEB84	TOMASZEWSKI	✓													4557	BROTHERS	800 Cal/R		✓	25	CKH		✓	190
10FEB84	ZULU						✓	✓							6770	HOGGS	1800 cal ADA		✓	40	CKH		✓	174
10FEB84	HADORN	✓													4992	Kildare	HLP TYPE IV		✓	35	RWR		✓	162
10FEB84	Charron	✓													0102	HAYES	SOFT		✓	20	RWR		✓	179
10FEB84	STANLY	✓													2149	Riggins	FIBER/R		✓	30	RWR		✓	156
10FEB84	LURCH	✓													9916	MONK	BLAND		✓	35	RWR		✓	182
10FEB84	BROWN	✓													1579	DAVIS	GESTATIONAL	✓		30	CKH		✓	125
11FEB84	CHARLES	✓													2814	Mull	GESTATIONAL	✓		30	CKH		✓	131
11FEB84	DEACON	✓													0048	Poole	GESTATIONAL	✓		30	CKH		✓	134
11FEB84	PUJAH	✓													1089	FERRER	GESTATIONAL	✓		30	CKH		✓	119
11FEB84	ALPHALPHA	✓													9231	SPOCK	GESTATIONAL	✓		30	CKH		✓	110
11FEB84	GALARZA						✓	✓							2514	BROTHERS	GESTATIONAL	✓		30	CKH		✓	135
11FEB84	WICKS		✓												3689	MONK	SOFT		✓	20	RWR		✓	180
12FEB84	JONES	✓													4891	Riggins	MINIMAL FIBER Mix Res.		✓	35	RWR		✓	179
12FEB84	JORDAN	✓													5124	Hoggs	1500 cal ADA		✓	40	RWR		✓	160
12FEB84	SMITH						✓			✓					6665	HADORN	80gm PRO		✓	25	RWR		✓	120
12FEB84	WELLS	✓													2158	PAUL	2gm Na		✓	40	CKH	✓		140
12FEB84	Peace	✓													7478	ROSS	T&A SOFT		✓	25	CKH	✓		189
13FEB84	DUNTON	✓													8144	MIKE	FAT/C Chol/R		✓	35	CKH	✓		169
13FEB84	BUTCH						✓	✓							0252	NANCIE	T&A SOFT		✓	45	CKH	✓		172

AF FORM MAR 74 2576

SHCS/MSOB overprint

☆ U.S. GOVERNMENT PRINTING OFFICE: 1978—631-271/1436 3-1

Figure 23
58

BLOCK II SDI

INTRODUCTION

The three major areas of security that you will be concerned with in Medical Food Service are given in the information that follows. An important point to remember here is that responsibility for security in Medical Food Service lies with all personnel assigned to the section.

INFORMATION

SECURITY PRECAUTIONS IN MEDICAL FOOD SERVICE

Building

Everyone in the MFS section is responsible for the security of your section. Keys are to be distributed to only a few responsible individuals, usually shift leaders and supervisory personnel. Much of the equipment, such as blenders, cooking utensils, pots and pans, etc. can be easily moved so it is extremely important that all windows and doors are locked when the last individual goes off duty. Any broken locks on windows or doors should be reported immediately. The responsibility for security lies with each Diet Therapy Specialist as much as with your supervisor.

Subsistence

All items of food in MFS are received and issued in terms of money. All items must be accounted for so subsistence must be protected against pilferage and loss, whether during storage, issue, receipt, or even preparation. Never give subsistence items away to anyone who is not authorized to sign for them. Likewise, subsistence should not be taken for personal use. If you know someone has an unauthorized key or is taking subsistence items or you see a storage area unlocked without someone present, report the incident immediately to your supervisor.

Money

A minimal change fund is kept in the Medical Food Service Department for the purpose of making change at mealtime. In addition, money is collected from all persons signing the AF Form 1087, Cash Meal Log, and is turned into the MSA office once each normal duty day. The money should be locked in the safe at all times except when collecting for meals during established meal hours. A good practice to follow is to limit the combination of the safe to certain individuals. It is not necessary for all personnel to know the combination. All persons within the section should be familiar with the procedures to be followed in case of a robbery and these should be posted at the cashier's table at all times.

You may be required to perform the cashier duties during mealtime from time to time. Your supervisor will have you sign for receipt of the change fund at the beginning of the meal. It is your responsibility to check to see that the entire amount you signed for is indeed in the cash box. At the end of the meal your supervisor will tally the amount collected on the 1087 and add this to the amount that is already in the change fund. If there is a discrepancy your supervisor will inquire as to the reasons that the cash is over or short. The supervisor must then document the reason on AF Form 1087, Cash Meal Log, as well as the name of the cashier. The explanation of the cash being short or over is then signed, by the supervisor, giving approval. If the explanation is not signed, or when a pattern of frequent overages or shortages occurs, or a larger than normal overage or shortage occurs, the medical foodservice officer consults with the base staff judge advocate to find out the appropriate action to take.

ROBBERY CONDUCT BRIEFING

PURPOSE: To ensure that all employees and funds custodians are familiar with proper actions to take in the event of a robbery. ACTUAL OR EXERCISE.

1. Avoid actions that might increase danger to yourself or others.

Remain as calm as possible and try not to excite the robber(s). Under no circumstances should you attempt to physically detain a robber or robbers.

2. Activate the robbery alarm system during the robbery if it appears such activations can be accomplished safely. CAUTION: DO NOT INCREASE DANGER TO YOURSELF OR OTHERS.

3. Observe the robber's physical features, voice, mannerisms, accent, dress, the kind(s) of weapon(s) he/she has, and any other characteristics that would be useful for identification purposes. Ensure that you utilize ATC Form 119, Physical Description Form. (See Figure 23). Be observant for style, length and color of hair, color of eyes, color and types of clothing, distinguishing marks such as scars, birthmarks tatoos, etc. If in military clothing, look for stripes, name tags patches...voice characteristics, ie., low, high, squeaky, is there a stutter present?...approximate height, weight, age. Also, look for types of weapon--revolver, automatic pistol, rifle, shotgun, hunting knife, kitchen knife, switch-blade, straight razor, etc..

4. Secure any evidence left by the robber (such as a note), do not handle it unnecessarily, and give it to the security police when they arrive. Refrain from touching, and assist in preventing others from touching articles or places where the robber may have touched or evidence he may have left so that fingerprints may be obtained. A robber may inadvertently or purposely drop an item (paper, ma s, note, button, cigarette, weapon). Secure any items left by a robber--if possible, do not tou e item(s).

5. Give the robber no more money than the amount he demands, and include marked/reco d money in the amount given.

6. If it can be accomplished safely, observe the direction of the robber's escape and the description and license number of the vehicle used, if any. North, South, East, West on what street? Walking? Driving? Color of vehicle? Make? Year, Model? 2 dr? motorcycle? License plate number? Color of license plates? Number of occupants?

7. Telephone the security police and inform them that a robbery has been committed or is in progress. DO NOT HANG UP THE TELEPHONE!! MAINTAIN TELEPHONIC CONTACT WITH THE SECURITY POLICE!!! If the robber has already left, it is very important that the security police be immediately notified so that time will not be wasted in surrounding the facility, and so that a search of the area outside the facility can be initiated as soon as possible.

8. If the robber leaves before the police arrive, ensure that a designated official or other employee waits outside the office or building, if it is safe to do so, to inform the security police when they arrive.

Refer to #7--notify the security police immediately after the robber leaves the scene.

9. Attempt to determine the names and addresses of other persons who witnessed the robbery or escape, request them to record their observations. Ask other employees or patrons who may have seen the robbery or escape to write down what they saw. Attempt to have each individual accomplish ATC Form 119, Physical Description Form.

10. Refrain from discussing the details of the robbery with others before recording the observations concerning the above circumstances. This is to help keep clear in your mind exactly what you saw and not what others present may have seen. This will bring about a better, more detailed description of the robber, vehicle, etc.

Remember that all of these steps must be taken during and after a robbery, whether it be ACTUAL OR EXERCISE? We cannot stress the importance of following these procedures. We will continue to have periodic Robbery Evaluation Exercises. We will attempt to make these exercises as realistic as possible and we ask your cooperation in following these procedures to the fullest extent possible. We hope that you will never be involved in an actual robbery situation, but if you are, you will be knowledgeable of the proper actions to take.

The two-digit authentication number system will be utilized by the Desk Sergeant to verify that you are (are not) under duress when you call to inform the security police of a robbery, actual or exercise. The Desk Sergeant will give you a number, if the robber has left the facility, you will respond with the correct number. If the robber is still in the facility, you will respond with an incorrect number, thereby notifying the Desk Sergeant that you are in a duress.

PHYSICAL DESCRIPTION

PROMPTLY FILL OUT THIS FORM AS ACCURATELY AND COMPLETELY AS POSSIBLE AND GIVE IT TO SECURITY POLICE

SEX	NATIONALITY	AGE	HEIGHT	WEIGHT	BUILD *(Thin, Stocky, etc)*

...N *(Light, Dark, Ruddy, etc)* | HAIR *(Color, Wavy, Straight, How combed)* | EYES *(Color, Small, Large, etc)*

..., *Small, Broad, Pug, etc)* | EARS *(Prominent, Small, etc)* | GLASSES *(Describe frames)* | MUSTACHE OR BEARD *(Color, Shape)*

...ALSEFACE *(Type, Color, etc)* | SCARS OR MARKS *(Tatoos, Birthmarks, Facial Blemishes, etc)* | DISTINGUISHING CHARACTERISTICS *(How would you pick this person out of a crowd?)*

CLOTHING

(Describe color, type of material, Style, etc)

...OTHING

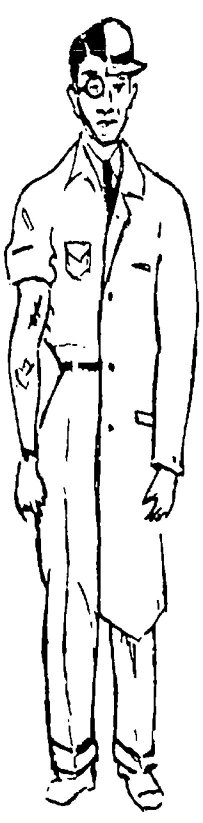
MISCELLANEOUS

...HIBITED *(Revolver, Automatic, Knife, etc)*

...ny *accent, peculiarity of speech)*

... USED

...S *(Right or left handed, unusual walk or carriage, nervous*



ADDITIONAL DATA

MEANS OF ESCAPE *Auto, Foot* | DIRECTION

MOTOR VEHICLE

LICENSE NO. | OTHER *Lic No. State, Color* | YEAR

MAKE | COLOR *Black, Two-tone, Color over Color*

MODEL *(2 door, convertible, etc)*

NUMBER, COLOR, SEX OF PASSENGERS

SPECIAL FEATURES *(Unusual trim, ornaments, white wall tires, wheel disks, visible accident damage, etc)*

REMARKS

PREPARED BY

POSITION OR ADDRESS

DATE & TIME OF INCIDENT

FOR TRAINING PURPOSES ONLY

M
73 119

BEST COPY AVAILABLE

INTRODUCTION

In your Air Force job as a Diet Therapist you will be working with both supplies and equipment. When you obtain more knowledge and experience of your job you may be tasked with ordering the supplies and equipment needed to operate your facility. The following information explains the difference between supplies and equipment as well as the forms needed to order them.

SUPPLIES AND EQUIPMENT

INFORMATION

Supplies are items which normally cost less than $300.00 and do not require calibration, safety inspection or preventive maintenance.

1. Durable. An expendable item that is not consumed in use and has a life expectancy in excess of one year but does not qualify as an equipment item.

2. Consumable. An expendable item that loses its identity when used, cannot be used for the same purpose, or is not durable enough to last one year.

Equipment items are those which last five years or more. These items are not consumed during use. An equipment item will not lose it's identity in use. Equipment will normally require either safety inspection, preventive maintenance or calibration. The primary difference between supply and equipment items is that an equipment item normally costs more than $300.00. However, some supply items may be listed as equipment for accounting purposes. Example: Hand held calculators.

SOURCES OF SUPPLIES AND EQUIPMENT

There are two sources available for obtaining supplies and equipment:

1. Central Procurement

Medical supply is the focal point for procuring supply and equipment items. Items from this source are referred to as "Standard Items," whether they are medical or nonmedical. The term "standard" means that these equipment and supply items are listed in the Federal Supply Catalog and are procured through government sources.

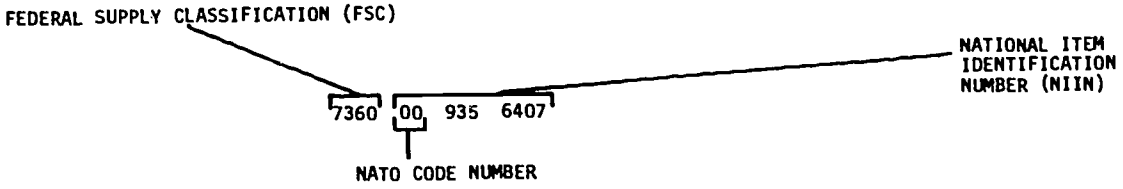
2. Local Purchase

The Local Purchase Review Committee or DBMS at each base determines the procedures to follow when ordering "nonstandard items." These equipment and supply items are not listed in the Federal Supply Catalog and have to be locally purchased through civilian sources. Ordering items through local purchase requires a detailed justification because they normally cost more than those obtained from government sources.

Publications Used In Ordering Supplies and Equipment

Prior to ordering a piece of equipment, the OIC and NCOIC of medical food service must decide if the item to be ordered will fulfill a particular need. This need may be to replace a worn out piece of equipment or simply to acquire a piece of equipment which will allow for a more efficient operation. To know what is available, the individual(s) ordering the equipment must research catalogs and determine which piece will best fit the needs of the department.

FEDERAL SUPPLY CATALOGS. There are several different federal supply catalogs that may be used to order supplies and equipment. One such catalog that is commonly used is General Services Administration (GSA). Each item listed in this catalog is purchased by the Federal Government and assigned a National Stock Number which identifies the item for the purpose of ordering. Each national stock number consists of 13 digits which can be broken down into three parts as follows:



The FSC, first four digits, identifies the general area in which each item can be found. The NATO code number, 5th and 6th digits (00), is used in procuring items for overseas use. The two zeros would be changed to other numbers to designate where the items are being ordered from. The NIIN, last nine digits (including the NATO code number), uniquely identifies each item. The NIIN for each particular item will be different.

CIVILIAN SUPPLY CATALOGS. If an item is not listed in the Federal Supply Catalog or if the item is listed but will not fit the needs of the department, consult Civilian Supply Catalogs or equipment brochures for the description of the item. These catalogs are made available by civilian firms. You should not procure items from civilian catalogs if a satisfactory item is available through the Federal Supply System. Civilian catalog-listed items do not carry a federal stock number in most instances and the item ordered from these catalogs may cost more than a comparable item in the GSA catalog. In the latter case, a justification as to why the GSA listed item is unsuitable must accompany the order. The information in the civilian catalog is basically the same as in the GSA catalog.

TABLE OF ALLOWANCE (TA 516). This allowance document prescribes the essential equipment required for support of food service functions in USAF hospitals and clinics. The basis of issue reflected in this allowance document, except when otherwise specified under special information, represents maximum allowances for nonexpendable items prescribed to support the mission/function designated.

Forms Used To Order Supplies And Equipment

Once a requirement has been established for a particular item, either a new or a replacement item, you must submit a formal request. All requests must include pertinent information about the item needed to ensure that the correct item and quantity are procured. Requests must also contain a detailed justification of why the item is needed. If it happens that you wish to procure a specific item from one specific company, then this is termed a "sole source" request. Normally, more than one company will be contacted and in most cases the least expensive company will be the procurement source, but in some instances only one company manufactures the specific item you require, in which case a "sole source justification" must be submitted. These justifications must be excellently written and indisputable.

AF Form 601, Equipment Action Request is used to request equipment, to turn-in equipment, or to transfer equipment between property custodians. When items are to be purchased or replaced using a 601, the form must include a well-written specification and a detailed justification. When the justification is for a new item or is for an item similar to one available in the GSA catalog, but the one in the GSA catalog will not fulfill the needs of your operation, the justification must be thorough. It should include a comparison of the advantages of the requested item over the one available in the GSA catalog or over the one now in use. The justification must also show time, labor, and money to be saved by having the new piece of equipment. (See Figure 24).

Equipment Specifications

Specifications are detailed descriptions of materiel items which meet government standards for operation and use. Requests submitted for equipment items must describe the exact characteristics needed in the item of equipment to be purchased. To simply request a coffee urn for the medical food service facility is like saying that you need a nail without specifying which size or what it is to be used for. Requests for equipment must describe the exact item that you need so equipment specifications should be included with the equipment request. Specifications should be clear, concise, and leave NO doubt as to what is desired in order to prevent misunderstandings and the receipt of unsatisfactory equipment.

TO	FROM	SIGNATURE	DATE	ACTION TAKEN
				APPROVED [ ] DISAPPROVED [ ]
				APPROVED [ ] DISAPPROVED [ ]
				APPROVED [ ] DISAPPROVED [ ]
				APPROVED [ ] DISAPPROVED [ ]
				APPROVED [ ] DISAPPROVED [ ]
				APPROVED [ ] DISAPPROVED [ ]

1. CUSTODIAN REQUEST NO.				8. IN-USE DOC. NO.	9. NATIONAL STOCK NO. OR PART NO.			18. ACTION REQUESTED
								A. AUTHORIZATION INCREASE [ ] ADD NEW [ ] REDUCE [ ] DELETE [ ]
2. CMO	3. FAD	4. UJC	5. BUD	10. USE CODE	11. PRICE	12. U/I	13. ERRCD	B. ISSUE/DUE OUT ADVICE CODE ( ) INITIAL ISSUE [ ] REPLACEMENT [ ] CANCEL DUE OUT [ ]
6. CUSTODIAN SIGNATURE				14. EQUIP CODE	15. NOMENCLATURE			C. TURN-IN *(Complete all applicable blocks)*

7. *I certify that I have evaluated this request and the action herein is required.*	16. ALLOWANCE IDENTIFICATION					17. QUANTITY			
	ASC	COMPOSITION CODE				IN USE	CURR AUTH	NEW AUTH	NO REQ'D
SIG OF ORGN COMDR *(Not required for turn-in)*		PART	SECT	SUB-JECT	COL				

CONDITION		STATUS	YES	NO
SERVICEABLE		COMPLETE *(List missing parts in Block 19)*		
REPARABLE		CALIBRATION REQUIRED		
CONDEMNED		CLEAN, PAINT, ETC.		
UNKNOWN		DISASSEMBLY REQUIRED		

DATE AVAILABLE FOR PICKUP

19. JUSTIFICATION AND ITEM DESCRIPTION

FOR TRAINING PURPOSES ONLY

20. REVIEWING AUTHORITY COMMENTS

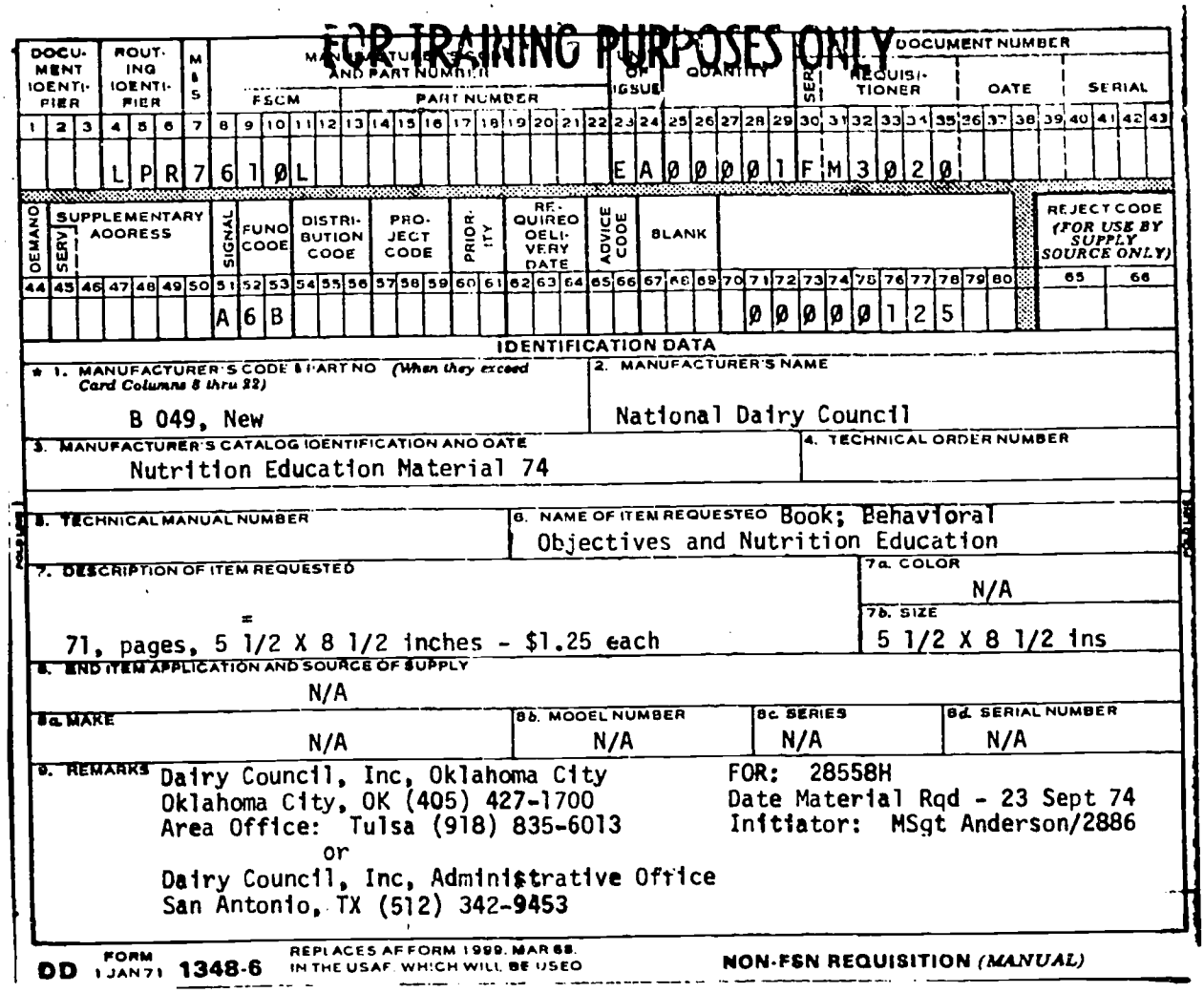
21. ORGN			22. UKC			23. LEVEL			24. DET			25. WRM			26. EMOLOC			27. SUPPLY CONTROL NO.								28. CEMO CONTROL NO.								29. AFLC CONTROL NO.							
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80

AF FORM 601 NOV 81 REPLACES AF FORMS 601A, APR 68 AND 601B, APR 70 WHICH WILL BE USED

EQUIPMENT ACTION REQUEST
(See Instructions on Reverse)

Figure 24

DD Form 1348-6, NON-FSN REQUISITION (MANUAL), is used to order medical and non-medical supply items that do not have a Federal Stock Number and have to be local purchased (ordered from civilian company). An example of these are nutrition text books, food models, filmstrips, and handouts. The 1348-6 should not be used to order equipment. (See Figure 25).



FOR TRAINING PURPOSES ONLY

DOCUMENT IDENTIFIER	ROUTING IDENTIFIER	M&S	MANUFACTURER'S CODE AND PART NUMBER		UI	QUANTITY	SUS	REQUISITIONER	DOCUMENT NUMBER: DATE	SERIAL
			FSCM	PART NUMBER						
	LPR	7	6 1 0	L	E A	0 0 0 0 1	F	M	3 0 2 0	

DEMAND	SUPPLEMENTARY ADDRESS SERV	SIGNAL	FUND CODE	DISTRIBUTION CODE	PROJECT CODE	PRIORITY	REQUIRED DELIVERY DATE	ADVICE CODE	BLANK	REJECT CODE (FOR USE BY SUPPLY SOURCE ONLY)
		A	6	B					0 0 0 0 0 1 2 5	

IDENTIFICATION DATA

1. MANUFACTURER'S CODE & PART NO (When they exceed Card Columns 8 thru 22)	2. MANUFACTURER'S NAME
B 049, New	National Dairy Council
3. MANUFACTURER'S CATALOG IDENTIFICATION AND DATE: Nutrition Education Material 74	4. TECHNICAL ORDER NUMBER
5. TECHNICAL MANUAL NUMBER	6. NAME OF ITEM REQUESTED: Book; Behavioral Objectives and Nutrition Education
7. DESCRIPTION OF ITEM REQUESTED: 71, pages, 5 1/2 X 8 1/2 inches - $1.25 each	7a. COLOR: N/A; 7b. SIZE: 5 1/2 X 8 1/2 ins
8. END ITEM APPLICATION AND SOURCE OF SUPPLY: N/A	
8a. MAKE: N/A	8b. MODEL NUMBER: N/A; 8c. SERIES: N/A; 8d. SERIAL NUMBER: N/A

9. REMARKS: Dairy Council, Inc, Oklahoma City
Oklahoma City, OK (405) 427-1700
Area Office: Tulsa (918) 835-6013
or
Dairy Council, Inc, Administrative Office
San Antonio, TX (512) 342-9453

FOR: 28558H
Date Material Rqd - 23 Sept 74
Initiator: MSgt Anderson/2886

DD FORM 1 JAN 71 1348-6 REPLACES AF FORM 1999, MAR 68, IN THE USAF WHICH WILL BE USED

NON-FSN REQUISITION (MANUAL)

Figure 25

AF Form 2005, Issue/Turn-In Request, is used to order supplies that have a national stock number such as those listed in the GSA catalog. Alternatives to using this form may be determined locally as required. (See Figure 26).

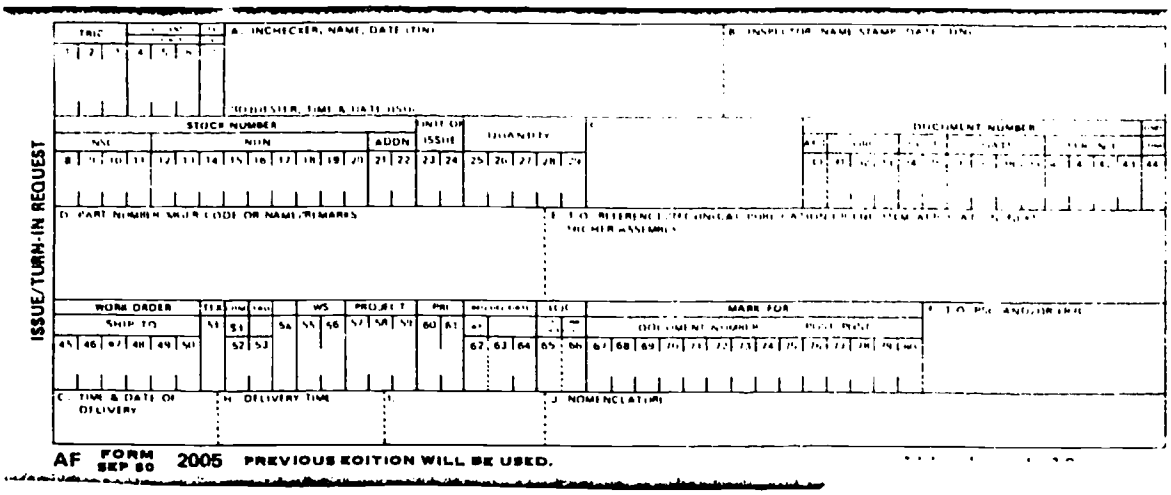


Figure 26

INTRODUCTION

Air Force Occupational Safety and Health Policy (AFOSH)-- The Air Force conducts a comprehensive and aggressive program to protect all Air Force personnel from work related deaths, injuries, and occupational illnesses. It includes all safety, fire prevention, and health activities that affect the safety and health of Air Force personnel at their workplace. Distinctions will not be made between the requirements for military personnel and civilian employees.

Food service operations present a variety of hazards requiring care and attention on the part of the worker and the supervisor to prevent injury. Floors must frequently mopped and cleaned to promote sanitation, but slippery floors are a safety hazard causing a large amount of slips and falls. Lifting and moving of food in boxes and cases can result in sprains and strains.

The equipment used in Medical Food Service is designed to heat, cut, or grind food. Fats and oils can scald when hot and, additionally are combustible liquids which will burn. Electrically operated dishwashers present both electrical hazards and burn hazards because of water temperatures used in the wash and rinse cycles. Accumulation of grease in ventilation hoods can cause fires. Broken glass must be handled with extreme care.

We in Medical Food Service are exposed to several potential health hazards. Among them are cleaning agents, noise, and misuse of food service equipment.

AFOSH STANDARDS

INFORMATION

GENERAL REQUIREMENTS

Fire Protection - Extinguishers must:

1. Be kept fully charged and in their designated places.

2. Be located along normal paths of travel.

3. Not be obstructed or obscured from view.

4. Be inspected by a designated individual at least monthly to ensure that:

   a. They have not been tampered with or actuated.

   b. They are serviced on a yearly basis.

5. All employees are trained in their use.

6. Fire exits must be clearly marked and the path of exit kept clear of equipment and materials. Emergency lighting must be provided, and all employees trained in evacuation procedures.

7. Telephone numbers of the fire department and other emergency services must be posted on each telephone.

Ventilation: Air flow must be adequate to provide fresh air and prevent condensation buildup in the receiving, storage, pots and pans, walk-in coolers, freezers, food preparation, cooking, serving, dining and warehousing areas.

Personal Protective Equipment may not be used as a substitute for feasible administrative or engineering controls. While these controls are being implemented, or if it has been determined that control methods are not feasible, personal protective equipment is required whenever there are hazards that do bodily harm through absorption, inhalation, or physical contact. This equipment includes respiratory and hearing protective devices, special clothing, and protective devices for the eyes, face, head, and extremities. All personal protective equipment must be of safe design and construction for the work to be performed and must be maintained in a sanitary and reliable condition.

1. Appropriate hearing protection must be used where employees are exposed to noise levels in excess of 84 dBA.

2. Non-skid shoes should be worn in all food service areas where floors may become wet or greasy. Where there is a reasonable probability of foot or toe injury from impact and compression forces, safety footwear must be provided.

Walking and Working Surfaces

1. All passageways and storerooms must be maintained clean, dry and orderly and in a sanitary condition. Spills must be promptly cleaned up.

2. Areas which are constantly wet should have non-slip surfaces where personnel normally walk or work.

SPECIFIC APPLICATIONS OF AFOSH STANDARDS

Dry Storage

1. Shelves must be adequate to bear the weight of stored items.

2. Employees must be instructed to store heavy items on lower shelves and lighter items above.

3. A safe ladder or other safe method must be provided for reaching high storage.

4. Cartons or other combustibles must be separated by at least two feet from light bulbs.

5. Light bulbs must be equipped with a shatter guard.

Pot and Pan Area

1. Approved rubber mats or other approved matting must be used, and it must be in safe condition.

2. Employees must be properly instructed in the use of correct amounts of detergent and other cleaning or sanitizing agents.

3. A waterproof apron and rubber gloves must be provided for each employee.

4. An adequate drainboard or other drying area must be provided so employees do not have to place pots and pans on the floor before or after washing.

5. Drain plugs must be designed so pot and pan sinks can be drained without the employee having to place his/her hands in hot water.

Walk-In Refrigerators and Freezers

1. Storage racks must be in safe condition free from broken or bent shelves and be supported on solid legs.

2. There must be a by-pass or other type device on the door to permit escape if an employee is locked in. In addition, an internally activated alarm bell must be provided.

3. Heavy items must be stored on lower shelves and lighter items on higher shelves.

Food Preparation Area

1. All electrical equipment must be properly grounded.

2. Electrical equipment must be inspected at least once every year by a certified electrician for safety defects.

3. Electrical switches must be located so they can be reached easily in an emergency.

4. Exhaust fans must be operating at all times when cooking equipment is in operation.

5. All exhaust hood lights will be equipped with shatter guards.

Serving Area

1. Hot food tables must be cleaned daily.

2. Floors must be mopped as necessary or at the end of each meal period and waxed with non-skid wax when necessary.

3. Traffic flow must be arranged so that the danger of customers colliding while carrying trays or obtaining food is minimized.

Dishwashing Area

1. Floor must be reasonably free of excessive water buildup and spillage.
2. Supplemental flooring must be properly maintained in safe condition.
3. All electrical units must be properly grounded.
4. Switches must be readily accessible and located to permit rapid shutdown in an emergency.
5. Employees must be able to reach switches without touching metal units such as tables and counters.
6. Employees must be carefully instructed in the use of detergents to prevent skin and eye irritation.

Bakery Area

Any machine using electric current must have its frame and electrical components grounded.

AIR FORCE ACCOUNTABILITY

INTRODUCTION

This section is intended to advise you of the Air Force policy in regard to property accountability and responsibility. You, as a member of the United States Air Force can, under certain circumstances, be made to reimburse the government for property damaged or destroyed while entrusted to you. Each member of the Air Force is responsible for the public property used in performing his/her job.

Perhaps up until now you were under the impression that only Medical Supply personnel had to be concerned with safeguarding property. This is not the case. Because you are in the Air Force you are responsible for the safeguarding, care, and proper use of public property. Because this property responsibility affects you personally, you should be aware of the system the government has established to protect its property.

PROPERTY ACCOUNTABILITY

INFORMATION

"Public Property" is synonymous with "Government Property" or "Air Force Property." It is categorized into two types:

Real Property

Similar to the civilian term "real estate" in that it includes land, buildings, and improvements. It also includes permanently installed property such as heating systems, air conditioning units, light fixtures, stoves, steam jacketed kettles etc.

Personal Property

All property not classified as real property falls into this category. This includes subsistence (food) items, the books you are using during this course, supplies and equipment in the kitchen at your facility.

Property Custodian

A property custodian is an officer, warrant officer, NCO, airman, or civilian employee who is responsible for all property issued to or in possession of a ward, clinic, section, or department of a hospital. The property custodian of medical food service is usually the NCOIC (Noncommissioned Officer in Charge). This individual will be appointed by the DBMS, placed on orders, and assigned an account symbol (number and/or letter) to indicate the location of all equipment. The property custodian will be held responsible for all equipment listed on inventory, even though it is everyone's responsibility to safeguard government property.

Since all personnel are subject to frequent changes of position and location, it is often necessary to transfer equipment from one property custodian to another to keep account of all equipment. When property custodians are going to be gone for forty-five (45) days or more, they must have a full inventory done on the property and transfer the responsibility to another custodian. When equipment transfer is desired, the losing account custodian must prepare an AF Form 601, which should indicate the losing and gaining accounts.

Each time equipment is issued to the department, the item is placed on a current inventory listing. The property custodian will be held directly responsible for all equipment listed on the inventory.

Property Accountability

Accountability is the obligation, imposed by law, lawful order, or regulation, on an officer or other person for keeping accurate records of funds. The person having this obligation may or may not have actual possession of the property or funds. Accountability is concerned primarily with custody, care, and safekeeping of equipment.

INTRODUCTION

AF Forms 2503 and 2504, Medical Food Service Patient/Patron Evaluations, are an important part of operating a Medical Food Service operation. When using these forms properly, your facility can attain a more accurate account of what others think of the job your facility is doing. Your facility may also use these forms to correct or change procedures in food preparation and services provided. It is therefore imperative that you understand how these forms can affect you and your job.

PATIENT/PATRON EVALUATION

INFORMATION

AF Form 2503, Medical Food Service Patient Evaluation.

As a diet therapist you have a special obligation to the patients. You must prepare well balanced therapeutic diets that are eye appealing and provide maximum palatability. You will be constantly under a patient's microscope. One of the first things a patient will be critical of during their stay in the hospital is the quality of the food. How does Medical Food Service monitor food quality and service?

AF Form 2503, Medical Food Service Patient Evaluation, is a helpful tool. It is a survey used to determine whether or not the food quality and service given is acceptable to inpatients. Medical Food Service management initiates action or changes to be made in procedures or services offered.

An AF Form 2503 is included on each patient's tray at one meal at least once every three months. Since you will be working in Patient Tray Service and in the diet office, many of the changes made will affect you directly.

Refer to Figure 27, question three. Note the response to this question. The person or persons responsible for serving the stewed tomatoes probably did not follow correct procedure. Perhaps they failed to use a slotted spoon to serve with or did not use a side dish.

The response to number five brings out many possibilities. Were food temperatures checked before serving the meal? Were plate warmers plugged in? Were the heated base with pellet enclosed heat maintenance system plugged in? These are questions management will ask. Did you use correct procedures when serving? Treat this form as a learning experience. The more you learn from this survey the better you can serve the patients.

AF Form 2504, Medical Food Service Patron Evaluation.

From time to time you will be called upon to work the front serving line in your facility. You will be serving ambulatory patients, as well as hospital staff. It is imperative that you serve people on this line with the same enthusiasm and skill as those patient trays you prepare on the diet line.

You may ask how can Medical Food Service help to control food quality and service on the front serving line. One way is by using the AF Form 2504, Medical Food Service Patron Evaluation survey. This form is used to survey the comments and opinions of patrons using the facility. Medical Food Service management uses the forms to decide what actions, if any, to take to correct or change a menu item, procedure, appearance, or personnel problems. The results of management review of this form will most likely involve you directly or indirectly.

Refer to figure 28 question four. Note the complaint. This complaint could be the result of a person working on the front serving line who is not following portion control procedures. Management will undoubtedly check to see that the procedure for portion control is being followed.

Note question nine. The airman who made the statement is obviously out of line. This is unacceptable behavior. Remember, serve other people as you would like to be served. As a result of these incidents the person who filled out the survey gave this facility a less than adequate rating. The way you perform your duties and how you act has great bearing on the impressions of others.

AF Form 2504 is given to every fifth person for one meal. The frequency of these evaluations are at least once every 3 months.

MEDICAL FOOD SERVICE PATIENT EVALUATION

Our primary mission in the Air Force Medical Food Service is to achieve high standards of nutrition and service. To help us provide the best medical food service possible, we need to know your thoughts. Please answer the following questions regarding the medical food service operation. Your *comments on negative answers* will be appreciated. If you wish, sign your name.

NOTE: 1. Patients being served food on inpatient unit answer Sections I and II.
2. Patients being served food in dining room answer Section II only.

PATIENTS BEING SERVED ON THE INPATIENT UNIT	YES	NO	COMMENTS
ARE YOU OFFERED A SELECTIVE MENU DAILY?	✓		
DO YOU RECEIVE EVERY ITEM YOU ORDERED ON THE SELECTIVE MENU?	✓		
ARE YOU VISITED DAILY BY MEDICAL FOOD SERVICE PERSONNEL?	✓		
ALL PATIENTS ANSWER THESE QUESTIONS			
ARE YOU ON A REGULAR DIET?	✓		
ARE YOU PERMITTED TO MAKE A SELECTION FROM FOODS OFFERED?	✓		
IS THE FOOD ATTRACTIVELY DISPLAYED AND SERVED?		✓	JUICE FROM THE STEWED TOMATOES SURROUNDED MY MASHED POTATOES
DO YOU RECEIVE THE AMOUNT OF FOOD YOU DESIRE?	✓		
ARE HOT FOODS SERVED HOT?		✓	FOOD WAS LUKE WARM
ARE COLD FOODS SERVED CHILLED?	✓		
DO YOU LIKE THE COFFEE?	✓		
DO THE MEDICAL FOOD SERVICE PERSONNEL PRESENT AN ACCEPTABLE PERSONAL APPEARANCE?	✓		
ARE MEDICAL FOOD SERVICE PERSONNEL COURTEOUS, RESPECTFUL AND CHEERFUL, PROVIDING RAPID SERVICE?	✓		

WHAT IS YOUR OVERALL RATING OF THE FOOD SERVED? *(Base your rating on quality, palatability, variety and appearance. If unsatisfactory, please comment.)*

[ ] OUTSTANDING [ ] EXCELLENT [X] SATISFACTORY [ ] UNSATISFACTORY

WHAT IS YOUR OVERALL RATING OF THE MEDICAL FOOD SERVICE OPERATION? *(If unsatisfactory, please comment.)*

[ ] OUTSTANDING [ ] EXCELLENT [X] SATISFACTORY [ ] UNSATISFACTORY

PLEASE WRITE ANY SUGGESTIONS OR ADDITIONAL COMMENTS ABOUT MEDICAL FOOD SERVICE. *(Use reverse side, if necessary.)*

HOW MANY DAYS HAVE YOU BEEN A PATIENT IN THE HOSPITAL?	STATUS OF INDIVIDUAL COMPLETING FORM		SIGNATURE *(If you desire)*	DATE
	[X] MILITARY [ ] RETIRED	[X] MALE		
	[ ] DEPENDENT [ ] OTHER	[ ] FEMALE		

F 2503

Figure 27 (Con't Next Page)

ADDITIONAL COMMENTS

FOR HOSPITAL USE

NUMBER OF FORMS DISTRIBUTED	DATE	NUMBER OF FORMS RETURNED (RECORDED)
SURVEY REVIEWED BY		DATE

REMARKS/ACTION TAKEN *(Identify by item number)*

Figure 27 (con't)

☆ U.S. Government Printing Office 1980 310-971/501

MEDICAL FOOD SERVICE PATRON EVALUATION

Our primary mission is to provide high standards of nutrition and service. To help us provide the best medical food service possible, we need to know your thoughts. Please answer the following questions regarding the medical food service. Your *comments on negative answers* will be appreciated. If you wish, sign your name

ITEMS	YES	NO	COMMENTS
1. ARE YOU ON A REGULAR DIET?	✓		
2. ARE YOU PERMITTED TO MAKE A SELECTION FROM FOODS OFFERED?	✓		
3. IS THE FOOD ATTRACTIVELY DISPLAYED AND SERVED?	✓		
4. DO YOU RECEIVE THE AMOUNT OF FOOD YOU DESIRE?		✓	NOT GETTING ENough MEAT.
5. ARE HOT FOODS SERVED HOT?	✓		
6. ARE COLD FOODS SERVED CHILLED?	✓		
7. DO YOU LIKE THE COFFEE?	✓		
8. DO THE MEDICAL FOOD SERVICE PERSONNEL PRESENT AN ACCEPTABLE PERSONAL APPEARANCE?	✓		
9. ARE MEDICAL FOOD SERVICE PERSONNEL COURTEOUS, RESPECTFUL AND CHEERFUL, PROVIDING RAPID SERVICE?		✓	AN A1C ON THE LINE SAID, "FORGET IT CHUMP!!, WHEN I ASKED FOR SECONDS ON MEAT.

10 WHAT IS YOUR OVERALL RATING OF THE FOOD SERVED (*base your rating on quality, palatability, variety and appe...*)

[ ] OUTSTANDING [ ] EXCELLENT [X] SATISFACTORY [ ] UNSATISFACTORY

IF UNSATISFACTORY, PLEASE COMMENT?

11. WHAT IS YOUR OVERALL RATING OF THE MEDICAL FOOD SERVICE DEPARTMENT?

[ ] OUTSTANDING [ ] EXCELLENT [X] SATISFACTORY [ ] UNSATISFACTORY

IF UNSATISFACTORY, PLEASE COMMENT

WRITE ANY SUGGESTIONS OR ADDITIONAL COMMENTS ABOUT MEDICAL FOOD SERVICE (*Use reverse side, if necessary*)

HOW MANY MEALS A WEEK DO YOU EAT IN THIS HOSPITAL DINING ROOM? 10	STATUS OF INDIVIDUAL COMPLETING FORM		SIGNATURE (*If you desire.*)	DATE
	[ ] OFFICER [ ] CIVILIAN	[X] MALE		
	[X] AIRMAN	[ ] FEMALE		

AF FORM 10 2504

Figure 28 (con't next page)

ADDITIONAL COMMENTS

FOR HOSPITAL USE

NUMBER OF FORMS DISTRIBUTED	DATE	NUMBER OF FORMS RETURNED RECORDED
SURVEY REVIEWED BY		DATE

REMARKS/ACTION TAKEN (IDENTIFY BY ITEM NUMBER)

Figure 28 (con't)

INTRODUCTION

In previous lessons you learned proper sanitation techniques, storage and preparation of food, food temperatures, etc. To ensure that you maintain those standards set forth in AFR 163-8, Control of Food Borne Disease, Environmental Health personnel will periodically inspect your facility. The following material will provide information about these evaluations that you as a Diet Therapy Specialist need to know.

EVALUATION OF MFS FACILITIES

INFORMATION

Evaluations of the MFS facility must be conducted at least twice each month. If the DBMS feels that it is necessary, they will be conducted more frequently. AF Form 977, Food Facility Sanitation Checklist, is used by Environmental Health personnel to record ratings of either Excellent, Satisfactory, Marginal, or Unsatisfactory (See Figure 29).

Although your MFSO is ultimately responsible for operation of the facility, you as a Diet Therapist will have the responsibility of getting your job done properly. When you are preparing and storing food it is your responsibility to ensure proper temperatures are maintained, sanitation techniques are used, and labeling (date and time) of foods is accomplished.

You will also be responsible for personal hygiene. Sanitation of equipment as well as for the sanitation of kitchen and dining areas. Personal hygiene includes bathing daily, wearing a clean uniform, proper head covers, and washing your hands frequently to prevent contamination of food. Most of these personal hygiene factors are obvious and are easily detected by the supervisor during his/her daily inspection. However, it is not always so easy to determine if an individual washed his/her hands after going to the restroom or whether equipment has been properly sanitized. For this reason AFR 163-8 outlines Tests for Cleaniness which can be conducted by Environmental Health personnel during their bimonthly evaluations. Some of these tests are "Finger-Plate" cultures, Rinse Test, Swab test, etc. The "Finger-Plate" culture is used to determine adequate handwashing. The other tests mentioned are used for equipment.

"In-House" Sanitation Inspection

There are procedures to follow when conducting an "in-house" sanitation inspection. These procedures will vary depending on what base you are assigned to. The dietitian or diet therapy supervisor at your base develops operating instruction to ensure the cleanliness of Medical Foodservice at all times. What will be discussed now is one way that a sanitation self-inspection can be done. It is important to remember that our "in-house" sanitation will help us to pass the formal inspection conducted by Environmental Health personnel.

PROCEDURES

1. A weekly sanitation self inspection will be conducted using AF Form 977, Food Facility Sanitation Checklist or locally developed form.

2. Areas to be inspected are:

   a. Main Dining Room - to include the serving line and dining area itself.

   b. Production area - to include the main kitchen, pots and pans area, salad preparation area, Dishwashing room, bakery, storerooms, and main supply room.

   c. Patient tray service area - to include food carts and mobile hot serving units.

   All of the above areas must be inspected for compliance with AFR 163-8, Control of Food Borne Disease, (i.e. food covered and dated). In general we are concerned with the overall sanitation, cleanliness and general appearance of the facility.

3. This inspection will be completed by a Dietitian, when one is assigned, the NCOIC, shift leader, or other designated representative; copies are made and distributed to supervisory personnel. One copy may also be posted to the bulletin board.

4. Supervisors must then ensure correction of any noted discrepancies in their area of responsiblility within 24 hours.

FOOD FACILITY SANITATION CHECK LIST

FACILITY OR AIRCRAFT/OPERATIONAL UNIT	BUILDING/AIRCRAFT NO	DATE EVALUATED	TIME

ITEMS EVALUATED	NON-COMPLIANCE	DATE CORRECTED
1 FOOD HANDLERS		
A HEALTH CERTIFICATES		
B PERSONAL HYGIENE		
C TRAINING CERTIFICATES		
D EXAMINATION BY SUPERVISORS		
2 FACILITIES AND EQUIPMENT		
A DESIGN AND CONSTRUCTION		
B VENTILATION		
C FLOORS		
D INSECT AND RODENT CONTROL		
E PREPARATION SURFACES		
F UTENSIL STORAGE		
G HAND WASHING FACILITIES		
H MOP AND BROOM RACK		
I OUTSIDE AREA		
J EATING(S)		
3 FROM APPROVED SOURCES		
A FOOD		
B WATER/ICE		
4 STORAGE TECHNIQUE		
A REFRIGERATORS		
B FREEZERS		
C VEGETABLES		
D BREAD AND BAKERY PRODUCTS		
E MILK DISPENSERS		
F DRY STORAGE		
G NON-FOOD		
H CLEAN EQUIPMENT		
I VENDING MACHINES		

ITEMS EVALUATED	NON-COMPLIANCE	DATE CORRECTED
5 PREPARATION TECHNIQUE		
A SERVING LINE *(Temperature)*		
B POTENTIALLY HAZARDOUS FOODS		
C SANDWICHES		
D GREEN VEGETABLES		
E FROZEN FOOD		
F LEFT-OVER FOODS		
G DISHES AND UTENSILS		
H HANDLING PROCEDURES		
6 WASHING AND SANITIZING		
A PRE-WASH		
B WASH *(Temperature)*		
C RINSE *(Temperature)*		
D SANITIZING *(Temperature or Chemical)*		
E LARGE EQUIPMENT *(Pots, Pans, etc.)*		
F AIRCRAFT WATER AND COFFEE CONTAINERS		
G OTHER FOOD CONTACT SURFACES		
H VENDING MACHINES		
7 FACILITY CLEANLINESS		
A GARBAGE STANDS/DUMPSTERS		
B GREASE INTERCEPTORS		
C AIRCRAFT REFUSE HANDLING		
8 OTHER		

REMARKS AND RECOMMENDATIONS *(Use reverse, if necessary)*

SATISFACTORY		UNSATISFACTORY
SIGNATURE OF FOOD FACILITY REPRESENTATIVE		SIGNATURE OF EVALUATOR

AF FORM 977 MAY 78

Figure 29

Government Printing Office: 1980—310-971/4071

FOR TRAINING PURPOSES ONLY

INTRODUCTION

One of the main reasons for our job as diet therapy specialists is the feeding/caring of patients. If it were not for the special needs of persons who are sick or need help in the planning, serving and preparation of a therapeutic diet, we would not have a job. Patient tray service is one of the ways we serve food to the patients, the other way is to serve ambulatory patients in the dining room. Patient tray service (PTS) is a job many of you will be doing when you arrive at your first base. PTS is a critical job because of the accuracy required when making trays to serve to patients who can not come to the dining room to eat. If patients eat in the dining room they select. On PTS, the patients tell you what they want by means of a tray identification slip (selective menu). PTS is the key to pleasing patients who eat on the nursing unit, for the tray represents the people of medical foodservice. Do You Care?

PATIENT TRAY SERVICE

INFORMATION

Types of Patient Tray Service

The methods of serving trays to patients and distributing these trays to patient wards can vary in different hospitals. Some civilian hospitals use a "decentralized tray service" in which food is sent to the patient wards in bulk. On the wards, food portions are served on individual trays for delivery to the patient. Some food, such as coffee, toast, and eggs are actually prepared on the wards.

Most Air Force hospitals use a "centralized tray service" which means that trays are completely prepared and assembled in the main kitchen of the hospital. In centralized tray service, there are three individual patient tray systems used. The Hot Tray-Cold Tray system, Insulated stacking tray system and the Heated base with pellet enclosed system. Because all three patient tray systems require the food to be prepared and assembled on the trays in the main kitchen of the hospital, the following basic procedures will be used when operating a centralized tray service.

Tray Systems: The patient tray service system will depend on the size of the facility. The following information will help you become more familiar with the various types of tray systems in centralized tray service.

1. Hot Tray-Cold Tray System

Those facilities of less than 200 beds use hot and cold tray cart systems. Figure 30 illustrates the hot tray-cold tray system. In this example, the tray to the left holds all cold food items, such as fruit juice, salad, dessert, milk, condiments, bread, and butter. The tray to the right holds all hot food items such as soup, meat, potatoes, vegetables, beverage cup, etc. In the kitchen, all cold food items are loaded on the tray to left, prior to loading the hot food items on the right side. The top left tray matches the top right tray and is so combined on the ward. Trays are checked for correctness before they are delivered to the patient.

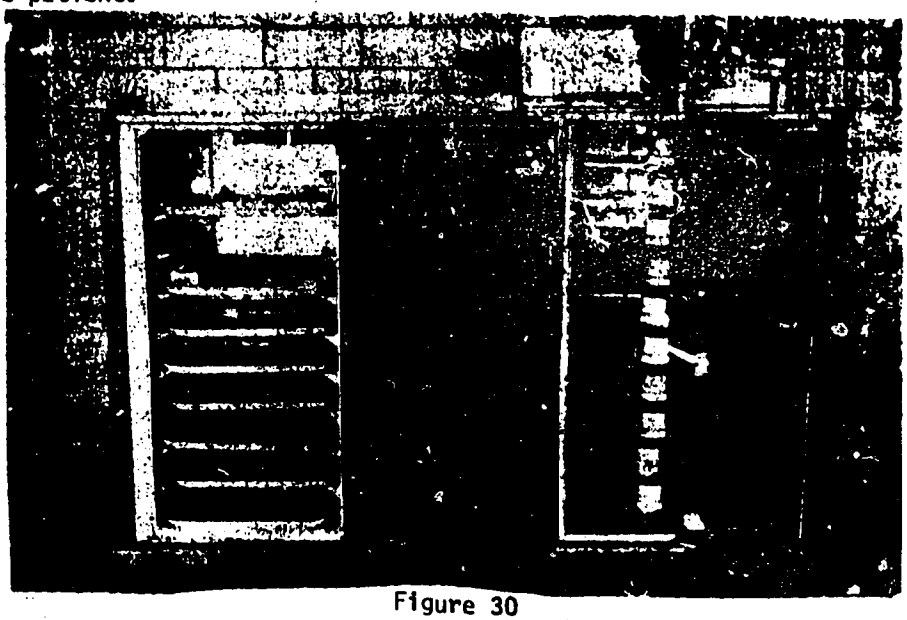


Figure 30

2. Conveyor Belt System. (Unitized Base or Heated Base with Pellet Enclosed)

The unitized base tray assembly system is another method of keeping food hot. This system is used in hospitals over 200 beds. The patient's tray is completely assembled in the kitchen and will be checked for accuracy by a diet therapy specialist, supervisor or dietitian. The unitized base is heated, then placed on a tray. The dish is then placed on top of the base and a domed lid is then placed over the dish.

3. Insulated Stacking Tay System. (Aladdin System)

This system is used when the number of meals to be served is small (usually less than 25 beds). Medical Food Service is supported by Base Food Service in this system in that we receive our meals from them. Disposable dishes are used with this system. These trays have openings in which the disposable dishes are inserted. The cover for the tray also has openings so that when placed on top of the tray the coffee cup, salad bowls and other items fit into those openings.

SAMPLE PATIENT TRAY SERVICE
(FOR LARGE HOSPITALS)

1. Dining packets and silverware.
2. Patient trays with covers.
3. Unitized base.
4. Hot food server, regular foods.
5. Heated plates in electric lowerators.
6. Salads and desserts.
7. Hot food server, diet foods.
8. Heated plates in electric lowerators.
9. Ice cream.
10. Toast, breads and butters.
11. Dish dispenser.
12. Milk and juice .
13. Beverages.
14. Cup and saucer dispenser.
15. Checker.
16. Dome lids dispenser.
17. Food cart.

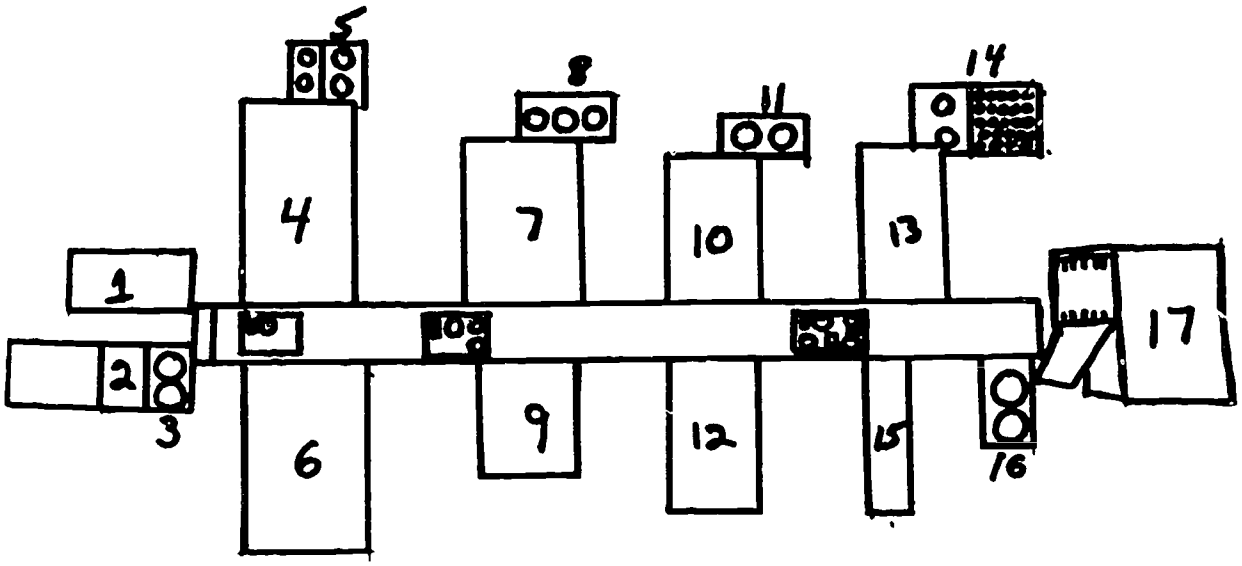


Figure 31

ORGANIZE FOOD AND SUPPLIES FOR TRAY ASSEMBLY

As you already know, there are many different systems used to deliver food to the nursing unit. Keeping this in mind, there are many ways to complete the procedures for PTS. Many bases have operating instructions that explain the procedures to set up and run PTS. We will explain a general way that may be used with the unitized base system. This system is similar to that at Sheppard Regional Hospital.

The PTS we will discuss has four positions: Starter, cold side, hot side and checker/loader. Each one has responsibilities and procedures to follow.

THE STARTER

The starter is responsible for gathering and placing the following items on the PTS line:

Dining packets
Silverware
Tray mats
Tea and Cocoa
Tray identification slips
Unitized base

Each of these items is strategicaliy placed to minimize movement and increase efficiency.

COLD SIDE

The cold side in this system is very involved. Therefore it is important to be properly organized to complete the job quickly and accurately. The person working the cold side is responsible for gathering and placing the following:

Regular and diet salad dressings
Desserts
Fruit juices
Individually wrapped breads
Diet margarines
Milk
Iced tea, etc.

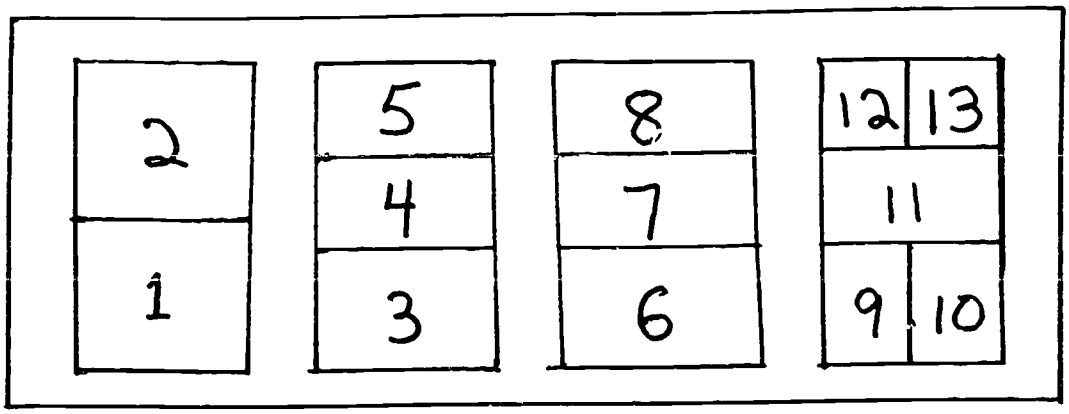
When organizing these foods on the PTS line, the responsible individual will locate them according to frequency of use.

HOT SIDE

Responsible for gathering and placing:

AF 2486, Diet Worksheet
All hot therapeutic foods listed on the AF Form 2486.
All hot regular foods as indicated on AF Form 679, Cooks worksheet or regular menu.

Again, the foods are located in a specific arrangement for easy access. An example is shown in Figure 32.



FIGURE

1. Non select regular meat
2. Select regular meat
3. Non select regular potato
4. Select regular potato
5. Diet meats preportioned wrapped and labeled
6. Non selected regular vegetable
7. Select regular vegetable
8. Diet potato
9. Regular gravy
10. Diet gravy
11. Diet vegetable
12. Regular soup
13. Full liquid soup

CHECKER (LOADER)

This person has a critical job. In addition to placing the completely assembled tray in the food cart, this person must check the tray for accuracy and appearance. It is at this point, that we have our last chance to examine the tray before it is served to the patient. This is perhaps the most critical job on the entire PTS line. In order to check the trays for accuracy, the checker uses a regular menu as well as the therapeutic worksheets.

We would be remiss if we didn't say something concerning the importance of starting the PTS on time. If you are responsible for any function on the PTS line, you must ensure that the task is completed in time to allow the line to start at pre-established times. Patients expect their meals at approximately the same time everyday. If you do not get your job done in time to allow the tray line to start on time, you may disrupt the schedule of the entire operation.

Food Temperatures

For the best tasting food that is free of food-borne disease, optimum temperatures must be maintained during holding and serving. AFR 163-8, Control of Food Illnesses, gives proper temperatures that foods should be served. Use of the pocket dial thermometer will help to maintain optimum temperatures. Additionally, plates used to serve hot foods are heated in electric lowerators.

To check the effectiveness of the delivery system used in patient tray service, sample trays should periodically be put on a food cart, sent to the inpatient unit and temperatures of food taken. Use AF Form 2582, Food Temperature Chart, to record the temperature of foods. See Figure 33.

FOOD TEMPERATURE CHART

☐ BREAKFAST ☐ DINNER ☐ SUPPER

	FOOD ITEM	MENU ITEM	OPTIMUM TEMPERATURE (°F)	TEMPERATURES (Circle hot foods under 140° F)				
				TRAY ASSEMBLY		NURSING UNIT	MAIN DINING ROOM	STAFF DINING ROOM
				FIRST TRAY	LAST TRAY	LAST TRAY		
BREAKFAST	JUICE		40 - 45					
	FRUIT		40 - 45					
	HOT CEREAL		155 – 165					
	EGGS		155 – 165					
	OMELET		155 – 165					
	MEATS		155 – 165					
			155 – 165					
			155 – 165					
	PANCAKE		140 – 150					
	FRENCH TOAST		140 – 150					
	SYRUP		140 – 150					
	MILK		40 - 45					
	COFFEE		175 – 185					
DINNER OR SUPPER	SOUP		165 – 175					
	MEAT		140 – 160					
			140 – 160					
			140 – 160					
			140 – 160					
	POTATOES		165 – 175					
			165 – 175					
	VEGETABLES		140 – 160					
			140 – 160					
	SALAD		40 - 45					
			40 - 45					
	SALAD DRESSING		40 - 45					
	DESSERT		40 - 45					
			40 - 45					
	MILK		40 - 45					
	COFFEE		175 – 185					
			TIME					
			INITIALS					

AF FORM 2582 MAY 76 PREVIOUS EDITION WILL BE USED. 84 ☆ U.S. G.P.O. 1976-621-924/9149

Figure 33

Select Food Items Using Menus and Worksheets

Now that everything on the PTS line is set up and organized it is now time to start preparing trays. The starter starts the trays by selecting the items listed on the tray identification slip. As the tray proceeds down the tray line, you will look at the tray identification slip and serve the proper foods (i.e. 3 oz F/C meat). You would then take 3 oz of F/C meat from the pan containing the meat and place it on the plate. You would continue to do this procedure for every item on the slip.

Position Food Items on Patients' Tray

The appearance of the patient's tray is of the utmost importance. If the total appearance of the tray is unattractive, the patient will not be as likely to accept his/her diet. Therefore the china, glassware, and silverware should be placed in a convenient, attractive and logical manner on the tray. The tray that is arranged haphazardly indicates poor food service. Everything on the tray-glasses, silverware, china- must be sparkling clean, China that is chipped or cracked must NEVER be used.

Food portions should be attractively served. Garnished food makes the diet more acceptable to the patient. Food portions that are too large are unattractive. Spilled liquids or sloppy serving of food is INEXCUSABLE.

The procedure used to position food items will vary with the system used. Figure 34 will show you one way that it is done.

1. Salad and dressing
2. Bread and butter
3. Dessert
4. Milk
5. Beverage
6. Coffee, tea or hot cocoa
7. Tray identification slip
8. Dining packet and silverware
9. Hot food with entree facing the patient and vegetable in a bowl placed on plate.

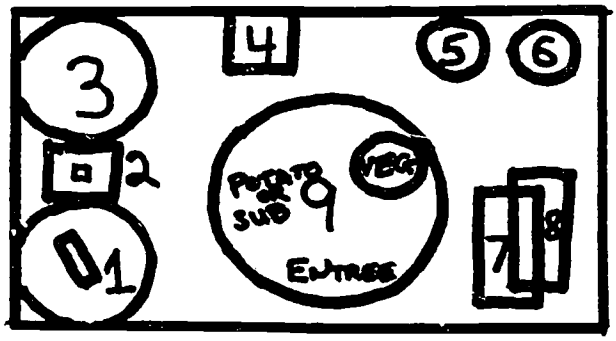


Figure 34

Check Patient Trays for Tray Identification, Accuracy of Food Items, and Appearance

As patient trays are prepared in the medical food service department for service to nonambulatory patients on the hospital wards, there are several items that must be checked so that the food trays are nutritionally, medically and esthetically correct. Some of these are:

a. Check that a tray identification slip has been prepared for every patient who is to receive a meal tray.

b. Check that the tray identification slip is accurate so that the patient receives the correct diet.

c. As trays are loaded, check the tray identification slips against the modified diet menu so that the correct food items are used to meet the requirements of the diet.

d. Position the food items and utensils on the plates and tray in an attractive and logical, planned manner. Again use Figure 34.

Load Patient Trays Into Food Carts

After each tray is completed it is loaded in the food cart. As soon as the last tray is loaded, the food cart is taken directly to the nursing unit. The responsibility of the Diet Therapy Specialists is to deliver the food carts to the patient wards. From this point, ward personnel deliver trays to the patient's bedside. Diet therapy personnel never deliver patient's tray to the bedside except in emergency situations. At the end of the meal, ward personnel collect trays from each bedside, return them to the food cart, and diet therapy personnel return the cart to the main kitchen for disassembly and cleaning.

Unload and Clean Patient Food Carts and Equipment

After food carts are returned to the kitchen, the soiled dishes are unloaded near the dishwashing machine to reduce transportation of the soiled items. The interior of the carts are cleaned thoroughly. Cleaning of the carts must be done immediately following each meal. Even the smallest particles of food must be removed; otherwise the carts become a haven for bacteria and insects. After cleaning, the carts are moved to the area of the kitchen where they are stored.

When you begin to disassemble the patient tray assembly line you must first consider what to do with leftover foods. Usually the extra food is either used on the main serving line or transformed into another menu item to be used later during the day. Leftover food will be kept to a minimum. It should be used within a 24 hour period. Such food requires immediate refrigeration and adequate reheating before being served again. After leftovers have been reheated and served, they should not be served again.

All equipment used on the patient assembly line must be thoroughly cleaned following each meal. If the tray assembly line is mobile, it is sometimes moved to a cleaning area. If the equipment is stationary, it is cleaned in position. Mobile equipment must be returned to its proper location on the assembly line for use the following meal. All inserts for both types of lines are removed and cleaned either in the pot-and-pan cleaning area or through the dish machine. All utensils are cleaned thoroughly. The entire assembly line is washed and cleaned, the floors swept and mopped.

Assemble Isolation Trays

For patients in isolation, special precautions are used to protect the patient and the rest of the hospital staff. These patients have an infection or communicable disease that must be contained; if not, it could be spread to other patients or the hospital staff. All personnel who enter the patient's room must take special precautions to prevent the spread of the infection. Medical Food Service Personnel should never enter rooms marked "isolation". This will prevent the possibility of cross-contamination (transferring a communicable disease from one ward to another). Disposable tableware is used for serving ALL foods and beverages, including disposable dishes, glasses, cups, silverware, trays, etc. These are stacked and burned after use by the patient, they are never returned to the kitchen.

If an isolation tray is accidentally placed on the food cart, the food cart is sterilized and quarantined for 24 hours. When permanent dishes and trays are given to an isolation patient by mistake nursing service decontaminates the items using the appropriate method for the disease. The decontaminated items are then returned to medical food service.

Reverse isolation is used for the patient that is not infected but highly susceptable to infection. An example of this would be a patient with second and third degree burns covering a large percent of the body. The burned surface area greatly increases the risk of infection. All personnel entering the room will be required to wear a gown, mask, and glvoes. As in the regular isolation patients sterile trays. plates, and cups, and plastic cutlery will also be used. Personnel from the medical food service will

not enter the room under any circumstances. These trays do not need to be stacked and burned when the patient is finished with the meal because the patient is not carrying a communicable disease that may be transmitted to others. Remember - the reverse isolation technique was performed to protect the patient from infection that could be carried to the patient by others.

EXERCISE 15

QUESTIONS

1. Explain what we mean by centralized tray service.

2. Explain what we mean by decentralized tray service.

3. Give two examples of foods that must be prewrapped to prevent drying out in the food carts: _____ and _____

4. Why are some foods preportioned on the patient assembly line?

5. Who is responsible for delivering food carts from the kitchen to the hospital wards?

6. Who is responsible for final assembly of trays on the ward?

7. Who is responsible for delivery of the tray to the patient's bedside?

8. Who is responsible for returning the food cart to the kitchen.

9. Why is it important that food carts be cleaned thoroughly at the end of each meal?

10. What are the 3 most commonly used patient tray service systems and explain each?

11. Define isolation.

12. Define reverse isolation.

13. List the procedures to follow if an isolation tray is accidentally placed back on the food cart after being served to the patient.

EXERCISE 14

QUESTIONS

1. Who will develop operating instructions for sanitation self-inspection?

2. List three areas that are inspected during the sanitation inspection.

PERSONAL SANITATION

Read AFR 163-8, P. 11-12 paragraph 3-2, 3-4, 3-5, and 3-6, then complete the following questions.

1. When is it necessary for foodhandlers to wash hands?
2. What kind of jewelry may be worn when preparing and serving food?
3. What are the standards for fingernails?
4. What must be done if the foodhandler has and infectious disease?

EXERCISE # 13

QUESTIONS:

1. What is the purpose of AF Form 2503, Medical Food Service Patient Evaluation?

2. How often should AF Form 2503 be distributed?

3. Who reviews AF Form 2504, Medical Food Service Patron Evaluation?

4. How are the AF Forms distributed?

EXERCISE 12

QUESTIONS

1. What is public property?

2. Who can be appointed a property custodian?

3. Who appoints the property custodian?

4. How are transfers of equipment from one property custodian to another done?

5. What is property accountability?

EXERCISE 11

1. Which is an AFOSH standard concerning fire extinguishers?

   a. Must be kept fully charged and in their designated places.
   b. Cartons or other combustibles must be separated by at least two feet from light bulbs.
   c. Must not be obstructed or obscured from view.

2. List three safety standards used in dry storage.

   a.

   b.

   c.

3. Which is <u>not</u> an AFOSH standard concerning walk-in refrigerators and freezers?

   a. Storage racks must be in a safe condition free from broken or bent shelves.
   b. Exhaust fans must be operated at all times.
   c. Heavy items must be stored on lower shelves and lighter itmes on higher shelves.

4. When must exhaust fans be operating?

5. List the six AFOSH standards concerning the dishwashing area?

   a.

   b.

   c.

   d.

   e.

   f.

6. When should nonskid shoes be used?

7. List two AFOSH standards concerning walking and working surfaces?

   a.

   b.

8. What type of wax must be used on the floor in the serving area?

EXERCISE 10

1. The last nine numbers of the National Stock Number are called the _____

_____

2. The first four numbers of the National Stock Number are called_____

_____

3. Which part of the National Stock Number uniquely identifies a specific item?

4. Define "supplies" -

5. Define "standard item" -

6. Define "nonstandard item" -

EXERCISE 9

1. Normally, the change fund which is maintained in the Medical Food Service Department is limited to _____ _____.

2. How often should the money collected for meals be turned into the Medical Service Account office?

3. Who is responsible for the security of the Medical Food Service section?

4. What is the purpose of the robbery conduct briefing?

EXERCISE 8

1. What should diet therapy personnel ask the patient in order to determine if the patient understood the diet instructions?

   a. Eating habits

   b. Previous diet orders

   c. Food likes and dislikes

   d. Summarize the diet instruction

2. The SF 513, Diet Consultation Sheet, must be returned to the records section within _____hours.

   a. 24

   b. 36

   c. 48

   d. 72

3. Which of the following is a trait that an interviewer must have?

   a. Good listener

   b. Introverted Personality

   c. Ability to speak softly

   d. Ability to maintain eye control

4. One of the purposes of the patient interview is to

   a. Inform the patient of how he/she is doing

   b. Evaluate the acceptance of the diet

   c. Retrain the patient's ideas of hospital food service

   d. Gather information about the patient's eating habits

5. What consideration do you need <u>not</u> take into account when you go to the nursing unit for an interview?

   a. The patient's state of health

   b. Whether the patient is male or female

   c. The time of day

   [illegible] patient [illegible]

What section of the SF 513, Consultation Sheet, is filled out by the dietitian or the diet therapy ialist?

   a. Consultation report

   b. Reason for request

   c. Place of consultation

   d. Date of request

7. What factor need not be considered when doing a dietary consultation?

   a. Choosing a place where there will be few distractions

   b. Being prepared with paper and pencil

   c. Who will be making dietary progress notes

   d. Having [illegible]13, Consultation Sheet

8. Obtaining the patient's nutritional history is very helpful, for the Diet Therapy Specialist, in all of the following except

   a. Teaching the patients about their diet.

   b. Planning menus based on their nutritional background

   c. Determining the individual food habits of the patient

   d. Understanding the patient's entire medical background

9. What is the purpose of patient interviews?

10. Before you can give a patient a thorough diet instruction, you need to make a detailed nutritional history of the patient. What information would you need to include?

   a.

   b.

   c.

   d.

   e.

   f.

   g.

   h.

   i.

   j.

11. What form must be used by a physician to request a diet instruction?

12. This form must be completed within _____hours after the diet instruction is performed.

EXERCISE 7

1. Define Code of Ethics.

2. List five key principles of the medical profession's Code of Ethics as they affect the medical airmen.

   a.

   b.

   c.

   d.

   e.

3. In your own words,explain the responsibilities of the following personnel in relation to their treatment and care of patients.

   a. Physician

   b. Nurse

   c. Ward Personnel

   d. Administrative Personnel

   e. Medical Food Service Personnel

4. Explain in your own words the psychology that you would use in serving patients.

5. What effects will illness have on the acceptance of food by patients?

6. What personnel from medical food service ma ward rounds?

7. When is the best time to make rounds?

EXERCISE 6

1. Define Aeromedical Evacuation.

2. What does CTIM mean?

3. What information is included on MAC 449?

4. What are the advantages of preparing and loading all CTIMs at selected locations?

5. Why are checklist packaged in each CTIM?

6. Upon the request of a CTIM from AECC or ASF, what form would you use to record the diet order? _____How may copies would you make? _____

7. What information should be included on the label of a CTIM?

8. In your own words, explain why bite-size meat is used on CTIM meals.

9. Select one answer for the following questions?

   a. CTIM meals are always frozen/chilled.

   b. CTIM meals provide a hot/cold meal for patients in the aeromedical system.

   c. Sandwiches are/are not used in the CTIM system.

   d. CTIM meals are prepared in advance/to order.

10. Explain the types of packaging materials that should be used for CTIMs.

11. List the regulation that pertains to cooked therapeutic inflight meals.

QUESTIONS

1. Where could you find a wide variety of therapeutic recipes?

2. What are the advantages of using therapeutic recipes?

3. What is progressive cookery?

EXERCISE 4

1. Why are ward pantries inventoried?

2. What is AF Form 2579, Nourishment used for?

3. What two kinds of nourishments are ordered on AF Form 2568, Nourishment request?

4. Explain the process by which specialized nourishments (those not already part of the meal pattern) are ordered.

5. What is the purpose of AF Form 2568, Nourishment Request?

6. When would AF Form 2579, Nourishment, be used?

EXERCISE 3

1. The mission of the USAF Medical Service is to provid edical support necessary to_____ of personnel in the Air Force.

2. Match each Medical facility in Column A with the correct function in column B by filling in the letter in each blank.

Column A	Column B
a. Clinic	_____1. Provides the widest range of specialized and consultative support for all medical facilities within the area.
b. Hospital	_____2. Provides consultant services and specialized clinical support for a specific portion of an area.
c. Regional Hospital	_____3. Provides outpatient service, inpatient care including diagnostic and therapeutic services, and the necessary supporting services to perform the assigned mission.
d. Area Medical Center	_____4. Provides outpatient medical service for nonhospital-type ambulatory patients

3. Define:

a. Fixed Medical Treatment Facility -

b. Non Fixed -

4. Correlate the grade and skill progression of the 926X0 speciality.

5. List four functions of the Medical Food Service Department.

a.

b.

c.

d.

6. Who may be assigned as Medical Food Service Officer?

7. T or F Two functions of the adminstrative office are admission and disposition of patients and administrative control of beds.

8. Define: Dietitian -

EXERCISE 2

QUESTIONS AND PROBLEMS

1. Define food:

2. List three functions of food in the body:

   a.

   b.

   c.

3. List six classes of nutrients:

   a. d.

   b. e.

   c. f.

4. Proteins are made up of simple substances called _____

_____

5. Describe the following - give two examples of each:

   a. Complete proteins

   b. Partially complete proteins

   c. Incomplete proteins

6. What is an "essential" amino acid?

7. List five functions of protein.

   a.

   b.

   c.

   d.

   e.

8. The minimum adult daily requirement for protein is now _____

_____

9. The major source of energy in the diet _____

Why? _____

_____

_____

10. List five sources of carbohydrate:

    a.

    b.

    c.

    d.

    e.

11. List four functions of carbohydrates in the body.

    a.

    b.

    c.

    d.

12. Identify the two classifications of fats.

    a.

    b.

13. List five functions of fat in the body.

    a.

    b.

    c.

    d.

    e.

14. Define visible fats and give examples_____

_____

15. Define vitamin:_____

_____

_____

16. What are the two classifications of vitamins? Define each.

    a.

    b.

17. Define minerals. _____

_____

_____

18. How are minerals classified? Define each.

a.

b.

c.

19. Match the nutrients in Column A with their functions in Column B.

Column A	Column B
a. _____Vitamin D	(1) Prevents scurvy
b. _____Fats	(2) Regulates body temperature
c. _____Niacin	(3) Helps adapt eyes from light to darkness
d. _____Water	(4) Oxygen Vehicle, carries oxygen to body cells
e. _____ Riboflavin	(5) Concentrated energy
f. _____ Vitamin A	(6) Builds and replaces body tissues
g. _____ Protein	(7) Builds strong bones and teeth
h. _____ Iron	(8) Aids in emotional and nervous system stability
i. _____ Calcium	(9) Quick energy
j. _____ Thiamine	(10) Deficiency causes cracking at corner of mouth
k. _____ Vitamin C	(11) Helps prevent dermatitis
l. _____ Carbohydrate	(12) To help the body to use calcium

20. Define fiber

21. What is the function of fiber in the diet?

22. List six sources of fiber in the diet.

a.

b.

c.

d.

e.

f.

23. List three functions of water in the body.

a.

b.

c.

EXERCISE 1

1. Define the term "diet"

2. List the Basic Four Food Groups

3. List the amounts of each of the following foods to be included in the daily diet as indicated.

	Adults	Teenagers	Children
Milk	_____	_____	_____
Meat	_____	_____	_____
Bread and Cereal	_____	_____	_____
Fruits and Vegetables	_____	_____	_____

4. Define energy.

5. Why does the body require energy?

6. If you ingest a caloric intake greater than the body's energy requirement, would you lose or gain weight?

7. List five involuntary body functions requiring energy.

   a.

   b.

   c.

   d.

   e.

8. One calorie is the amount of heat required to

9. One gram of pure:

   Carbohydrate yields: _____calories

   Protein yields: _____calories

   Fat yields: _____ _____calories

10. BMR is the abbreviation for:

    Define BMR:

11. List seven factors that influence the BMR.

    a.

    b.

    c.

    d.

    e.

    f.

    g.

12. List four factors which influence the total energy requirements of the body.

    a.

    b.

    c.

    d.

Technical Training

Diet Therapy Specialist

MEDICAL FOOD SERVICE MANAGEMENT, PRODUCTION, AND SERVICE

August 1984

SCHOOL OF HEALTH CARE SCIENCES, USAF
Department of Biomedical Sciences
Sheppard Air Force Base, Texas 76311

Designed For ATC Course Use RGL: 10.16

DO NOT USE ON THE JOB

Department of Biomedicial Sciences
School of Health Care Sciences, USAF
Sheppard Air Force Base, Texas 76311

SW J3ABR92630-001-II-1
August 1984

MEDICAL FOOD SERVICE MANAGEMENT, PRODUCTION, AND SERVICE

OBJECTIVES

After completing this Study Guide (SG) you will be able to

1. Given a list of Standard Air Force publications by number or title and AFR 0-2, locate information, nine (9) of fourteen (14) must be correct.

2. Identify facts concerning requests for maintenance of equipment and physical plant with 80 percent accuracy.

3. Identify facts concerning the Medical Food Service war mobilization and disaster contingency plans with 80 percent accuracy.

4. Identify facts concerning the development of regular and therapuetic menus with 80 percent accuracy.

5. Given AF Form 2577 and 2578, identify facts concerning work scheduling with 80 percent accuracy.

6. Given AF Form 287 and a list of specific subsistence items, order subsistence with no instructor assists.

7. Given a completed AF Form 287 and specific subsistence items, process subsistence with no more than one (1) instructor assist.

8. Given AF Form 287, 543, 1742, and subsistence items, account for subsistence with no more than two (2) instructor assists.

9. Given AF Form 544, 1087, 1339, and MALACS cash register receipt, complete AF Form 540, Ration Earnings Record, with no more than three (3) instructor assists.

10. Determine the procedures used to file medical food service forms with 80 percent accuracy.

AIR FORCE PUBLICATIONS

INTRODUCTION

How does an executive of a multi-million dollar business converse with his personnel on the other side of the country. With today's vast expansion in the field of communications, there are many ways. There is one mode however, that is most reliable and provides written documentation of the communication contents. The Air Force calls these written documents . . . Publications.

INFORMATION

USAF POLICIES ON MANAGING PUBLICATIONS

Commanders and staff at all organizational levels in the Air Force need to communicate written policies, procedures, and information to those under their jursidiction. The main ways to do this are through military letters, messages, and publications. Each of these ways has its purpose and advantages. Commanders and staff will find that a publication is the most reliable, effective, and economical way to communicate information that affects many people or organizations and that must be kept on hand for future reference.

A publication is drafted, coordinated, and reviewed prior to approval. Next it is printed and distributed. The publication is numbered, indexed, and filed in publication library files for convenient reference and use. An annual review of each publication determines if it is essential, current, and accurate. If a modification is necessary it is printed and distributed in the same way as the original publication, as a change, supplement, or revision. If a publication is no longer required it is rescinded.

This supersedes SW J3ABR92630 000-II-1, March 1984

A dynamic and progressive Air Force publications program; results in issuing effective Air Force publications at minimum cost; insures that publications meet high standards; insures careful planning of and programming for Air Force publications, including budgeting of printing funds where applicable; improves usability and readability of Air Force publications; insures that Air Force publications contain only essential, accurate, and current material; and reduces the number of publications used in the Air Force.

AIR FORCE PUBLICATIONS DEFINED

Air Force publications are defined as: Media through which the Secretary of the Air Force, Chief of Staff of the Air Force, and various echelon Commanders announce policies, prescribe procedures, and furnish instructions and information necessary to accomplish the Air Force mission.

CLASSES AND TYPES OF STANDARD AIR FORCE PUBLICATIONS

Departmental and Field Publications

Air Force publications are divided into two general classes (1) departmental and (2) field.

DEPARTMENTAL PUBLICATIONS. Departmental publications normally originate in HQ USAF. They may originate in a major command (MAJCOM) or separate operating agency (SOA) by direction of HQ USAF, if that extends beyond its command jurisdiction. The communications security publications issued by the USAF Security Service are an example.

FIELD PUBLICATIONS. Field publications originate at MAJCOM or SOA level or below and apply to all units or activities under the jurisdiction of the issuing headquarters or unit.

Types of Standard Publications and Their Uses

Within two general classes of publications listed above are standard publications, such as regulations, manuals, pamphlets, numbered letters, operating instructions,supplements, bulletins, staff digests, and visual aids. These may be either at the departmental or field level. The purpose and use of each type is explained below.

REGULATIONS are used to announce policies, assign responsibilities, direct actions, and prescribe procedures. Regulations are normally permanent directives. For example, a regulation is considered permanent if in effect for 18 months or more. Regulations may contain an expiration date 18 months or more after the date of issuance. Those of a temporary nature may contain an expiration date--not later than 18 months from date of publication.

MANUALS are used for the same purpose as regulations and are often identical to them in appearance, volume, scope, and applicability. Because they have no unique characteristics which distinguish them from regulations, manuals are redesignated as regulations as they are revised.

PAMPHLETS are handbooks, booklets, or brochures containing informative and instructional rather than directive material. They are usually issued as a brochure and may be written in an informal style to create and maintain reader interest. They are permanent in nature but may contain an expiration date. (Paragraphs may or may not be numbered and titled. However, titles aid readability, serve as a frame of reference, and help break up the text).

OPERATING INSTRUCTIONS are used to announce policies and prescribe procedures:

SUPPLEMENTS are auxiliary publications that augment publications issued by higher headquarters. Each supplement bears the number of the basic publication it augments and is filed with the basic publication.

BULLETINS contain announcements, notices, and temporary instructions. Temporary direction material of no permanent reference value may also be included. Base bulletins and the weekly publications bulletin prescribed in AFM 7-1 are examples.

STAFF DIGESTS contain summaries of significant staff actions, important announcements, and special notices. They are used primarily to keep the commander and his senior staff officers advised of current matters that would not come to their attention through normal channels. A digest may be issued daily, weekly, or as required.

VISUAL AIDS are charts, posters, or graphic illustrations issued for display on walls, bulletin boards, and other suitable places. There are two kinds:

Permanent Visual Aids. Issued for explanatory or instructional purposes. An example would be a chart portraying military insignia. These aids are numbered and indexed the same as other publications.

Temporary Visual Aids (Posters). Issued for promotional or motivational purpose. A poster promoting the annual campaign to sell US savings bonds is an example. As a rule, their display period is limited to 30 days, never more than 90 days. An expiration date is printed in small type at the bottom of the visual aid as follows: "Expires (date)." These aids are not numbered, indexed, or retained in permanent record sets.

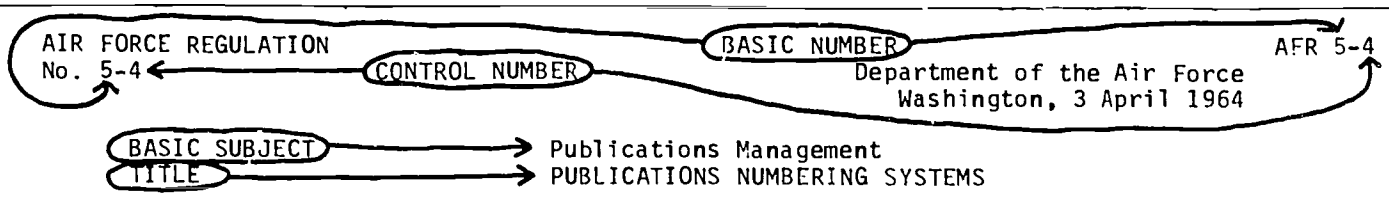
STANDARD OPERATING INSTRUCTION (SOI). Refers to an established or desired way of performing a function or task. It does not mean a standard publication. However, if an SOP applies generally throughout a command, headquarters staff office, etc., it should be published in a regulation or other appropriate standard publication.

USAF PUBLICATION FILE NUMBERING SYSTEM

Numbering of Publications

The three categories of Air Force publications are (1) standard, (2) specialized, and (3) periodicals, as defined in AFR 5-4. The system for numbering these categories vary as follows:

STANDARD PUBLICATIONS. Standard Publications are numbered in accordance with AFR 5-4, Publications Numbering System. Each publication is identified by a basic subject, basic number, control number, and title.



This regulation explains how Air Force publications are numbered. It mainly concerns publications management personnel, but it is of general interest to all personnel.

1. To simplify reference, handling, and control, a basic number is assigned to each basic subject. There are over 100 basic numbers and subjects listed in AFR 5-4.

2. A control number preceded by a dash pinpoints identification of the publication.

3. The title is used to indicate the purpose of functions of the particular publication.

4. The basic subject heading identifies the subject series most closely related to the subject matter.

We can tell a great deal about AFR 5-4 from looking at the illustration on the previous page. First we know it is a department publication because of the AF in AFR. Secondly, we know that the type of publication is regulation because of the "R". Thirdly, we know that this is the fourth publication published in the 5 series because of the 5-4.

If, for example, the illustration had been TACR 5-4, then we would know that this is a field publication and that in order to find out its title, we would have to check TAC Regulation 0-2, which is the numerical index for Tactical Air Command Publications We previously mentioned that there would be no duplication of information contained in publications. Therefore, TACR 5-4, would not be the same as AFR 5-4 and could, in many situations, apply to a completely different area than the AFR 5-4. If TAC, however, wants to clarify or add to AFR 5-4, it would then issue a supplement to this publication.

a. Each regulation, manual, pamphlet, operating instruction, and visual aid is identified with the basic subject series number most closely related to its subject matter, as described in the illustration. In addition to its basic number, each uch publication has a control number, preceded by a dash. For example, a regulation is 4, preceded by a dash. Hence, AFR 5-4. (Control numbers are assigned in sequence, beginning with number 1 for each series.)

NOTE: Pamphlets issued by HQ USAF are no longer assigned a middle number for grouping them under secondary numbers. Existing pamphlet numbers are converted to the two-number system as each pamphlet is revised.

b. Supplements are identified with their parent publication number, plus a supplement number. For example, ATC Supplement 1 to this regulation would be identified as AFR 5-4/ATC Sup 1; and so forth. A supplement of separate directive that implements a higher headquarters publication is always assigned the same basic subject series number as the publication it supplements or implements. Remember that supplements are always issued at an echelon of command that is subordinate to the command publishing the original publication.

c. Staff Digest and Bulletins are numbered in sequence, beginning with number 1 for each calendar year.

RECURRING PERIODICALS. Each issue of a recurring periodical is identified with the basic subject series number and a control number as explained for standard publications. (This number is shown in its masthead or on its cover.) For example, a HQ USAF recurring periodical is identified as AFRP 62-1; another recurring periodical in the same subject area is identified as AFRP 62-2; and so fourth. A TAC recurring periodical is identified as TACRP 62-1. In addition to the number of the recurring periodical, each issue is assigned in sequence, beginning with number 1 for each calendar year. For example, TACRP 62-1, January 1969, Number 1: TACRP 62-1, February 1969, Number 2; and so forth.

The Chief of Administration in charge of the Administrative Section Office (ASO) is responsible for supervising all official publications used in your medical facility. Each section must establish its publications requirements with this office. To do this, each section must furnish them with a list showing the publication number, title, justification, and number of the publications required. The ASO will review the list for essentiality and then consolidate the requirements from all sections. Then ASO orders each different publication. They use AF Form 764A to order the basic publication and its changes to date and to get the hospital included on the series distribution list at the Publication Distribution Office (PDO).

This makes sure that your department is included when new changes to publicatons come out. It is also used to change an established requirement. ASO will forward the original or the completed form to your PDO and keep the duplicate in their file.

DEPARTMENTAL INDEXES

Of the many departmental indexes of publications, there are three that are of primary importance to medical administrative personnel. These indexes are publications themselves:

AFR 0-2

AFR 0-2, the numerical and subjective index of standard publications and recurring periodicals, gives the most information about each publication, and will be your most frequently used index. This is a numerical listing of all Air Force Standard and Recurring Publications. AF regulations, AF manuals, AF pamphlets, and visual aids are listed numerically by subject series. On inspecting the current AFR 0-2 you were provided, you will find that it also has an alphabetical list of subject series.

The numerical listing is arranged by publication series. The series number is a reference to the subject of the publications. For example, all publications dealing with medical administration are numbered 168 and referred to as the 168 series. (See Figure 1)

In addition to the series number, each publication has a control number, preceded by a dash (example, 168-1, 168-2, etc.). Control numbers are assigned in sequence beginning with a number "1" for each series. There may be three types of publications (regulations, manuals, and pamphlets) assigned to each control number. Each of the three types will not always be assigned, but if all three are assigned, they will be listed regulations first, manuals second, and pamphlets third (example: R168-4 followed by M168-4, or R168-1 followed by P168-1 where there is no manual assigned control number 1).

Use of Publication Indexes (How to use the Indexes)

Suppose that you are due for a promotion in the near future and would like to look up the directive which covers promotions. You would look in AFR 0-2, alphabetical list. This index is alphabetical, but you would look under the general heading, "Enlisted Personnel", to find promotions. "Enlisted Personnel" is the heading for the 39 series. Turn to the 39 series in the 0-2 and see that "Promotion of Airmen" is to the right of "R39-29". This means that information on airmen promotion can be found in AFR 39-29.

AFR 0-9

AFR 0-9, the numerical index of forms, is useful in placing orders for forms. This index is divided into sections by type of form (Air Force, Department of Defense, Standard Forms, etc.) Each section gives a complete listing of forms available of that type, numerically within each category and alphabetically by title under functional code number. To use the index with its numerical arrangement, you must locate the information by the form's number. Adjacent to the form number will be listed the date of the form, an abbreviation of the type of construction, the form title, the unit of requisition, and the prescribing directive. The type of construction is how the form will be assembled (pad, folder, set, ect.). The unit of requisition specifies how you should order; example: A form constructed in a pad may be ordered by the number of copies needed. The prescribing directive is the publication that directs and explains the use of the form. (See Figure 2)

SUBJECT-SERIES LIST FOR AIR FORCE PUBLICATIONS

FIGURE 1

Number	Date	Unit of Rgn	AIR FORCE (AF) FORMS Title	Const/ Pkg	Func Code	Prescribing Directive
2440	Jul 80	CS	Void and Refund Record	CS	5200	AFR 145-1
2441	Jan 80	CS	Off-Line Voids	CS	5200	AFR 145-1
2442	Oct 75	CS	Precision Measurement Equipment Inspection Report	CS	4420	AFR 66-1V3,4
2443	Apr 74	CS	Shop Workload Summary	CS	4410	AFR 66-1V2,3,4
2445	Jan 79	CS	Document Control Register (LRA)	CS	5200	AFR 145-1
2446	Mar 76	CS	Schedule of Technician Availability	CS	4410	AFR 66-1V5
2447	Jun 72	CS	Telephone Trouble Log	PD/50	4410	AFR 66-1V5
2450	Jul 72	CS	Stratification Report of Stock Fund Secondary Items (LRA)	CS	4200	AFR 67-56
I 2451	Apr 79	CS	Financial Statement—Remission of Indebtedness (LRA)	CS	1820	AFM 177-373V2
2452	Sep 79	CD	Management Analysis Special Study Request	CS	3020	AFR 178-3
B 2453	Apr 76	CS	Tuberculosis Detection and Control Data (LRA)	CS	5412	AFR 161-29
2454	Feb 73	CS	Part II—Relative Priority of Other Requirements Initial FY ___ Operations Operating Budget (LRA)	CS	2100	AFM 172-1V2
2467	Jan 75	CD	Pest Control Historical Record (LRA)	CD	3910	AFR 91-21
2468	Apr 77	CS	Technical Inspection Computation	CS	4410	AFR 66-1V2
2470	Apr 80	CS	Item Record Change Addition	CS	5200	AFR 145-1
2471	Dec 78	CS	Automated Blanket Order Receiving System—New Vendor Header Record (LRA)	CS	5200	AFR 145-1
2472	Jan 79	CS	Operating Supply Consumption Record	CS	5200	AFR 145-1
2473	Nov 80	CS	Home of Selection Travel and Transportation Entitlements	CS	4350	AFR 75-25
2475	Apr 80	CS	Single Signature Key Issue Log	CS	4410	AFR 125-37
						AFR 66-1V3 &
2478	Mar 81	CS	Sodium Restricted (Pink) (3 way Perf)			AFR 66-5
2479	Apr 82	CS	Diabetic (Green) (3 way perf)	CS	5483	AFR 168-4
2480	Dec 81	CS	Diabetic (Green) (6 way perf)	CS	5483	AFR 168-4
2481	Jul 82	CS	Liquid (Yellow) (3 way perf)	CS	5483	AFR 168-4
2482	Apr 81	CS	Liquid (Yellow) (6 way perf)	CS	5483	AFR 168-4
2483	Oct 81	CS	Dental Soft—T&A Soft (Yellow) (3 way perf)	CS	5483	AFR 168-4
2484	Oct 79	CS	Dental Soft—T&A Soft (Yellow) (6 way perf)	CS	5483	AFR 168-4
2485	Aug 80	CS	Sodium Restricted (Pink) (6 way perf)	CS	5483	AFR 168-4
2486	Aug 80	CS	Diet Worksheet	CS	5483	AFR 168-4
2487	Mar 74	CS	Hyperlipoproteinemia Diet 2/Diet 4 (Blue) (3 way perf)	CS	5483	AFR 168-4
2488	May 82	CS	Hyperlipoproteinemia Diet 2/Diet 4 (Blue) (6 way perf)	CS	5483	AFR 168-4
2489	Aug 80	CS	Bland (Yellow) (3 way perf)	CS	5483	AFR 168-4
2490	Jan 80	CS	Bland (Yellow) (6 way perf)	CS	5483	AFR 168-4
2491	Apr 81	CS	Pediatric (Yellow) (3 way perf)	CS	5483	AFR 168-4
2492	Apr 81	CS	Pediatric (Yellow) (6 way perf)	CS	5483	AFR 168-4
2493	Aug 80	CS	Selective Menu-Soft-Bland Fiber Restricted (Yellow) (3 way perf)	CS	5483	AFR 168-4
2494	Nov 79	CS	Selective Menu-Soft-Bland 4 Fiber Restricted (Yellow) (6 way perf)	CS	5483	AFR 168-4
2495	Jan 75	CS	Breakfast Therapeutic Worksheet	CS	5483	AFR 168-4
2496	Mar 74	CS	Dinner/Supper Therapeutic Worksheet	CS	5483	AFR 168-4
2497	Oct 78	CS	Modified Fat (Blue) (3 way perf)	CS	5483	AFR 168-4
2498	Oct 79	CS	Modified Fat (Blue) (6 way perf)	CS	5483	AFR 168-4
2499	May 78	CS	Calorie Restricted (Green) (3 way perf)	CS	5483	AFR 168-4
2500	Jun 79	CS	Calorie Restricted (Green) (6 way perf)	CS	5483	AFR 168-4
2501	Mar 74	CS	Recipe	CS	5483	AFR 168-4
2502	Mar 74	CS	Soft, Bland, Fiber Restricted (non-Selective) (Yellow) (6 way perf)	CS	5483	AFR 168-4
2503	Jul 82	CS	Medical Food Service Patient Evaluation	CS	5483	AFR 168-4
2504	Sep 80	CS	Medical Food Service Patron Evaluation	CS	5483	AFR 168-4
• 2505	Oct 82	ST	Guest Registration	ST	3900	AFR 90-9
• 2506	Oct 82	ST	Reservation for Individuals	ST	3900	AFR 90-9
• 2507	Oct 82	ST	Reservation for Groups	ST	3900	AFR 90-9
2510	Jul 75	CS	Payroll Information Input Data	CS	0700	AFM 30-130V4
2511	Aug 82	CS	Mobility Schedule of Events	CS	3100	AFR 28-4
2512	Feb 81	CS	Mobility Schedule of Events—Aircraft Loading Schedule	CS	3100	AFR 28-4
2513	May 78	CS	Mobility Alert Information (LRA)	CS	3100	AFR 28-4
2514	May 78	CS	Deployment Load List	CS	3100	AFR 28-4
2515	May 78	CS	Ramp Coordinator Log	CS	3100	AFR 28-4
2516	May 78	CS	Troop Commander's Itinerary	CS	3100	AFR 28-4
2517	May 78	CS	Air Cargo Courier Log (LRA)	CS	3100	AFR 28-4
2518	May 78	CS	Deployment Packing List	CS	3100	AFR 28-4
2519	Aug 81	CS	• All Purpose Checklist	CS	3100	AFR 28-4
2520	Dec 78	CS	Repair Cycle Control Log	CS	4410	AFR 66-5
2521	Dec 78	CS	Turnaround Transaction Log	CS	4410	AFR 66-5
2522	Jul 82	LA	Military Working dog Notice (3 feet by 6 inches)	LA	5000	AFR 125-37
2523	Nov 81	LA	Installation Warning Sign (1 1/2 feet by 1 1/2 feet)	LA	5000	AFR 125-37

FIGURE 2

Types of Civilian Publications

a. Equipment and Supply Catalogs. These catalogs provide information concerning various products that civilian companies sell. They work basically the same as a Sears catalog. Medical Food Service orders these catalogs by writing directly to the company.

b. Nutrition Texts and Related Publications. These consist of the thousands of text books, pamphlets, journals, and newsletters devoted to the science of nutrition. The text book you are using in this course is only one of the many texts available on the market. Additionally, many companies and other private organizations market newsletters, pamphlets, and other periodicals which contain current information on various nutrition topics.

Most Medical Food Service operations will have many nutrition text books and newsletters available for reference. Although AFM 160-8, Diet Manual, is the most comprehensive diet manual in existence, you may have occasion to utilize additional references, to obtain information not contained in the Diet Manual. For instance, in studying for your WAPS test, you will find that many of the training references listed in your STS are civilian publications and text books.

LOCATING INFORMATION IN CIVILIAN PUBLICATIONS

Equipment and Supplies. If you are required to locate information from a commercial source you must first determine the name of the company that makes the particular item. After determining the name of the company that makes the item, you will research the catalog to obtain the information you want. Since each company's catalog will probably have a different format, you will have to scan the publication, check the table of contents or the index first. If you cannot find the required information, you will have to continue leafing through the publication until you have found what you are looking for.

If none of the companies carry a particular item, call the medical supply folks. They can at least put you on the right track. You may find that you will have to order additional catalogs to give you a wider variety of references.

Nutrition Texts. We have already covered the procedures for obtaining these references. Suppose you wanted to find extensive information on a particular vitamin. Your diet manual would not give you detailed information on this topic. Using the available references in medical food service or the medical library, you would find the appropriate text and use the table of contents and the index to help you find the information.

REPAIR AND MAINTENANCE OF EQUIPMENT AND FACILITY

INFORMATION

Service for maintenance of equipment or to the physical plant is provided by Civil Engineering Squadron, Medical Equipment Maintenance, and Plant Management.

The plan manager is responsible for the overall medical facility to include the interior and exterior areas. The plant manager coordinates with civil engineers for repair and maintenance of the physical plant and equipment. Physical plant includes building, loading docks, and parking lots. Request and procedures for repairs or maintenance are developed locally by the plant manager. Most of the maintenance needed in medical food service will be provided by the civil engineer section.

Procedures During Duty Hours:

Report malfunction to supervisor

Supervisor records malfunction in log book

Supervisor then reports malfunction to plant manager

Supervisor records a work order number in log book to incude time and date that he called plant management for the repair

Local policy will determine how to report equipment malfunctions or repairs to the physical plant at times other than normal duty hours. Normally Base Civil Engineer is available 24 hours a day seven days a week with personnel on standby after normal duty hours. The plant manager or supervisor on duty at the time can call them for repair of equipment or to the physical plant. If a malfunction is not taken care of in a reasonable length of time the plant manager should be notified.

DISASTER CONTINGENCY PLAN

INTRODUCTION

When someone hears the word "disaster", a nuclear attack immediately comes to mind. Actually, you are more likely to become involved in natural disasters (such as tornadoes, hurricanes, earthquakes, floods, or fires) before a nuclear disaster. Disasters are sudden, unforeseen misfortunes which produce a variety of injuries and loss of property. Since disasters are sudden and unforeseen, there is no method of predicting when or where one will occur. The causes of disasters are numerous, but they are grouped into two categories: (1) natural and (2) man-made. The causes of natural disasters are mentioned above. Man-made disasters are the result of either human error or the use of chemical, biological, or nuclear weapons. The types and severity of injuries depends on the cause of the disaster and this, in-turn determines the initial medical response to be made. Regardless of the cause, you, as a specialist, must have a knowledge of your responsibilities during a disaster situation. Your responsibilities at <u>your</u> hospital may differ somewhat from those of other students attending this class.

INFORMATION

The planning and operation of the USAF Disaster Preparedness Program is covered in AFM 355-1. This manual states basic Air Force policies, explains the scope and objectives, and assigns responsibilities for disaster preparedness planning and for operations under disaster conditions at all echelons of command. Basic policies, requirements and philosophy of AFM 355-1 are applicable Air Force - wide. Major commands may authorize variations in procedures as dictated by mission requirements. All Air Force commanders have an inherent responsibility to act promptly during attacks and disasters to maintain the capability to execute the primary USAF mission, save lives, alleviate human suffering, minimize damage, and support civil agencies in the execution of their responsibilities to protect the civilian population. Therefore, the mission of the USAF Disaster Preparedness Program is to protect Air Force resources from the effects of attack and disasters, to restore primary mission assets following attacks and disasters, and to fullfill the humanitarian disaster relief responsibilities of commanders.

Both your base and your stateside community have emergency action plans for a natural disaster. The Base Disaster Preparedness Operations Plan (Base OPLAN 355-1) outlines the operations and action to cope with ON/OFF base emergencies and disasters. As a Diet Therapy Specialist, you may have an important assignment in an emergency.

BASE LEVEL

Each base in the USAF has emergency operations plans which detail what every organization on base would do in the event of both natural and man-made disaster. Each organization on base, including the hospital, develops emergency contingency plans which are incorporated into the base master plan.

Medical Food Service develops disaster plans that are incorporated into the hospital plan which in-turn, becomes part of the base plan. As a Diet Therapist you may be involved in emergency operations. The operations may be in the form of an exercise or the real thing. If you think about the consequences of a disaster what would happen if:

A storm interrupted the power supply to the hospital?

The elevators break down and are not abailable for transporting food carts to the ward?

A tornado destroys the food service?

The Medical Food Service OPLAN 355-1, would outline the procedures to be followed in these instances.

WARTIME FEEDING

INTRODUCTION

You have probably heard of a "C" ration. The military is famous for "C" rations as a result of their appearance in many war movies. But did you know that everything you eat in the military is a ration? We have rations for peacetime as well as for wartime -- feeding personnel and patients in a combat zone will be much more difficult than feeding them in a peacetime hospital setting. Let's begin by defining the term "ration".

INFORMATION

Ration: The amount of food required to feed one person for one day.

You ate a ration if you ate three meals at the dining hall yesterday. We have many kinds of rations in the military. We will talk about the "A" and "B" rations for now. Let us start with an "A" ration:

"A" ration - This ration consists of perishable (fresh or frozen) and nonperishable (canned or packaged) items necessary to prepare the type of menus prescribed in AFR 146-17, United States Air Force Worldwide Menu, and the 31-day field feeding menu. Fresh or frozen items are the most desirable type of foods that can be served in the field. However, this type of food does require refrigeration and, unfortunately, refrigeration is not usually available in the field. If refrigeration is available, every effort should be made to obtain and use fresh and frozen food items, since their use greatly expands the menu and increases patron satisfaction. The food you eat in the dining hall is an "A" ration.

"3" ration - This ration consists of about 100 nonperishable items - mainly, canned and dehydrated - and is supplied in bulk. Hot meals furnishing about 4,000 calories per person, per day, are prepared using a 10-day cycle menu: Caloric content may be changed to meet requirements of varying climatic conditions or degree of physical activity of the troops, as determined by the local medical authority. AFR 146-8 contains a collection of recipes, menus, and issue factors that are used for preparing this ration. This ration is used when kitchen facilities, with the exception of refrigeration are available. In a combat zone, this ration would be served well to the rear of hostilities.

"BH" ration - This ration is a modification of the "B" ration. It consists of canned and dehydrated foods that are appropriate for the preparation of high protein, soft, bland, diabetics, calorie restricted, sodium restricted, and dental soft diets.

"BHL" ration - This is a further modification of the "B" ration in that it consists of canned and dehydrated bulk food items appropriate for preparation of high protein liquid, dental liquid, full liquid, clear liquid, and forced liquid diets.

Meal, ready-to-eat, individual (MRE) is designed for issue as the tactical situation dictates. It is issued in individual units as a meal, or in multiples of three as a complete ration. This ration is used in combat and other operational environments where no cooking facilities are available.

1. Its advantages are:

   a. Reduced weight

   b. Easier to carry with no sharp edges

   c. Easier to open no can opener required

   d. Pouches are disposable

   e. Can be eaten hot or cold, dry or rehydrated

   f. Longer self life

MREs have 12 different menus all containing 1200 calories per meal. All meals contain one meat component in retortable pouch thermostabilized or dehydrated; crackers; cheese, jelly, or peanut butter; dessert that could be wet fruit, dehydrated fruit, brownies, or fruitcake; other items depending on the menu such as freeze-dehydrated potato patty, cocoa beverage powder, etc.; and accessory packet. Candies are also included. Each meal furnishes about one-third of the daily minimum nutrient intake prescribed by regulations.

MEAL, READY-TO-EAT, INDIVIDUAL

Meals per case	12 individual
Weight per case	15 1/2 - 16 pounds
Weight per meal (less shipping case)	1 pound
Cube per case	0.80 cubic feet
Cube per meal	.067 cubic feet
Calories per meal	1200
Specification	33 - 74A
National stock number	8970-00-149-1094

(See Figure 3)

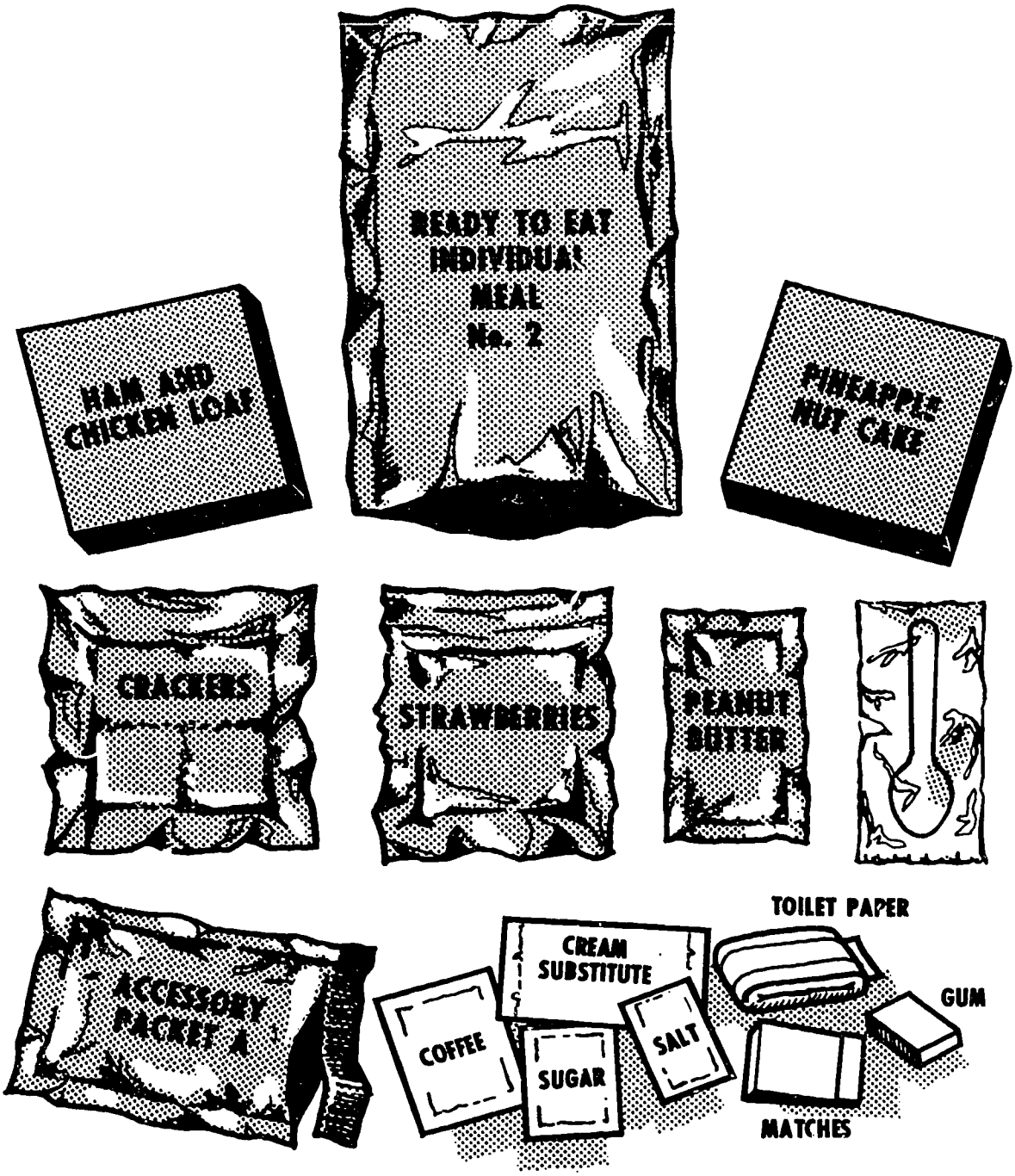
Medical food service will play a vital role in the event of war. Not only will we be manning state-side facilities and providing quality medical care as we presently do in peacetime, but we will also be tasked to provide a limited range of dietary services on the battlefield.

The area of hostilities will be divided into four echelons or zones. The first echelon will oe the "front line". The second echelon will be futher back. The third and fourth echelons will be still further back, (Diet Therapists will be assigned to the third and fourth echelons). In planning wartime contingency plans Air Force officials have to plan for the troops to be fed.

In the first two echelons, the MRE will be the ration served. Can you determine why? In the third and fourth echelons there will be more permanent facilities. Therefore, one would expect more food service capability. What rations would you expect to be served to patients and staff in these areas?

The "B" rations ("B" "BH" and "BHL") will be served in the third and fourth echelons because there will be cooking facilities with the possible exception of refrigeration, available. Conversely, the MRE will be available in the first two echelons because there will be no food service equipment on the front lines.

When you go to your first assignment, you will probably work in a relatively modern food service operation in a relatively modern hospital. You will have a wide variety of food service equipment available for you to perform your job. In this kind of environment it is easy to lose sight of the fact that the most important part of our mission is the capability to defend our nation. In the event of war, the Diet Therapy Specialist will play an important role in fulfilling that mission.



MEAL — READY TO EAT

FIGURE 3

MENU WRITING

INTRODUCTION

The importance of menu planning to the success of a medical food service operation cannot be overemphasized. Menu planning is largely influenced by the attitudes and abilities of the planner. This individual should recognize that the task is an important one requiring imagination, creative thinking, and a real interest in food.

Diet therapy personnel are required to plan and write menus. They are also required to monitor, modify or adjust menus that have already been written. The objective of an Air Force medical food service department is the production of high-quality foods that not only meet the nutritional needs of the patients and personnel but to see that these are provided within the value of the earned ration. The basis for accomplishing this objective is a well planned menu prepared by cooks following standardized recipes for the menu items listed. Although often more complex, the basic principles of meal planning in a hospital are the same as in other types of food services. The complexity of hospital food service evolved because for each service period (breakfast, lunch, and supper), foods must be provided for many kinds of diets, ranging from liquid to sodium, calorie restricted and bland.

It will become readily apparent that menu writing is an art. Menu writing is truly a task that will allow you to show your creativity and give you the satisfaction of knowing that you have contributed significantly to the overall operation of medical food service.

INFORMATION

MENU TERMS DEFINED

Before menu planning can be discussed, a few terms must be clearly understood. The following are definitions of some of these important terms:

1. Menu. To the patient and hospital staff, the menu is a list of foods to be served at a particular meal. To diet therapy personnel, the menu is also a blueprint for action to be taken while preparing the meal. From the menu each individual knows which foods to prepare. The menu is the basis for food production.

2. Regular menu. A listing of foods to be served to patients and staff who do not require any modifications to their diet. The regular menu is the basis for the preparation of the modified menu.

3. Therapeutic or modified diet menu. An adjustment of the regular menu to meet a specific dietary requirement or adjust the caloric level. Preparation of this menu is just as important as preparation of the regular menu. Using as many regular menu items as possible, and simply modifying them in preparation method will reduce the number of special items which must be prepared for each meal. These menus should be prepared with variety, the same as the regular menu.

4. Selective menu. A menu that offers a choice between two or more food items for each classification (entree, dessert, salad, etc.) on the menu. Selective menus may be offered for regular and for modified diets. By offering a choice, the number of special items needed is greatly reduced. When patients fill out the selective menu, diet personnel should check the menu for nutritional adequacy, particularly if the patient is to be in the hospital for an extended period of time. If the diet selected is nutritionally inadequate, this fact should be discussed with the patient by diet therapy personnel.

5. Cycle menu. Any of the menus above should be made into a cycle menu. The cycle menu is a series of daily regular and therapeutic menus designed for a specific period of time, such as 28 or 35 days, or any other combination suitable for your operation.

28 DAY CYCLE

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
1	2	3	4	5	6	7
8	9	10	etc			

Any cycle less than 28 days is too short because repetition of daily menus would be obvious. At the end of the specified period of time, the cycle menu repeats itself and starts over again with the first day. Menu planning, when you are serving three meals per day, twenty-one meals per week, ninety-plus meals per month, becomes a complicated process because you want to avoid the repetition which makes meals so monotonous. Well planned cycle menus, especially when planned for Fall, Winter, Spring, and Summer cycles will allow for seasonal availability of foods and will help keep the menus interesting. The cycle menus may be either selective or nonselective, but both require careful planning. Once they are established, the menus are a saving in time and labor in planning menus, cooks' worksheets, and subsistence orders.

Menu writing is the responsibility of the dietitian or diet therapy supervisor. AFM 168-4 chap 11, section E provides guidelines for writing menus for Air Force hospitals. Other basic materials required for writing menus are AFM 146-12, Standardized Recipes and AF Form 2580, Menu Planner and Analysis Worksheet.

EXTENDING MENUS FOR THERAPEUTIC DIETS

Once the regular menu has been planned, the work of "extending" the menu for modified diets begins. Whenever a food item from the regular menu cannot be used on a therapeutic diet, always consult AFM 160-8, Diet Manual, to determine what foods are allowed. Whenever the dietitian or diet therapy supervisor writes the therapeutic menu they always try to use as many regular foods as possible.

WORK DIRECTION FORMS

INTRODUCTION

Work Direction Forms are important management tools for Medical Food Service. Without them there might not be someone to wash dishes, cook or even make up patient trays. Every medical food service in the USAF uses some type of work direction form.

INFORMATION

The Medical Food Service Officer, Diet Therapy Supervisor or other specified individual uses AF 2578, Medical Food Service Work Schedule, to schedule the personnel assigned to Medical Food Service. The schedule is written for a period of three weeks or more and posted at least one week in advance.

Refer to Figure 4, the example of the schedule. Notice that the schedule shows all personnel assigned, hours of duty, and days off. If there are any changes to be made to the schedule, they will only be made by the appropriate supervisory personnel. The schedule is usually posted in a central location for all to see.

AF Form 2577, Medical Food Service Daily Work Assignment is another tool that is used to get the job done. The work schedule we talked about previously tells the workers what their duty schedule is. AF 2577 tells the workers what jobs they will be performing when they are scheduled for duty. The AF 2577 is completed by the Shift Leader on a daily basis. It is also posted in a central location. Figure 5, is an example of this form.

MEDICAL FOOD SERVICE WORK SCHEDULE

MONTH: 31 July -20 Aug 83

NAME	31 SUN	1 MON	2 TUES	3 WED	4 THUR	5 FRI	6 SAT	7 SUN	8 MON	9 TUES	10 WED	11 THUR	12 FRI	13 SAT	14 SUN	15 MON	16 TUES	17 WED	18 THUR	19 FRI	20 SAT
Msgt Jones	Off	0730 1630	0730 1630	0730 1630	0730 1630	0730 1630	Off	Off	0730 1630	0730 1630	0730 1630	0730 1630	0730 1630	Off	Off	0730 1630	0730 1630	0730 1630	0730 1630	0730 1630	Off
Tsgt Leonard	Off	0900 1800	0900 1800	0900 1800	0900 1800	0900 1800	Off	Off	0900 1800	0900 1800	0900 1800	0900 1800	0900 1800	Off	Off	0900 1800	0900 1800	0900 1800	0900 1800	0900 1800	Off
Ssgt Brown	Off	0500 1330	0500 1330	0500 1330	0500 1330	0500 1330	Off	Off	0500 1330	0500 1330	0500 1330	0500 1330	0500 1330	Off	Off	0500 1330	0500 1330	0500 1330	0500 1330	0500 1330	Off
Ssgt Baker	1030 1900	Off	Off	1030 1900	1030 1900	1030 1900	1030 1900	1030 1900	Off	Off	1030 1900	1030 1900	1030 1900	1030 1900	1030 1900	Off	Off	1030 1900	1030 1900	1030 1900	1030 1900
Ssgt Pujah	0500 1330	1030 1900	1030 1900	0930 1800	Off	Off	0500 1330	0500 1330	1030 1900	1030 1900	0930 1800	Off	Off	0500 1330	0500 1330	1030 1900	1030 1900	0930 1800	Off	Off	0500 1330
Amn Charron	Off	0500 1330	0500 1330	0500 1330	0500 1330	0500 1330	Off	Off	0500 1330	0500 1330	0500 1330	0500 1330	0500 1330	Off	Off	0500 1330	0500 1330	0500 1330	0500 1330	0500 1330	Off
SrA Sain	1030 1900	Off	Off	1030 1900	1030 1900	1030 1900	1030 1900	1030 1900	Off	Off	1030 1900	1030 1900	1030 1900	1030 1900	1030 1900	Off	Off	1030 1900	1030 1900	1030 1900	1030 1900
A1C Padgett	0500 1330	1030 1900	1030 1900	0930 1800	Off	Off	0500 1330	0500 1330	1030 1900	1030 1900	0930 1800	Off	Off	0500 1330	0500 1330	1030 1900	1030 1900	0930 1800	Off	Off	0500 1330
Mr. Hadorn	Off	0500 1330	0500 1330	0500 1330	0500 1330	0500 1330	Off	Off	0500 1330	0500 1330	0500 1330	0500 1330	0500 1330	Off	Off	0500 1330	0500 1330	0500 1330	0500 1330	0500 1330	Off
Mrs. Jackson	1030 1900	Off	Off	1030 1900	1030 1900	1030 1900	1030 1900	1030 1900	Off	Off	1030 1900	1030 1900	1030 1900	1030 1900	1030 1900	Off	Off	1030 1900	1030 1900	1030 1900	1030 1900
Mrs Shavers	0500 1330	1030 1900	1030 1900	0930 1800	Off	Off	0500 1330	0500 1330	1030 1900	1030 1900	0930 1800	Off	Off	0500 1330	0500 1330	1030 1900	1030 1900	0930 1800	Off	Off	0500 1330
Ssgt Reed (Diet Clerk)	Off	0800 1700	0800 1700	0800 1700	0800 1700	0800 1700	Off	Off	0800 1700	0800 1700	0800 1700	0800 1700	0800 1700	Off	Off	0800 1700	0800 1700	0800 1700	0800 1700	0800 1700	Off
Sgt Smith (Storeroom Clerk)	Off	0600 1500	0600 1500	0600 1500	0600 1500	0600 1500	Off	Off	0600 1500	0600 1500	0600 1500	0600 1500	0600 1500	Off	Off	0600 1500	0600 1500	0600 1500	0600 1500	0600 1500	Off
Mrs Andrews (Salads)	Off	0800 1700	0800 1700	0800 1700	0800 1700	0800 1700	Off	Off	0800 1700	0800 1700	0800 1700	0800 1700	0800 1700	Off	Off	0800 1700	0800 1700	0800 1700	0800 1700	0800 1700	Off

AF FORM 2578 134

☆ U. S. GOVERNMENT PRINTING OFFICE: 1975—630-895/1363 3-1

Figure 4

MEDICAL FOOD SERVICE – DAILY WORK ASSIGNMENT

DATE: 3 DEC 81

EARLY SHIFT COOKS	ASSIGNED & OTHER DUTIES	LATE SHIFT COOKS	ASSIGNED & OTHER DUTIES
1. MR BAKER	SHIFT LEADER SSGT LEONARD	1. MR REYES	SHIFT LEADER SSGT GABRIEL
2. MR BROWN	ASST SHIFT LEADER	2. MR WATSON	ASST SHIFT LEADER
3.	FIRST COOK MR BAKER	3.	FIRST COOK MR REYES
4.	COOK MR BROWN	4.	COOK MR WATSON
5.	COOK	5.	COOK
6.	COOK	6.	COOK
7.	COOK	7.	COOK
EARLY SHIFT DIET COOKS	**ASSIGNED & OTHER DUTIES**	**LATE SHIFT DIET COOKS**	**ASSIGNED & OTHER DUTIES**
1. SRA CHARRON		1. AIC DONNELLY	
2.		2.	
DIET WORKERS	**ASSIGNED & OTHER DUTIES**	**DIET WORKERS**	**ASSIGNED & OTHER DUTIES**
1. AMN O'NEAL	PTS AMN ONEAL - COLD	1. SGT HOLLOWAY	PTS AIC BROWN-COLD
2. SRA KIRKPATRICK	PTS SRA KIRKPATRICK - HOT	2. AIC BROWN	PTS AIC HADORN HOT
3. SGT NASISE	PTS SGT NASISE - CHECK	3. AIC HADORN	PTS SGT HOLLOWAY - CHECK
4.	PTS AIC BROWN - PULL CARTS	4.	PTS
5.	PTS AIC HADORN - NOURISHMENTS	5.	PTS
6.	PTS	6.	PTS
FOOD SERVICE ATTENDANTS	**ASSIGNED & OTHER DUTIES**	**FOOD SERVICE ATTENDANTS**	**ASSIGNED & OTHER DUTIES**
1. MRS KING	DISHWASHER MRS KING	1. MR VASSEY	DISHWASHER MR VASSEY
2. MRS CLAY	DISHWASHER MRS CLAY	2. MR NEWBERRY	DISHWASHER MR CHARRON
3. MR. SMITH	DISHWASHER	3. MRS CHARRON	DISHWASHER
4.	MAIN DR	4.	MAIN DR
5.	STAFF DR	5.	STAFF DR
6.	POT & PAN MR SMITH	6.	POT & PAN MR NEWBERRY
7.	KITCHEN	7.	KITCHEN
8.	KITCHEN	8.	KITCHEN
SIGNATURE Sgt Leonard		SIGNATURE SSgt Gabriel	

AF FORM OCT 78 2577 PREVIOUS EDITION WILL BE USED

Figure 5

SUBSISTENCE

INTRODUCTION

Subsistence is the technical term we use when we talk about food. Food is the heart of our operation. After all, that's one of the biggest part of our jobs - to serve wholesome meals to patients and staff. As you might imagine, a typical Medical Food Service will use hundreds of thousands of dollars worth of food each year. That's a lot of money. Notice that we talk about food in terms of money. Think of food in terms of money. Most people keep large sums of money in a bank. We keep our food (money) in a bank also. That bank is called a storeroom. If you get the opportunity to work in the storeroom you will have a great deal of responsibility.

When you go to a bank to withdraw funds, you probably notice that there are strict controls placed over funds. Well, you will find that strict controls are placed on the food in the storeroom. After all the storeroom is our bank.

SUBSISTENCE ORDERING, PROCESSING AND ACCOUNTING

Procedures for Ordering Subsistence Items

LOCAL VENDORS. Special purchase agreements or contracts must be established for this type of procurement through the Base Procurement Office. The are direct deliveries to include items such as bread, milk, ice cream and other foods.

TROOP ISSUE. Subsistence items are normally procured from troop issue warehouses (non-perishables) or cold storage (perishables).

COMMISSARY SALES STORE. If items cannot be procured from troop issue, purchases can be obtained from the commissary sales store. Verbal or written agreements are often made for hospitals to procure items from the shelves in the store.

LOCAL PURCHASE. Many times, special subsistence items are required. These items are not normally available through the above sources. However, the commissary office can arrange for the hospital to purchase these special items and can add them to the contracts that already exist.

Whenever subsistence items are purchased from any of the above sources, AF Form 287, Subsistence Request, is required. We will talk more about this form later.

NOTE: When utilizing the commissary sales store, each section, i. e., produce, grocery, meat, etc., must have a separate AF Form 287.

Processing Subsistence Received, Including Counting, Weighing and Quality Inspections

When subsistence items are received, they must be unloaded from the transport vehicle and stored in their proper place.

Before signing for receipt of any subsistence items on AF Form 287, you must compare the amount actually receive against the amount stated on AF Form 287. Some items can simply be counted, such as canned goods. Other items must be weighted, such as meat and fresh potatoes. In either case, ALWAYS compare either the weighted or the counted quantity against the amounts stated on AF Form 287. (If there is a difference, do not sign AF Form 287 until the counts or weights are corrected and you are assured that you have received all you are supposed to receive). Remember, your storeroom account is inventoried by the Air Force periodically. Sign only for what you receive.

Your will also be responsible for making a quality inspection of the items to insure they are of high quality and that you are not receiving an item that has already been damaged. Once you sign for an item, you are committed to accept it. If the item is damaged or if you are unable to use it, your department will have to accept the loss. If there is any question as to the condition of an item, have one of the supervisors check it out with you so that you do not cause your department to pay for something it cannot use. This means checking for container leakage, toxic conditions, temperature, ordor, etc. Remember, it is left up to you to assure that your dining hall gets its money's worth in subsistence items and supplies received.

Date Stamping Subsistence and Storing on a First-In First-Out (FIFO) Basis

All subsistence items that are classified as perishable or non-perishable items should be date stamped. This is done by marking the date of receipt on the outer container. Example: You received a crate of fresh bananas on November 5, 1977. Using a magic marker pen or a china marking crayon, you would mark the date (either as 11/5/77 or 5 Nov 77) on the outside of the crate. Always be sure to place the date in a position so it can easily be seen by everyone.

When storing any subsistence items, whether perishable or non-perishable, you should use the first-in first-out (FIFO) system. This means that the items you received first in your storeroom will be the first items to be issued out to the kitchen. For example: On 4 November 1977, you received 1 case of canned green beans. During the week, you use 1/2 case in the kitchen, but there is another 1/2 case on the storeroom shelves. On 11 November 1977, you received 1 more case of green beans. The beans received on 11 Nov. would be stored behind those received on 4 Nov. so that the ones that had been on the shelves longer (4 Nov.) would be issued out to the kitchen next time green beans were needed.

FOOD SPECIFICATIONS

Food specifications are defined as a list of detailed descriptions that specify the requirements desired in a particular food item. Federal specifications are established to assure a consistent quality and quantity of subsistence that will give a satisfactory yield of serving portions.

Specifications for food items are established by various agencies of the Federal government and the military. For example, the U.S. Department of Agriculture establishes and publishes grades and grade standards for such foods as eggs, poultry, beef, lamb, pork, veal, butter, cheese and vegetables.

The Department of Defense used AFM 160-10, Federal Hospital Subsistence Guide, in procuring food supply items for the four military services. Federal specifications may be used by any branch of the Federal Government, such as the Veterans Administration, and including the military services. Food items purchased from Troop Issue are an example of subsistence items controlled by federal or military specifications.

Military specifications are written and established at the Defense Personnel Support Center (DPSC). This office, together with four regional offices, procures subsistence items and directs their inspection to assure that they meet established specifications. The Base Procurement Office is responsible for writing contracts for foods not procured by DPSC, such as milk, bread, ice cream, etc., that is purchased locally. Base veterinarians assist the Base Procurement Office in writing specifications to cover these subsistence items if they are not ordered by brand name.

Specifications are needed:

1. As a medium through which the Air Force can inform various food purveyors of their requirements for bidding purposes.

2. To allow veterinarians and food inspectors working for the Air Force to check food items against quality and quantity standards.

3. For user activities to monitor the food itmes they receive.

PROCEDURES FOR REPORTING UNSATISFACTORY OR SUSPECTED SUBSISTENCE

As a diet specialist, you should be gravely concerned about unsatisfactory or suspected spoiled subsistence items. On the following pages are the procedures, explaining how spoiled subsistence is disposed of and the responsibilities involved. Follow these general guidelines:

1. Retain the suspected item. Never throw suspected subsistence away until directed to do so by someone who is responsible for making adjustments in funds.

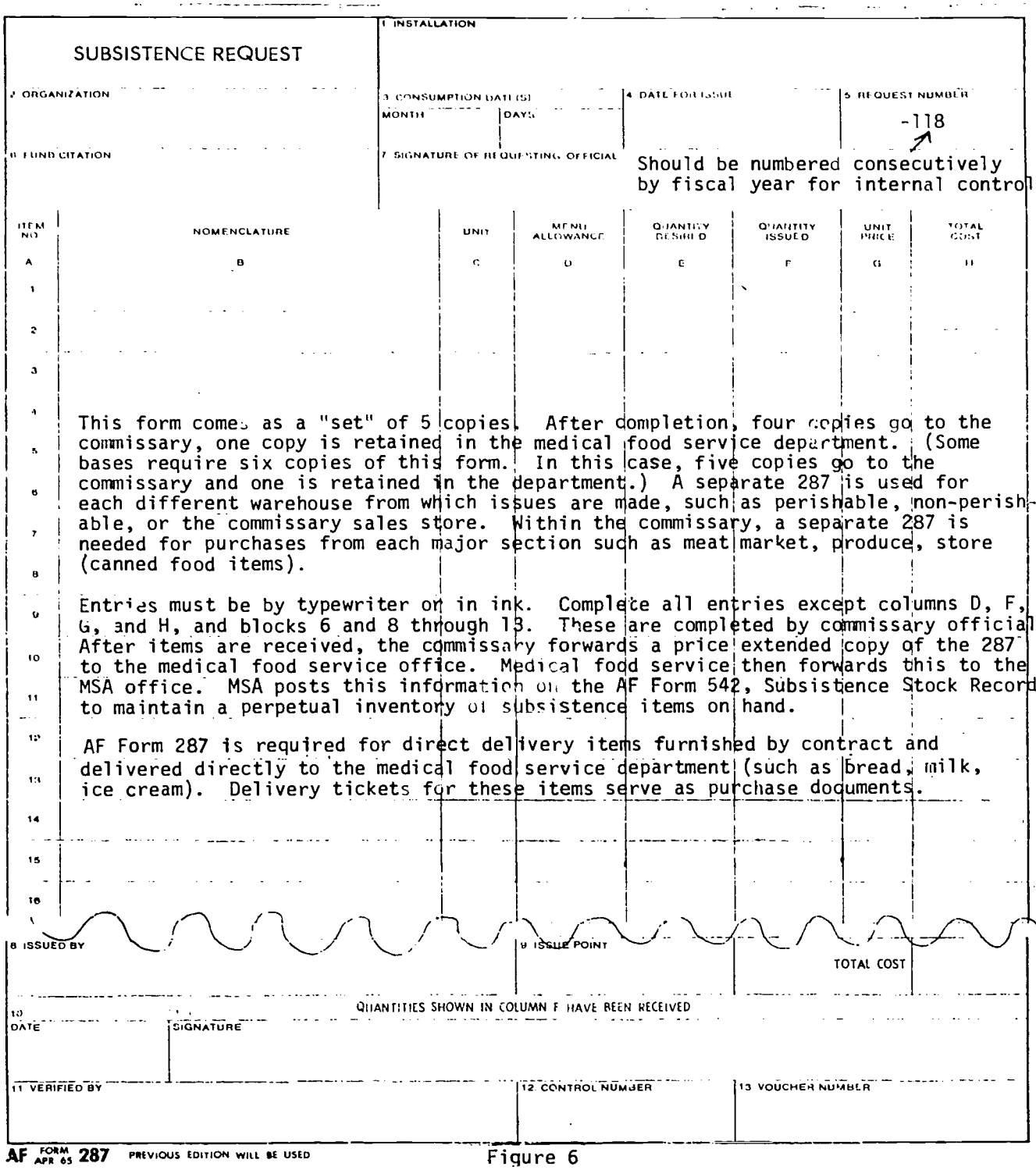
2. Notify your supervisor. Don wait! Let the boss know immediately.

3. Notify the base veterinarian. This office will determine if the item is or is not fit for human consumption.

AF Form 287. The next step is to initiate the proper form for receiving or receipt of subsistence items and supplies. Whenever you receive subsistence items for the medical food service department, you must acknowledge receipt of these items on AF Form 287, Subsistence Request. To be able to sign AF Form 287, you must have been given the authorization to sign by the DD Form 577, Signature Card. For example, if you were assigned to the storeroom at your next duty assignment, you would have to go to the commissary to pick up subsistence items. To do this, you must have AF Form 287. Someone at the commissary would sign block 8 when they issued the supplies to you. You would then sign block 10 to indicate that you received the supplies. Your signature would then be checked against the DD Form 577 to be sure that you were authorized to receive those subsistence supplies.

Therefore, each person authorized to receive subsistence - either for direct deliveries to the food service department or at the commissary - must have a DD Form 577 before they can sign AF Form 287.

NOTE: You will not be required to have a DD Form 577, Signature Card, while in training because you will not be required to sign for any subsistence itmes or supplies.



SUBSISTENCE REQUEST

1 INSTALLATION

2 ORGANIZATION

3 CONSUMPTION DATE (S) MONTH | DAYS

4 DATE FOR ISSUE

5 REQUEST NUMBER -118

Should be numbered consecutively by fiscal year for internal control.

6 FUND CITATION

7 SIGNATURE OF REQUESTING OFFICIAL

ITEM NO	NOMENCLATURE	UNIT	MENU ALLOWANCE	QUANTITY DESIRED	QUANTITY ISSUED	UNIT PRICE	TOTAL COST
A	B	C	D	E	F	G	H
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							

This form comes as a "set" of 5 copies. After completion, four copies go to the commissary, one copy is retained in the medical food service department. (Some bases require six copies of this form. In this case, five copies go to the commissary and one is retained in the department.) A separate 287 is used for each different warehouse from which issues are made, such as perishable, non-perishable, or the commissary sales store. Within the commissary, a separate 287 is needed for purchases from each major section such as meat market, produce, store (canned food items).

Entries must be by typewriter or in ink. Complete all entries except columns D, F, G, and H, and blocks 6 and 8 through 13. These are completed by commissary officials. After items are received, the commissary forwards a price extended copy of the 287 to the medical food service office. Medical food service then forwards this to the MSA office. MSA posts this information on the AF Form 542, Subsistence Stock Record, to maintain a perpetual inventory of subsistence items on hand.

AF Form 287 is required for direct delivery items furnished by contract and delivered directly to the medical food service department (such as bread, milk, ice cream). Delivery tickets for these items serve as purchase documents.

8 ISSUED BY

9 ISSUE POINT

TOTAL COST

10 QUANTITIES SHOWN IN COLUMN F HAVE BEEN RECEIVED

DATE

SIGNATURE

11 VERIFIED BY

12 CONTROL NUMBER

13 VOUCHER NUMBER

AF FORM APR 65 287 PREVIOUS EDITION WILL BE USED

Figure 6

AF Form 287, Subsistence Request, Figures 6-8, is used to buy food from the commissary.

PROCEDURES: For initiating AF Form 287, Subsistence Request

Block 1: Name of Hospital and Base

Block 2: Organization, Medical Food Service

Block 4: Date for Issue (Date to be picked up and/or delivered)

Block 7: Signature of requesting official (Medical Food Service Officer or Designated Rep).

Column B: Nomenclature (Name of items)

Column C: Unit of issue (can, lb, btl, case)

Column E: Quantity desired, amount actually needed.

Column F, G, and H: Entries in these columns are made by commissary personnel.

Block 8: Issued by: (Signature of person making the issue)

Block 9: Issue Point: (Warehouse items are to be requisitioned from cold storage, dry storage, etc.). Needed to inform commissary personnel which issue point paperwork should be routed to.

Block 10. (Date and signature of person accepting issued items).

SUBSISTENCE REQUEST	1 INSTALLATION: General Hospital, Sheppard AFB, Texas			
2 ORGANIZATION: Medical Food Service	3 CONSUMPTION DATE(S) MONTH / DAYS		4 DATE FOR ISSUE: 12 Jul 1978	5 REQUEST NUMBER: 203
6 FUND CITATION	7 SIGNATURE OF REQUESTING OFFICIAL: Victor Smith MEDICAL FOOD SERVICE OFFICER			

ITEM NO	NOMENCLATURE	UNIT	MENU ALLOWANCE	QUANTITY DESIRED	QUANTITY ISSUED	UNIT PRICE	TOTAL COST
A	B	C	D	E	F	G	H
1	Beans Green #10	cn		12	12		
2	Beets Sliced #10	cn		6	6		
3	Peaches #303	cn		12	12		
4	Jelly Grape 2 Lb	jar		12	12		
5	////////////	LAST	ITEM	////////	////////	////////	////////
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
26							

8 ISSUED BY	9 ISSUE POINT	TOTAL COST
Harry James	Dry Storage	

10. QUANTITIES SHOWN IN COLUMN F HAVE BEEN RECEIVED

DATE	SIGNATURE	11. VERIFIED BY	12. CONTROL NUMBER	13. VOUCHER NUMBER
13 Jul 1978	John T. Doe			

AF FORM APR 65 287 PREVIOUS EDITION WILL BE USED

FIGURE 7

SUBSISTENCE REQUEST

1 INSTALLATION: General Hospital, Sheppard AFB, Texas

2 ORGANIZATION: Medical Food Service

3 CONSUMPTION DATE(S): MONTH | DAYS

4 DATE FOR ISSUE: 12 Jul 1978

5 REQUEST NUMBER: 203

6 FUND CITATION:

7 SIGNATURE OF REQUESTING OFFICIAL: Regina S. Smith
MEDICAL FOOD SERVICE OFFICER

ITEM NO (A)	NOMENCLATURE (B)	UNIT (C)	MENU ALLOWANCE (D)	QUANTITY REQUIRED (E)	QUANTITY ISSUED (F)	UNIT PRICE (G)	TOTAL COST (H)
1	Beef Diced	Lb		51	51		
2	Butter	Lb		30	30		
3	Potatoes White	Lb		300	300		
4	/ / / / / / / / / / / / / / / / / / /	/ LAST	ITEM / /	/ / / / /	/ / / / /	/ / /	/ / / / /
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
20							

8 ISSUED BY: Harry James

9 ISSUE POINT: Cold Storage

TOTAL COST

10. QUANTITIES SHOWN IN COLUMN F HAVE BEEN RECEIVED

DATE: 13 Jul 1978

SIGNATURE: John T. Doe

11. VERIFIED BY

12 CONTROL NUMBER

13 VOUCHER NUMBER

AF FORM APR 65 287 PREVIOUS EDITION WILL BE USED

FIGURE 8

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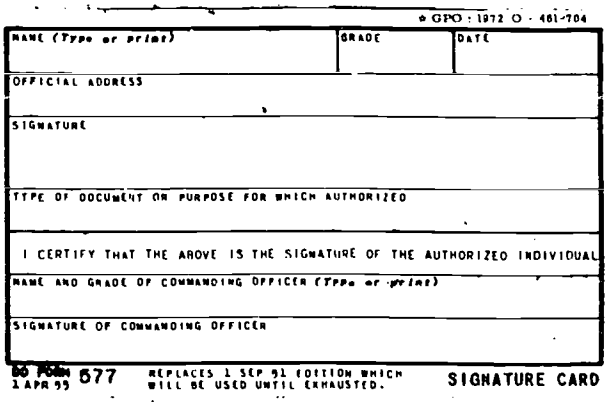
Receiving Subsistence and Supplies

DD Form 577. Before you, as a Diet Therapy Specialist, can receive any type of supplies or subsistence items, you must have the proper authorization. The medical food service officer give authorization by preparing a DD Form 577, Signature Card, for each person authorized to sign for subsistence items. The persons authorized to pick up rations and sign for direct deliveries are usually the medical food service officer, diet therapy supervisor, storeroom clerk, and shift leaders. (See Figure 9)



* GPO : 1972 O - 461-704

NAME (Type or print)	GRADE	DATE
OFFICIAL ADDRESS		
SIGNATURE		
TYPE OF DOCUMENT OR PURPOSE FOR WHICH AUTHORIZED		
I CERTIFY THAT THE ABOVE IS THE SIGNATURE OF THE AUTHORIZED INDIVIDUAL		
NAME AND GRADE OF COMMANDING OFFICER (Type or print)		
SIGNATURE OF COMMANDING OFFICER		

DD Form 577 1 APR 55 REPLACES 1 SEP 51 EDITION WHICH WILL BE USED UNTIL EXHAUSTED. SIGNATURE CARD

Figure 9. Signature Card

For each authorized individual, one 577 will be completed. The medical food service officer will send a letter to the commissary officer listing the names of all authorized individuals. The commissary officer will also be advised in writing when authorization is withdrawn.

MAINTAINING APPROPRIATE STOCK LEVELS OF SUBSISTENCE

To maintain an appropriate stock level, you must be aware of your inventory. You need to know the amount you have of each item and when you will use it. As soon as the food is put in the storeroom, you must add it to the AF From 1742, "Food Purchase/Use Record", and in the MSA office it must be added to AF Form 542, "Subsistence Stock Record".

Procedure

AF FORM 1742, FOOD PURCHASE/USE RECORD. This form is a card which, when maintained up-to-date, gives you (1) inventory of each item and (2) identifies amounts received, issued, and returned to the storeroom.

Initiating AF Form 1742, Food Purchase/Use Record (See Figure 10)

1. Source/FSN is a commissary price control number. Diet supervisor or designated member will make entries in this column.

2. Unit (type of container) box, bag, pounds, package, can, jar, bottle.

3. Item and size (item nomenclature) example: beans, green #10.

4. Index: I (identification number, the storeroom clerks own individual filing system).

5. Date (date received, issued, or returned).

6. Quantity:

   a. In - (Subsistence Received)

   b. Returned -

   c. Out -

7. Balance

SOURCE/FSN | ITEM AND SIZE: Peaches, #303 | UNIT: CN | ORDERING DATA | INDEX NO.

DATE	QUANTITY IN	QUANTITY RETURNED	QUANTITY OUT	BALANCE	DATE	QUANTITY IN	QUANTITY RETURNED	QUANTITY OUT	BALANCE
2 Jul	48			48					
6 Jul			4	44					
10 Jul	6			50					
11 Jul		2		52					
12 Jul	12			64					
12 Jul			20	44					

SOURCE/FSN | ITEM AND SIZE: Peaches, #303 | UNIT: Cn | ORDERING DATA | INDEX NO.

FOOD PURCHASE/USE RECORD AF FORM 1742

Figure 10

AF FORM 542, SUBSISTENCE STOCK RECORD. This form is maintained by the MSA office, providing a current, perpetual inventory for each item of subsistence. Items on AF Form 287, Subsistence Request, are posted as "received". Items on AF Form 543, Food Issue Record, are posted as "issued". (Figure 11)

Issuing Subsistence

Once the subsistence is purchased and recorded on the inventory, it must be issued on an AF Form 543. Be sure to carefully count or weigh all items being issued from the storeroom, then properly record them on the 543.

Procedures for Initiating AF From 543 (See Figure 12)

A, B, C, D, Self Explanatory

Item Column - Nomenclature of food item.

Unit Column - Unit of issue such as case, bottle, can, box, pounds

Quantity - The amount requested, and actual amount issued.

Cost - To be filled in by MSA.

Requested by - Signature of food service office or designated representative.

Issued by - Signature of storeroom clerk making issue of subsistence.

SUBSISTENCE STOCK RECORD

NAME AND DESCRIPTION: Peaches, #303 | UNIT: Cn | GROUP: 3

FY DATE	VOUCHER NUMBER	RECEIVED QUANTITY	RECEIVED UNIT PRICE	ISSUED QUANTITY	ISSUED UNIT PRICE	BALANCE QUANTITY	BALANCE UNIT PRICE	BALANCE TOTAL VALUE
2 Jul 77	-709	48	.43			48	.43	20.64
6 Jul 77				4	.43	44	.43	18.94
10Jul77	-718	6	.43			50	.43	21.50
12Jul77				20	.43	30	.43	12.90
12Jul77	-734	12	.43			42	.43	18.06

NAME AND DESCRIPTION | UNIT | GROUP

AF FORM 542 JUL 64 PREVIOUS EDITIONS OF THIS FORM WILL BE USED UNTIL STOCK IS EXHAUSTED. C-45511 GPO 935-

Figure 11

FOOD ISSUE RECORD

ISSUE DATE: 12 Jul | USE DATE: 12 Jul

FOOD GROUP A	ITEM B	UNIT C	QUANTITY REQUESTED D	QUANTITY RETURNED E	QUANTITY ISSUED F	COST UNIT G	COST TOTAL H
	Corn, Canned, #10 cans	can	3		3	.94	2.82
	Peaches, 303	can	20		20	.43	8.60
							11.42

This form comes as a "set" of three copies. It is prepared by the diet therapy supervisor, or the designated representative, for each day of the week, including weekends and holidays. All entries are typed or written in ink. AF Form 543 is completed with the appropriate date and lists all food items used for that particular day, the unit of issue, and quantities of food items used.

The 543 will include all direct delivery items (ice cream, milk, bread) on the day they are received. Perishable fresh fruits and vegetables (lettuce, green peppers, onions, lemons, etc.) or high volume, low cost items (jelly and condiments) which are normally used for daily food production or in large quantities may also be issued upon receipt or for periods longer than one day.

Food items may be listed according to groups for easier issuing, posting, pricing, and review. The person responsible for issuing subsistence supplies completes the "Issued" column and signs the 543 in the "Issued By" space. The cook or diet therapy specialist responsible for receiving subsistence supplies verifies the actual count of the items and signs in the "Received By" space.

The first two copies of the 543 go to the MSA office for review and price extension. The issues are posted to AF Form 542, Subsistence Stock Record, by the MSA office. The price extended duplicate is returned to the medical food service office for review and filing. The third copy is retained by the storeroom clerk and the issues are posted to AF Form 1742, Food Purchase/Use Record.

TOTAL FOR DAY

REQUESTED BY | ISSUED BY | RECEIVED BY

AF FORM MAR 69 543 PREVIOUS EDITIONS OF THIS FORM WILL BE USED UNTIL STOCK IS EXHAUSTED.

D-7384

Figure 12

INVENTORY

As noted earlier, the storeroom has to be a tightly controlled operation. An inventory is taken to insure that the amount of food actually on hand in the storeroom agrees with the records maintained by the MSA office. Inventories are performed quarterly. The inventory is taken by an officer or senior enlisted member appointed by the Hospital Commander. As you can see, it is very important that accurate records are kept and that every single item of food is accounted for.

FUND CUSTODIAN DUTIES

INTRODUCTION

In the section on the storeroom, we compared the storeroom to a bank. There is another job in Medical Food Service that actually involves handling money. This job is the cashier function, or more technically put, the fund custodian function. When you eat your meals at the dining hall, you show your meal care to the cashier. Additionally, you may have noticed that some people have to pay cash to eat. Just as in a bank, the person handling the money has a great deal of responsibility. That person could be held accountable for shortages. You may be called upon to perform this task, so pay close attention to the information that follows.

INFORMATION

Change Fund

The Base Finance Officer issues a change fund to the Medical Foodservice Officer. The change fund is used for collecting cash and making change for meals sold in the Medical Foodservice activity. The amount of the change fund is kept to the fewest dollars possible to meet operating needs. People who pay for meals in the Medical Foodservice dining room should be encouraged to bring the correct change for meals.

Safeguarding the Money

The money in the change fund will be kept in a secure, fireproof container or safe in the foodservice facility. During meal hours when the change fund is being used it must be safeguarded by the person who has signed for the cashbox. AF Form 2570, Medical Foodservice Cash and Forms Receipts, (Figure 13) is used by the diet therapy supervisor to issue the change fund, AF Form 1087, Cash Meal Log and AF Form 1339, Dining Hall Signature Record, to the cashier (meal checker). The AF Forms 1087 and 1339 are controlled forms which we will discuss later. The same AF Form 2570 is used by the cashier to turn in the change fund at the end of each meal along with cash collected, AF Forms 1087 and 1339 to the diet therapy supervisor. If the cash collected matches the total amount of money collected on the AF Form 1087, the AF Form 2570 is destroyed. If the amounts do not match, the cashier is responsible for the difference.

You must keep in mind that the change fund is Government property and should be guarded as such. Base Finance personnel will make a periodic unannounced audit of the change fund to insure its accuracy. Never leave the cashbox containing the change fund unattended. When not in use it must be kept in a locked safe.

MEDICAL FOOD SERVICE CASH & FORMS RECEIPT		DATE
MEAL ☐BREAKFAST ☐DINNER ☐SUPPER ☐NIGHT		
	RECEIVED	TURNED-IN
CASH		
AF FORM 1339 *(Inclusive no)*		
AF FORM 1087 *(Inclusive no)*		
SIGNATURE OF CASHIER		
SIGNATURE OF MEDICAL FOOD SERVICE REPRESENTATIVE		

AF FORM MAR 76 2570 PREVIOUS EDITION WILL BE USED.

Figure 13

Identifying Diners

In general there are two kinds of patrons eating in our facilities - those who subsist at government expense and those who must pay cash for their meals. If a person is authorized to subsist at government expense, he/she must show you a meal card and sign AF Form 1339.

MEAL CARDS

DD Form 714, MEAL CARD. This form is issued to all enlisted personnel authorized to subsist in medical food service dining rooms at government expense. The Medical Squadron Commander will issue a "Meal Card" to permanent party enlisted medical personnel and other airmen to include enlisted duty personnel of other military services, who are not required to reimburse the government for meals. The name of the medical facility will be over-typed in capital letters on the form. The cashier is to check each 714, for currency before personnel can sign AF Form 1339, and be admitted to the dining facility.

The diner must present the meal card to the cashier with proper identification (Military I.D. card) before being allowed to sign the AF Form 1339, Dining Hall Signature Record. Each meal card has an identification number which must be used along with the signature of the diner on AF Form 1339.

Dining Hall Signature Record, AF Form 1399.

This form will be used to obtain the signatures of all personnel who are provided meals in medical dining facilities at government expense with the exception of inpatients.

Separate forms will be provided for the following:

1. Assigned and attached personnel.

2. Casuals, TDY personnel, and transient patients.

3. AF Reserves on active duty.

4. Cross service personnel (specify branch of service).

The cashier is responsible for seeing that only those personnel who are authorized to sign the AF Form 1339 do so. A sample of AF Form 1339 appears on page 31, Figure 14.

CASH COLLECTIONS

Cash Meal Log, AF Form 1087

This form provides a basic record of all cash collected for meals sold on a cash basis. In general, if a patron does not have a meal card, the patron pays cash and signs AF 1087, Cash Meal Log.

As well as receiving the proper meal price, it is the cashier's responsibility to insure that each individual taking a meal in the Medical Food Service facility completes the AF 1087 as follows:

1. Full name (Column A).

2. Grade (Column B).

3. Check the appropriate classification (Columns C-F).

4. Amount of cash paid (Column G).

(A sample of AF Form 1087 appears on page 32, Figure 15.

DINING HALL SIGNATURE RECORD	CATEGORY OF PERSONNEL (Check one) [ ] CROSS SERVICE (Specify) [X] PERMANENT [ ] TRANSIENT	SHEET REGISTER NO C 1713146

DINING HALL NO.	DATE	TYPE OF MEAL SERVED (Check one)
Hosp	29 Jan 73	[ ] BREAKFAST [XX] SUPPER [ ] LUNCHES [ ] DINNER [ ] NIGHT MEAL [ ] OTHER (Specify)

NO	SIGNATURE	GRADE	MEAL CARD NO	NO	SIGNATURE	GRADE	MEAL CARD NO
1	David A. Jones	A1C	6954	27			
2	Henry W. Bell	A1C	7190	28			
3	Larry C Hardy	Amn	6955	29			
4	John K. Smith	Amn	6540	30			
5				31			
6				32			
7				33			
8	AF Form 1339, Dining Hall Signature Record, is an accountable form.			34			
9	It is used to obtain signatures for all persons, except patients,			35			
10	authorized to eat in the medical facility at government expense.			36			
11	Theses persons will be identified by showing DD Form 714, Meal Card, issued to them by the squadron orderly room. No one signs the 1339 without a meal Card or appropriate orders.			37			
12	Separate forms will be provided for categories of personnel according to AFM 168-4. All entries will be made legibly and in ink. Separate forms will be used for each meal and prepared accoring to directions in AFM 168-4. Totals from this form are posted to AF Form 544, Ration Earnings Record, so that medical food service receives credit for having served each and every meal. The forms will be closed out following each meal.. NEVER use them at the following meal to obtain additional signatures.						
13							
14							
15							
16				42			
17	This form when completed for each meal must be signed by the cashier and the dining hall supervisor.			43			
18				44			
19				45			
20				46			

I hereby certify that the above individuals have been furnished meals as listed above in a field ration dining hall at Government expense.

TYPED OR PRINTED NAME, GRADE OF CASHIER	SIGNATURE
William E. Bower Sgt	William E Bower
TYPED OR PRINTED NAME, GRADE OF UNIT COMMANDER OR DINING HALL SUPERVISOR	SIGNATURE
Mary O. Harris 2Lt	Mary O. Harris

Figure 14

SAMPLE -- FOR TRAINING PURPOSES ONLY

CASH MEAL LOG

MEAL SERVED: BREAKFAST [ ] X DINNER [ ] SUPPER [ ] | NUMBER 0377 | DATE 23 Mar 81

I RECAPITULATION *(Includes Log Number 0377 through 0377 Inclusive.)*

LINE	PERSONNEL SERVED	RATIONS SERVED A	CHARGES: MEAL B	CHARGES: SURCHARGE C	NUMBER OF MEALS D	TOTAL COLLECTED: FOR MEALS E	TOTAL COLLECTED: FOR SURCHARGE F	AMOUNT PAID G
1	HOSPITAL PERSONNEL							
A	OFFICERS AND CIVILIANS		1.10		3	3.30		3.30
B	ENLISTED PERSONNEL		1.10		1	1.10		1.10
C	DUTY PERSONNEL							
2	NONHOSPITAL PERSONNEL AND GUESTS							
A	OFFICERS AND CIVILIANS		1.10	.25				
B	ENLISTED PERSONNEL		1.10					
3	TDY PERSONNEL							
A	OFFICERS AND CIVILIANS		1.10	1.60				
B	ENLISTED PERSONNEL		1.10					
4	OTHER							
A	CHILDREN UNDER 12 YEARS		.55	.20	1	.55	.20	.75
B	ROTC AND CADETS							
C	OTHER							
5	TOTAL AMOUNT DUE							
6	TOTAL CASH TURNED IN							
7	CASH OVER *(Short)*							
8	EXPLANATION OF CASH OVER *(Short)*							

II PERSONNEL SUBSISTED

LINE	SIGNATURE A	GRADE B	STATUS: HOSPITAL PERSONNEL C	STATUS: NON-HOSPITAL PERS. AND GUESTS D	STATUS: TDY E	STATUS: OTHER F	AMOUNT PAID G
1	Robert E. Bertrand	SSgt	x				1.10
2	Mrs Lois B. Silver	Civ	x				1.10
3	Ron Jones	Lt	x				1.10
4	Betty Barnes	Lt	x				1.10
5	David Smith	Capt	x				1.10
6	Cindy Smith	Dep				Child	.75
7	AF Form 1087, Cash Meal Log, is used to record cash payment for meals in the dining						
8	room. This form, along with the money collected, is turned in to the MSA office at						
9	least once each duty day. These forms are a controlled and pre-numbered form so						
10	must be accounted for on DD Form 1150, Request for Issue or Turn-In, when received,						
11	and on AF Form 1127, Hospital Invoice/Receipt/Account Receivable Record, when forms						
12	and cash are turned in. The medical food service officer is held responsible for any						
13	forms missing, so keep the forms in sequence and accounted for. Each AF Form 1087 has						
14	space (front and back) for 41 signatures. If more than one form is used at a meal,						
	the first form (the lowest numbered form) will indicate the totals of all forms used. The midnight meal will be totaled with either the breakfast or supper meal, depending upon which type of meal is served at that time. Refer to para 11-15, Chapter 11, AFM 168-4, for procedures to complete AF Form 1087. Totals from these forms are recorded on AF Form 544, Ration Earnings Record, so that medical food service receives credit for serving each and every meal. Since these are controlled forms, they are kept in a locked safe.						

AF FORM OCT 78 1087 PREVIOUS EDITION IS OBSOLETE.

Figure 15

CASHIER FUNCTIONS IN THE MEDICAL A LA CARTE (MALACS)

INTRODUCTION

The latest development in USAF Medical Food Service activities is the Medical A La Carte Feeding System. This system is similar to commercial foodservcie activities in that the patron pays for meals or an item-by-item basis. If you've eaten at McDonalds, or Burger King you've seen a similar system.

INFORMATION

Under the MALACS system, each menu item is individually priced. The price is loaded in an electronic cash register similar to the one at McDonalds or Burger King. The "cash box" or conventional system we just discussed is obviously different from the MALACS system. The biggest difference is that we use an electronic cash register to receive money instead of forms and a cashbox.

In that the cash register has a memory, it acts like a computer. Therefore, we don't use AF 1339 or 1087 in this system. If a person is on a meal card, the cashier enters the card number into the register (computer). If a person is paying cash, the total sale is entered into the machine just like at McDonalds or Burger King. Additionally the buttons on the keyboard are labeled to correspond to the particular menu item being served when the button is pushed (i.e. milk). The register will produce a receipt to show the cost of the milk. Therefore, it is not necessary to put a price sticker on each food item. Remember, the price of each item is already entered in the register.

The change fund is handled just like the other system. A minimum amount of funds is kept on hand to make change.

COST DATA AND FINANCIAL REPORTS

INTRODUCTION

If you owned a resturant, you would certainly want to know how well the resturant was doing financially. Well, the managers of USAF Medical Food Service operations need to know how their operations are doing financially. The following section will acquaint you with the tools that are used to get this information.

INFORMATION

The manager of a resturant would look at the customer checks and the invoices for the food he received in order to ascertain how well the organization is doing financially. In Medical Food Service, there are many forms used to obtain financial data. One very important form is the AF 544, Ration Earnings Record.

Ration Earnings Record, AF Form 544.

This form is used by Medical Foodservice and the MSA office to record the number of meals served to inpatients and diners in the dining room. The diet therapy supervisor or designated representative records the number of diners served and the MSA office records the number of inpatients served.

Each day the diet therapy supervisor or designated representative prepares AF Form 544 in two copies. This form includes the number of diners fed breakfast, dinner, and supper. The information is taken from AF Form 1087, Cash Meal Log and AF Form, 1339, Dining Hall Signature Record (In MALACS, the information is obtained from cash register tapes)

Remember these two forms? These are the forms you were responsible for when you were performing the cashier function. The Diet Therapy Supervisor or designated representative completes the sections of the 544 that deal with personnel served. The two copies of the AF 544 and the money collected are sent to the MSA office. The MSA office will then complete the financial data section and return it to Medical Food Service. The completed form tells us how we are doing financially.

DIFFERENCES IN OBTAINING COST DATA BETWEEN THE TWO SYSTEMS (MALACS AND CONVENTIONAL)

Both systems require the use of AF Form 544, Ration Earnings Record. The key difference between the two systems is how the information is obtained.

In the conventional system, you must physically tally the number of diners from AF 1087 and AF 1339. The figures are then entered on AF 544. (See Figure 16, page 34)

RATION EARNINGS RECORD

DATE: 28 June 83

CATEGORY	MEALS SERVED				RATIONS SERVED
	BREAKFAST	DINNER	SUPPER	TOTAL	
1. INPATIENTS SUBSISTED IN KIND					
A. WEIGHTED RATIONS					
2. ALL OTHER INPATIENTS					
A. WEIGHTED RATIONS					
3. MEDICAL DUTY PERSONNEL SUBSISTED IN KIND					
A. WEIGHTED RATIONS					
4. CASUALS TDY PERSONNEL AND TRANSIENT PATIENTS SUBSISTED IN KIND					
A. WEIGHTED RATIONS					
5. MEDICAL DUTY PERSONNEL SUBSISTED ON A CASH BASIS					
A. WEIGHTED RATIONS					
6. GUESTS, NONMEDICAL DUTY PERSONNEL AND TRANSIENT PATIENTS SUBSISTED ON A CASH BASIS					
A. WEIGHTED RATIONS					
7. OTHER PERSONNEL SUBSISTED AT GOVERNMENT EXPENSE *(Billing required)*					
A. WEIGHTED RATIONS					
8. AF RESERVES ON ACTIVE DUTY FOR TRAINING					
A. WEIGHTED RATIONS					
9. TOTAL MEALS SERVED					
A. WEIGHTED RATIONS					

AF form 644, Ration Earnings Record is used by the MSA Office and the Diet Therapy Supervisor to record the number of meals served to inpatients and diners.

FOOD COST DATA

	CURRENT			
	DATE	MONTH	QUARTER	FY TO DATE
10. OPENING INVENTORY				
11. COST OF FOOD PURCHASED				
12. COST OF FOOD ISSUED				
13. RATION EARNINGS				
14. MONETARY STATUS *(Lines 13-11)*				
15. RATION EARNINGS LESS COST OF FOOD ISSUED *(Lines 13-12)*				
16. NUMBER OF RATIONS SERVED				
17. COST PER RATION SERVED				

SIGNATURE OF DIET THERAPY SUPERVISOR

SIGNATURE OF MSA OFFICER

In the MALACS system, we don't use AF 1087 or AF 1339. Remember, the information that would have been on these forms is now stored in memory in the machine. The Diet Supervisor simply pushes a button and all the information required is produced on a cash register tape as shown below. This information is then transferred to the AF 544. In the conventional system the cash, AF 544, 1087, and 1339's are turned in to the MSA office. In the MALACS system the AF 544 and register tapes, and cash are turned in to MSA.

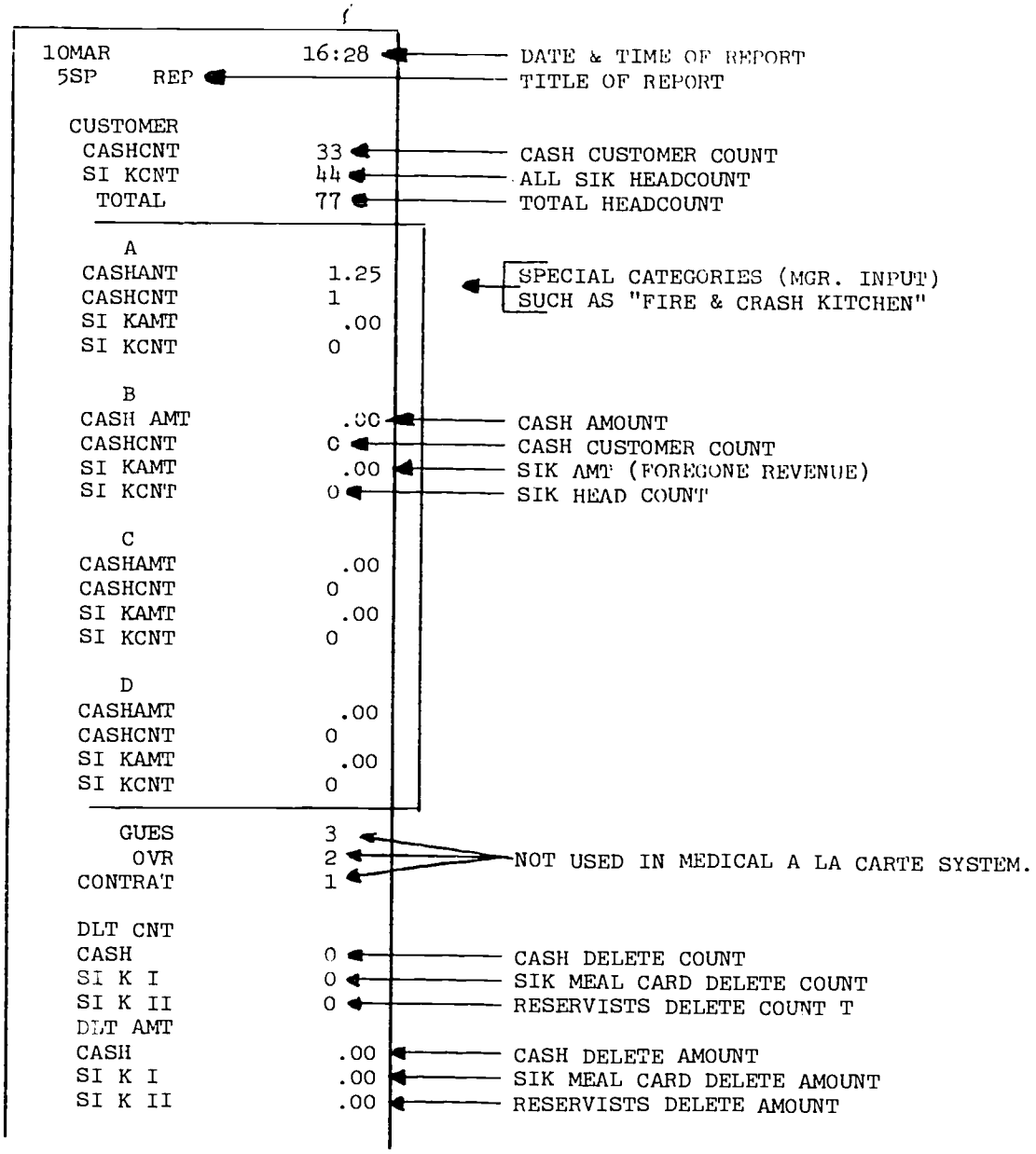


Figure 17

FILING SYSTEM

INTRODUCTION

One of your duties as a diet therapist will be to maintain the filing system in your Medical Food Service activity. Filing plays an important role in any type of Air Force activity where records are kept and used in the effective management of manpower, supplies, money, and many other areas. The filing system serves as documentation of the past and present.

Here is an example to further impress upon you the importance of a filing system. Suppose you are promoted and receive an increase in your pay. If the increase did not show up in your paycheck you'd need to inquire about it at Accounting and Finance. There you would have your pay records checked for errors. Suppose when you arrive you find out that your pay records can't be found because the person who filed them is no longer stationed there. Additionally, the system he used for filing was one he developed and nobody there has figured it out yet. You would probably be upset! Could you imagine how frustrated you would be if your Medical Records were lost in an emergency situation? These are just a few areas that are important to you throughout your Air Force career. In order for the Air Force to keep an accurate record of you and its many activities it uses a systematic filing system. There are hundreds of forms used in Medical Food Service. Therefore, there must be a systematic system to keep track of them.

INFORMATION

These records are filed in subject series. Just as the AFR 0-2 breaks publications into specific groups by subject, the AFR 12-50 separates records into groups by subject.

The Air Force uses two forms in filing its record or documentation, these are AF Form 80, Files Maintenance and Disposition Plan and AF Form 82, Files Disposition Control Label. AFR 12-20 and 12-50 are used to complete these forms. These regulations govern how all Air Force forms and records are to be filed or destroyed.

AF Form 80 is used to identify all the documentation for which an office is responsible for filing. The AF Form 80 is similar to a table of contents in a book. It is maintained in the very front of the first drawer of your files. It lists all the documentation in your files and where each subject group can be found. Not all your records are located in the file cabinet. Some will be kept in a cardex on your supervisor's desk. Locator cards are an example of this. Some are odd sized forms or charts that need to be kept somewhere else. The activity in your office will determine a great deal of which records you maintain. Each office prepares AF Form 80 in duplicate, IAW AFR 12-20 and 12-50, one copy is maintained in the front of the files, the other is forwarded to the documentation manager for review and use in monitoring your files. The administration section in your hospital will assist you in preparing and maintaining your files if you only ask.

Once your AF Form 80 is completed, you prepare an AF Form 82 for each subject you listed on the AF Form 80. The AF Form 82 is then put on the folder, cardex, notebook, etc. that the AF Form 80 shows as location for that subject. Think of it as the title of that chapter. It tells you what contents are inside your folder, but it also gives you cut off and disposition instructions. Cut off is like the "end of its shelf life" - - an expiration date. If the cut off instructions read 30 Sept then at the end of the fiscal year those records are no longer current. If it say 31 December, those records are not current after the end of the calendar year. But you don't just throw the records away. The disposition instructions give you further instructions -- to keep for one year, two years or when superseded. Each subject series has its own rules for cut off and disposition. AFR 12-50 gives this information. Of course, you should realize the files are done every year -- so you always have a current file and last year's files. The AF Form 80 is accomplished each year and is kept with its own file.

As mentioned earlier a good filing system in Medical Food Service is very important. Up to now, you have been introduced to many different forms used in various operations within Medical Food Service activities. Some of these were records used in menu planning, or purchasin, storing, and issuing food supplies and management of clinical dietitics. So, it is of utmost importance to be familiar with the Air Force's filing system. See Figures 18 thru 22 for examples of how Medical Food Service files its forms.

FILES MAINTENANCE AND DISPOSITION PLAN

DATE PREPARED: 1 April 1984

1. OFFICE OF RECORD (Symbol, title and unit. Use AFM 11-2 and 11-4 abbreviations)
Medical Food Service
USAF Regional Hospital Sheppard

2. PREPARED BY (Name of documentation clerk)
Michel Pujah (secretary)

3. TYPED NAMED AND POSITION TITLE OF DOCUMENTATION CUSTODIAN
Real J Charron
NCOIC Medical Food Service

4. SIGNATURE OF CUSTODIAN

☒ INITIAL PLAN (Does not replace a previous plan)

☐ SUPERSEDES PLAN DATED _____ (Include office symbol and title if different from item 1.)

FILES PLAN

A	B TITLE OR DESCRIPTION OF DOCUMENTATION SERIES	C FILING ARRANGEMENT OF EACH SERIES (Subjectively, numerically, alphabetically, etc.)	D DISPOSITION (Insert table and rule number in AFM 12-50. If table and rule cannot be found, enter "None")
1	Files Maintenance and Disposition Forms (AF Forms 80 & 82)	Front of Files and each series	T12-, R2
2	Clinical Dietetics A - Diet Orders (AF Form 1094) B - Diet Order Change (AF Form 2567)	Chronological	T168-11, R2
3	Work Load Data A - Diet Census (AF Form 2573) B - Medical Food Cost Report (AF Fm 541) C - Diet Consultation Record (AF Fm 2576)	Subjective	T168-11, R3
4	Receipts for Controlled Forms A - Request for Issue or Turn In (DD Fm 1150) B - Hospital Invoice/Receipt/ Accounts Receivable Record (AF Fm 1127) C - Ration Earnings Record (AF Fm 544)	Subjective	T168-11, R4
5	Food Cost, Purchasing, Control, Storing A - Food Purchase Use Record (AF Fm 1742) B - Subistence Request (AF Fm 287) C - Food Issue Record (AF Fm 543)	Subjective A-(Filed on desk in storeroom) B- (Storeroom) C- (Storeroom)	T168-11, R5
6	Menu Planning A - Regular and Therapeutic Hosp Menus B - Menu Planner and Analysis (AF Fm 2580) C - Therapeutic Worksheet/Breakfast (AF Fm 2495) D - Therapeutic Worksheet/Dinner/Supper (AF Fm 2496)	Subjective	T168-11, R6

AF FORM 80 JUL 69

Figure 18

1. FILE MAINTENCE AND DISPOSITION FORMS.

(AF Form 80 and 82)

1. ITEM NO. AND TITLE OR DESCRIPTION OF DOCUMENTATION SERIES

2. TABLE AND RULE NUMBER FROM AFM 12-50
T12-1, R2

3. CUTOFF INSTRUCTIONS

See Below

4. DISPOSITION INSTRUCTIONS (After Cut Off)

Destroy when superseded, obsolete, or no longer needed.

FILES DISPOSITION CONTROL LABEL

AF FORM JUL 69 82

2. CLINICAL DIETITICS

Diet Order (AF Fm 1094) and Diet Order Change (AF Fm 2567)

1. ITEM NO. AND TITLE OR DESCRIPTION OF DOCUMENTATION SERIES

2. TABLE AND RULE NUMBER FROM AFM 12-50
T 168-11 R8

3. CUTOFF INSTRUCTIONS

30 September

4. DISPOSITION INSTRUCTIONS (After Cut Off)

Destroy after one yr unless needed for operational support

FILES DISPOSITION CONTROL LABEL

AF FORM JUL 69 82

3. WORK LOAD DATA

Diet Census (AF Fm 2573) Information copy of Medical Food Cost Report (AF Fm 544) Diet Consultation Report (A F Fm 2576)

1. ITEM NO. AND TITLE OR DESCRIPTION OF DOCUMENTATION SERIES

2. TABLE AND RULE NUMBER FROM AFM 12-50
T168-11 R3

3. CUTOFF INSTRUCTIONS

30 September

4. DISPOSITION INSTRUCTIONS (After Cut Off)

Destroy After 2 yrs

FILES DISPOSITION CONTROL LABEL

AF FORM JUL 69 82

4. RECEIPTS FOR CONTROLLED FORMS.

Request for Issue of Turn in (AF Fm 1150), Hospital Invoice/ Reciept/Account Receivable Record (AF Fm 1127), Duplicated Copies of AF Fm 544

1. ITEM NO. AND TITLE OR DESCRIPTION OF DOCUMENTATION SERIES

2. TABLE AND RULE NUMBER FROM AFM 12-50
T168-11 R4

3. CUTOFF INSTRUCTIONS

30 September

4. DISPOSITION INSTRUCTIONS (After Cut Off)

Destroy after 1 yr

FILES DISPOSITION CONTROL LABEL

AF FORM JUL 69 82

5. FOOD COST, PURCHASING, CONTROL, STORING

Subsistence Requests (AF Fm 287), Extended Copies of Food -Issue Record (AF Fm 543) - Food Purchase Use Record (AF Fm 1742)

1. ITEM NO. AND TITLE OR DESCRIPTION OF DOCUMENTATION SERIES

2. TABLE AND RULE NUMBER FROM AFM 12-50
T168-11 R5

3. CUTOFF INSTRUCTIONS

30 September

4. DISPOSITION INSTRUCTIONS (After Cut Off)

Destroy After 1 year Unless needed for operational purposes.

FILES DISPOSITION CONTROL LABEL

AF FORM JUL 69 82

6. MENU PLANNING (MASTERS)

Reg and Ther Menus. Menu Planner Analaysis (AF Fm 2580), Theraputic Worksheet/Breakfast (AF Fm2496) Theraputic Worksheet/Dinner/Supper (AF Fm 2496)

1. ITEM NO. AND TITLE OR DESCRIPTION OF DOCUMENTATION SERIES

2. TABLE AND RULE NUMBER FROM AFM 12-50
T168-11 R6

3. CUTOFF INSTRUCTIONS

See Below

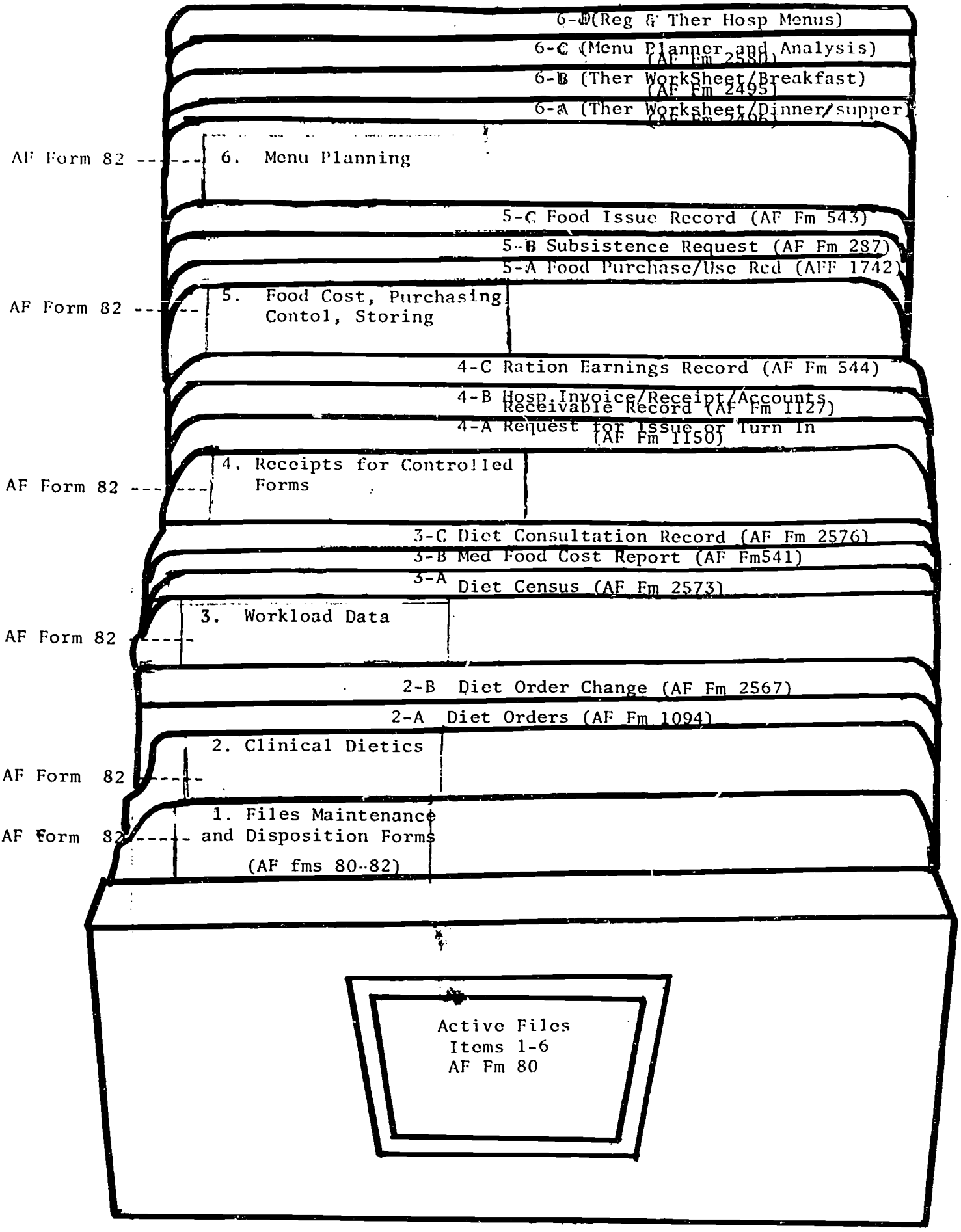
4. DISPOSITION INSTRUCTIONS (After Cut Off)

Destroy after 1 yr unless needed for operation purposes.

FILES DISPOSITION CONTROL LABEL

AF FORM JUL 69 82

Figure 18


6-D (Reg & Ther Hosp Menus)
6-C (Menu Planner and Analysis) (AF Fm 2580)
6-B (Ther WorkSheet/Breakfast) (AF Fm 2495)
6-A (Ther Worksheet/Dinner/supper) (AF Fm 2496)
AF Form 82
6. Menu Planning
5-C Food Issue Record (AF Fm 543)
5-B Subsistence Request (AF Fm 287)
5-A Food Purchase/Use Rcd (AFF 1742)
AF Form 82
5. Food Cost, Purchasing Contol, Storing
4-C Ration Earnings Record (AF Fm 544)
4-B Hosp Invoice/Receipt/Accounts Receivable Record (AF Fm 1127)
4-A Request for Issue or Turn In (AF Fm 1150)
AF Form 82
4. Receipts for Controlled Forms
3-C Diet Consultation Record (AF Fm 2576)
3-B Med Food Cost Report (AF Fm541)
3-A Diet Census (AF Fm 2573)
AF Form 82
3. Workload Data
2-B Diet Order Change (AF Fm 2567)
2-A Diet Orders (AF Fm 1094)
AF Form 82
2. Clinical Dietics
AF Form 82
1. Files Maintenance and Disposition Forms (AF fms 80-82)
Active Files
Items 1-6
AF Fm 80

Medical food service records are created in the operation of medical food service activities. They consist of records used in menu planning; purchasing, storing, and issuing food supplies; production and service of meals to bed patients and dining room patrons; accounting for money from the sale of meals; accumulating workload data; and in the management of clinical dietetics.

TABLE 168-11

MEDICAL FOOD SERVICE RECORDS

RULE	A If documents are or pertain to	B consisting of	C which are	D then
1	work schedules	Medical Food Service Work Schedule (AF Form 2578), Daily Absentee Record (AF Form 2581), and Medical Food Service Daily Work Assignment (AF Form 2577)		destroy after 1 year.
2	in-service training			destroy when purpose has been served.
3	workload data	* Diet Census (AF Form 2573), Diet Consultation Record (AF Form 2576), and information copy of Medical Food Cost Report (AF Form 541)		destroy after 2 years.
4	receipts for controlled forms	Request for Issue or Turn-in * (DD Form 1150), Hospital Invoice/Receipt/Account Receivable Record (AF Form 1127), duplicate copies of Ration Earnings Record (AF Form 544) and for clinics supported by Base Food Service, carbon copy of Dining Hall Signature Record (AF Form 1339)	subject to audit	destroy after 1 year, providing requirements of table 175--2 have been met.
5	food purchasing, control, storing, issuing, and food cost data	Advance Orders, Subsistence Requests (AF Form 287), Tally-In-Out (AF Form 129), and Food Purchase/Use Record (AF Form 1742), and extended copies Food Issue Record (AF Form 543)		destroy after 1 year, unless needed for operational purposes.

Figure 20

TABLE 168-11 (Continued)

R E E	A If documents are or pertain to	B consisting of	C which are	D then
6	menu planning	Regular and Therapeutic Hospital Menus, Menu Planner and Analysis (AF Form 2580), Therapeutic Worksheet - Breakfast (AF Form 2495), Therapeutic Worksheet - Dinner/Supper (AF Form 2496)	master copies	
7	food production and service	Outpatients' and Vistors' Meal Log (AF Form 2563), Medical Food Service Cash and Forms Receipt (AF Form 2570), Recipe Popularity Record (AF Form 2571), Meat/Salad Worksheet (AF Form 2575), Baker's Worksheet (AF Form 2574), Diet Worksheet (AF Form 2486), Food Temperature Chart (AF Form 2582), Cooks Worksheet (AF Form 679)		destroy immediately after purpose has been served
8	clinical dietetics	★ Diet Record (AF Form 1041), Therapeutic Menu Patterns, copies of Selective Menu (AF Forms 1737 and 1739), Therapeutic Menu (AF Forms 1738 and 1740), Soft, Bland 4, Fiber Restricted (Selective) (AF Forms 2493 and 2494), Soft, Bland 4, Fiber Restricted (Non-Selective) (AF Form 2502), Dental Soft-T&A Soft (AF Forms 2483 and 2484), Pediatric (AF Forms 2491 and 2492), Liquid (AF Forms 2481 and 2482), Calorie Restricted (AF Forms 2499 and 2500), Diabetic (AF Forms 2479 and 2480), Bland (AF Forms 2489 and 2490), Sodium Restricted (AF Forms 2478 and		

Figure 21
41

TABLE 168-11 (Continued)

RULE	A	B	C	D
	If documents are or pertain to	consisting of	which are	then
		2485), Modified Fat (AF Forms 2497 and 2498), Hyperlipoproteinemia Diet 2/Diet 4 (AF Forms 2487 and 2488), Nourishment Order (AF Form 2568), Nourishment (AF Form 2579), Nutritional Assessment (AF Form 2572) and Nutrition History (AF Form 2569)		
9 ★		Diet Order (AF Form 1094) and Diet Order Change (AF Form 2567)	substantiating documents to meet JCAH requirements	destroy after 1 year.

Figure 22

42

EXERCISE 7

QUESTIONS

1. Why is it important f the Air Force to have a systematic filing system?

2. How is AF Form 80 used in a filing system?

3. How is AF Form 82 used in a filing system?

4. What two regulations govern how a filing system is to be set up for all Air Force activities that are responsible for keeping accurate records of documentation?

EXERCISE 6

1. Who issues DD Form 714, Meal Card?

2. What diners must sign AF Form 1339, Dining Hall Signature Record?

3. When are the used AF Form 1339 turned in to the MSA office?

4. What information must the diner enter on AF Form 1339?

5. What is the AF Form 1087 used for?

6. What information would a diner complete on AF Form 1087?

7. Which AF Forms used in Medical Food Service are accountable or controlled forms?

8. Why would it be necessary to control them?

9. What is AF Form 544, Ration Earnings Record used for?

10. What information is supplied by the Diet Therapy Supervisor or his designator representative?

    a. Where does this information come from in the conventional system?

    b. In the MALACS?

11. What is the MALACS concept?

12. Why is AF Form 287 and 1339 no longer needed in MALACS?

EXERCISE 5

1. DD Form 577, Signature Card is issued by the _____ to each individual in Medical Food Service Departments who are authorized to sign for _____ items.
2. AF Form 287, Subsistence Request, is used to purchase _____ from the commissary officer.
3. How many issue points can one set of AF Form 287 be used for?

   _____

4. What should be done before signing Block 10 on AF Form 287?

   _____

5. What is AF Form 1742, Food Purchase/Use Record used for?

   _____

   _____

6. Who maintains AF Form 1742, Food Purchase/Use Record?

   _____

7. Explain the First-in, First-out method.

   _____

   _____

   _____

8. AF Form 543, Food Issue Record, is used to _____

   _____.

9. AF Form 543, Food Issue Record is initiated by _____.
10. AF Form 543 is prepared in _____ copies.
11. Who completes the "ISSUED" column of AF Form 543?

    _____

12. What type items may be ordered from the local vendor?

    _____

    _____

13. Who authorizes the contract for local vendors?

    _____

14. When are inventories performed?

    _____

    _____

EXERCISE 4

To answer these questions you must use Figures 4 and 5.

1. Who prepares AF Form 2578, Medical Food Service Work Schedule?

   _____

2. Schedules must be prepared in and posted _____ weeks in advance.

3. Schedules must cover a minimum of how many weeks?

   _____

4. Who prepares AF Form 2577, Medical Food Service Daily Work Assignment?

   _____

5. Using the work schedule provided in this SW on page 16, answer the following questions.

   a. What are Mrs Jacksons days off?

      _____

   b. What are the hours of duty on 3 Aug for A1C Padgett?

      _____

   c. What are the hours of duty on 16 Aug for Mrs Shavers?

      _____

   d. What are the hours of duty and days of duty for the storeroom clerk?

      _____

6. Using the work assignment sheet provided on page 17 of this SW, answer the following questions.

   a. Who are the diet workers for the early shift and what are their jobs?

      _____

      _____

   b. Who is the first cook for the late shift?

      _____

   c. Who is working the cold side of PTS for the late shift?

      _____

   d. Who is doing pots and pans for the early shift?

      _____

   e. Identify the two shift leaders and specify what shift they are on.

      _____

      _____

EXERCISE 3

1. Define a menu

2. Define "Selective Menu"

3. Are selective menus nutritionally adequate? Why?

4. Why are cycle menus used?

EXERCISE 2

1. Information concerning USAF disaster contingency plans are found in what regulation?

2. What part does Medical Food Service play in the development of the hospital OPLAN?

3. Is your role as a Diet Therapist in a disaster important? Explain why?

4. What are rations?

5. What is a "B" ration?

6. What is the difference between "A" and "B" rations?

7. What is an MRE?

8. List four advantages of the MRE.

   a.

   b.

   c.

   d.

9. When is the "BH" ration used?

EXERCISE 1

1. Define Air Force Publications.

2. List two classes of Air Force Publications.

   a.

   b.

3. Who issues departmental publications and to whom do they apply?

4. Who issues field publications? To whom would they pertain?

5. Define each of the following:

   a. Regulations -

   b. Manuals -

   c. Pamphlets -

6. Explain the part each of the following plays in the USAF publications numbering system:

   a. Title -

   b. Basic number -

   c. Control number -

   d. Basic subject heading -

7. If you were asked to provide your boss with information concerning medical discharges, where would you look first?

J3ABR92630-001-I-2

Technical Training

Diet Therapy Specialist

NUTRITION AND DIET THERAPY

August 1984

SCHOOL OF HEALTH CARE SCIENCES, USAF
Department of Biomedical Sciences
Sheppard Air Force Base, Texas 76311

Designed for ATC Course Use

RGL: 11.1

DO NOT USE ON THE JOB

Department of Biomedical Sciences
School of Health Care Sciences, USAF
Sheppard Air Force Base, Texas 76311

SW J3ABR92630-003-I-2
August 1984

NUTRITION AND DIET THERAPY

OBJECTIVES:

After completing this Study Guide/Workbook you will be able to:

1. Identify facts concerning dietetic terminology with 60% accuracy.

2. Identify facts concerning principles of nutrition IAW PC J3ABR92630-000-I-2b(1) through 2b(7).

3. Given AFM 160-8, AF Forms 1094, 1741, 2486, 2495, 2496, 2567, 2573 and menus process patient menus, with no more than ten (10) instructor assists.

4. Using AFM 160-8 and anthropometric information calculate a calorie restricted dietary regimen, with no more than three (3) instructor assists.

5. Using recipe TF-3 in AFM 160-8, prepare a tube feeding with no more than two (2) instructor assists.

MEDICAL TERMINOLOGY

INTRODUCTION

This section is an introduction to medical terminology and medical and dietetic abbreviations. It is not a complete dictionary of medical terms, but it does contain a selection of the most commonly used medical prefixes, roots, and suffixes. With this as a basis, you will be able to understand the more commonly used terms you encounter in the field of health care.

INFORMATION

As a member of the medical team it is important for you to have an understanding of terminology and abbreviations used in the medical field. You will see medical terminology and abbreviations on diet prescriptions and will use them in your conversations with other medical personnel. This is necessary because medicine, like other professions, has its own working language.

Medical terminology was not designed to confuse laymen. Instead, it was designed to provide uniformity. In early medicine there was little uniformity; consequently, confusion resulted when different words were used to describe the same anatomical structure or medical condition.

Eventually, Greek and Latin words were adopted and certain principles of medical terminology evolved. These principles are:

1. Each part should have one name only

2. The names should be as short and simple as possible

3. Related structures should have similar names

4. Adjectives, with few exceptions, should be in opposing pairs

Medical Terminology Defined

Medical terminology exists only for the field of medicine. It is used to describe the human body, such as:

1. Its functions

2. Its normal state

3. Its abnormal state

4. Diseases or injuries which may affect it

This supersedes SW JABR92630 000-I-2, March 1984

Learning Medical Terminology

Medical terminology and the medical vocabulary are extensive. Familiarity with it is necessary to prevent errors in interpretation and use. It may be possible to "pick up" medical words over a long period of association with physicians and other hospital personnel, but a more rapid familiarity may be obtained by memorizing those which are frequently encountered. How do you begin to learn medical words? You learn them by an analysis of words themselves.

Each medical terms contains a:

ROOT or STEM - This forms the body or basis of the term created. It is used to describe and locate injuries, treatment and diagnosis.

PREFIX - A prefix is a syllable, a group of syllables, or a word placed before the stem to alter its meaning. Prefixes may explain location, number, direction or position.

SUFFIX - A suffix may be a letter or a syllable at the end of a word that gives additional meaning to and clarifies a word stem. Its function is much the same as a prefix; that is, it may explain location, number, direction or position.

When you hear a term, or see it, break it down - analyze it - find the meaning of the root, prefix and suffix and combine them. Then you will find it easy, while learning the meaning, to learn the correct spelling also. The misunderstanding or leaving out of a single letter may completely change the meaning. Also, some words sound alike but have different meanings. As an example:

Pschosis = a severe mental disorder
Sycosis = inflammation of hair follicle

Care must be taken, however, to insure that the meaning of the stems, prefixes, and suffixes are fully understood. The misinterpretation of just a single letter may completely alter the meaning or even reverse it.

Example: Prefixes	Root or Stem	
AB	duct	= to lead away
AD	duct	= to draw toward

Figure 1 shows how words are broken down to the prefix, stem, and suffix of the word to give its common meaning:

Whole Word	Prefix	Stem	Suffix	Common Meaning
Supervisor	Super (over)	Vit (life)	or (one who)	an overseer
Transportation	Trans (across)	Port (carry)	ation (act or state)	act of carrying or moving
Dislocation	Dis (away or apart from	Loc (a place)	ation (act or state)	act of putting out of place
Hyperglycemia	Hyper (excess)	Glyc (glucose)	emia (blood)	excess glucose in the blood

Figure 1

Pronouncing Medical Terms

Learn to pronounce medical terms correctly. Pronounce all syllable of the word distinctly; listen to the doctors; use the self-pronouncing dictionary; try new words on your friends.

Mispronunciation is easy since many words have similar sound and only a slight difference in spelling, but a big difference in meaning. Examples are:

1. MYOLYSIS - muscle destruction

2. MYOSITIS - inflammation of muscle

3. MYELITIS - inflammation of bone marrow or spinal cord

4. MYOCYTE - muscular tissue cell

5. MYELOCYTE - cell in bone marrow

You can see that these words can easily be confused and require extra care in learning. So, above all, when using medical terms, pronounce clearly, do not slur. You will avoid confusion. Listen to words and practice them.

Pronunciation will be much easier if you remember these shortcuts.

1. Ch is sometimes pronounced like k. Example: cholecystitis, chronic

2. Ps is pronounced like s. Example: psychosis, pseudonym

3. Pn is pronounced with only the n sound. Example: pneumonia

4. C and g are given the soft sound of s and j, respectively, before e, i and y in words of both Greek and Latin orgin. Example: cyst, sytoplasm, genesis, gelatin

5. C and g have a harsh sound before other letters. Example: cardiac, cryotherapy, gastric, gland

6. Ae and oe are pronounced ee. Example: alae, casease, coelom

7. I at the end of word (to form a plural) is pronounced eye. Example: glomeruli, fungi

8. E and es, when forming the final letters or letter of a word, are often pronounced as separate syllables. Example: rete (reetee), nares (nayreez)

Sources for Finding the Meaning of Unfamiliar Terminology

In the event you are not able to define a medical term in a text or on a diet order, there are several sources that you may consult to find the correct definition or explanation. These sources will be in your medical library, department library and in some of your texts.

1. Dictionary - includes all of the words in the English vocabulary

2. Medical dictionary - lists all medical, scientific, and technical words pertaining to the field of medicine

3. Glossary - a partial dictionary of words and terms used in a particular text. It contains foreign, difficult and technical terms with explanations and/or translations.

4. Index - a table, list or file, usually arranged alphabetically in the back of a book for facilitating reference to topics, names or objects in a book together with page numbers.

5. Table of contents - a compact, systematic list of chapters and subjects included in each chapter. Usually found in the front of a book.

Common Roots

You have already learned that each medical term contains a root or stem which is the body or basis of the term created. One or more may be used together and are at times used in a combining form as a prefix.

Here are some commonly used roots and combining forms:

Medical Root	Common Word	Combining Form	Example
adeno	gland	aden-	adenectomy
arthro	joint	arthr-	arthritis
crani	skull	crani-	cranium
cardi	heart	card-, cardi-	cardialgia
chole	bile	chole-	cholecystitus
cholecyst	gall bladder	cholecyst-	cholecystectomy
derm	skin	derm-	dermatology
enter	instestines	enter-	enterology
gastr	stomach	gastro-	grastrectomy
hem	blood	hemo-	hemostasis
hepat	liver	hepat-	hepatitis
my	muscle	myo-	myocardial
nas	nose	nas-	nasal
nephr	kidney	nehpr-	nephritis
ren	kidney	ren-	intrarenal
neur	nerve	neur-	neurocyte-
ost	bone	ost-	osteomyelitis
oss	bone	oss-	ossiphone
ot	ear	ot-	parotid
aur	ear	aur-	aurinasal
pharyng	throat	pharyng-	pharyngeal
phleb	vein	phleb-	phlebitis
pneumo, pulmo	lungs	pneum-, pulmon-	pulmonary
stom	mouth	stomat-	stomatal

Common Prefixes

The prefix is a syllable or group of syllables joined to the beginning of a word to alter its meaning. For example: the prefix "anti" means "against". The term "sepsis" means "poisoning which is caused by the product of a putrefactive process". When the prefix "anti" is added to the term (root) to form antisepsis, the word means "the prevention of sepsis (poisoning) by the inhibition of causative organism". Another example: the term "bacterial" means "pertaining to or caused by bacteria". When the prefix "anti" is added to the term (root) to form antibacterial, the word now means "that which destroys bacteria or suppresses their growth".

Listed below are frequently used medical prefixes and their meanings.

A - without or not
Alg - pain
bi - two
bio - life
bil - bile
cardi - heart
chol - bile
derm - skin
dys - bad; improper
em - blood
gastro - stomach
glcy - sweet, sugar
hem - blood
hepat - liver
hydr - water
hyper - excess, above, beyond
hypo - below, under
kilo - one thousand
lact - milk
lip - fat
mal - bad; abnormal
metr - measure
micr - small
nephr - kidney
neur - nerve
pneum - breath, air
poly - many
post - behind in time or place
pre - before in time or place
pulmo - lung
renal - kidneys
mega - great; large

DIETETIC TERMINOLOGY AND ABBREVIATIONS

Abbreviations are used to save time. There are a number of abbreviations frequently used by medical food service personnel. They are important to you on the job. They offer many shortcuts in writing and speaking. For instance we can write "H.S." instead of "hour of sleep" or we can write "Na/R" instead of prepared without salt".

Always use accepted abbreviations. Do not make up your own. Some of the accepted abbreviations commonly used in medical food service are:

Abbreviation	Meaning	Abbreviation	Meaning
ADA	American Dietetic Association	mg	milligram
A.P.	as purchased	ml	milliliter
bid or 2id	twice a day	Na/R	prepared without salt
b.m.r.	basal metabolic rate	NPO	nothing by mouth
Bu	buttered	oz	ounce
C	cup	p	after
Ca	calcium	P	Phosphorus
Cal/R	calorie restricted	p.c.	after meals
cc	cubic centimeter	p.o.	by mouth
CHO	carbohydrate	pt	pint
DB or diab	diabetic	prn	as necessary
e.g.	for example	pro	protein
E.P.	edible portion	q	every
Ex or exch	food exchange	q2h	every two hours
Fat/C or F/C	fat controlled	q3h	every three hours
fdg	feeding	qd	every day
Fe	iron	qid	four times a day
fl	fluid	qs	as much as necessary
fort	fortified	qt	quart
G.I.	gastrointestinal	SC	soft cooked
gm	gram	Sl	slice
gr	grain	stat	at once
gr	ground	str	strained
h	hour	sub	substitution
HC	hard cooked	T&A	Tonsillectomy and Adenoidectomy
HS	hour of sleep or bedtime	TA	Table of Allowances
I	Iodine	tbsp or T	tablespoon

Abbreviation	Meaning
IU	international unit
IV	intravenously
jc or ju	juice
K	potassium
Kg	kilogram
lb or #	pound
lg	large
liq	liquid
/R	restricted
Chol	cholesterol

Abbreviation	Meaning
tid	three times a day
IBW	ideal body weight
MAO	monoamine oxidase
wh	whole
NaCL	sodium chloride
tsp or t	teaspoon
w/or $\bar{c}$	with
W/O or $\bar{s}$	without
Na	sodium

SYMBOLS

↓ decrease

↑ increase

> greater than

< less than

RECOMMENDED DIETARY ALLOWANCES

INTRODUCTION

Now that you have studied the composition of foods and know the sources of various nutrients, the time has come to learn how to analyze a diet. By using tables of food values to analyze a diet, you can determine whether or not an individual is consuming enough nutrients to keep his/her body in optimum health.

INFORMATION

Late in 1940, the Food and Nutrition Board of the National Research Council was activated to guide the government in a nutrition program. One of the first activities of this board was the careful review of research on human requirements for various nutrients. From this study came the publication of the Recommended Dietary Allowances in 1943. Since that time, the board has functioned, and will continue to function, in the evaluation of new research on nutritional needs. The board has published revisions of the standards in 1945, 1948, 1953, 1958, 1963, 1968 and 1974. The latest revision was released in 1980.

The formulations designed by the Food and Nutrition Board of the National Research Council were designated "Recommended Dietary Allowances" (RDA). These were value judgments based on the existing knowledge of nutritional science and subject to revision as new knowledge became available. The allowances, from their beginning, have been primarily intended to serve as guides for planning adequate diets for healthy individuals and population groups. They also serve as guides for interpreting food consumption records of specific groups of population.

RDAs are recommendations for the average daily amounts of nutrients that population groups should consume over a period of time. RDA should not be confused with requirements for a specific individual. Differences in the nutrient requirements of individuals are ordinarily unknown. Therefore, RDA (except for energy) are estimated to exceed the requirements of most individuals and thereby ensure that the needs of nearly all in the population are met. Intakes below the recommended allowance for a nutrient are not necessarily inadequate, but the risk of having an inadequate intake increases to the extent that intake is less than the level recommended as safe. (See Figure 1)

RDAs are recommendations established for healthy populations. Special needs for nutrients arising from such problems as premature birth, inherited metabolic disorders, infections, chronic diseases, and the use of medications require special dietary and therapeutic measures. These conditions are not covered by the RDA.

RDAs are intended to be met by a diet of a wide variety of foods rather than by supplementation or by extensive fortification of single foods. Therefore, diets should be composed of a variety of foods that are acceptable, palatable, and economically attainable by the consumer using the RDA as a guide to assessment of their nutritional adequacy.

In recognition of individual biological variability, the estimated average requirement is increased in establishing the RDA to meet the needs of nearly all the healthy population. Estimation of the recommended allowances follows essentially four steps:

1. Estimating the average requirement of a population for a given nutrient and the variability of requirement within the population.

2. Increasing the average requirement by an amount sufficient to meet the needs of nearly all members of the population.

3. Increasing the allowance to account for insufficient utilization by the body of the nutrients as consumed (poor absorption).

4. Using judgment in interpreting and estimating allowances when information on requirements is limited.

The RDAs are presented as daily allowance in order to simplify dietary calculations. Yet, the various protective mechanisms of the body are such that, if the recommended dietary allowance for a nutrient is not met on a particular day, a surplus consumed shortly thereafter will compensate for the inadequacy for normal individuals. In addition, the body has the ability to store some nutrients when the amounts exceed immediate needs of the body. An individual who has habitually had a high intake of Vitamin A, a fat-soluble vitamin, may have stored enough of this vitamin to meet his/her needs for several months. The water-soluble vitamins are not stored to the same extent and thus must be maintained much closer to that of the RDAs. In estimating dietary adequacy, it would seem entirely acceptable to average intakes of nutrients over a five to eight day period.

Conditions That May Require Adjustment in RDA

PHYSICAL ACTIVITY. Work, physical exercise and athletic activity increase energy expenditure. Physical activity, like any other condition in which energy expendure is elevated, leads to increased food intake. In turn a reduction in any of these activities will lead to a reduced food intake.

CLIMATE. Usually, adjustments are made in clothing and housing to protect the body against drastic changes in environmental temperature. Therefore, adjustments in dietary allowances to compensate for changes in temperature are not considered necessary. There is little evidence that nutrient requirements, other than those for energy, are altered when individuals are exposed to heat or cold. The increase in food intake for cold weather should carry with it extra amounts of all nutrients present in the food. Prolonged exposure to high temperatures may reduce activity and energy expenditure and, therefore, food intake. Thus, it is important to ensure that the total food consumed provides appropriate amounts of essential nutrients. Exposure to temperatures that increase sweating will also increase the need for water and salt.

AGING. It is evident from studies of adult populations that body composition changes throughout life, with fat increasing and metabolically active tissues being slowly reduced. This reduction accounts for the fall in basal energy metabolism, along with which there is often aneven greater reduction in physical activity. As a result, less food is needed to meet energy requirements, and, unless food choices are made with great care, the amounts of essential nutrients consumed are likely to be less than during the more active years and may fall below desirable levels. Also, the limited and monotonous social environment of many older people often fails to afford the usual stimli for a good appetite. For this group in particular, it is important to ensure that the smaller quantities of food consumed are selected to provide the needed amounts of essential nutrients. Effort should be made to stimulate appetite by providing an environment that makes eating a pleasure rather than a necessity. In addition, physical activity should be continued in adult life and into old age.

Chronic diseases occur with increasing frequency as aging progresses, many requiring special dietary modification for those affected.

CLINICAL PROBLEMS. The special nutritional needs arising from metabolic disorders, chronic diseases, injuries, prematurity, and many other medical conditions require therapeutic treatment not covered by RDA for healthy persons. Infections, even mild ones, increase metabolic losses of nitrogen and of a number of vitamins and minerals. In addition, acute or chronic infections involving the gastrointestinal tract impair the absorption of nutrients. At the same time, poor appetite may lead to curtailed food intake, commonly resulting in depletion of body stores of nutrients and wasting of tissues. Severe or prolonged illness may precipitate malnutrition in individuals habitually receiving inadequate diets.

The period of recuperation following illness, trauma, burns, and surgical procedures, during which body stores are being replenished and tissues restored, is probably comparable to a period of growth. Ordinarily, food consumption is stimulated during such periods, but if appetite remains depressed, special dietary management may be required to meet the increased needs for nutrients for restoring depleted tissues, especially the need for energy.

Infestations by intestinal parasites prevalent in many areas of the world may reduce the amounts of certain nutrients available to the host. Such infestations require medical attention, but when reinfection is almost continuous (especially in young children), additional food or nutritional supplements will compensate in part for nutrient losses.

Application of Recommended Dietary Allowances

In considering the use of the RDA for a variety of purposes, certain limitations must be kept clearly in mind.

RDA should be applied to population groups rather than to individuals. RDA was devised as standards or guides to serve as a goal for good nutrition on the basis that, in population groups consuming a varied diet providing the RDA for all nutrients, there would be few individuals suffering from nutritional inadequacy. RDAs are estimates of acceptable daily nutrient intakes in the sense that the needs of most healthy individuals will no greater than the RDA. The basis for estimation of RDA is such that, even if a specific individual habitually consumes less than the recommended amounts of some nutrients, his/her diet is not necessarily inadequate for those nutrients. However, since the requirements of each individual are not known, it is clear that the more habitual intake falls below the RDA and the longer the low intake continues, the greater is the risk of deficiency.

RDAs should not be used as justifications for reducing habitual intakes of nutrients. In developing RDA, no effort was made to relate them to what, for reasons other than strictly nutritional ones, may be considered desirable intakes. For example, a diet that provided merely the recommended dietary allowance for protein would be unacceptable to most people in countries where animal products are an important part of the diet.

In planning diets, it is usually not possible to supply all the recommended nutrients at exactly the allowance levels. Intakes of some nutrients will exceed the RDA standard when the diet provides just the recommended quantities of other that are in low concentration in the food supply. For example, animal products that are naturally high in protein are important sources of several trace nutrients; to meet the allowances for some of the trace nutrients it may be necessary to exceed the allowances for protein and other nutrients.

Most, but not all, nutrients are tolerated well in amounts that exceed the allowances by as much as two to three times, and a substantial proportion of the population commonly consumes an excess over the RDA for several nutrients without evidence of adverse effects.

However, an intake of energy in excess of requirements is highly undesirable, as it will lead to obesity. High intakes of a number of nutrients - such as Vitamins A an D and certain trace elements can be toxic.

In addition to the limitations discussed above, the following points should be recognized: (1) RDAs have not been extablished for all the essential nutrients. (2) Many foods have not been analyzed for all these nutrients. And (3) interactions of various types between nutrients and other food constituents may affect the bicavailability of some nutrients.

Nutritional Allowances As Guidelines For Planning and Procuring Food Supplies And In Establishing Policy For Health And Welfare Programs

Several further considerations are necessary when the RDAs are used as the basis for estimating food requirements and meal patterns for school lunch programs, special food services, and various child feeding programs, or by federal, state, or local health and welfare agencies as a basis for licensing and certification standards for such group facilities as day-care centers, nursing homes, and residential homes.

First, the RDA should be met with a wide variety of foods. Nutritional deficiencies are encountered primarily in populations that select from a variety of foods. It has not been possible to set RDA for all the known nutrients. RDA serve rather, as a guide such that a varied diet meeting RDA will probably be adequate in all other nutrients. Therefore, it is important to plan a diet to meet the RDA wide a wide variety of foods rather than to depend heavily on a more limited selection fortified only in nutrients for which an allowance has been set (cereals, juice substitutes, etc.).

Second, the foods selected must be palatable and acceptable so they will be consumed over long periods of time in the required quantities. Low-cost diets can be devised that will meet the RDA standards, but, if these diets are to be used by public agencies as standards for estimating food requirements for health and welfare programs or for public assistance, they should be composed of foods that will be eaten and enjoyed.

Finally, to meet the RDA adequately, a supply of food for one week should include all nutrients at allowance levels in proportion to energy need. (An individual food, or even a meal, should not be expected to contain allowances for all nutrients.)

NUTRITION EDUCATION

For nutrition education programs, it is customary to group foods according to the nutrients for which the foods are major sources. Guidelines are usually provided to illustrate how nutrient needs can be met by selecting from among a relatively few groups of foods. Such food groupings and food guides are useful for illustrating the essential elements of a basic diet, but it is important that such guides be adapted and modified imaginatively to meet the needs of individuals and families with different levels of income, cultural patterns, and lifestyles. The RDA for nutrients can be obtained from a wide variety of food combinations and dietary patterns - any of which can be adequate, provided that care is exercised in food selection.

THE REFERENCE MAN AND REFERENCE WOMAN

The RDA is a goal towards which to aim when planning an adequate diet. Naturally, not everyone will have the same nutritional requirements because each individual's body metabolizes food and stores nutrients at different rates. In addition, adjustments must be made in the RDA to allow for body size and changes in activity and environmental temperature.

To aid in applying the RDA, the Food and Nutrition Board adopted the concept of the "reference" man and woman which allows for formulating standard calorie allowances in which certain influences, such as age, weight, activity, and environmental temperature are specified. The "reference" man and woman serve as a basis from which adjustments for body size and changes in activity and environmental temperature can be made.

The data on the "reference" man and woman are as follows:

Reference man - weighs 70 Kg (or 154 lbs)
23-50 years of age
is moderately active
lives in a temperate climate

Reference woman - weights 55 Kg (or 120 lbs)
23-50 years of age
is moderately active
lives in a temperate climate

TABLE OF FOOD COMPOSITION

There are several different methods for calculating nutrient intake. Most methods use tables of Food Value Composition to provide the information needed to calculate total nutrient intake. Your text, Basic Nutrition and Diet Therapy, by Corinne H. Robinson, provided such a table as Appendix Table A-1.

These tables serve as a basis for comparing one food nutrient analysis with another. For example, if you were comparing the vitamin C content of one orange with 1/2 cantaloupe, the Food Composition Tables would give you the exact vitamin C content of each. The tables also provide a method of calculating the total adequacy of a diet or an estimate of the diet's adequacy. The tables provide references to answer numerous questions pertaining to the exact nutritive value of foods, and thus are effective in counteracting food misinformation.

FOOD AND NUTRITION BOARD, NATIONAL ACADEMY OF SCIENCES–NATIONAL RESEARCH COUNCIL
RECOMMENDED DAILY DIETARY ALLOWANCES,[a] Revised 1980

Designed for the maintenance of good nutrition of practically all healthy people in the U.S.A.

	Age (years)	Weight (kg)	Weight (lb)	Height (cm)	Height (in)	Protein (g)	Fat-Soluble Vitamins: Vitamin A (μg RE)[b]	Vitamin D (μg)[c]	Vitamin E (mg α-TE)[d]	Water-Soluble Vitamins: Vitamin C (mg)	Thiamin (mg)	Riboflavin (mg)	Niacin (mg NE)[e]	Vitamin B-6 (mg)	Folacin[f] (μg)	Vitamin B-12 (μg)	Minerals: Calcium (mg)	Phosphorus (mg)	Magnesium (mg)	Iron (mg)	Zinc (mg)	Iodine (μg)
Infants	0.0–0.5	6	13	60	24	kg × 2.2	420	10	3	35	0.3	0.4	6	0.3	30	0.5[g]	360	240	50	10	3	40
	0.5–1.0	9	20	71	28	kg × 2.0	400	10	4	35	0.5	0.6	8	0.6	45	1.5	540	360	70	15	5	50
Children	1–3	13	29	90	35	23	400	10	5	45	0.7	0.8	9	0.9	100	2.0	800	800	150	15	10	70
	4–6	20	44	112	44	30	500	10	6	45	0.9	1.0	11	1.3	200	2.5	800	800	200	10	10	90
	7–10	28	62	132	52	34	700	10	7	45	1.2	1.4	16	1.6	300	3.0	800	800	250	10	10	120
Males	11–14	45	99	157	62	45	1000	10	8	50	1.4	1.6	18	1.8	400	3.0	1200	1200	350	18	15	150
	15–18	66	145	176	69	56	1000	10	10	60	1.4	1.7	18	2.0	400	3.0	1200	1200	400	18	15	150
	19–22	70	154	177	70	55	1000	7.5	10	60	1.5	1.7	19	2.2	400	3.0	800	800	350	10	15	150
	23–50	70	154	178	70	56	1000	5	10	60	1.4	1.6	18	2.2	400	3.0	800	800	350	10	15	150
	51+	70	154	178	70	56	1000	5	10	60	1.2	1.4	16	2.2	400	3.0	800	800	350	10	15	150
Females	11–14	46	101	157	62	46	800	10	8	50	1.1	1.3	15	1.8	400	3.0	1200	1200	300	18	15	150
	15–18	55	120	163	64	46	800	10	8	60	1.1	1.3	14	2.0	400	3.0	1200	1200	300	18	15	150
	19–22	55	120	163	64	44	800	7.5	8	60	1.1	1.3	14	2.0	400	3.0	800	800	300	18	15	150
	23–50	55	120	163	64	44	800	5	8	60	1.0	1.2	13	2.0	400	3.0	800	800	300	18	15	150
	51+	55	120	163	64	44	800	5	8	60	1.0	1.2	13	2.0	400	3.0	800	800	300	10	15	150
Pregnant						+30	+200	+5	+2	+20	+0.4	+0.3	+2	+0.6	+400	+1.0	+400	+400	+150	*h*	+5	+25
Lactating						+20	+400	+5	+3	+40	+0.5	+0.5	+5	+0.5	+100	+1.0	+400	+400	+150	*h*	+10	+50

[a] The allowances are intended to provide for individual variations among most normal persons as they live in the United States under usual environmental stresses. Diets should be based on a variety of common foods in order to provide other nutrients for which human requirements have been less well defined. See text for detailed discussion of allowances and of nutrients not tabulated. See Table 1 (p. 20) for weights and heights by individual year of age. See Table 3 (p. 23) for suggested average energy intakes.

[b] Retinol equivalents. 1 retinol equivalent = 1 μg retinol or 6 μg β carotene. See text for calculation of vitamin A activity of diets as retinol equivalents.

[c] As cholecalciferol. 10 μg cholecalciferol = 400 IU of vitamin D.

[d] α-tocopherol equivalents. 1 mg *d*-α tocopherol = 1 α-TE. See text for variation in allowances and calculation of vitamin E activity of the diet as α-tocopherol equivalents.

[e] 1 NE (niacin equivalent) is equal to 1 mg of niacin or 60 mg of dietary tryptophan.

[f] The folacin allowances refer to dietary sources as determined by *Lactobacillus casei* assay after treatment with enzymes (conjugases) to make polyglutamyl forms of the vitamin available to the test organism.

[g] The recommended dietary allowance for vitamin B-12 in infants is based on average concentration of the vitamin in human milk. The allowances after weaning are based on energy intake (as recommended by the American Academy of Pediatrics) and consideration of other factors, such as intestinal absorption; see text.

[h] The increased requirement during pregnancy cannot be met by the iron content of habitual American diets nor by the existing iron stores of many women; therefore the use of 30–60 mg of supplemental iron is recommended. Iron needs during lactation are not substantially different from those of nonpregnant women, but continued supplementation of the mother for 2–3 months after parturition is advisable in order to replenish stores depleted by pregnancy.

Figure 1

DIGESTION AND ABSORPTION

INTRODUCTION

We must have fuel to carry on the voluntary and involuntary work of the body. This is in the form of calories which we get from food. Most of the food eaten cannot be used directly by the cells of the body; therefore, the ingested food must be converted into smaller and simpler units that can be absorbed by the body. This conversion of food into smaller and simpler units is known as digestion. After digestion is complete, food nutrients are in a form that can be readily absorbed into the blood stream to be carried to different parts of the body for use. The following information provides the step-by-step process of mechanical and chemical digestion and absorption of food.

INFORMATION

Digestion is a series of physical and chemical changes by which food, taken into the body, undergoes hydrolysis (addition of water) and is broken down in preparation for absorption from the intestinal tract into the blood stream. This conversion of food into nutrients usable by the body takes place in the alimentary canal.

The alimentary canal is also referred to as the digestive tract or gastrointestinal (GI) tract. The alimentary canal is a muscular, membraneous "tube" that extends throughout the length of the body trunk. This "tube" is very coiled and folded repeatedly into the abdominal region, and, in its entirety, attains a length of about thirty feet.

The walls of the alimentary canal consist of a secreting and absorbing mucous membrane layer and two layers of muscle. The muscular layers contribute to the wave-like contractions, called peristaltic waves, which move the food through the digestive system.

Conversion of food into nutrients usable by the body is a complicated process which requires the cooperation of all the organs and associate organs of digestion which make up the alimentary canal. In the following paragraphs you will learn each of these organs and their function in digestion.

Organs And Associate Organs Of Digestion

ORAL CAVITY (mouth) - Both chemical and mechanical digestion begins in the oral cavity. The oral cavity is composed of the following parts:

1. Teeth - usually 32 in the adult, arranged in two rows of 16 each. The teeth are important in the process of mastication (tearing and grinding) of the food, a necessity for efficient digestion.

2. Tongue - a muscular structure concerned with the manipulation of food in the oral cavity. The tongue aids mechanically in the chewing and swallowing of food. The taste buds of the tongue, along with the nose, are involved in tasting the food.

3. Salivary glands - there are three pairs of salivary glands in the walls of the oral cavity. These glands secrete saliva, which is 99.5 percent water. The other 0.5 percent is composed of ptylain, which contains the enzyme, amylase, and a substance known as mucin. The amylase works to breakdown carbohydrates (starches) to simple sugars. Mucin moistens and softens the food for ease in swallowing. The food, when ground and mixed with saliva, is called the bolus.

   a. Parotid glands - the largest of the salivary glands; secretes ptyalin which acts to change cooked starch to simple sugars. This breakdown of carbohydrate is actually the only chemical digestion that takes place in the oral cavity (the mouth).

   b. Sublingual glands - secretes mucin, a protein substance, that makes particles of food stick together and lubricates the food for easier swallowing.

   c. Submaxillary glands - the smallest of the salivary glands; secretes both mucin and ptyalin.

4. Pharynx (throat) - the common passageway for air and food. The pharynx is a muscular-walled structure connecting the mouth and esophagus. The epiglottis (part of the larynx) is a piece of cartilage, a thin flap-like structure, which plays an important role during swallowing. When an individual swallows, the epiglottis closes off the opening to the respiratory system (the trachea), thereby preventing aspiration of food material. When an individual breathes, the epiglottis closes off the esophagus.

ESOPHAGUS - the esophagus, a tube approximately 10 inches long, connects the pharynx with the stomach. The bolus, food ground and mixed with saliva, passes from the pharynx, over the epiglottis, and into the esophagus. The walls of the esophagus (and the entire alimentary canal) contain two types of muscle tissue: muscle fibers that run in a circular direction and muscle fibers that run in a longitudinal direction. (See Figure 2)

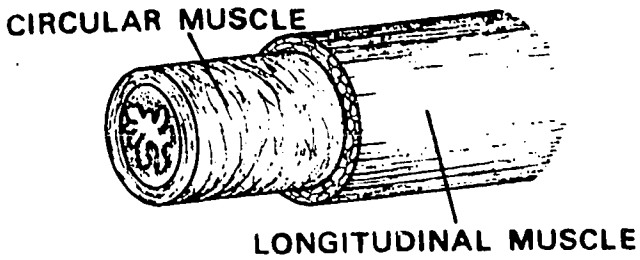


Figure 2. Cross Section of the Esophagus

When the circular fibers contract, the squeezing process results in the food being broken into smaller pieces and mixed with digestive juices. The contractions of the longitudinal fibers cause the food mass to be pushed on through the tract. The coordinated movement results in a wave-like motion, called peristalsis, which forces the food down the esophagus and into the stomach.

Before the bolus enters the stomach, it passes through a circular ring or band of muscle called the cardiac sphincter. The cardiac sphincter is the upper opening of the stomach, and is so named because it is located immediately below the heart. This valve acts similarly to purse strings, opening and closing to let measured amounts of food into the stomach.

STOMACH (gastr) - the stomach is shaped like a "J" and has three areas of activity: the fundus (top area), the corpus or body (middle area), and the pyloric antrum (the third area). The capacity of the stomach is approximately one to four quarts.

1. Fundus - food is held in the fundus for approximately 30 minutes to two hours. You should know that not all of the food is automatically dumped into the stomach at one time. At first the food you eat moves into the stomach by being pushed downward by more food. After some food has entered the stomach and digestion starts, the quantity entering and rate of movement through the stomach are controlled by the amount of digestion taking place. Liquids and carbohydrates are digested more rapidly than proteins and fats, so would stay for a shorter length of time in the stomach. In the fundus, tonus waves (similar to peristaltic waves) churn and mix the food with gastric juices and the bolus is changed to chyme (pronounced "kime", not "chime"). Chyme has a thin, soup-like consistency.

2. Corpus (the body or middle area of the stomach) - the chyme is mixed with hyrdochloric acid and enzymes for active chemical digestion of protein to begin. The chyme then moves on to the:

3. Pyloric antrum - this portion derives its name from the sphincter muscle located at the end of the stomach. In this area, more gastric juices are mixed with the chyme. The peristaltic movement of the stomach can be very active, particularly in the area of the pyloric antrum. Because of the excessive activity in this area, it is necessary to have a valve between the pylorus and the small intestine to prevent the backflow of material from the small intestine into the stomach. This valve is called the pyloric sphincter valve.

SMALL INTESTINE - this area of the digestive tract is approximately 22 feet in length and is divided into three segments: the duodenum, the jejunum, and the ileum. It is one of the most important parts of the digestive tract because most digestion and absorption takes place here.

1. Duodenum - the first segment of the small intestine is approximately 10 inches long. The majority of chemical digestion occurs in this segment for two reasons: first, the food material (chyme) in the stomach and small intestine has been adequately broken down mechanically; second, the associate organs of digestion empty their digestive juices into the duodenum by way of the common bile duct. The importance of these reasons are discussed in the following paragraphs:

a. Liver (hepat) - is the largest gland of the body, located in the upper right area of the abdomen. Among the most important functions of the liver is the production of bile. Bile aids in emulsifying fats for more rapid reaction with the enzymes. The liver also stores carbohydrate as glycogen until it is needed for energy. In addition, the liver stores vitamins and iron and detoxifies harmful substances found in food or produced by the body. (Dextoxifies means that the properties harmful to the body are removed.)

b. Gallbladder - located on the undersurface of the liver. This organ stores and concentrates the bile produced by the liver. Concentration occurs by removing a portion of the fluid content.

c. Pancreas - this gland produces two substances: pancreatic juices and insulin. Pancreatic juices contain digestive enzymes that work on carbohydrates, proteins, and fats, and complete the digestive process. These juices are the only ones containing all three types of enzymes. The Islets of Langerhans, cells distributed throughout the pancreas, produce insulin which is a hormone concerned with carbohydrate metabolism. You will hear insulin frequently when working with diabetic diets insufficient production of insulin results in the disease diabetes mellitus.

2. Jejunum - the middle segment of the small intestine is approximately 8 to 10 feet in length. Most nutrient absorption occurs here as the complex foods have been chemically digested to the form in which they can be absorped. In addition, the structures for absorptions are located in the jejunum, ileum, and large intestine. These are called villi. Villi are tiny, finger-like projections which line the walls of the intestines. Peristaltic waves carry the villi and the blood and lymph capillaries of the villi absorb the nutrients which are now in their simplest form. Absorption will be discussed later in this study guide.

3. Ileum - the third segment of the small intestine is approximately 12 to 14 feet in length. Absorption of nutrients continues and absorption of fluids from the chyme starts here though this fluid absorption is not nearly so great as that which occurs in the large intestine.

LARGE INTESTINE - the large intestine is approximately five feet long and has three segments, the cecum, colon, and rectum.

1. Cecum - the blind-end of the large intestine which receives the chyme from the ileum. The cecum offers the last chance for nutrients to be absorbed during the digestive process. Once food enters the cecum through the ileo-cecal valve, it cannot backup into the ileum.

2. Colon - the portion of the digestive tract that carries fecal material from the cecum to the rectum. The colon absorbs fluids, and under normal conditions, the fluid intake is so regulated as to leave the feces in the proper consistency for expulsion. You should keep in mind, however, that failure to reabsorb fluid produces diarrhea and excessive reabsorption of fluid produces constipation. The colon nas four sections.

a. Ascending colon - passes up the right side of the abdomen to reach the liver, at which point it turns to the left to become the:

b. Transverse colon - crosses the abdomen approximately one inch above the navel, from right to left. When it reaches the general area of the spleen, it turns downward to become the:

c. Descending colon - passes down the left side of the abdomen until it reaches the hip bone or pelvis, where it starts to turn and become the:

d. Sigmoid colon - passes posteriorly and medially. When the colon reaches the posterior end of the pelvis, it curves downward for a short distance and leads into the:

3. Rectum - this portion of the large intestine acts as a temporary storage place for fecal material. When adequate fecal material has been collected to stimulate the nerves in the walls of the rectum, a message to the brain stimulates the anus and allows expulsion of the waste as feces. The anus refers to the anal valve rather than a section of the large intestine.

The Role of Enzymes In Digestion

Enzymes are complex chemical substances, produced by the organs and associate organs of digestion, which act on other substances causing them to split up. An enzyme would be defined as a substance, frequently protein in nature and formed in living cells, which brings about chemical changes but itself is not changed during these chemical reactions. Enzymes aid in the breakdown of the complex carbohydrates to simple sugars, the fats (lipids) breakdown to fatty acids and glycerol, and the proteins breakdown to amino acids.

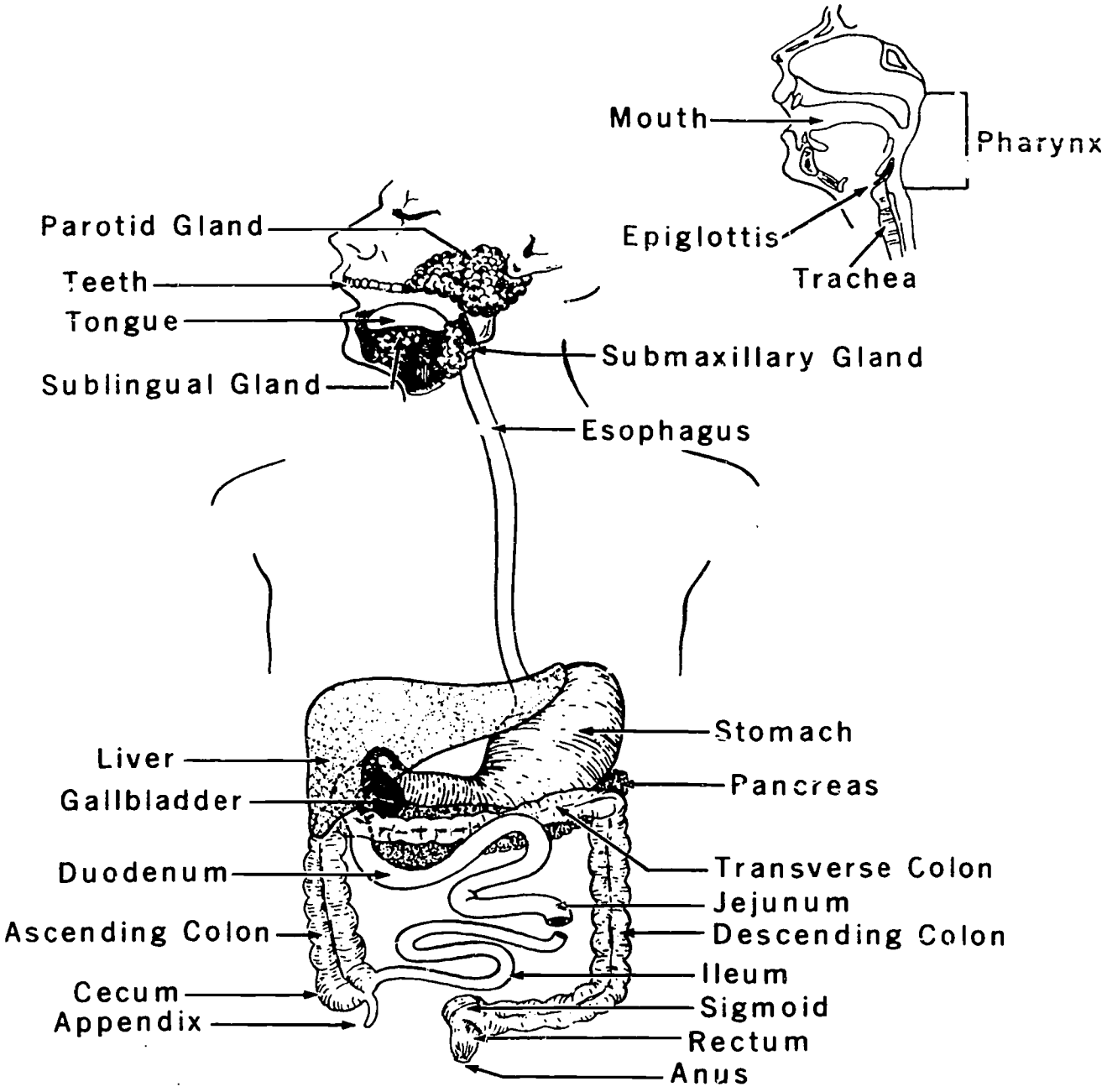

Mouth
Pharynx
Epiglottis
Trachea
Parotid Gland
Teeth
Tongue
Sublingual Gland
Submaxillary Gland
Esophagus
Stomach
Liver
Gallbladder
Pancreas
Duodenum
Transverse Colon
Jejunum
Ascending Colon
Descending Colon
Ileum
Cecum
Appendix
Sigmoid
Rectum
Anus

Figure 3

A distinctive feature of an enzyme is that it is specific; those that act on carbohydrates are not capable of acting on fats or proteins and vise versa. In the system of enzyme nomenclature, the root of the enzyme name is derived from the substance upon which it acts (the substrate) plus the suffix "ase". Enzymes that subdivide carbohydrate, fat, and protein are called carbohydrases, lipases, and proteinases, respectively. For a specific carbohydrate, such as starch, the root of the enzyme name is derived from the word "amylum" meaning starch, thus amylase is the enzyme acting on starch. The root of disaccharide-splitting enzymes are derived from the sugars themselves, i.e., sucrase, maltase and lactase. Because the steps in digestion of one nutrient may occur in different parts of the digestive tract, an adjective that describes the source of the secretion is used before the root word to complete the enzyme name. For example, the fat-splitting enzyme which acts in the small intestine is secreted by the pancreas and is called pancreatic lipase. The starch splitting enzyme produced by the salivary glands is called salivary amylase.

The classes of enzymes are specific for specific nutrients. Proteinases cannot react with carbohydrates or fats and lipases cannot react with carbohydrates or proteins. The following show the enzymes, classes of nutrients, and the breakdown products of the reaction.

Carbohydrate	+	Carbohydrase	=	Monosaccharides
Protein	+	Proteinase	=	Amino Acids
Fats (lipids)	+	Lipase	=	Fatty Acids and Glycerol

The length of time that food remains in the stomach differs with the diet and varies widely with individuals. An ordinary meal leaves the stomach in three to four and one-half hours. Carbohydrates leave most rapidly because chemical digestion starts in the mouth and the foods don't have to remain in the stomach for extended periods while digestion occurs. Protein chemical digestion starts in the stomach so protein foods are next in line after carbohydrates for the length of time they remain in the stomach. Fat digestion occurs in the duodenum after the addition of bile and bile salts to emulsify the fats. (Emulsify means they are broken down into small particles for easier mixing with digestive juices.) This late start at digestion means that fat moves slowly through the stomach. We say that fat has the highest "satiety" value of the three foodstuffs because of the length of time it remains in the stomach. Satiety value refers to the ability of a particular food to satisfy the hunger of an individual. Meals with more fat and solids will keep the individual from becoming hungry for a prolonged period of time. A liquid meal or one which contains a high percentage of carbohydrates will pass rapidly through the digestive system and is said to have a low satiety value.

ABSORPTION

The process of absorption is the taking up of nutrients and fluids from the digestive tract by the lymphatic and circulatory systems. The absorption area of the walls of the jejunum, ileum and large intestine are greatly increased by thousands of fine, hair-like projections called villi. Nutrients are absorbed from the digestive thract through the villi. Each villus contains a lymph vessel (arteries and veins), each surrounded by a network of capillaries. Fatty acids and glycerol are absorbed into the lymph capillaries (lacteals) of the villi, and pass into the lymphatic system. They then proceed to the blood stream where they are routed to the liver for storage or are utilized as energy. Monosaccharides and amino acids are absorbed by the blood capillaries of the villi and empty into the protal vein to be carried directly to the liver for storage or to be used by the body as energy or for building tissue (see Figure 3).

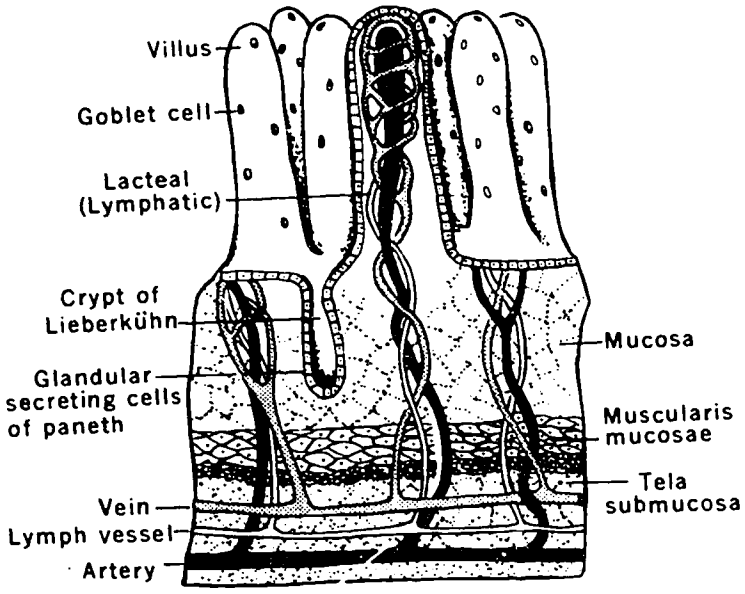


Figure 3. Villi

Nervous Control Of Digestion

The entire body is controlled by the nervous system. All areas are under some control so that they may be integrated into the total body activity. The digestive system is no different from any other group of internal organs in that it is controlled by the autonomic division of the nervous system.

The autonomic nervous system control all of the involuntary functions of the body. Divisions of the system are as follows:

SYMPATHETIC - controls the body in times of emergency; emotional state, such as anger, fear, extreme stress, excitement, etc., or physical; such as fighting, sports, running from a bull in a field, etc.

PARASYMPATHETIC - controls the body under normal circumstances of day-to-day living.

The important thing to consider is that when a patient is excited, angry or fearful; the digestive processes are slowed considerably if not stopped completely. If a person is emotionally or physically aroused only those systems required for immediate action are speeded up. The digestive system is not required for emergency action, therefore, it will slow down or stop. When movement (peristalsis) is stopped in the alimentary canal, the chyme is not moved through the stomach and intestines. The chyme contains quantities of digestive enzymes and hydrochloric acid which may irritate the stomach and/or intestine if the individual remains emotionally or physically aroused for prolonged periods of time.

PRINCIPLES OF THERAPEUTIC NUTRITION

INTRODUCTION

The food an individual eats each day affects that individual in many ways. Most people eat food because it tastes good, not because they are aware of all the functions that food performs in the body once it is eaten. The majority of the population of the United States eats whatever they please and consider themselves to be receiving a well balanced diet. There are times, however, when individuals can not eat a regular diet. We will discuss these instances in the following section.

As a Diet Therapy Specialist, you will be dealing with regular and therapeutic diets during food preparation, tray assembly, and distribution of trays to the nursing units. Since you cannot memorize all of the modifications of the numerous diets listed in AFM 160-8 at this time, you must learn certain basic concepts of the diets. Learn to use AFM 160-8 with speed and accuracy, for it will help you on the job.

INFORMATION

In a previous lesson, you learned the definition of a diet. You should remember that the term is so general that even if a person ate only candy bars every day, this routine would be considered a diet. On the other hand, the food eaten by another person who eats a perfectly balanced diet every day also would fall under the basic definition of a diet. Both diets could be called "normal" because they would be the norm for the individual eating them. Calling the diet "normal" still does not make the first diet mentioned an acceptable diet. Perhaps we would do better to use the adjectives "adequate" or "basic" or "regular" when meaning a well-balanced diet, with each diet including the minimum allowances of the Basic Food Groups, unless otherwise stated.

The term "diet therapy" implies the use of diet (including both food and drink) not only in the care of the ill, but also in the prevention of disease and the maintenance of health. Regardless of the individual's physical status, whether they are healthy or sick, they must maintain good nutritional balance. As a Diet Therapy Specialist you will be concerned primarily with using food to help patients recover from illnesses.

Therapeutic nutrition is defined as the use of food as an agent in effecting recovery from illness. In some metabolic diseases, such as diabetes and hypoglycemia, the therapeutic diet is the only medication ordered for the patient by the physician. Most of the time, however, the therapeutic diet is ordered in conjunction with some type of medication to return the patient to good health.

The term "therapeutic diet" will be defined as an adaptation of the normal (adequate) diet to meet a specific health need. All diets are based on the "foundation" diet. This is another term for "Basic Diet". The terms "therapeutic" and "modified" indicate that the diet has been changed from the normal diet. These terms will be used interchangeably through this course.

In addition to other terms applied to diets, you will hear diets referred to as "standard" and "non-standard" diets. For our purpose within the Air Force, when using AFM 160-8, the following definitions apply:

All diets listed in AFM 160-8 would be considered standard Air Force diets. A non-standard diet would be a diet that is not listed in AFM 160-8. Physicians sometimes desire to use a diet that is not in the Air Force Diet manual. In such a case, they would need to work closely with the dietitian or diet therapy supervisor to be sure they are familiar with the diet. Often there is a diet that is included in the Air Force Diet manual that is very similar and could be used.

As mentioned in the introduction, not everyone can tolerate a regular diet but this is not the only objective for preparing therapeutic diets. Therapeutic diets may be planned and served for any one or a combination of the following objectives:

a. Modification of total calories

b. Modification of consistency

c. Modification of levels of nutrients

d. Elimination of specific foods

e. Preparation methods

DIETS FOR THE LIFE CYCLE

INTRODUCTION

The life cycle is a continuous aging process from birth to death. The desire for certain foods changes with age. Foods for the infant differ substantially from adult foods. There are several fairly well defined periods in the life cycle with respect to food.

INFORMATION

Good nutrition is critical from the moment of conception until death. Beginning with conception, the fetus develops and grows via the nutrients supplied by the mother. It is therefore important that the mother be well-fed while she is pregnant. Her nutritive requirements are greater than normal during pregnancy.

After birth, the infant grows at a rapid pace. At no other time in life does growth so fast. In the first few months of life, the infant will be nourished with milk. As the infant's digestive system develops, solid foods are gradually introduced, usually beginning with iron-fortified infant cereal. As the infant continues to develop, strained food will be replaced with chopped or ground "finger food". The initial sucking motion of the infant will be supplemented by a chewing motion for the development of facial muscles. Infancy (birth to one year) is a period of very rapid growth which makes good nutrition through a variety of foods essential.

Next is the preschool stage (one to five years), in which the child goes through various phases of independence, and exploration with food. Colorful, attractive foods that are easy to handle and eat are appealing to children. An environment and utensils that are conducive to enjoyment and ease in handling food encourages curiosity and successful eating patterns. Children should not be forced or bribed to eat, but rather encouraged by making mealtime an enjoyable time.

Good nutrition can be continued during school years (six to twelve years) by educating the child in nutrition. One way to help children want to eat wisely is to convince them that what they eat really does make a difference in the way they grow. Children at this age desire to grow normally and to be like their peers. They are ready to learn about the realationship of food to a healthy body.

Adolescent years (13 to 19 years) are the second period of rapid growth, but because the growth spurt varies with the individual so should the quantity of the nutritional intake. These years are also the most active period of life. Because of the double demands of activity and growth, food needs are high and extremely important. Special attention should be given to the adolescent "dieter" to ensure that dietary intake is adequate by providing the right foods.

The adult stage of the life cycle lasts the longest period of time. This is when the body has fully developed and growth is complete, with the exception of a few individuals who will continue to grow through their early twenties. Energy requirements will drop from that required in the adolescent stage and will remain stable for most people until the geriatric stage.

During the adult stage it is important to emphasize the continuing need for good nutrition and exercise because bad habits can lead to poor health in later years.

The geriatric stage (old age) is a period when body processes (BMR) slow down and activity level normally decreases. During this stage calorie requirements normally drop to 90% of those needed during the adult stage (23-50 years). During the geriatric stage it is important to plan a well balanced diet to ensure adequate intake of essential nutrients while ommitting unneeded empty calories.

MENU PROCESSING

INTRODUCTION

One of the most important jobs in the Medical Food Service is the Diet Clerk's job. Although the diet clerk performs a variety of tasks, we can generally say that all the tasks involve processing patient menus. Processing these menus includes delivering the menus to wards, receiving completed menus from wards, tallying food items, recording workload data, writing therapeutic menus using the Diet Record, writing nourishments, and initiating the Diet Worksheet or "special items" list. Additionally you may be required to assist in the patient tray assembly area, where you will assemble both regular and therapeutic patient trays. Therefore, it is important that you have some basic knowledge of the more commonly used diets so that you can perform these important tasks.

INTRODUCTION

Ward Diet Orders

As a Diet Clerk, your job will be to make sure that the patient gets the meals that the doctor ordered including nourishments. This job entails paper work prior to even getting the meals to the patients. We will now go over that paper work that is so important in getting the job done correctly.

AF Form 1094, Diet Order, is used to inform medical food service of the diets required for individual patients. A separate AF Form 1094 is prepared and signed by nursing service personnel for each separate nursing unit (ward) within the hospital. The form gives information concerning the name, room, bed number, and type of diet requested for each hospitalized patient.

This form is prepared and sent to the medical food service department at least once daily, usually at 1000 hours. One form is forwarded from each hospital nursing unit, or ward. Prior to each meal, the selective menus will be checked against the 1094 (and the AF Form 2567, explained below) to insure that a menu has been prepared for each patient. (See Figure 4)

Diet Changes

Many changes may take place on a hospital ward throughout the day. Patients are admitted, discharged, some are transferred to another ward, and some expire. The diet ordered for a patient may change several times throughout the day, depending on the patient's progress. Personnel in medical food service department must keep up with the many changes to assure that the patient always gets the correct tray. Whoever handles this responsibility must be extremely organized so that the correct diet gets to the right person at the right time.

As mentioned, AF Form 1094 is forwarded to the food service department at 1000 hours daily, and lists all hospitalized patients, room number, and type of diet. When a change in the type of diet ordered occurs, nursing service personnel notify food service personnel of the changes, utilizing AF Form 2567, Diet Order Change. This form is normally sent down to the food service department at 1500 hours daily for the supper meal, and 500 hours daily for the breakfast meal.

Information from AF Form 2567 indicates whether a patient has been discharged, transferred to another ward, place on NPO (nothing by mouth), if a meal has been withheld for tests, or if the patient's diet has been changed. When the 2567 is received in the food service department, this information should be posted to AF Form 1094, Diet Order, so that diet changes are kept current and are reflected on Form 1094. From the 1094, diet therapy personnel will prepare the proper tray identification slips for various diets. Copies of the 2567 received at 1500 hours and at 0500 hours should be stapled to the 1094 by ward numbers so that all information is kept handy and orderly. (See Figure 5)

DIET ORDER			INPATIENT UNIT: 3 EAST			ACCOMPLISHED BY: MRS JONES					DAY: TUES	DATE: 26 JUN 83
			LOCATION			TYPE OF DIET						
ROOM	BED	NAME	INPATIENT UNIT	DINING ROOM	HOLD/NPO	REGULAR	SOFT	FULL LIQUID	CLEAR LIQUID	RESTRICTED CLEAR LIQUID	OTHER (Specify)	
1	a	Smith	✓			✓						
	b	Greene	✓					✓				
2	a	~~Brown~~		✓		✓		D/C			~~---~~	
	b	Johnson	✓								1800 cal DB	
	c											
	d	Williams	✓								1500 cal/R	
3	a											
4	a	Gonco	✓					✓	X			
5	a	Watts	✓				✓					
	b	Sullivan	✓			✓	X					

A.F FO M JUL 79 1094 PREVIOUS EDITION WILL BE USED.

Figure 4

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OTE: SEND TO MEDICAL FOOD SERVICE AT 0500 AND 1500 HOURS.
EW ADMISSIONS AFTER THESE HOURS WILL BE SUBMITTED BY
ELEPHONE PRIOR TO 0630 AND 1700 HOURS.

NPATIENT UNIT	DATE	HOUR SUBMITTED
3 EAST	27 JUN 83	0500

PATIENT'S NAME (Print)	ROOM NO./ BED NO.	DIET (Print)	INDICATE OTHER INFORMATION BY CHECK (√)											
			CHANGE OF ROOM NO./ BED NO.	NEW ADMISSION	CHANGE OF DIET	HOLD MEALS B-D-S	NPO	PASS OUT	PASS RETURNED	DISCHARGED	INPATIENT UNIT TO DINING ROOM	DINING ROOM TO INPATIENT UNIT	UCA CODE FOR PHARMACEUTICAL FOOD ITEMS
Brown	2a	Regular								✓			
Jones	4a	F/L			✓								
Sullivan	5b	Regular			✓								

REMARKS (If any)

ACCOMPLISHED BY
Mrs. Jones

F FORM 2567 MAR 81 PREVIOUS EDITION WILL BE USED. ☆U.S. Government Printing Office 1981—340-979/507 DIET ORDER CHANGE

Figure 5

Diet Record and Central Diet Ordering File

Completing AF Form 1741, Diet Record, is usually the responsibility of the dietitian. However, in smaller hospitals where there is no dietitian or where there is only one dietitian, the diet therapy specialist may be called upon to accomplish these records. Information recorded on AF Form 1741 regarding the type of diet the patient is on, patient's name, room and bed number, is obtained from AF Form 1094, Diet Order.

Other information is obtained from the patient's medical records maintained at the nurse's station, such as age, height, weight, attending physician, type and amount of insulin (if used), date of admission, diagnosis. Other information is obtained from the patient, such as food likes and dislikes. By visiting the patient daily, the dietitian or diet therapy specialist would be able to determine how well the patient is tolerating the diet, whether or not the patient understands the diet, and if he or she is having any particular problems in following the diet as ordered.

AF Form 1741 is maintained in the food service office or in the clinical dietetics area of the department. These become the central diet ordering file. A Kardex is most useful to keep these forms in sequence so that they can be used when needed. The entire Kardex can be carried to the hospital nursing units when ward rounds are made (usually during mealtime).

The reverse side of AF Form 1741 can be used in calculating caloric and diabetic diets. (See Figure 6)

DIAGNOSIS: DIVERTICULITIS

PHYSICIAN:

HT: 5'8" (Circle one) (M) F

AGE: 36

WEIGHT — MAX/MIN (Standard): ADMIT: 165

DATE: 165

ADDITIONAL WEIGHTS:

DIET/DRUG INTERACTION:

DATE	Dietary Prog Notes/Diet Instructions	T	RCRL
6FEB79	PT VISITED [illegible]	PD	
	LIKES + DISLIKES		
8FEB79	DOING WELL ON DIET	PD	
	PT WANTED MORE		
	MILK EXPLAINED		
	RESTRICTION OF MILK		
	PT REQUEST DECAF		
	COFFEE & EACH		
	MEAL.		
9FEB79	PT DOING WELL HAPPY	PD	
	WITH DECAF COFFEE		

DATE	DIET ORDER	INIT
6FEB79	FIBER RESTRICTED	PD

VISIT DATES	INIT	DIET WRITING INFORMATION	
		LIKES	DISLIKES
6 Feb-79	PD	MILK CRM SOUP	GELATIN BEETS SPINACH
8FEB79	PD	DECAF COFFEE T.I.D.	

UNIT	BED	ROOM NO.	NAME	GRADE	DIET ORDER	Circle One: NPO	OTHER STATUS: HOLD, VSI, PASS, SI
4E	B	12	BROWN, JOE		FIBER RESTRICTED		

DIET CALCULATION

EXCHANGE	AMT	C	P	F	OTHER NUTRIENTS	
MILK						
VEG						
FRUIT						
BREAD						
MEAT						
FAT						
TOTALS						

CALORIES		X4	X4	X9
	Per Grams C, P, Fat			
	TOTAL			

CALCULATED BY

DATE

DIET ORDER

DIVIDE INTO TENTHS OR OTHER DISTRIBUTION

	B	C	CAL	1000	C	CAL	D	C	CAL	1400	C	CAL	S	C	CAL	2000	C	CAL
MILK																		
VEG																		
FRUIT																		
BREAD																		
MEAT																		
FAT																		
TOTALS																		

(For Patient Identification - Mechanical Imprint)

AF FORM 1741 PREVOUS EDITION WILL BE USED. MAY 82 DIET RECORD

Figure 6

Menu Forms

A variety of AF Forms are available to use in patient tray service. AF Forms 1737 and 1739, Selective Menu, are white. The 1737 is perforated in thirds. These are designed for a centralized tray system in which each tray is completed in the kitchen, such as the Uni-Tray, pellet, and hot-pack systems. AF Form 1739 is perforated in sixths. These menus are designed for use with the hot tray - cold tray system of tray service. Once the carts are taken to the nursing units, the two sections of the menu are matched according to patient name and room number to insure the patient receives the proper hot and cold foods for his/her diet. These menu forms are typed on plain offset masters and are reproduced locally by the base printing plant overprinting onto forms 1737 or 1739.

AF Forms 2478 through 2485, 2487 through 2494, 2497 through 2500 and 2502 are used for therapeutic menu patterns. These are designed for tray identification and for the assembly and service of trays to bed patients. They are designed for one-time use only. The form is destroyed after each serving period. The use of selective menus and therapeutic menus is mandatory for all Air Force hospitals. These forms are designed in 1/3s or in 1/6s to accommodate the different types of centralized tray service found in Air Force hospitals. The menu forms perforated in thirds are designed for centralized tray service systems where each tray is completed in the kitchen. Menus perforated in sixths are designed for use with hot tray - cold tray system. All of these forms are color coded in order to facilitate identification on the tray line. Your instructor will show you these forms in class.

These forms are explained further below.

1. AF Forms 1737 and 1739, Selective Menu, are white. AF Form 1737 is perforated in thirds. AF Form 1739 is perforated in sixths. The daily selective menu is overprinted on the selective menu forms.

2. AF Form 2493 and 2494, Soft, Bland, Fiber Restricted (selective), are yellow. AF Form 2493 is perforated in thirds. AF Form 2494 is perforated in sixths. The daily selective menu is typed and reproduced locally by overprinting on the form.

3. AF Form 2502, Soft, Bland, Fiber Restricted (non-selective), is yellow and perforated in sixths.

4. AF Forms 2483 and 2484, Dental Soft - T&A Soft, are yellow. AF Form 2483 is perforated in thirds. AF Form 2484 is perforated in sixths.

5. AF Form 2491 and 2492, Pediatric, are yellow. AF Form 2491 is perforated in thirds. AF Form 2492 is perforated in sixths.

6. AF Form 2481 and 2482, Liquid, are yellow. AF Form 2481 is perforated in thirds. AF Form 2482 is perforated in sixths.

7. AF Form 2499 and 2500, Calorie Restricted, are green. AF Form 2499 is perforated in thirds. AF Form 2500 is perforated in sixths.

8. AF Forms 2479 and 2480, Diabetic, are green. AF Form 2479 is perforated in thirds. AF Form 2480 is perforated in sixths.

9. AF Forms 2489 and 2490, Bland, are yellow. AF Form 2489 is perforated in thirds. AF Form 2490 is perforated in sixths.

10. AF Forms 2478 and 2485, Sodium Restricted, are pink. AF Form 2478 is perforated in thirds. AF Form 2485 is perforated in sixths.

11. AF Forms 2497 and 2498, Modified Fat, are blue. AF Form 2497 is perforated in thirds. AF Form 2498 is perforated in sixths.

12. AF Forms 2487 and 2488, Hyperlipoproteinemia, Diet 2/Diet 4, are blue. AF Form 2487 is perforated in thirds. AF Form 2488 is perforated in sixths.

13. AF Forms 1738 and 1740, Therapeutic Menu, are yellow. AF Form 1738 is perforated in thirds. AF Form 1740 is perforated in sixths. The forms may be used for selective menus or for menus which do not fit any of the patterns. These menus may be overprinted. Test meals may be overprinted on this form.

Procedures For Distributing And Collecting Patient Menus

There are various methods for distributing and collecting patient menus. This is a responsibility of Nursing Service personnel, and the procedures for distribution will be set up according to the facilities available at each hospital. The patients mark their own selective menus and return them. They are to be returned to medical food service no later than 1200 hours.

AF Forms are overprinted at the base printing plant with the selective menu used for regular diets and modified (therapeutic) diets. These forms must be identified with the individual patient's name, room number, bed number and type of diet ordered. This is usually accomplished in the medical food service department by a diet therapy specialist, but other systems may also be used. If selective menus are used for therapeutic diets, they are checked for nutritional adequacy.

Before we can begin to tally menus we must further clarify how the menu system is designed. When regular menus are planned and written they are set up in cycles of four weeks or longer. There is a different menu for each day of each of the four weeks and each menu will be identified by the week and day (e.g. week II Friday). At the end of week IV, we start over again with week I menus. By planning menus in this way we can avoid the repetion that makes meals so monotonous.

Therapeutic cycle menus are extended from the regular cycle menus. For example, if on week III, Monday you were serving fried chicken, the therapeutic menu for Monday of week III would offer baked chicken. We will go into more detail about planning menus later in the course.

Procedures For Tallying Patient Selective And Therapeutic Diet Menus

Once the patient menus have been distributed and collected, this brings you to the next duty related to patient menus. We will call this duty "Menu Tallying".

Hospital menus are the basis for food supply procurement, food production and meal service. To know how many servings of each menu item to prepare you must make a count, or "Menu Tally".

A selective menu offers each patient a variety of foods to choose from. Normally, a selective menu offers two or more entrees, two or more vegetables, two or more salads, two or more desserts along with other items to select from. The tally must be accomplished early so that enough time is allowed to permit those personnel preparing the food to prepare the correct amounts required for all diets.

There are various ways to prepare menu tallies, the one you use will depend on the facility you go to. Two different tallies will be prepared for each meal, one for the therapeutic diets and one for the regular diets. The following are examples of ways that the tally can be prepared.

Regular Menu Tally

To prepare a regular menu tally you can use a copy of the regular selective menu to record the number of servings of each food item needed for the meal. Some items need not be counted because they don't have to be prepared and are always on hand in bulk quantity (e.g. milk, butter, jelly). Essentially what you are doing is transferring the food items selected by each patient on a regular diet onto one menu.

Patients who don't get an opportunity to fill out a selective menu will be given the food items denoted by an asterisk (*) on the selective menu. See Figure 7 for a completed regular menu tally for the dinner meal.

SELECTIVE MENU (Circle Desired Foods)	SELECTIVE MENU (Circle Desired Foods)	SELECTIVE MENU (Circle Desired Foods)
BREAKFAST	DINNER	SUPPER
NAME / INPATIENT UNIT / BED/ROOM	NAME / INPATIENT UNIT / BED/ROOM NO.	NAME / INPATIENT UNIT / BED/ROOM N

TALLY

Hot Farina

*Scrambled Eggs
Fried Eggs
Spanish Omelet

*Grilled Bacon

Creamed Beef on Toast

French Toast W/Syrup

*Chilled Orange Juice
Chilled Tomato Juice

Corn Flakes
Rice Krispies
Shredded Wheat

3 *Fried Fish Portions III
2 Cheese Enchiladas II
2 Beef Tacos II

3 *Mexican Corn III
2 Spanish Rice II
1 Chili Beans I

3 *Buttered Broccoli III

*Mexican Coleslaw II
2 Apple, Celery, and Pineapple Salad
4 Tossed Salad IIII

Thousand Island/French/Italian
Blue Cheese/Salad Dressing
Cocktail Sauce/Tartar Sauce

2 *Bread Pudding II
5 Crisp Toffee Bar IIII
3 Vanilla Ice Cream III

*Sweet and Sour Pork
Grilled Liver and Onions

*Steamed Rice
Mashed Potatoes

*Glazed Carrots
Southern Style Greens

*Tossed Salad
Molded Pear Salad

Thousand Island/French/Italian
Blue Cheese/Salad Dressing

*Lemon Chess Pie
Peach Cobbler

#*WHITE TOAST	*LOW FAT MILK	*COFFEE
WHEAT TOAST	MILK	DECAFFINATED
RAISIN TOAST	# NONFAT MILK	COFFEE
*REGULAR KIT (Sugar - Salt - Pepper)	CHOCOLATE MILK	HOT TEA
# SUGAR SUBSTITUTE KIT (Sugar Sub - Salt - Pepper)	BUTTERMILK	ICED TEA
#*MARGARINE		COCOA
BUTTER		CREAM
*JELLY		LEMON
CATSUP		

*REGULAR KIT (Sugar - Salt - Pepper)	*LOW FAT MILK	*COFFEE
# SUGAR SUBSTITUTE KIT (Sugar Sub - Salt - Pepper)	MILK	DECAFFINATED
#*MARGARINE	NONFAT MILK	COFFEE
BUTTER	CHOCOLATE MILK	HOT TEA
JELLY	BUTTERMILK	ICED TEA
CATSUP	#*WHITE BREAD	COCOA
MUSTARD	WHEAT BREAD	CREAM
VINEGAR	RYE BREAD	LEMON
CRACKERS		

*REGULAR KIT (Sugar - Salt - Pepper)	*LOW FAT MILK	*COFFEE
# SUGAR SUBSTITUTE KIT (Sugar Sub - Salt - Pepper)	MILK	DECAFFINATED
#*MARGARINE	# NONFAT MILK	COFFEE
BUTTER	CHOCOLATE MILK	HOT TEA
JELLY	BUTTERMILK	ICED TEA
CATSUP	#*WHITE BREAD	COCOA
MUSTARD	WHEAT BREAD	CREAM
VINEGAR	RYE BREAD	LEMON
CRACKERS		

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Therapeutic And Diet Worksheets

Therapeutic Worksheets (AF 2495 and AF 2496) are used to write the therapeutic menus for our patients. Remember, though you will learn more about the mechanics of menu writing later on in your career, it is necessary for you to know some basic facts about menus prior to performing the Diet Clerk's job.

The regular menu is the menu that is planned for hospital personnel and patients who do not need a therapeutic diet. After the regular menu is written, the therapeutic menus is written using many of the same foods as are on the regular menu. The AF 2495, Breakfast Therapeutic Worksheet and AF 2496 Dinner-Supper Therapeutic Worksheet become the therapeutic menus when they are filled in.

The therapeutic worksheets serve other purposes. They are used on the patient tray line to determine the correct therapeutic foods to be placed on the tray. Remember that the therapeutic menu slips only give you the general class of the food. For example: 1500 calorie diabetic menu pattern will say "F/R meat". You know from your lessons in terminology and abbreviations that this means that the person would be getting a "Fat-Restricted" meat. But what kind of meat would the patient be getting? The therapeutic worksheets would tell you exactly what kind of fat restricted meat the patient was to receive, e.g. chicken.

The therapeutic worksheets are also used to "tally" the amount of foods to be prepared. "Tallying" is simply the process of totaling the amounts of food that the food production personnel will prepare and will be discussed later in this workbook.

The last worksheet we will discuss is AF 2486, Diet Worksheet. This form is used to communicate the hot and cold therapeutic food requirements to appropriate production personnel. After the "tallying" process is complete the specific kinds of therapeutic foods to be prepared as well as the quantity is transferred to the Diet Worksheet. Additionally there may be a requirement for preparation of a "special item". A "special item" is any food item not on the regular or therapeutic menu for that day. For instance, the dietitian may have visited a patient who wanted a hamburger for supper on a night when hamburgers were not on the menu. The dietitian or the diet supervisor has the authority to approve production of "special items". In this example, the hamburger would appear on the Diet Worksheet.

Each of these forms is interrelated. In class, your instructor will explain how all the forms are used to process patient menus.

Therapeutic Menu Tally

The forms that are used to prepare the therapeutic menu tally are as follows: AF Form 2495, Breakfast Therapeutic Worksheet or AF Form 2496, Dinner/Supper Therapeutic Worksheet and two copies of AF Form 2486, Diet Worksheet. The AF Form 2496 (2495) shows what food items will be given on each therapeutic diet for a certain meal on a certain day in a certain week of the cycle. For example: AF Form 2496 is for the dinner meal on Friday of week IV (see Figure 8).

Now how do you complete the tally? Let's say that today is 19 April 84. After the 1500 hour diet changes (dated 19 Apr) have been made to AF Form 1094 (dated 19 Apr), you will complete AF Form 2573, Diet Census. The next step to be completed is preparing the patients menu. To prepare the patients menu properly you are required to have AF Form 1094, Diet Order; AF Form 1741, Diet Record; and appropriate menu pattern cards. After gathering all of the forms required, you compare the AF Form 1094, Diet Order with each patient's menu. You must have a menu for each patient listed on AF Form 1094, Diet Order if they are eating on the nursing unit. As you ensure that each patient has a menu, you also check AF Form 1741, Diet Record for likes and dislikes. If an item is being served that a patient dislikes you must make a change to the patient's menu, and the change must also be reflected on the appropriate AF Form 2486, Diet Worksheet (dated 20 Apr). Additionally, the menu pattern card may also have changes made to it. The changes on the menu pattern card also must be reflected on the patient's menu. This procedure is completed for each patient and not one step can be missed. The final step is to transfer the numbers of diets counted on AF Form 2573, Diet Census, (dated 19 Apr), to either AF Form 2495, Breakfast Therapeutic Worksheet, or AF Form 2496, Dinner/Supper Therapeutic Worksheet (dated 20 Apr). These procedures may vary from hospital to hospital.

DINNER/[redacted] THERAPEUTIC WORKSHEET

WEEK: IV | DAY: FRI | DATE: 20 Apr / 18 May / 15 June

DIET	SOUP	MEAT	POTATO	VEGETABLE	SALAD/DRESSING	FRUIT/DESSERT	OTHER
SOFT/BLAND 4/ FIBER RESTRICTED (Copy from Master Menu)	*Crm Fish Beef Broth	*Bk Lean Ham Bl Seafood Au Gratin	*Pot Au Gratin Rice	*Spinach Bk Acorn Squash	* Tsd lett Stuff Apricots	*Mock Pecan Pie Banana	*Mayo *Vinegar
DENTAL SOFT	Crm Fish	Grd Seafood Au Gratin	Rice	Chpd Bk Acorn Squash	Stuff Apricots	Choc Ice Crm	
T & A SOFT	Crm Fish	Grd Seafood Au Gratin	Rice	[redacted]	Stuff Apricots	Choc Ice Crm	Bread (No Crust)
CHILD SOFT (2 - 5 Years)	----------	Seafood Au Gratin	Rice	Bk Acorn Squash	Carrot-Raisin	Banana	
CHILD SOFT (1 - 2 Years)	[redacted]	Grd Seafood Au Gratin	Mashed	Chpd Bk Acorn Squash	[redacted]	Banana	4oz Milk 1/2 Sl Brea
INFANT SOFT (5 - 12 Months)	[redacted]	Str Ham	----------	Str Bk Acorn Squash	[redacted]	Str Fruit Banana	Custard
INFANT SOFT (1 - 4 Months)	[redacted]	Baby Egg Yolk	----------	Str Bk Acorn Squash	[redacted]	Str Fruit Banana	
BLAND III	Crm Fish	Bl Seafood Au Gratin	Rice	Bk Acorn Squash	[redacted]	----------	1/2 sl Bre
BLAND II	----------	Bl Seafood Au Gratin	Rice	Str Bk Acorn Squash	[redacted]	[redacted]	4 oz Milk
BLAND I Miminal Residue	Beef Broth	Lean Ham	Refined Pot Sub Rice	[redacted]	[redacted]	Angel Cake	White Toa
DENTAL LIQUID	Str Crm Fish	Thin Str Seafood Au Gratin	Thin str Pot Au Gratin	Thin Str Acorn Squash	[redacted]	Thin Str Bk Custard	Choc. MS
FULL LIQUID	Str Crm Fish	[redacted]	[redacted]	[redacted]	[redacted]	Bk Custard	Choc. MS Grape Juic
T & A LIQUID	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	Bk Custard	Wh. Grape Gingerale
CLEAR LIQUID	Beef Broth	[redacted]	[redacted]	[redacted]	[redacted]	Strawberry Gelatin	Grape Juic
DIABETIC/CALORIE RESTRICTED	F/R Beef Broth	F/R Lean Ham	F/R Acorn Squash (1/2c)	F/R Spinach/Vinegar(1/2c)	F/R (1) Romaine (2) Shred Car Cal/R Whip	Cal/R Fr Melon	Cal/R Whip
FAT RESTRICTED	F/R Beef Broth	F/R Lean Ham	F/R Acorn Squash	F/R Spinach/Vinegar	Cal/R Whip F/R Shred Carrot	F/R Banana	Cal/R Whip
FAT CONTROLLED	F/C Noddle Na/R Chicken	F/C Bk Fish	F/C Acorn Squash	F/C Spinach/Vinegar	F/C Shred Carrot Cal/R Whip	F/C Fr Melon	Mayo
SODIUM RESTRICTED	Na/R Chicken Noodle	Na/R Bk Fish	Na/R Acorn Squash	Na/R Spinach/Vinegar	Na/R Shred Carrot Cal/R Whip	Na/R Fr Melon	
CALORIE RESTRICTED/ SODIUM RESTRICTED	Na/R Beef Broth F/R	Na/R Bk Fish F/R	Na/R Acorn Squash F/R 1/2c	Na/R Spinach/Vinegar F/R 1/2c	Na/R Romaine F/R	Na/R Fr Melon Cal/R	Na/R Cal/R Dressing

AF FORM MAR 74 2496

Workload Data

Another job of the Diet Clerk when processing menus is to maintain workload data.

Workload data are statistics that are maintained regarding the number of trays served to patients on both wards and in the dining room. This data is maintained on the AF Form 2573, Diet Census. The types of special diets served are listed in the left hand column. Various hospital wards are indicated across the top of the page. Information can be compiled either for each meal (as might be required in the larger medical centers) or by the day (as might be sufficient for the smaller hospitals).

This data is important because it can be used for planning future requirements. It also tells you what your workload has been in the past, for any given period. It gives you a breakdown of the number and types of therapeutic diets served at each meal. It also assists in determining what staffing requirements may be because it clearly indicates work requirements for the preparation of therapeutic diets. These workload figures should be consolidated on a monthly basis and used for planning purposes.

AF Forms 1094 and 2567 are used in compiling workload data. The 1094 is first received at 1000 hours daily, for use at the noon meal. Following the meal, all diets would be tallied on the AF Form 2573, Diet Census. At 1500 hours, you would receive diet changes on AF Form 2567 for the supper meal. These diet changes would be posted to AF Form 1094, and following the supper meal, all diets served would be tallied on AF Form 2573, Diet Census. At 0500 hours the next morning, you would receive diet changes on AF Form 1094 (the SAME one received yesterday at 1000 hours, for it is used for three meals). Following the breakfast meal, all diets served would be tallied on AF Form 2573. At 1000 hours, you would receive a new AF Form 1094, and you would start the process over again for that day. Each time you post the 2573, you are indicating the number of trays served for each type of diet listed on the 1094. Keep in mind that all diets for which you prepared a tray - both regular and therapeutic, on the wards and in the dining hall - will be listed. (See Figure 9)

DIET CENSUS	MEAL BREAKFAST	DATE AUGUST 11 1983

TYPE DIET	INPATIENT UNITS												TOTAL	DINING ROOM			GRAND TOTAL
	3E		3S		4E		4S							IN-PATIENT	OUT-PATIENT	TOTAL	
REGULAR	15		21		16		14						66	4		4	70
SOFT/BLAND/ FIBER RESTRICTED	4		8		6		2						20				20
DENTAL SOFT			1		2								3				3
H & A SOFT							1						1				1
INFANT – DIET 1	1												1				1
INFANT – DIET 2			1										2				2
INFANT – DIET 3					1								1				1
CHILD SOFT							1						1				1
CHILD JUNIOR	2		3										5				5
½ MEAL BLAND																	
MINIMAL FIBER MINIMAL RESIDUE			2				4						6				6
DENTAL LIQUID	1		2		3		4						10				10
FULL LIQUID	3		1		6		8						18				18
H & A LIQUID																	
CLEAR LIQUID	8		10		8		3						31				31
RESTRICTED CLEAR LIQUID																	
CALORIE RESTRICTED	10		10		8		3						31	6	4	10	41
DIABETIC UNDER 1800 CAL	6		8		4		9						27				
DIABETIC 1800 CAL AND ABOVE	2		2		1		1						6	1		1	7
FAT RESTRICTED	4		5		7		9						25				25
FAT CONTROLLED ILP 2/4			3				7						10				10
FAT CONTROLLED SODIUM RESTRICTED	4				9								13				13
SODIUM RESTRICTED	8		2		4		7						21	2		2	23
CALORIE RESTRICTED SODIUM RESTRICTED	2		4		6		8						20				20
TOTAL THERAPEUTIC MEALS	55		62		64		71						252	9	4	13	265
GRAND TOTAL	70		83		80		85						318	13	4	17	335

Figure 9

EXERCISE 7

1. What is the AF Form 1094, Diet Order, used for?

2. What AF Form is used by Nursing Service personnel to inform Medical Food Service about diet changes?

3. What are the three sources of information that can be used to complete AF Form 1741, Diet Record?

4. Who is responsible for the collection of selective menus?

5. At what time is AF Form 1094, Diet Order sent to Medical Food Services?

6. At what times are AF Form 2567, Diet Order Change sent to Medical Food Service?

7. What is maintained on AF Form 2573, Diet Census?

8. Where is AF Form 1741 maintained?

9. Who is responsible for distribution of selective menus?

10. Selective menus will be returned to Medical Food Service no later than _____ hours.

11. What is the purpose of a menu tally?

12. What is the purpose of AF Form 2486, Diet Worksheet?

EXERCISE 6

Before answering the following questi·ns, read AFM 160-8, Diet Manual pages 3;1/pg 3;5, paragraph 3-2; pg 3-10 paragraph 3-3, pg 3-15, pg 3-19, page 3-22.

1. What is the life cycle?

2. Define the term "regular" diet. When do you think we would use a regular diet?

3. Should pregnant patients drink coffee? Explain.

4. Outline the principles of the infant diets.

5. What is the difference between an infant and a child? (THINK!!!) How would this effect the food we give th·se children?

Chapter one contains material explaining the manual itself and should be read before you proceed any further. After you have read and studied chapter one and the SW answer the following questions.

EXERCISE 5

1. Define therapeutic nutrition.

_____

_____

2. What are the objectives of therapeutic diets?

a. _____

b. _____

c. _____

d. _____

e. _____

3. Proper adaptations have been made in the regular diet to fulfill the special requirement of theuapeutic diets in the treatment of _____, _____ and _____.

4. For what reasons are diets classified as food fads?

_____

_____

5. Why are certain items starred (*) on the avoid lists in 160-8?

_____

_____

6. What would a breakfast entree include?

_____

_____

7. What is a meatless entree?

_____

_____

8. What is a "non-standard" diet?

_____

_____

9. In each chapter of the manual there is a section titled "Indications for Use". What is its purpose?

_____

10. In each chapter of the manual there is a section called "Principles". What is the purpose of this section?

_____

EXERCISE 4

1. Describe the functions of the villi.

2. Define absorption.

3. How are fatty acids and glycerol absorbed?

4. What major organ stores excessive nutrients?

5. What nutrients are absorbed through the blood capillaries?

6. When an individual is emotionally upset during a meal, the digestive processes are speeded up/slowed down. (Circle the correct answer.)

EXERCISE 3

1. The first chemical digestion of food takes place in the _____.

2. Name the three pairs of salivary glands.

   a. _____

   b. _____

   c. _____

3. Name the three parts of the stomach.

   a. _____

   b. _____

   c. _____

4. Name the three parts of the small intestine.

   a. _____

   b. _____

   c. _____

5. What is the function of the salivary glands?

   _____

   _____

   _____

6. What is stored in the gallbladder?

   _____

   _____

   _____

7. What two substances are produced by the pancreas?

   _____

   _____

8. What are the three functions of the liver?

   a. _____

   b. _____

   c. _____

9. What is an enzyme?

   _____

EXERCISE 2

1. Define the RDA.

_____

_____

_____

2. From the information available on the lastest RDA revisions:

   a. Decribe the Reference Man:

      Age _____ Weight: in pounds _____

      Climate _____ in kilograms _____

      Activity _____

   b. Describe the Reference Woman:

      Age _____ Weight: in pounds _____

      Climate _____ in kilograms _____

      Activity _____

3. The latest RDA revisions were made in _____ (year).

   What are "Tables of Food Composition"?

_____

_____

_____

4. List and explain four adjustments that must be made in the RDA of individuals when they differ from the Reference Man or Reference Woman.

   a. _____ _____

      _____

      _____

   b. _____ _____

      _____

   c. _____ _____

      _____

   d. _____ _____

      _____

EXERCISE I

1. Why do we use abbreviations?

2. Name four sources you could use to define a medical term.

3. Define prefix, suffix and root word. Give examples of each.

4. Match prefixes, suffixes and root words to their proper meaning.

1. Hyper	_____	inflammation
2. osis	_____	skin
3. emia	_____	blood
4. Hypo	_____	below
5. itis	_____	s w/o
6. gastr	_____	liver
7. hepat	_____	above excess
8. derm	_____	condition
9. cardi	_____	heart
10. a	_____	stomach

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Match the term to its abbreviation

1.	Potassium	_____	ChoL
2.	Twice a day	_____	CHO
3.	As much as necessary	_____	tid
4.	Fat Restricted or prepared without Fat	_____	$\bar{s}$ w/o
5.	With	_____	qs
6.	Without	_____	PRO
7.	Three times a day	_____	K
8.	Four times a day	_____	q3h
9.	PRN	_____	N.P.O.
10.	B.M.R.	_____	qid
11.	Every three hours	_____	bid or 2id
12.	Iron	_____	Fe
13.	Cholesterol	_____	basal Metabolic Rate
14.	Carbohydrate	_____	A.D.A.
15.	Nothing by mouth	_____	$\bar{c}$ W/
16.	Protein	_____	as necessary
17.	American Dietetic Association	_____	Ca
18.	Calorie Restricted	_____	F/R FAT/R
19.	Calcium	_____	Cal/R

WORKBOOK

J3ABR92630-001-I thru II

Technical Training

Diet Therapy Specialist

DIET THERAPY

August 1984

SCHOOL OF HEALTH CARE SCIENCES, USAF
Department of Biomedical Sciences
Sheppard Air Force Base, Texas 76311

Designed For ATC Course Use

RGL: NA

DO NOT USE ON THE JOB

Department of Biomedical Sciences
School of Health Care Sciences, USAF
Sheppard Air Force Base, Texas 76311

SW J3ABR92630 001-I thru 11
August 1984

DIET THERAPY

INTRODUCTION

This workbook will be used during the entire course. There are five workbook projects to be completed prior to doing the corresponding progress check. The purpose of these workbook projects will be to familiarize yourself with the procedures for doing the project prior to being formally graded by progress check.

OBJECTIVE

Given a list of standard AF publications by number or title and AFR 0-2, locate information. Nine (9) of fourteen (14) must be correct.

PROJECT #I

1. Research AFR 0-2 and record the type of publication, the basic number, control number and current date of the following standard AF publications:

TITLE	TYPE OF PUBLICATION	BASIC NUMBER	CONTROL NUMBER	CURRENT DATE
a. Control of Foodborne Disease	_____	_____	_____	_____
b. Air Force Subsistence Program	_____	_____	_____	_____
c. Armed Forces Recipe Service-Recipes	_____	_____	_____	_____
d. Weather Modification	_____	_____	_____	_____
e. Applied Clinical Nutrition	_____	_____	_____	_____

2. Research AFR 0-2 and record the publication title and date of the following AF publications:

TITLE	TYPE OF PUBLICATION	BASIC NUMBER	CONTROL NUMBER	CURRENT DATE
a. _____	AFR	211	3	_____
b. _____	AFP	190	4-8	_____
c. _____	AFM	168	4	_____
d. _____	AFR	164	5	_____
e. _____	AFR	127	7	_____
f. _____	AFR	146	15	_____

This supersedes SW J3ABR92630 000-I thru 11, April 1984

OBJECTIVE

Using AFM 160-8 and anthrapometric information calculate a calorie restricted dietary regimen with no more than three instructor assists.

PROJECT #2

Part I Using Figure 5-7 on page 5-11 in AFM 160-8 complete the following procedures:

1. Calculate ideal body weight for a female 5"4", medium frame. Present weight of this patient is 150 lbs. (Step 1 in Figure 5-7).

2. Determine this patient's daily caloric requirement, she is moderately active. (Step 2 in Figure 5-7).

3. Determine the total calories that need to be provided per day for a weight loss of one pound per week for this patient. (Step 3 in Figure 5-7).

Part II Using Figure 1, Dietary calculation for Diabetic Diet in this workbook and step 3 above calculate a nonstandard calorie restricted diet.

1. Use the calorie level you calculated in step 3 above and provide 50% CHO, 20% Pro, and 30% Fat.

2. You must be within + or - 5 gm of the required amounts of CHO, Pro, and Fat. You must also be within + or - 3% of the total calories requested.

3. Use <u>whole</u> exchanges.

4. Use the Guide to Good Eating as a guide for the recommended number of servings from each food group for an adult.

Figure 1. DIETARY CALCULATION FOR DIABETIC DIET
EXAMPLE CALCULATION OF DIABETIC DIET

(FOR TRAINING PURPOSES ONLY, COURSE 622X1)

Prescription: Calories per day _____

Carbohydrate (grams) _____ Protein (grams) _____ Fat (grams) _____

LIST	EXCHANGE GROUP	No. of Exchanges	CHO (grams)	Protein (grams)	Fat (grams)
1	Milk, Non-Fat		12	8	tr.
1	Milk, 1% Fat		12	8	2.5
1	Milk, 2% Fat		12	8	5
1	Milk, Whole		12	8	10
2	Vegetable		5	2	-
3	Fruit		10	-	-
Special Foods					
	Egg Substitute		3	7	6
	Diet Jelly		2	-	-
	Cal/R Dressing		2	-	1
	Total carbohydrates from sources other than bread exchanges				
	_____ grams carbohydrate in prescription _____ grams carbohydrate from sources other than Bread Exchange _____ grams carbohydrate ÷ 15 = No. of Bread Exchanges _____ _____ (15 grams carbohydrates per 1 Bread Exchange)				
4	Bread		15	2	-
4	Prepared Food		15	2	5
4	Prepared Food		15	2	10
	Total protein from sources other than Meat Exchange				
	_____ grams protein in prescription _____ grams protein from sources other than Meat Exchange _____ grams protein ÷ 7 = No. of Meat Exchanges _____ _____ (7 grams protein per 1 Meat Exchange)				
5	Meat, Lean		-	7	3
5	Meat, Medium-Fat		-	7	5.5
5	Meat, High-Fat		-	7	8
	Total fat from sources other than Fat Exchange				
	_____ grams fat in prescription _____ grams fat from sources other than Fat Exchange _____ grams fat ÷ 5 = No. of Fat Exchanges _____ _____ (5 grams fat per 1 Fat Exchange)				
6	Fat		-	-	5
	Total grams: carbohydrates, protein and fat				

2

3

OBJECTIVE

Given AFM 160-8, AF Forms 1094, 1741, 2486, 2495, 2496, 2567, 2573 and menus, process patient menus with no more than ten (10) instructor assists.

PROJECT #3

Note: Insure that each step is completed before going on to the next step, today is 2 Jan 82.

SUPPER

1. Post changes to 1094, this step has been done for you.

2. Update AF Form 1741, this step has also been completed for you.

3. Complete AF Form 2573, Diet Census, again this step is completed.

4. Prepare patient menus for each patient on the 1094.

5. At this point tally the foods to be prepared for the following day, using the selective menu provided and AF Forms 2486, 2495 and 2496.

BREAKFAST

1. Post the changes from the AF Form 2567 (0500 hrs) to the AF Form 1094 dated 2 Jan 82.

2. Check the AF Forms 1741 against the updated 1094 and make the necessary changes (i.e. discharge, new admissions, change of diets).

3. Using the menus prepared yesterday ensure that an appropriate menu is completed for each patient listed on AF Form 1094.

4. Using the AF Form 1094 prepare AF Form 2573, Diet Census.

DINNER

1. Use the new 1094 dated 3 Jan 82. The changes for the dinner meal are already included on the new AF Form 1094. DO NOT post changes from AF Form 2567.

2. Complete steps two thru four, above for dinner meal.

During wards rounds following the dinner meal you visited patient Dumas on ward 4S room 6B. The patient stated that he disliked all flavors of Koolaid, and beef boullion. He also stated that he like apple juice, grape juice, popsicles, cream soups and Pepsi. When visiting another patient Sain in room 4A, she stated that she disliked asparagus and veal, but she liked tenderloin steak and Diet Pepsi.

MAKE THE NECESSARY CHANGES TO YOUR AF 1741s.

SUPPER

1. Use the new AF Form 1094, dated 3 Jan 82 and post the changes to it that AF Form 2567 (1500 hrs) states.

2. Complete steps two thru four, above (breakfast) for supper meal.

DIET CENSUS				MEAL: BREAKFAST-DINNER-SUPPER						DATE: 2-3 JAN			
TYPE DIET	2 JAN			INPATIENT UNITS	3 JAN			TOTAL	DINING ROOM			GRAND TOTAL
	B	D	S		B	D	S		IN-PATIENT	OUT-PATIENT	TOTAL	
REGULAR	4	5	4									
SOFT/BLAND/ FIBER RESTRICTED	2	2	3									
DENTAL SOFT	1	1	1									
T & A SOFT												
INFANT – DIET 1												
INFANT – DIET 2												
INFANT – DIET 3												
CHILD SOFT												
CHILD JUNIOR												
6 MEAL BLAND												
MINIMAL FIBER MINIMAL RESIDUE												
DENTAL LIQUID												
FULL LIQUID												
T & A LIQUID												
CLEAR LIQUID	1	1	1									
RESTRICTED CLEAR LIQUID												
CALORIE RESTRICTED	2	2	1									
DIABETIC UNDER 1800 CAL												
DIABETIC 1800 CAL AND ABOVE	1	1	1									
FAT RESTRICTED		1	1									
FAT CONTROLLED HLP 2/4	1											
FAT CONTROLLED SODIUM RESTRICTED												
SODIUM RESTRICTED	1	1	1									
CALORIE RESTRICTED SODIUM RESTRICTED												
TOTAL THERAPEUTIC MEALS	9	9	9									
GRAND TOTAL	13	14	13									

AF FORM MAY 80 2573 PREVIOUS EDITION WILL BE USED. FOR TRAINING PURPOSES ONLY

DIET ORDER			INPATIENT UNIT 45			ACCOMPLISHED BY Capt Misel.					DAY SUN	DATE 2 JAN 82
			LOCATION			TYPE OF DIET						
ROOM		NAME	INPATIENT UNIT	DINING ROOM	HOLO/NPO	REGULAR	SOFT	FULL LIQUID	CLEAR LIQUID	RESTRICTED CLEAR LIQUID	OTHER (Specify)	
1	A	Lunz	✓								Bland	
	B	~~Johnson~~	~~✓~~				D/C				~~1500 cal~~	
	C											
2	A	Jones	✓			✓						
	B											
	C	Kaough	✓				✓					
3	A											
	B	Charron	✓								800 cal	
	C											
	D	~~Colyer~~	~~✓~~								~~Dental soft~~	
4	A	Sain	✓								Fat / R	
	B	Myers	✓			✓						
	C	Colyer	✓								Dental soft	
	D	Leonard	✓			✓						
5	A											
	B	~~Brown~~	~~✓~~			~~✓~~		D/C				
6	A	Baker	✓						✓			
	B											
7	A											
	B	Smith	✓			✓						
8		Dion	✓								2200 cal Diab	
9												
10		Waterman	✓								1000 mg Na	
11	A											
	B	King	✓								Bland	

AF FORM 1094 JUL 79 PREVIOUS EDITION WILL BE USED.

FOR TRAINING PURPOSES ONLY

NOTE: SEND TO MEDICAL FOOD SERVICE AT 0500 AND 1500 HRS., NEW ADMISSIONS AFTER THESE HOURS WILL BE SUBMITTED BY TELEPHONE PRIOR TO 0630 AND 1700 HOURS.

INDICATE OTHER INFORMATION BY CHECK (✓)

INPATIENT UNIT	DATE	HOUR SUBMITTED
4S	3 JAN	0500

PATIENT'S NAME (Print)	ROOM NO./ BED NO.	DIET (Print)	CHANGE OF ROOM NO./ BED NO.	NEW ADMISSION	CHANGE OF DIET	HOLD MEALS B-D-S	NPO	PASS OUT	PASS RETURNED	DISCHARGED	INPATIENT UNIT TO DINING ROOM	DINING ROOM TO INPATIENT UNIT
Dumas	6B	Clear liquid		✓								✓

REMARKS (If any): FOR TRAINING PURPOSES ONLY

ACCOMPLISHED BY: Capt Janet Misel

AF FORM 2567 SEP 79 PREVIOUS EDITION WILL BE USED. ☆U.S. G.P.O. 1979-620-241/3026 DIET ORDER CHANGE

NOTE: SEND TO MEDICAL FOOD SERVICE AT 0500 AND 1500 HRS., NEW ADMISSIONS AFTER THESE HOURS WILL BE SUBMITTED BY TELEPHONE PRIOR TO 0630 AND 1700 HOURS.

INDICATE OTHER INFORMATION BY CHECK (✓)

INPATIENT UNIT	DATE	HOUR SUBMITTED
4S	3 JAN	1500

PATIENT'S NAME (Print)	ROOM NO./ BED NO.	DIET (Print)	CHANGE OF ROOM NO./ BED NO.	NEW ADMISSION	CHANGE OF DIET	HOLD MEALS B-D-S	NPO	PASS OUT	PASS RETURNED	DISCHARGED	INPATIENT UNIT TO DINING ROOM	DINING ROOM TO INPATIENT UNIT
Dion	8	2200 cal Diab								✓		
King	11B	Bland								✓		
Reed	5A	1500 cal		✓								✓

REMARKS (If any): FOR TRAINING PURPOSES ONLY

ACCOMPLISHED BY: Capt Janet Misel

AF FORM 2567 SEP 79 PREVIOUS EDITION WILL BE USED. ☆U.S. G.P.O. 1979-620-241/3026 DIET ORDER CHANGE

7

DIET ORDER			INPATIENT UNIT 45			ACCOMPLISHED BY Capt. Misel					DAY MON	DATE 3 JAN
			LOCATION			TYPE OF DIET						
ROOM	BED	NAME	INPATIENT UNIT	DINING ROOM	HOLD/NPO	REGULAR	SOFT	FULL LIQUID	CLEAR LIQUID	RESTRICTED CLEAR LIQUID	OTHER (Specify)	
1	A	Luna	✓								Bland	
	B											
	C											
2	A	Jones	✓			✓						
	B											
	C	Kaough	✓			✓						
3	A											
	B	Chan	✓								800 cal	
	C											
	D											
4	A	Sain	✓								Fat/R	
	B	Myers	✓			✓						
	C	Colyer	✓								Dental soft	
	D											
5	A											
	B											
6	A	Baker	✓					✓				
	B	Dumas	✓						✓			
7	A											
	B	Smith	✓			✓						
8		Dion	✓								2200 cal Diab	
9												
10		Waterman	✓								1000 mg Na	
11	A											
	B	King	✓								Bland	

AF FORM 1094 JUL 79 PREVIOUS EDITION WILL BE USED.

FOR TRAINING PURPOSES ONLY

DIAGNOSIS: Ulcers

HT: 63" (Circle one: M F)

WEIGHT — MAX/MIN (Standard): 139.8/124.9 (116.5)

WEIGHT — DATE: 2 JAN 82

ADMIT: 118

ADDITIONAL WEIGHTS:

DIET/DRUG INTERACTION:

PHYSICIAN: Mai Williams

AGE: 21

DATE	Dietary Prog Notes/Diet Instructions	INIT	RCRD
2 JAN 82	Discussed diet with pt and recorded likes and dislikes	SKS	

DATE	DIET ORDER	INIT
2 JAN 82	Bland	SKS

VISIT DATES	INIT	DIET WRITING INFORMATION — LIKES	DISLIKES
2 JAN 82	SKS	Chicken, broccoli, Liver, baked potatoes	beets, mashed potatoes, apple jc.

FOR TRAINING PURPOSES ONLY

UNIT	BED	ROOM NO.	NAME	GRADE	DIET ORDER	Circle One: NPO	OTHER STATUS: HOLD, PASS, VSI, SI
4S	A	1	Luna		Bland		

AF FORM 1741 PREVOUS EDITION WILL BE USED. MAY 82 — DIET RECORD

DIAGNOSIS:

HT: 66" (Circle one: M F)

WEIGHT — MAX/MIN (Standard): 163.2/122.4 (136)

WEIGHT — DATE: 30 DEC 81

ADMIT: 138

ADDITIONAL WEIGHTS:

DIET/DRUG INTERACTION:

PHYSICIAN: Col Wood

AGE: 31

DATE	Dietary Prog Notes/Diet Instructions	INIT	RCRD
30 DEC 81	Discussed diet with pt and recorded likes and dislikes	SKS	
2 JAN 82	Pt doesn't want extra soup with new diet	SKS	

DATE	DIET ORDER	INIT
30 DEC 81	Full liquid	SKS
2 JAN 82	Soft	SKS

VISIT DATES	INIT	DIET WRITING INFORMATION — LIKES	DISLIKES
30 DEC 81	SKS	extra bowl of ~~soup~~ at each meal	tomato soup
31 DEC 81	SKS		
1 JAN 82	RWR		
2 JAN 82	SKS		

FOR TRAINING PURPOSES ONLY

UNIT	BED	ROOM NO.	NAME	GRADE	DIET ORDER	Circle One: NPO	OTHER STATUS: HOLD, PASS, VSI, SI
4S	C	2	Kaough		~~Full liquid~~ Soft		

AF FORM 1741 PREVOUS EDITION WILL BE USED. MAY 82 — DIET RECORD

DIAGNOSIS: Obese
HT: 68" (Circle M F)
WEIGHT: MAX/MIN (Standard): 174/130.5 (145)
ADMIT: 200
DATE: 1 JAN 82
PHYSICIAN: Capt Dunn
AGE: 31
ADDITIONAL WEIGHTS
DIET/DRUG INTERACTION

DATE	Dietary Prog Notes/Diet Instructions	INIT
1 JAN 82	Pt has been on cal/c diets before with little success, began instruction based on previous history	SKS

RCRD	DATE	DIET ORDER	INIT
	1 JAN 82	800 Cal	SKS

VISIT DATES	INIT	DIET WRITING INFORMATION LIKES	DISLIKES
1 JAN 82	SKS		none
2 JAN 82	SKS		

FOR TRAINING PURPOSES ONLY

UNIT: 45 | BED: B | ROOM NO.: 3 | NAME: Charron | GRADE: | DIET ORDER: 800 Cal

Circle One: NPO | OTHER STATUS: HOLD, PASS, VSI, SI

AF FORM 1741 MAY 82 PREVOUS EDITION WILL BE USED. DIET RECORD

DIAGNOSIS: Cholecystitis
HT: 66.5" (Circle M F)
WEIGHT: MAX/MIN (Standard): 166.2/124.7 (138.5)
ADMIT: 140
DATE: 2 JAN 82
PHYSICIAN: Capt Gerdes
AGE: 30
ADDITIONAL WEIGHTS
DIET/DRUG INTERACTION

DATE	Dietary Prog Notes/Diet Instructions	INIT
2 JAN 82	Began diet instruction, recorded likes and dislikes.	RWR

RCRD	DATE	DIET ORDER	INIT
	2 JAN 82	Fat/R	RWR

VISIT DATES	INIT	DIET WRITING INFORMATION LIKES	DISLIKES
2 JAN 82	RWR	Whole wheat bread OJ, coffee tomatoes grits	wax beans meatloaf

FOR TRAINING PURPOSES ONLY

UNIT: 45 | BED: A | ROOM NO.: 4 | NAME: Sain | GRADE: | DIET ORDER: Fat/R

Circle One: NPO | OTHER STATUS: HOLD, PASS, VSI, SI

AF FORM 1741 MAY 82 PREVOUS EDITION WILL BE USED. DIET RECORD

DIAGNOSIS	HT	WEIGHT	MAX/MIN (Standard)	ADMIT	ADDITIONAL WEIGHTS						DIET/DRUG INTERACTION
Oral Surgery	67" (Circle one) M F (M circled)			142	141						
PHYSICIAN: Capt Deas	AGE: 35	DATE	68.6/ 120.5 ([illegible])	27 DEC 81	30 DEC 81						

DATE	Dietary Prog Notes/Diet Instructions	INIT	RCRD
21 DEC 81	Discussed pt diet and recorded likes/dislikes	PTD	

DATE	DIET ORDER	INIT
27 DEC 81	Dental liquid	PTD
2 JAN 82	Dental soft	PTD

VISIT DATES	INIT	DIET WRITING INFORMATION: LIKES	DISLIKES
27 DEC 81	PTD	Milkshakes	Custard
28 DEC 81	PTD	Chocolate milk	white milk
29 DEC 81	PTD	coffee	
30 DEC 81	RWR		
1 JAN 82	RWR		
2 JAN 82	PTD		

FOR TRAINING PURPOSES ONLY

UNIT	BED	ROOM NO.	NAME	GRADE	DIET ORDER	Circle One: NPO	OTHER STATUS: HOLD VSI PASS SI
45	DC	24	~~Colyer~~		Dental ~~liquid~~ Soft		

AF FORM 1741 MAY 82 PREVIOUS EDITION WILL BE USED. DIET RECORD

DIAGNOSIS	HT	WEIGHT	MAX/MIN (Standard)	ADMIT	ADDITIONAL WEIGHTS						DIET/DRUG INTERACTION
	69" (Circle one) M F (M circled)			150							
PHYSICIAN: Capt Gerdes	AGE: 16	DATE	179.4/ 134.6 (149.5)	1 JAN 82							

DATE	Dietary Prog Notes/Diet Instructions	INIT	RCRD
1 JAN 82	Explained diet to pt	SKS	

DATE	DIET ORDER	INIT
1 JAN 82	Clear liquid	SKS

VISIT DATES	INIT	DIET WRITING INFORMATION: LIKES	DISLIKES
1 JAN 82	SKS	grape jc	Cranberry jc
2 JAN 82	SKS	coffee	

FOR TRAINING PURPOSES ONLY

UNIT	BED	ROOM NO.	NAME	GRADE	DIET ORDER	Circle One: NPO	OTHER STATUS: HOLD VSI PASS SI
45	A	6	Baker		Clear liquid		

AF FORM 1741 MAY 82 PREVIOUS EDITION WILL BE USED. DIET RECORD

DIAGNOSIS: Diabetes Mellitus
HT: 67" (Circle one) M (F)
WEIGHT: MAX/MIN (Standard) 158.4/118.8 (132)
ADMIT: 117
DATE: 2 JAN 82
PHYSICIAN: Col Wood
AGE: 46
ADDITIONAL WEIGHTS
DIET/DRUG INTERACTION

DATE	Dietary Prog Notes/Diet Instructions	INIT
2 JAN 82	Began diet instruction and recorded likes/dislikes	SFS

FOR TRAINING PURPOSES ONLY

RCRD	DATE	DIET ORDER	INIT
	2 JAN 82	2200 cal Diab	SFS

VISIT DATES	INIT	DIET WRITING INFORMATION LIKES	DISLIKES
2 JAN 82	SFS	Fried chicken mashed potatoes watermelon stuffed peppers	Liver tomatoes

UNIT	BED	ROOM NO.	NAME	GRADE	DIET ORDER	Circle One: NPO	OTHER STATUS HOLD	VSI
45		8	Dion		2200 cal Diab		PASS	SI

AF FORM 1741 MAY 82 PREVOUS EDITION WILL BE USED. DIET RECORD

DIAGNOSIS: Edema
HT: 69" (Circle one) (M) F
WEIGHT: MAX/MIN (Standard) 179.4/134.6 (149.5)
ADMIT: 155
DATE: 1 JAN 82
PHYSICIAN: Maj Williams
AGE: 45
ADDITIONAL WEIGHTS
DIET/DRUG INTERACTION

DATE	Dietary Prog Notes/Diet Instructions	INIT
1 JAN 82	Discussed characteristics of diet with pt.	SFS

FOR TRAINING PURPOSES ONLY

RCRD	DATE	DIET ORDER	INIT
	1 JAN 82	1000 mg Na	SFS

VISIT DATES	INIT	DIET WRITING INFORMATION LIKES	DISLIKES
1 JAN 82	SFS	spinach	greens
2 JAN 82	SFS		

UNIT	BED	ROOM NO.	NAME	GRADE	DIET ORDER	Circle One: NPO	OTHER STATUS HOLD	VSI
45		10	Waterman		1000 mg Na		PASS	SI

AF FORM 1741 MAY 82 PREVOUS EDITION WILL BE USED. DIET RECORD

DIAGNOSIS: Ulcers

HT: 68"

WEIGHT (Circle one): (M) F

MAX/MIN (Standard): 174/130.5 (195)

ADMIT: 140

DATE: 30 DEC 81

ADDITIONAL WEIGHTS:

DIET/DRUG INTERACTION:

PHYSICIAN: Capt Dunn

AGE: 29

DATE	Dietary Prog Notes/Diet Instructi	INIT	RCRD
30 DEC 81	Began diet instruction entered carded likes/dislikes	PTD	
2 JAN 82	Pt verbalizes understanding of diet.	RWR	

DATE	DIET ORDER	INIT
30 DEC 81	Bland	PTD

VISIT DATES	INIT	DIET WRITING INFORMATION: LIKES	DISLIKES
30 DEC 81	PTD	Liver, fish	eggs
31 DEC 81	PTD	Coffee	whole milk
1 JAN 82	RWR	Cnd oranges	decaf. coffee
2 JAN 82	RWR	fresh apples	

FOR TRAINING PURPOSES ONLY

UNIT	BED	ROOM NO.	NAME	GRADE	DIET ORDER	Circle One: NPO	OTHER STATUS: HOLD	VSI
45	B	11	King		Bland		PASS	SI

AF FORM 1741 MAY 82 PREVOUS EDITION WIL. BE USED. DIET RECORD

DIAGNOSIS | HT (Circle one) M F | WEIGHT | DATE | MAX/MIN (Standard) | ADMIT | ADDITIONAL WEIGHTS | DIET/DRUG INTERACTION

PHYSICIAN | AGE

DATE	Dietary Prog Notes/Diet Instructions	INIT	RCRD

DATE	DIET ORDER	INIT

VISIT DATES	INIT	DIET WRITING INFORMATION	
		LIKES	DISLIKES

FOR TRAINING PURPOSES ONLY

UNIT	BED	ROOM NO.	NAME	GRADE	DIET ORDER	Circle One: NPO	OTHER STATUS HOLD PASS VSI SI

AF FORM 1741 MAY 82 PREVOUS EDITION WILL BE USED. DIET RECORD

DIAGNOSIS | HT (Circle one) M F | WEIGHT | DATE | MAX/MIN (Standard) | ADMIT | ADDITIONAL WEIGHTS | DIET/DRUG INTERACTION

PHYSICIAN | AGE

DATE	Dietary Prog Notes/Diet Instructions	INIT	RCRD

DATE	DIET ORDER	INIT

VISIT DATES	INIT	DIET WRITING INFORMATION	
		LIKES	DISLIKES

FOR TRAINING PURPOSES ONLY

UNIT	BED	ROOM NO.	NAME	GRADE	DIET ORDER	Circle One: NPO	OTHER STATUS HOLD PASS VSI SI

AF FORM 1741 MAY 82 PREVOUS EDITION WILL BE USED. DIET RECORD

DIET WORKSHEET (Place a checkmark before each item after it is prepared)	☐ PATIENT TRAY ASSEMBLY	DIET FOODS ☐ HOT ☐ COLD	DATE

	BREAKFAST		DINNER		SUPPER

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AF FORM AUG 80 2486 PREVIOUS EDITION WILL BE USED. FOR TRAINING PURPOSES ONLY

DIET WORKSHEET *(Place a checkmark before each item after it is prepared)*	☐ PATIENT TRAY ASSEMBLY	DIET FOODS ☐ HOT ☐ COLD	DATE
BREAKFAST	DINNER	SUPPER	

AF ORM 2486 AUG 80 PREVIOUS EDITION WILL BE USED.

FOR TRAINING PURPOSES ONLY

BREAKFAST THERAPEUTIC WORKSHEET

FOR TRAINING PURPOSES ONLY

WEEK: I | DAY: SUNDAY | DATE:

DIET	EGGS	MEAT	HOT BREAD	CEREAL	FRUIT/JUICE	OTHER
SOFT/BLAND 4/ FIBER RESTRICTED (Qy from Master Menu)	Scrambled	Crisp Bacon	Toast	Hot Oatmeal	Orange Juice	
DENTAL SOFT	Scrambled		Toast	Hot Oatmeal	Orange Juice JC	
TEA SOFT			BREAD - NO CRUST		JC	
CHILD SOFT (2 - 5 Years)			WHITE TOAST		JC	
CHILD SOFT (1 - 2 Years)	Scrambled		TOAST - NO CRUST	Hot Oatmeal	Orange Juice JC	/MILK (4 OZ)
INFANT SOFT (5 - 12 Months)	BABY EGG YOLK			BABY CEREAL	JC	
INFANT SOFT (1 - 4 Months)				BABY CEREAL	JC (2 OZ)	
BLAND III		CRISP BACON	WHITE TOAST		JC	COCOA
BLAND II			WHITE TOAST (1/2)		JC (3 OZ)	MILK (4 OZ/
ANIMAL RESIDUE	Scrambled		WHITE TOAST	CREAM	Orange Juice JC	CREAM (3 OZ/
DENTAL LIQUID				THIN STR Oatmeal	Orange Juice JC	EGGNOG Cocoa
FULL LIQUID				STR Oatmeal	Orange Juice JC	COCO
TEA LIQUID					NECTAR	GELATIN
CLEAR LIQUID					Apple Juice JC	Lime GELATIN
DIABETIC/ CALORIE RESTRICTED	F/R Scrambled	CRISP BACON	TOAST	Hot Oatmeal	CAL/R Orange Juice	CAL/R
FAT RESTRICTED	F/R Scrambled		TOAST	Hot Oatmeal	Orange Juice	
FAT CONTROLLED	F/C Scrambled		TOAST	Hot Oatmeal	Orange Juice	
SODIUM RESTRICTED	NA/R Scrambled		TOAST	NA/R Hot Oatmeal	Orange Juice	
CALORIE RESTRICTED/ SODIUM RESTRICTED	NA/R F/R Scrambled		TOAST	NA/R Hot Oatmeal	CAL/R Orange Juice	CAL/R

AF FORM 2495 JAN 78 PREVIOUS EDITION WILL BE USED.

DINNER/[redacted] THERAPEUTIC WORKSHEET FOR TRAINING PURPOSES ONLY

WEEK	DAY	DATE
I	SUNDAY	

DIET	SOUP	MEAT	POTATO	VEGETABLE	SALAD/DRESSING	FRUIT/DESSERT	OTHER
SOFT/BLAND & FIBER RESTRICTED (Copy from Master Menu)	Crm of Chicken	Roast Pork Loin	Mashed	Bu Green Peas	Shredded Lettuce w/Mayonnaise	Reg Canned Pears	Brown Gravy
DENTAL SOFT	Crm of Chicken	Ground Pork	Mashed	Bu Green Peas	(omit salad on Bland)	Reg Canned Pears	Brown Gravy
T & A SOFT							
CHILD SOFT (2 - 5 Years)							
CHILD SOFT (1 - 2 Years)		Ground Pork	Mashed	Bu Green Peas		Strawberry Jello	
INFANT SOFT (5 - 12 Months)							
INFANT SOFT (1 - 4 Months)							
BLAND III							
BLAND II							
BLAND I							
DENTAL LIQUID	Crm of Chicken	Pureed Pork Loin	Pureed Mashed	Pureed Green Peas		Vanilla Milkshake	Ice Cream
FULL LIQUID	Crm of Celery					Vanilla Milkshake	Ice Cream
T & A LIQUID							
CLEAR LIQUID	Beef Bouillon					Strawberry Jello	Kool Aid
DIABETIC/CALORIE RESTRICTED	Beef Bouillon	Roast Pork Loin	Mashed	Carrots Green Peas (bread)	Coleslaw	Diet Canned Pears	Brown Gravy
FAT RESTRICTED	Beef Bouillon	Roast Pork Loin	Mashed	Green Peas	Tossed Salad	Reg Canned Pears	Brown Gravy
FAT CONTROLLED	Beef Bouillon	Roast Pork Loin	Mashed	Green Peas	Coleslaw	Reg Canned Pears	Brown Gravy
SODIUM RESTRICTED	Na/R Beef Bouillon	Roast Pork Loin	Mashed	Green Peas	Coleslaw	Reg Canned Pears	Brown Gravy
CALORIE RESTRICTED/ SODIUM RESTRICTED	Na/R Beef Bouillon	Roast Pork Loin	Mashed	Carrots	Coleslaw	Na/R Diet Canned Pears	Brown Gravy

AF FORM MAR 74 2496

[redacted]/SUPPER THERAPEUTIC WORKSHEET FOR TRAINING PURPOSES ONLY

WEEK	DAY	DATE
I	SUNDAY	

DIET	SOUP	MEAT	POTATO	VEGETABLE	SALAD/DRESSING	FRUIT/DESSERT	OTHER
SOFT/BLAND 4/ FIBER RESTRICTED (Copy from Master Menu)	Crm of Mushroom	Grilled Veal Patty	Baked Potato	Bu Asparagus	Molded Peach	Vanilla Ice Cream	
DENTAL SOFT	Crm of Mushroom	Ground Veal	Baked Potato	Bu Asparagus	Molded Peach	Vanilla Ice Cream	
T & A SOFT							
CHILD SOFT (2 - 5 Years)							
CHILD SOFT (1 - 2 Years)		Ground Veal	Baked Potato	Bu Asparagus		Vanilla Ice Cream	
INFANT SOFT (5 - 12 Months)							
INFANT SOFT (1 - 4 Months)							
BLAND III							
BLAND II							
BLAND I							
DENTAL LIQUID	Crm of Mushroom	Pureed Veal	Pureed Potato	Pureed Asparagus		Vanilla Ice Cream	Chocolate Milkshake
FULL LIQUID	Crm of Mushroom					Vanilla Ice Cream	Chocolate Milkshake
T & A LIQUID							
CLEAR LIQUID	Chicken Bouillon					Lime Jello	Kool Aid
DIABETIC/CALORIE RESTRICTED	Chicken Bouillon	Grilled Veal Patty	Baked Potato	Steamed Asparagus	Tossed Salad	Fresh Orange	
FAT RESTRICTED	Chicken Bouillon	Grilled Veal Patty	Baked Potato	Steamed Asparagus	Tossed Salad	Fresh Orange	
FAT CONTROLLED	Chicken Bouillon	Grilled Veal Patty	Baked Potato	Steamed Asparagus	Tossed Salad	Fresh Orange	
SODIUM RESTRICTED	Na/R Chicken Bouillon	Grilled Veal Patty	Baked Potato	Steamed Asparagus	Tossed Salad	Fresh Orange	
CALORIE RESTRICTED/ SODIUM RESTRICTED	Na/R Chicken Bouillon	Grilled Veal Patty	Baked Potato	Steamed Asparagus	Tossed Salad	Fresh Orange	

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AF FORM 2496 MAR 74

OBJECTIVE

1. Given AF Form 287 and a list of specific subsistence items order subsistence with no instructor assist.

2. Given a completed AF Form 287 and specific subsistence items, process subsistence with no more than one instructor assist.

PROJECT #4

Note: Read and complete each step before going on to the next step. Also, have your instructor check each step prior to going to the next step.

ORDER

STEP 1 - You are the storeroom manager. Upon your arrival at work this morning you are told by the senior cook, Mr. Brown, that he needs the following items:

Peas and Carrots	#303 Cn	24
Instant Mashed Potatoes	24oz Bx	8
Diet Tunafish	6½oz Cn	12

You will be required to order items from the commissary if you do not have enough on hand. Also you must take into account the appropriate stock levels of each item. They are as follows:

Peas and Carrots	#303 Cn	24
Instant Mashed Potatoes	24oz Bx	12
Diet Tunafish	6½oz Cn	18

With the information provided above and AF Form 287 and AF Forms 1742 provided, order your subsistence.

PROCESS

STEP 2 - Upon your arrival at the commissary, you find that they have the items listed below:

Peas and Carrots	#303 Cn	48
Instant Mashed Potatoes	24oz Bx	120
Diet Tunafish	6½oz Cn	60
Peas, Green	#303 Cn	36
Carrots	#303 Cn	72

NOTE: The cans of peas and carrots are rusted and some are dented.

Complete the Quantity Issued Column of AF Form 287 and complete all other applicable spaces at this time. Mr. Jones issued you the food. Then post quantities purchased to AF Forms 1742.

STEP 3 - Issue the food items requested by Mr. Brown and complete the appropriate forms and post issues to AF Forms 1742.

NOTE: Remember FIFO when issuing foods.

FOR TRAINING PURPOSES ONLY

SUBSISTENCE REQUEST	1. INSTALLATION			
2. ORGANIZATION	3. CONSUMPTION DATE(S)		4. DATE FOR ISSUE	5. REQUEST NUMBER
	MONTH	DAYS		
6. FUND CITATION	7. SIGNATURE OF REQUESTING OFFICIAL			

ITEM NO. A	NOMENCLATURE B	UNIT C	MENU ALLOWANCE D	QUANTITY DESIRED E	QUANTITY ISSUED F	UNIT PRICE G	TOTAL COST H
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							

8. ISSUED BY	9. ISSUE POINT	TOTAL COST	
10. QUANTITIES SHOWN IN COLUMN F HAVE BEEN RECEIVED			
DATE	SIGNATURE		
11. VERIFIED BY	12. CONTROL NUMBER	13. VOUCHER NUMBER	

FOR TRAINING PURPOSES ONLY

AF FORM APR 65 287

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FOR TRAINING PURPOSES ONLY

SOURCE/FSN	ITEM AND SIZE	UNIT	ORDERING DATA	INDEX NO.

DATE	QUANTITY IN	QUANTITY RETURNED	QUANTITY OUT	BALANCE	DATE	QUANTITY IN	QUANTITY RETURNED	QUANTITY OUT	BALANCE
1 Jul 83	48			48					
2 Jul 83			15	33					
4 Jul 83			25	8					
9 Jul 83	24			32					
13 Jul 83			18	14					
15 Jul 83		6		20					

SOURCE/FSN	ITEM AND SIZE	UNIT	ORDERING DATA	INDEX NO.
	PEAS & CARROTS # 303	Cn		

FOOD PURCHASE/USE RECORD

AF FORM 1742

FOR TRAINING PURPOSES ONLY

SOURCE/FSN	ITEM AND SIZE	UNIT	ORDERING DATA	INDEX NO.

DATE	QUANTITY IN	QUANTITY RETURNED	QUANTITY OUT	BALANCE	DATE	QUANTITY IN	QUANTITY RETURNED	QUANTITY OUT	BALANCE
1 Jul 83	24			24					
3 Jul 83			18	6					
4 Jul 83		3		9					
10 Jul 83			9	Ø					

SOURCE/FSN	ITEM AND SIZE	UNIT	ORDERING DATA	INDEX NO.
	PEAS, GREEN # 303	Cn		

FOOD PURCHASE/USE RECORD

AF FORM 1742

FOR TRAINING PURPOSES ONLY

SOURCE/FSN | ITEM AND SIZE | UNIT | ORDERING DATA | INDEX NO.

DATE	QUANTITY IN	QUANTITY RETURNED	QUANTITY OUT	BALANCE	DATE	QUANTITY IN	QUANTITY RETURNED	QUANTITY OUT	BALANCE
8 JUL 83	BALANCE BROUGHT FORWA'D			18					
10 JUL 83			8	10					
13 JUL 83			6	4					

SOURCE/FSN | ITEM AND SIZE: INSTANT MASHED POTATOES 24 OZ | UNIT: BX | ORDERING DATA | INDEX NO.

FOOD PURCHASE/USE RECORD

AF FORM 1742 JUL 77

FOR TRAINING PURPOSES ONLY

SOURCE/FSN | ITEM AND SIZE | UNIT | ORDERING DATA | INDEX NO.

DATE	QUANTITY IN	QUANTITY RETURNED	QUANTITY OUT	BALANCE	DATE	QUANTITY IN	QUANTITY RETURNED	QUANTITY OUT	BALANCE
30 JUN 83	AS PER INVENTORY			18					
7 JUL 83			18	Ø					

SOURCE/FSN | ITEM AND SIZE: CARROTS #303 | UNIT: CN | ORDERING DATA | INDEX NO.

FOOD PURCHASE/USE RECORD

AF FORM 1742 JUL 77

FOR TRAINING PURPOSES ONLY

SOURCE/FSN	ITEM AND SIZE	UNIT	ORDERING DATA	INDEX NO.

DATE	QUANTITY			BALANCE	DATE	QUANTITY			BALANCE
	IN	RETURNED	OUT			IN	RETURNED	OUT	
10 JUL 83	48			48					
13 JUL 83			12	36					

SOURCE/FSN	ITEM AND SIZE	UNIT	ORDERING DATA	INDEX NO.
	DIET TUNAFISH 6½ OZ	Cn		

FOOD PURCHASE/USE RECORD

AF FORM 1742

FOOD ISSUE RECORD				ISSUE DATE			USE DATE		
Posted					QUANTITY			COST	
M F S	M S A	FOOD GROUP A	ITEM B	UNIT C	RE-QUESTED D	RE-TURNED E	ISSUED F	UNIT G	TOTAL H
FOR TRAINING PURPOSES ONLY						TOTAL FOR DAY			
REQUESTED BY				ISSUED BY		RECEIVED BY			

AF FORM DEC 81 543 PREVIOUS EDITION WILL BE USED.

OBJECTIVE

Given AF Forms 544, 1087, 1339, and MALACS cash register receipt complete AF Form 544 Ration Earnings Record, with no more then three instructor assists.

PROJECT #5

Part A

1. You are the cashier. Your supervisor, TSgt Jones, gives you $25.00 and AF Forms 1087 and 1339.

2. You must sign for receipt of the money and forms that your supervisor has listed on the AF Form 2570 below. Before signing this receipt check the control numbers on the AF Forms 1087 and 1339 provided in this WB.

NOTE: You did receive $25.00 from TSgt Jones.

FOR TRAINING PURPOSES ONLY

MEDICAL FOOD SERVICE CASH & FORMS RECEIPT		DATE
MEAL ☐ BREAKFAST ☐ DINNER ☒ SUPPER		
	RECEIVED	TURNED-IN
CASH	$25.00	
AF FORM 1339 (Inclusive no)	A1102653	
AF FORM 1087 (Inclusive no)	105	
SIGNATURE OF CASHIER		
SIGNATURE OF FOOD SERVICE REP		

FOR TRAINING PURPOSES ONLY

AF FORM MAR 74 2570 PREVIOUS EDITIONS OF THIS FORM WILL BE USED.

Part B

The duty you will be performing as cashier is an important one and must be accomplished with the highest possible degree of accuracy. It is your responsibility, as cashier, to ensure that each person eating meals in the dining hall signs in on the correct form and provides all the necessary information. To ensure that you can accomplish this you will be required to fill in the signature and other applicable information, on the correct form, for each of the personnel listed on page 29

1. Using the list of personnel on page 29 fill in signatures and other applicable information on the AF Forms 1087 and 1339 provided. NOTE: Only personnel who have a meal card number next to their name will sign in on the 1339, all others will sign in on the 1087. Remember to include the amount paid for each person on the 1087.

2. AF Form 1087

a. Enter the total number of meals served to each category of personnel in column D. Total this column to get the total number of personnel who ate the dinner meal and enter this total on the last blank space in column D. This total should equal the number of lines that were used on the form by personnel signing in.

b. Calculate the total collections for meals by multiplying the price charged for meals (column B) by the total number of meals sold in each category (column D) and enter this total in column E. Add the figures in column E and enter the total on the last blank space.

c. Multiply the surcharge, if applicable, in column C by the number of meals sold to each category in column D and enter the total in column F. Add the figures in column F and enter the total on the last blank space.

d. The sum of the figures in column E plus the figures in column F will be entered in Column G. Add the figures in column G and enter this total on line 5, Total Amount Due and line 6, Total Cash Turned In.

e. Add the totals on line 5 of columns E and F. This sum must equal the total in column G.

f. Close out this form by drawing a diagonal line from left to right, starting on the first blank line and ending on the last blank line. Then sign your name on this line.

3. AF Form 1339

a. At the top of the form check the box that pertains to the category of personnel signing in. For this project we will use "Permanent".

b. The dinning hall number would be the number of the building that it is in. For this project use "1200".

c. The date you fill in would be the date the form was used. For this project use today's date.

d. Separate sheets would be used for each meal. Never use a 1339 to carry over from one meal to the next. This is the supper meal, check the appropriate box.

e. Only one signature will be obtained from each diner at a given meal. Each diner must show their meal card before signing in, if in civilian clothes they must also show their military ID Card.

f. Close out this form by drawing a Z in each of the two colums on back and front that were not used. On the first Z start on the first blank line, beginning with your initials and end on the last blank line. For the other columns start on the first line and end at the last line - you initials are required only on the first Z.

g. Cashier's certification: On the back of the form print your name & grade in the applicable box and sign your name in the signature block.

h. Supervisor's Certification: Print the name and grade of your supervisor in the block under your name. Remember your supervisor is TSgt Jones. DO NOT sign his name, he would do this after he has checked the form for proper completion.

Part C

1. AF Form 544, Ration Earning Record.

a. Fill in the date that this form was used - use today's date for this project.

b. Enter the total number of medical duty personnel from AF Form 1339, who subsisted at government expense, on line 3.

c. Enter the total number of hospital personnel who subsisted on a cash basis from the AF Form 1087, on line 5.

d. Enter the total number of guests and nonhospital personnel (including TDY), who subsisted on a cash basis, from AF Form 1087 on line 6.

e. The rest of the form will be completed by the MSA office.

Names and Category of Personnel that Ate Dinner

1.	Newton W. [illegible]ane	SSgt	Hospital Personnel
2.	Raymond Estep	Sgt	Meal Card 1554
3.	Linda S. Garcia	Amn	Meal Card 7315
4.	John R. Clapp	2Lt	Hospital Personnel
5.	Donna Bethel	Maj	TDY
6.	Marvin S. Garrett	Col	TDY
7.	Daniel E. Mudd	SSgt	Hospital Personnel
8.	Robert O. Rayan	MSgt	Hospital Personnel
9.	Tyman A. Brown	Amn	Meal Card 2695
10.	Mary Leath	A1C	Meal Card 7105
11.	James B. Evans	Lt	Hospital Personnel
12.	Clifford O'Neal	A1C	Hospital Personnel
13.	Neal Sharp	Capt	Hospital Personnel
14.	John Williamson	A1C	Meal Card 3704
15.	Carol Fields	Lt	Hospital Personnel
16.	Robin Cruse	A1C	Meal Card 3919
17.	Linda Laird	Capt	Hospital Personnel
18.	Frank Show	TSgt	TDY
19.	John Archer	Sgt	Meal Card 2109
20.	Earl Murphy	TSgt	Non Hospital Personnel
21.	Jessie Steward	Sgt	Meal Card 4150
22.	William Andrews	Capt	Hospital Personnel
23.	Ronald O. Hedges	SSgt	Hospital Personnel
24.	Robert Parsons	Amn	Meal Card 9560
25.	Donald T. Ward	Capt	Hospital Personnel
26.	Ray Saunders	A1C	Meal Card 6110
27.	Lucille Hoffman	LtCol	Hospital Personnel
28.	Kathy Aris	Civ	Hospital Personnel
29.	Debbie Aris	Civ	Under 12
30.	Virginia Aris	Civ	Under 12
31.	Mary Carter	Civ	Hospital Personnel
32.	John Avis	Lt	Out Patient

FOR TRAINING PURPOSES ONLY

CASH MEAL LOG

MEAL SERVED: BREAKFAST ☐ DINNER ☐ SUPPER ☒ | NUMBER: 105 | DATE:

I RECAPITULATION (Includes Log Numbers ____ through ____ Inclusive.)

LINE	PERSONNEL SERVED	RATIONS SERVED A	CHARGES MEAL B	CHARGES SURCHARGE C	NUMBER OF MEALS D	TOTAL COLLECTED FOR MEALS E	TOTAL COLLECTED FOR SURCHARGE F	AMOUNT PAID G
1	HOSPITAL PERSONNEL							
A	OFFICERS AND CIVILIANS		1.75	.25				
B	ENLISTED PERSONNEL		1.75					
C	DUTY PERSONNEL		1.75					
2	NONHOSPITAL PERSONNEL AND GUESTS							
A	OFFICERS AND CIVILIANS		1.75	.25				
B	ENLISTED PERSONNEL		1.75					
3	TDY PERSONNEL							
A	OFFICERS AND CIVILIANS		1.75	2.50				
B	ENLISTED PERSONNEL		1.75					
4	OTHER							
A	CHILDREN UNDER 12 YEARS		1.00	.25				
B	ROTC AND CADETS		1.75					
C	OTHER							
5	TOTAL AMOUNT DUE							
6	TOTAL CASH TURNED IN							
7	CASH OVER (Short)							
8	EXPLANATION OF CASH OVER (Short)							

II PERSONNEL SUBSISTED

LINE	SIGNATURE A	GRADE B	STATUS: HOSPITAL PERSONNEL C	STATUS: NON-HOSPITAL PERS. AND GUESTS D	STATUS: TDY E	STATUS: OTHER F	AMOUNT PAID G
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							

AF FORM OCT 78 1087 PREVIOUS EDITION IS OBSOLETE.

PERSONNEL SUBSISTED *(Continued)*							
	SIGNATURE A	GRADE B	HOSPITAL PERSONNEL C	NON-HOSPITAL PERS. AND GUESTS D	TDY E	OTHER F	AMOUNT PAID G
15							
16							
17							
18							
19							
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21							
22							
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FOR TRAINING PURPOSES ONLY

DINING HALL SIGNATURE RECORD	CATEGORY OF PERSONNEL *(Check one)* ☐ CROSS SERVICE *(Specify)* ☐ PERMANENT ☐ TRANSIENT	SHEET REGISTER NO. A 1102653

DINING HALL NO.	DATE	TYPE OF MEAL SERVED *(CHECK ONE)* ☐ BREAKFAST ☐ LUNCH ☐ DINNER ☐ BRUNCH ☐ SUPPER	MIDNIGHT MEAL ☐ BREAKFAST ☐ DINNER

NO.	SIGNATURE	GRADE	MEAL CARD NO.	NO.	SIGNATURE	GRADE	MEAL CARD NO.
1				27			
2				28			
3				29			
4				30			
5				31			
6				32			
7				33			
8				34			
9				35			
10				36			
11				37			
12				38			
13				39			
14				40			
15				41			
16				42			
17				43			
18				44			
19				45			
20				46			
21				47			
22				48			
23				49			
24				50			
25				51			
26				52			

AF FORM JUL 76 1339 PREVIOUS EDITION WILL BE USED.

(SAMPLE)

NO.	SIGNATURE	GRADE	MEAL CARD NO	NO	SIGNATURE	GRADE	MEAL CARD NO
53				78			
54				79			
55				80			
56				81			
57				82			
58				83			
59				84			
60				85			
61				86			
62				87			
63				88			
64				89			
65				90			
66				91			
67				92			
68				93			
69				94			
70				95			
71				96			
72				97			
73				98			
74				99			
75				100			
76				101			
77				102			

I hereby certify that the above individuals have been furnished meals as listed above in a field ration dining hall at Government expense.

TYPED OR PRINTED NAME, GRADE OF CASHIER	SIGNATURE
TYPED OR PRINTED NAME, GRADE OF UNIT COMMANDER OR DINING HALL SUPERVISOR	SIGNATURE

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FOR TRAINING PURPOSES ONLY

RATION EARNINGS RECORD

DATE

CATEGORY	MEALS SERVED				RATIONS SERVED
	BREAKFAST	DINNER	SUPPER	TOTAL	
1. INPATIENTS SUBSISTED IN KIND					
A. WEIGHTED RATIONS					
2. ALL OTHER INPATIENTS					
A. WEIGHTED RATIONS					
3. MEDICAL DUTY PERSONNEL SUBSISTED IN KIND	20	60			
A. WEIGHTED RATIONS					
4. CASUALS TDY PERSONNEL AND TRANSIENT PATIENTS SUBSISTED IN KIND					
A. WEIGHTED RATIONS					
5. MEDICAL DUTY PERSONNEL SUBSISTED ON A CASH BASIS	25	75			
A. WEIGHTED RATIONS					
6. GUESTS, NONMEDICAL DUTY PERSONNEL AND TRANSIENT PATIENTS SUBSISTED ON A CASH BASIS	10	20			
A. WEIGHTED RATIONS					
7. OTHER PERSONNEL SUBSISTED AT GOVERNMENT EXPENSE *(Billing required)*					
A. WEIGHTED RATIONS					
8. AF RESERVES ON ACTIVE DUTY FOR TRAINING					
A. WEIGHTED RATIONS					
9. TOTAL MEALS SERVED					
A. WEIGHTED RATIONS					

FOOD COST DATA

	CURRENT			
	DATE	MONTH	QUARTER	FY TO DATE
10. OPENING INVENTORY				
11. COST OF FOOD PURCHASED				
12. COST OF FOOD ISSUED				
13. RATION EARNINGS				
14. MONETARY STATUS *(Lines 13-11)*				
15. RATION EARNINGS LESS COST OF FOOD ISSUED *(Lines 13-12)*				
16. NUMBER OF RATIONS SERVED				
17. COST PER RATION SERVED				

SIGNATURE OF DIET THERAPY SUPERVISOR	SIGNATURE OF MSA OFFICER

AF FORM NOV 79 544 PREVIOUS EDITION WILL BE USED.