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## ABSTRACT

To evaluate the effects of the public-television series on nutrition, Mulligan Stew, a survey was conducted of 4,332 4th, 5th and 6th-grade students in four areas of Missouri. Children were asked if they had voluntarily yatched the program and pre- and post-tested for nutrition knowledge: Comparisons were also made between teacher-reinforced lessons and no reinforcement, and children were questioned whether they believed additional programs would be helpful. Results showed that a large percentage of children watched the show at home, but a smaller percentage watched all six programs. Children who watched the program at school scored higher in post-test nutrition knowledge; girls scored higher than boys, and 4th and 6th graders higher than 5th. Teacher reinforcement significantly increased nutrition knowledge. Both teachers and students evaluated the series positively. Appendixes include summaries of the six programs in the series, and the student questionnaire. (SK)



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# MULLIGAN STEW

An Evaluation of the Television Series

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The University of Missouri is an Equal Educational Opportunity Institution



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Initial direct contact with the participating schools was made by the area Extension youth professiomals. In the areas used in this evaluation, these persons were: Richard Cass, Carolyn Holmes and Max Miller.

Sylvia Trautmann and Kay Taggart prepared the data for analysis.

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### MULLIGAN STEW

### An Evaluation of the Television Series

# INTRODUCTION

One of the most basic principles of education is that one must begin where the student is in order to teach. Today, children in this country are in front of the television for many hours of each day. Thus, if we are going to teach them, television would be a good place to begin. Watching television consumes more of a child's time than any activity other than sleep. By the time the average child enters kindergarten she will have spent more hours watching television than she will spend in a college classroom earning a bachelor's degree.

The goal of commercial television in the United States is to entertain, not to teach. However, much teaching occurs in the process of entertaining. Television has become a major source of knowledge and values for people in this country. The lessons taught by television, particularly by those shows designed specifically for children, have been sharply criticized. It has been charged these shows teach children that violence is acceptable, that problems are most easily solved through devious means and that adults are fools. In addition, persons of minority races are frequently portrayed in a stereotypical manner and life in this country is portrayed in idealized terms.

Despite the distortions presented by television and the fact that the televised portrayal of life is frequently different than that which the child experiences, recent research indicates that children accept as facts far more of the material and situations presented on television than most adults realize (Ambrosino, 1972). Television is frequently a child's first experience with or exposure to a situation. Young children approach the world literally. They believe what they see. It is therefore natural for them to regard television as a source of truth. Arguments about television being a wasteland do not succeed in denying the reality of its



influence. As children become older their skepticism or disbelief at what is presented on television, particularly what is presented in commercials, increases. However, young children make little, if any, distinction between the content of a television show and the commercials that sponsor it (Rubinstein, 1972). Thus, part of that which children learn from television is the message designed for them and presented through commercials.

Seventy-five percent of all children's TV programming is accompanied by commercials for food (Blyler, 1974). During any given year an average child will see over 5,000 food commercials on television. Good health would be difficult to maintain on the diet that is advertised on television. The foods that are most highly advertised are those with the least nutritional value. These are the overprocessed, oversweetened foods that children are encouraged to pressure their parents to buy or buy themselves. Through these commercials children learn that if they don't like milk, a little chocolate sweetener will help. If they want to be popular, they should provide their friends with a drink that is flavored sugared water and that in order to clean one's teeth, one should chew gum. Thus, one of the lessons taught by television is a lesson in malnutrition. This lesson is being taught to children who live in a country where nutrition related problems such as heart disease, obesity and tooth decay are prominent.

It is frequently argued that eating habits are difficult to change, yet the eating habits of persons in this country are changing rapidly. Gussow reports that consumption of bottled sodas has skyrocketed from 19.1 gallons per person in 1962 to 34.8 gallons per person in 1971 while consumption of milk and fruits and vegetables has declined. But, consumption of beef has doubled in twenty years and the cookie market is growing twice as fast as the population (Gussow, 1973). Each year thousands of new food products are introduced into the supermarket and people learn to eat them. So the American diet is changing quite drastically and it's changing for the worse. The influence television has had on this dietary



change should not be underestimated. Nutritional information is seldom presented on television for children or for their parents. This occurs despite the fact that survey after survey indicates there are widespread vitamin and mineral inadequacies among the people in this country. These inadequacies can be found at all economic levels. Fortunately, clinically evident malnutrition is rare in this country; but there are some nutritionists who suspect that this country's relatively poor infant mortality record and low life expectancy may have something to do with diet (Gussow, 1973).

Many persons have suggested that one way in which to counter the hard sell malnutrition lesson taught on television is to present a lesson in nutrition. This paper is a report of an evaluation of a television series designed to present nutrition information to 4th, 5th and 6th grade children. Mulligar Stew is a television series on nutrition that was developed by the National 4-H Foundation in cooperation with Extension Service, USDA, and the state Extension Service of the land-grant universities. The series consists of six half-hour color films (See Appendix 1). They feature five children who form a rock band called Mulligan Stew. Together with their friend Wilbur Dooright they sing, dance and entertain their way through nutritional assignments from "upstairs" bringing their messages about the four food grou, , the magic 4-4-3-2 clue, breakfast, snacks, fad diets and calories. The young actors do one liners and on-the-street interviews. They also interview astronauts, scientists and food authorities. Puppets and animated characters reinforce the nutritional messages.

# PURPOSE OF THE EVALUATION

The purpose of the evaluation was to determine:

1. How many 4th, 5th and 6th grade sutdents voluntarily watched each film of the Mulligan Stew series.



- 2. Whether there is a relationship between number of films viewed and nutrition knowledge.
- 3. Whether teacher reinforcement of the television message has an effect on nutrition knowledge over and above viewing the films.
- 4. Whether 4th, 5th and 6th grade teachers feel that additional similar programs would be worth producing.
- 5. Whether 4th, 5th and 6th grade teachers would recommend to school administrators that they purchase materials developed to accompany similar programs.

# DESIGN OF THE EVALUATION

In Missouri, the Mulligan Stew television series was shown over public television as a public service during the fall and winter of 1973. The date and time of showing differed for each of the television stations. A sufficient number of television stations cooperated so that the series was available to all children in the state. Support for the program and for the evaluation was obtained from the State Department of Education. Support from the State Department of Education included providing information on how to contact school systems and how to distribute materials to participating systems. The support also included informing and urging principals and teachers in 1,200 elementary schools to cooperate. This support was valuable in gaining wide acceptance of the program.

A workbook for each 4th, 5th and 6th grade student and a discussion guide for their teachers were provided free if requested by the school principal. It was suggested that teachers use these materials to reinforce the television message. Posters announcing the program were made available to principals who wished to use them. One minute commercials telling of the program were provided to participating television stations for publicity purposes. Newspaper publicity was also provided to local newspapers. The purpose of this publicity was to encourage children to watch the series.

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Four areas of the state were chosen for participation in the evaluation.

Schools in Springfield were included because the children in those schools were to view the Mulligan Stew series in the classroom on six consecutive school days.

Including these children in the evaluation made it possible to determine whether there was a difference in the nutrition knowledge of those who watched it in school as opposed to those who voluntarily watched it in their home.

The criteria for choosing the other three areas were: (1) they must differ from each other in population density, and (2) the children in each area must have access to the Mulligan Stew series on one and only one television station. The three areas chosen were Clark County, Callaway County and Columbia. In each of the participating areas initial contact with the schools was made through the Extension youth professional.

All data for the evaluation were gathered by the 4th, 5th and 6th grade teachers in each of the schools. Following the broadcasting of each Mulligan Stew film the teachers assessed whether each child had access to television, whether the child was watching television at the time the series was broadcasted and whether the child was watching Mulligan Stew. At the end of the presentation of the six films the teachers assessed the nutrition knowledge of each child. In addition, each teacher evaluated the films in terms of their content and appropriateness for 4th, 5th and 6th grade children, indicated the extent to which they reinforced the nutrition message using the accompanying free materials and indicated their beliefs concerning the appropriateness of producing similar materials in the future.

Conclusions from the study are based upon data gathered from 4,332 children. For purposes of the analysis, Clark County, Callaway County and Columbia were

The television stations broadcasting to the areas involved in this study were:
Springfield, KOLR; Clark County, KTVO (Kirksville); Callaway County and Columbia,
KOMU (Columbia). Other stations that broadcasted the series as a public service
are: KETC (St. Louis), WSIL (Harrisburg, Illinois), KOAM (Pittsburg, Kansas),
KQTV (St. Joseph), WDAF (Kansas City, KRCG (Jefferson City), KMOS (Sedalia),
KHQA (Quincy, Illinois) and KFVS (Cape Girardeau).



combined and a distinction is made between those children who viewed the Mulligan Stew series in school and those who viewed the series at home.

# RESULTS OF THE EVALUATION:

# Did 4th, 5th and 6th Grade Students Voluntarily Watch the Mulligan Stew Series?

Table 1 indicates the number of children who had access to television on each day that the Mulligan Stew series was broadcasted, who viewed television at the time the series was broadcasted and who viewed each of the films in the series. The number who viewed television and the number who viewed Mulligan Stew are presented as a percentage of those with access to television.

TABLE 1

Number of Children Who Had Access to Television,
Who Viewed Television at the Time Mulligan Stew Was On,
and Who Viewed Mulligan Stew by School Versus Home Viewing.
Those Who Viewed Television at the Time Mulligan Stew Was On and
Those Who Viewed Mulligan Stew as a Percentage of Those Who Had Access to Television

|        | Viewed at School        |                       |                             | Viewed at Home          |                       |                             |
|--------|-------------------------|-----------------------|-----------------------------|-------------------------|-----------------------|-----------------------------|
|        | Access to<br>Television | Watched<br>Television | Watched<br>Mulligan<br>Stew | Access to<br>Television | Watched<br>Television | Watched<br>Mulligan<br>Stew |
| Film 1 | 3189*                   | 3181<br>99.7%         | 3181<br>99.7%               | 798*                    | 409<br>51.2%          | 279<br>34.9%                |
| Film 2 | 3264                    | 3253<br>99.6%         | 3253<br>99.6%               | 786                     | 464<br>59.0 <b>%</b>  | 365<br>46.4%                |
| Film 3 | 3227                    | 3192<br>98.9%         | 3192<br>98.9%               | 743                     | 479<br>64.4%          | 350<br>47.1%                |
| Film 4 | 3215                    | 3179<br>98.8%         | 3179<br>98.8%               | 732                     | 473<br>64.6%          | 320<br>43.7%                |
| Film 5 | 3250                    | 3244<br>99.8 <b>%</b> | 3244<br>99.8%               | 741                     | 451<br>60.8%          | 314<br>42.3%                |
| Film 6 | 3238                    | 3235<br>99.9%         | 3235<br>99.9%               | 720                     | 473<br>65.6%          | 347<br>48.1%                |

Differences in the number of children who viewed at school and who viewed at home are due to two factors: (1) differences in the size of the various school systems and (2) differences in the extent to which the school systems participated.



As one would expert, all children who were in school on days that the Mulligan Stew series was broadcasted in the Springfield schools had access to television and very few failed to watch it. All those who watched television watched the series. Thus, information about whether students voluntarily watched the series must be based on data gathered in the other areas of the state. These data indicate that for any film in the series approximately half to two-thirds of the children with access to television watched it at the time the Mulligan Stew series was broadcasted. Approximately one-third to one-half of those with access to television watched the series. This high percentage probably reflects the influence of the publicity that accompanied the series. On the averag, at the time any one of the films was being broadcasted, approximately 43% of the children who had access to television watched the Mulligan Stew film.

Table 2 indicates the total number of films viewed by each of the children.

TABLE 2

Number of Mulligan Stew Films Viewed by School Versus Home Viewing

| Number of Films<br>Viewed | Viewed at School | Viewed at Home       |
|---------------------------|------------------|----------------------|
| , <b>0</b>                |                  | 208<br>22.98         |
| 1                         | 4                | 198<br>21.8%         |
| 2                         | 13               | 173<br>19.1 <b>%</b> |
| 3                         | 10               | 130<br>14.3%         |
| 4                         | 57<br>1.8%       | 94<br>10.4%          |
| 5                         | 323<br>10.1%     | 70<br>7.7%           |
| 6                         | 2,800<br>87.3%   | 34<br>3.7 <b>2</b>   |



Not surprisingly, whether a child viewed the films in school or at home had an effect on the number of films viewed. Almost all children who viewed the series in school saw all six films. However, very few of the children who viewed the series at home saw all films. Most of the children who viewed the saw only one or two of the films.

Among those children who viewed the series in school, sex and grade did not influence the total number of films seen. Among those who viewed the series at home, there was tendency for girls to watch more of the films than boys. Children in the 5th grade watched more of the films than children in the 4th or 6th grade. Children in the 6th grade watched fewest of the films.

# What is the Relationship Between Viewing the Mulligan Stew Ser es and Nutrition Knowledge?

The children's knowledge of nutrition was assessed by a ten item multiple choice nutrition quiz (See Appendix 2). The children who viewed the films in school scored an average of 6.75 points while those who viewed the films in their home scored an average of 6.33 points (t=6.27, p<.001). Tables 3, 4 and 5 present further information about nutrition knowledge scores as they relate to the children's sex, grade and number of Mulligan Stew films viewed.

TABLE 3

Nurrition Knowledge Score by Sex by School Versus Home Viewing

|      | Viewed at School | Viewed at Home  |
|------|------------------|-----------------|
| Boys | 6.60<br>(N=1415) | 6.01<br>(N=437) |
| irls | 6.90<br>(N=1379) | 6.67<br>(N=414) |



TABLE 4

Nutrition Knowledge Score by Grade by School Versus Home Viewing

|         | Viewed at School | Viewed at Home  |
|---------|------------------|-----------------|
| Grade 4 | 6.80<br>(N=40)   | 6.53<br>(N=237) |
| Grade 5 | 6.63<br>(N=1366  | 6.03<br>(N=279) |
| Grade 6 | 6.86<br>(N=1388) | 6.43<br>(N=335) |

TABLE 5

Nutrition Knowledge Score by Number of Mulligan Stew Films Viewed by School Versus Home Viewing

| Number of<br>Films Viewed | Viewed at School | Viewed at Home  |
|---------------------------|------------------|-----------------|
| 0                         |                  | 5.95<br>(N=186) |
| 1                         | 5.75<br>(N=4)    | 6.34<br>(N=173) |
| 2                         | 2.00<br>(N=9)    | 6.31<br>(N=145) |
| 3                         | 6.00<br>(N=6)    | 6.56<br>(N=109) |
| 4                         | 6.40<br>(N=50)   | 6.31<br>(N=75)  |
| 5                         | 6.57<br>(N=270)  | 6.81<br>(N=57)  |
| 6                         | 6.79<br>(N=2370) | 6.77<br>(N=30)  |



In general, regardless of whether the films were viewed at home or in school, girls obtained a higher nutrition knowledge score than boys (t=8.66, p<.001); children in the 5th grade obtained scores lower than those in the 4th or 6th grade (f=15.30, p<.01); and there was an overall positive relationship between the number of films viewed and nutrition knowledge score (f=10.30, p<.01).

# Does Teacher Reinforcement of the Television Message Have an Effect On Nutrition Knowledge Over and Above Viewing the Films?

Teachers of approximately half the children reinforced the message of the television series. Those children whose teacher reinforced the television message by classroom discussion and activities scored higher on the nutrition knowledge test than those whose teachers did not reinforce the message (t=8.48, p<.001). Tables 6 and 7 present this information.

TABLE 6

Nutrition Knowledge Score by Teacher Reinforcement by School Versus Home Viewing

|                   | Viewed at School | Viewed at Home |  |
|-------------------|------------------|----------------|--|
| Not Reinforced by | 6.59             | 6.01           |  |
| Teacher           | (N=1685)         | (N=424)        |  |
| Reinforced by     | 6.98             | 6.65           |  |
| Teacher           | (N=1109)         | (N=427)        |  |



TABLE 7

Nutrition Knowledge Score by Teacher Reinforcement
by Number of Mulligan Stew Films Viewed by School Versus Home Viewing

| Number of       | Viewed at School |            | Viewed at Home |                 |
|-----------------|------------------|------------|----------------|-----------------|
| Films<br>Viewed | Not Reinforced   | Reinforced | Not Reinforced | Reinforced      |
| 0               |                  |            | 5.63<br>(N=91) | 6.78<br>(N=117) |
| 1               | 7.00             | 4.50       | 5.86           | 6.69            |
|                 | (N=2)            | (N=2)      | (N=73)         | (N=100)         |
| 2               | 5.60             | 6.50       | 6.12           | 6.49            |
|                 | (N=5)            | (N=4)      | (N=69)         | (N=76)          |
| 3               | 6.00             | 6.00       | 6.00           | 7.17            |
|                 | (N=1)            | (N=5)      | (N=57)         | (N=52)          |
| 4               | 6.33             | 6.57       | 5.83           | 6.61            |
|                 | (N=36)           | (N=14)     | (N=28)         | (N=46)          |
| 5               | 6.41             | 6.82       | 6.36           | 7.24            |
|                 | (N=162)          | (N=108)    | (N=28)         | (N=29)          |
| 6               | 6.62             | 7.05       | 6.67           | 6.83            |
|                 | (N=141)          | (N=929)    | (N=12)         | (N=18)          |

The positive effect of teacher reinforcement is present regardless of whether the children viewed the films in school or at home and regardless of the number of films viewed.

# Do 4th, 5th and 6th Grade Teachers Believe Additional Similar Programs Would be Worth Producing and Would they Encourage the Purchase of Accompanying Materials?

In general, teachers who were unable to view the Mulligan Stew films in the classroom made little effort to view them in their home. However, among those who viewed one or more of the films, over 85% evaluated the content of the films as either good or very good and 90% indicated they believed the films were appropriate for the use for which they were designed. The primary criticism of the films was that it was difficult to understand the audio portion.



It was possible for the teachers to use the materials provided for reinforcing the television message without having viewed the films. Approximately 50% of the teachers used the teacher's guide for this purpose. Of those who used it, approximately 50% found it to be useful. Few teachers used the student workbook. This was because the Springfield school system chose not to use it and there was some delay in delivering them to the other schools. However, those teachers who received and used the student workbooks found them to be very useful and those who did not use the student workbooks indicated they believed such a workbook would have been useful.

The teachers were in almost unanimous agreement that another series of films would be useful to them in their teaching. The subjects they would most like to have a series on are: health, drugs including alcohol, and cleanliness. The teachers indicated that if these series of films were produced, they would encourage their schools to purchase any teacher and student workbooks that might be developed to accompany the films. They indicated a willingness to encourage the schools to pay up to 50¢ per teacher workbook and 25¢ per student workbook.

# SUMMARY OF THE RESULTS OF THE EVALUATION OF MULLIGAN STEW

- 1. A large percentage of those 4th, 5th and 6th grade students who had access to television in their home voluntarily watched the Mulliga. Sew films. This percentage may have been increased by the publicity which a companied the series but nevertheless indicates that children do voluntarily watch educational programs designed for them.
- 2. Children who watched one television series at home were unlikely to view all films in it. Children who viewed the films in school were apt to see the entire series.



- 3. There was a positive relationship between the number of films viewed and the score obtained on a test of nutrition knowledge.
- 4. Children who viewed the films in school obtained higher nutrition knowledge scores than those who viewed the films at home.
- 5. Girls obtained higher nutrition knowledge scores than boys.
- 6. Children in the 4th and 6th grades obtained higher nutrition knowledge scores than those in the 5th grade.
- 7. Those children whose teacher reinforced the message of the television series obtained a higher nutrition knowledge score than those children whose teacher did not reinforce the message.
- 8. Teachers of 4th, 5th and 6th grade students evaluated the Mulligan Stew television series very positively, both in terms of content and suitability for the purpose for which it was designed.
- 9. Teachers of 4th, 5th and 6th grade students indicated a desire to have similar series developed to assist them with their teaching. The subjects most frequently mentioned were health, drugs including alcohol and cleanliness.
- 10. Teachers of 4th, 5th and 6th grade students indicated a willingness to encourage the schools for which they work to pay for materials that might be developed to accompany any future television series.

# CONCLUSIONS

On the basis of these results it is suggested that:

1. It would be a good investment of resources to produce similar mass media messages for children.



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- 2. It would be a good investment of resources to produce written materials to accompany mass media messages that are developed.
- 3. School systems be encouraged to purchase the written materials designed to accompany mass media messages.
- 4. Publicity be given in advance to any similar programs so as to maximize the audience.
- 5. School systems be encouraged to permit future mass media messages to be broadcast directly into the classroom.
- 6. Teachers be encouraged to reinforce the teachings of mass media messages to increase student learning from them.



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### APPENDIX 1

The content of the six Mulligan Stew films is as follows:

## Film 1: THE GREAT NUTRITION TURN ON

The Mulligan Stew team is sent to the town of Lazy Susan to determine why everyone in the town has fallen asleep. They discover that the citizens of the town have fallen asleep because they don't eat right. The Mulligan Stew team wakes up the town with their rock music and songs about good nutrition. They tell the town about the four food groups, the number of daily servings needed from each group and some of the nutrients obtained from certain foods.

# Film 2: LOOK INSIDE YOURSELF

The Mulligan Stew team determines why a teenaged brother and sister are cranky and tired all the time and are doing poorly in school. They determine that the problem is due to failure to eat breakfast. They sing and play music about why breakfast is very important for good health. The film also shows how food is digested and what parts of the body are used to help digestion. This show repeats the four food groups and the number of recommended daily servings.

## Film 3: THE FLIM FLAM MAN

The Flim Flam Man tells the Mulligan Stew team that they should buy his book on fad diets and they don't have to eat a balanced diet. Four of the Mulligan Stew team give his diets a try. Wilbur Dooright, a friend of the Mulligan Stew team, challenges the Flim Flam Man in physical strength to prove that his crazy diets won't work. Wilbur wins every event and the Flim Flam Man goes down in defeat. The Mulligan Stew kids are glad to go back to the diets they learned provide good nutrition.



## Film 4: GETTING IT ALL TOGETHER

The Mulligan Stew team is to prepare a meal for young people from all over the world so that all can eat food from each of their home lands and sample a little of each others home cooking too. As they collect the food needed to prepare the menu planned they recognize that the five essential nutrients are available in foods from all over the world.

# Film 5: COUNT DOWN 4-4-3-2

Wilbur Dooright goes on a camping trip alone. He becomes trapped by a flood and does not have enough food to last until he can get safely home. It is impossible to rescue Wilbur so the Mulligan Stew team puts together a food package to be dropped to him. To find out what foods from the four food groups could be dropped to Wilbur, they visit the space program headquarters. This must be food that will not spoil as Wilbur does not have an ice box or refrigerator. They learn from the NASA food specialists that most of the things they can send to Wilbur can be found in their neighborhood supermarket. They learn how foods can be changed during processing to have more nutrients, not spoil, and take up less space. They also learn where new kinds of food will be grown to feed the worlds people.

# Film 6: THE RACER THAT LOST HIS EDGE

A fat race car driver who keeps losing and his new bride who keeps stuffing him with goodies learn why a healthy body is for champions. They learn you are what you eat and you have to plan right, buy right, and prepare right. The Mulligan Stew team help the race car driver and his wife learn that it is important to eat according to the 4-4-3-2 nutrition principle rather than simply filling up on goodies.

### APPENDIX 2

| Name    | <del></del> | <br> |  |
|---------|-------------|------|--|
| Teacher |             | <br> |  |

# STUDENT QUESTIONNAIRE

All people need food to live and grow. I want to know what you know about food. Please answer these questions by putting a circle around the right answer.

- 1. If you eat foods from the four good groups every day, you will be on your way to good nutrition. Which of these lists names the four food groups?
  - a. meat, protein, fruits and vegetables, and vitamins
  - b. water, milk, minerals, and breads and cereals
  - c. carbohydrates, vitamins, fruits and vegetables, and calories
  - d. meat, milk, fruits and vegetables, and breads and cereals
- 2. What does good nutrition mean?
  - a. Eating enough food to keep from being hungry.
  - b. Eating the right amount of food from each of the four food groups.
  - c. Eating all the food that your mother serves to you.
  - d. Eating lots of vegetables.
- 3. How many glasses of milk or foods made from milk do you need to drink or eat each day?
  - a. one
  - b. two
  - c. three
  - d. four
- 4. Protein is a nutrient. What kind of food contains the most protein?
  - a. meat and milk
  - b. bread
  - c. fruits
  - d. vegetables

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- 5. Snacks can be food for you. Which of these snacks has food from all of the four food groups?
  - a. cheeseburger and french fries
  - b. ice cream sundae
  - c. potato chips and coke
  - d. peanut butter and jelly sandwich
- 6. Which of the following is <u>not</u> a nutrient?
  - a. protein
  - b. carbohydrates
  - c. meat
  - d. vitamins
- 7. Calcium helps you to have strong bones and teeth. What group of foods gives you the most calcium?
  - a. meat
  - b. milk
  - c. fruits and vegetables
  - d. breads
- 8. How many servings of fruits and vegetables do you need every day?
  - a. one
  - b. two
  - c. three
  - d. four
- 9. If you are too fat, what would be a good way to lose it?
  - a. Go to school without eating breakfast
  - b. Stop eating bread
  - c. Eat foods that have less calories from all four food groups
  - d. Take vitamin pills instead of eating
- 10. What is the best way to get your vitamins each day?
  - a. Eat foods from each of the four food groups
  - b. Take a vitamin pill
  - c. Drink lots of milk
  - d. Sweeten your food with honey

