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ABSTRACT

This annotated bibliography focuses on issues in sports and athletics for adolescents and young adults with chronic illnesses and disabilities. The listings are drawn from the National Resource Library of the National Center for Youth with Disabilities, which includes journals, books, and non-published materials. The section on bibliographic materials is divided into categories for physical disabilities (38 resources), mental retardation (10 resources), chronic illnesses (31 resources), visual impairments (5 resources), and fitness (37 resources). A section on training and educational materials lists four videotapes/films, a brochure, a curriculum, an exercise program, and a manual. A final section lists five organizational and periodical resources. Listings include bibliographic information along with descriptive annotations of generally two to four sentences. (JDD)

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For additional information on the Society for Adolescent Medicine, contact:

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We extend our thanks to Barbara Jirik and Robin Whitebird for their valued assistance in the preparation of this bibliography.



Welcome to this issue of *CYDLINE Reviews*, a publication of the National Center for Youth with Disabilities (NCYD). As part of NCYD's commitment to raising awareness of the needs of adolescents and young adults with chronic illnesses and disabilities, we have prepared this bibliography focusing on issues of sports and athletics. It is a companion to another bibliography focusing on recreation and leisure. For those new to these Reviews, this collection of annotated bibliographies is drawn from NCYD's National Resource Library. The National Resource Library is a computerized, comprehensive database containing information about youth with chronic illnesses and disabilities, and it includes up-to-date expertise, programs and literature of all relevant disciplines. Issues of *CYDLINE Reviews* that may be ordered are:

- *Transition from Pediatric to Adult Health Care for Youth with Disabilities and Chronic Illnesses*
- *Adolescents with Chronic Illnesses—Issues for School Personnel*
- *Promoting Decision-Making Skills by Youth with Disabilities—Health, Education, and Vocational Choices*
- *An Introduction to Youth with Disabilities (In English or Spanish)*
- *Substance Use by Youth with Disabilities and Chronic Illnesses*
- *An Introductory Guide for Youth and Parents (In English or Spanish)*
- *Issues in Sexuality for Adolescents with Chronic Illnesses and Disabilities*
- *Vulnerability and Resiliency: Focus on Children, Youth, and Families*
- *Race and Ethnicity: Issues for Adolescents with Chronic Illnesses and Disabilities*
- *Recreation and Leisure: Issues for Adolescents with Chronic Illnesses and Disabilities*
- *Sports and Athletics: Issues for Adolescents with Chronic Illnesses and Disabilities*

Nearly 200 journals are regularly reviewed as are relevant books and non-published materials. New entries are added to the library quarterly. Topics in the Bibliographic File include chronic illness or disabling conditions; psychosocial issues; social issues; developmental processes; family; sexuality; education; employment and vocational rehabilitation; community and independent living; service approaches; professional issues; and policy, planning, and legal rights issues.



In addition to the Bibliographic File, the National Resource Library also includes a Program File with information about model programs throughout the country; an Educational Materials File with information on resources for professional development and programming usage; and a Technical Assistance File containing names and background information on consultants with expertise valuable to those involved with youth with disabilities.

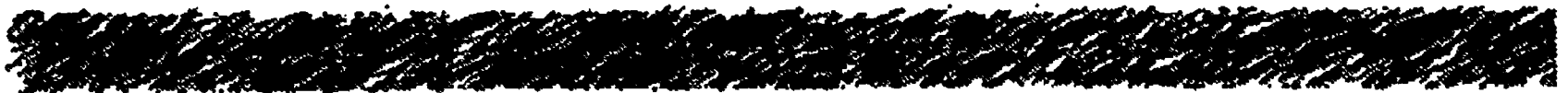
You may request specialized searches of the NCYD Resource Library on topics of your choice simply by calling an NCYD Information Specialist. This person will then send the requested information to you in a format similar to this bibliography. In this way, you can easily receive current information on youth with disabilities which is specific to your particular needs and interests. NCYD has other publications available: *Connections* (newsletter published three times a year); and *F.Y.I. Bulletin* (Fact Sheets presenting statistical and demographic data illustrated with tables, charts, and graphs). If you wish to receive a Publications List or would like information about the Resource Library, our Center can be reached (toll-free in the United States) at 1-800-333-6293, 612-626-2825, or TDD 612-624-3939.

Thank you for your interest in NCYD. We hope you will take the time to read through this issue of NCYD's *CYDLINE* Reviews and share the contents with others.



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NCYD has prepared this annotated bibliography as part of our effort to raise awareness and disseminate information about the needs of adolescents with chronic illnesses and disabilities. Please help us evaluate the quality of this publication by completing this questionnaire and returning it to NCYD. Remove this page from the book and fold it in thirds so that the self-address is showing; seal with tape. Thank you for your cooperation.

1. Which section was most useful to you?

- Bibliographic
- Educational Materials
- Programs and Resources

2. How satisfied were you with the amount of information provided in each section?

- There was too little information.
- There was too much information.
- It was about right.
- I wish you had included _____

3. How satisfied were you with the quality of the abstracts in the bibliographic section?

- They were too short.
- They were too long.
- They were about right.

4. How satisfied were you with the layout/design?

- Very
- Somewhat
- Not at all

My suggestions: _____

5. In what ways was this bibliography most useful to you?

- Raising general awareness
- Improving knowledge about an issue or disability
- Stimulating discussion/thought
- Aiding research efforts
- Aiding direct service/program planning
- It was not useful
- Other (please specify): _____

6. Did you share this bibliography with anyone else?

- Yes
- No

7. Have you ever requested other information from NCYD?

- Yes
- No

8. What is your primary occupation in relation to adolescents with disabilities?

- Parent/consumer
- Advocate
- Planner/policymaker
- Librarian/information specialist
- Educator
- Physician
- Nurse
- Physical therapist/occupational therapist/recreational therapist
- Psychologist
- Social worker
- Program administrator
- Vocational rehabilitation counselor
- Other (please specify): _____

9. In what setting do you do this type of work?

- Hospital
- Clinic/health service agency
- Social service agency
- Government agency
- University/college/postsecondary school
- Elementary/secondary school
- Library/information center
- Community organization
- Not applicable (I am a parent/consumer)
- Other (please specify): _____

10. Where do you usually get information on youth with disabilities?

- Professionals
- Organizational newsletters
- Professional journals
- University/college libraries
- Television/newspapers/magazines
- Bookstore/public libraries
- Friends or family members
- No regular sources
- Other (please specify): _____

Please list any topics you would like us to address in future bibliographies:



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I. BIBLIOGRAPHIC MATERIALS

A. PHYSICAL DISABILITIES

- TITLE SOURCE** | **Aquatics for special populations: YMCA of the USA.**
Human Kinetics: Champaign, IL, 1987:168.
- ABSTRACT** | **Aquatics and adaptive professionals will find information on planning and public relations, health/safety, leadership requirements, facilities and equipment, and YMCA programs. Sixty-five exercises are presented in full detail with many helpful illustrations.**
- AUTHOR TITLE SOURCE** | **American Academy of Pediatrics Committee on Sports Medicine;**
Recommendations for participation in competitive sports.
Pediatrics 1988 May;81(5):737-9.
- ABSTRACT** | **Position statement with guidelines for specific medical conditions and disabilities.**
- TITLE SOURCE** | **Feature issue: Testing the handicapped. A challenge by law.**
Journal of Physical Education, Recreation & Dance 1988 Jan;59(1):32-67.
- ABSTRACT** | **This special issue features eight articles focusing on physical testing of students with disabilities. Topics addressed are: effects of PL 99-142, measuring ability or disability, screening for developmental delays, assessing movement competence, measuring physical and motor performance, testing and rewards, criterion-referenced testing, and future issues.**
- AUTHOR TITLE SOURCE** | **Asken MJ; Goodling MD;**
Sport psychology: An undeveloped discipline from among the sport sciences for disabled athletes.
Adapted Physical Activity Quarterly 1986 Oct;3(4):312-19.
- ABSTRACT** | **A general review addressing the lack of information and research as well as the needs and benefits of applying sport psychology to competitive sports for individuals with disabilities. Approaches for integrating sport psychology knowledge and techniques for athletes with disabilities are discussed.**
- AUTHOR TITLE SOURCE** | **Berridge ME; Ward GR;**
International perspectives on adapted physical activity.
Human Kinetics: Champaign, IL, 1987:320.
- ABSTRACT** | **This text represents current theory and practice in adapted physical activity. It offers a mix of physiological and sociological studies and descriptions of successful exercise and recreational programs for special populations.**

- AUTHOR** | **Burton SS;**
TITLE | **Sports: More than winning.**
SOURCE | ***The Exceptional Parent* 1987 Mar;17(2):35-6.**
- ABSTRACT** | **An article addressing the importance of competitive sports for youth with disabilities. Briefly described are the Special Olympics, intramurals, community recreation leagues, and interscholastics competition.**
- AUTHOR** | **Curtis KA; Dillon DA;**
TITLE | **Survey of wheelchair athletic injuries: Common patterns and prevention.**
SOURCE | ***Paraplegia* 1985 Jun;23(3):170-5.**
- ABSTRACT** | **A small number of surveys provide information on injuries sustained by wheelchair athletes. Soft-tissue injuries (muscle pulls, strains, sprains, bursitis and tendonitis), blisters, and skin lacerations/abrasions were the most common cited injuries. Mechanisms of common injury causes and means of prevention are also presented.**
- AUTHOR** | **DePauw KP;**
TITLE | **Sports for individuals with disabilities: Research opportunities.**
SOURCE | ***Adapted Physical Activity Quarterly* 1988 Jan;5(1):80-9.**
- ABSTRACT** | **A review of research that has been conducted on sports for individuals with disabilities. Seven areas of research are listed, and a general summary of results is given. Current trends and future directions are discussed.**
- AUTHOR** | **Dresen MH; deGroot G; MesaMenor JR; et al.;**
TITLE | **Aerobic energy expenditure of handicapped children after training.**
SOURCE | ***Archives of Physical Medicine and Rehabilitation* 1985 May;66(5):302-6.**
- ABSTRACT** | **The purpose of this study was to examine whether work capacity and efficiency in children with physical disabilities could be improved through an intensified physical training program incorporated into the classroom. Through the use of bicycle ergometer tests, researchers concluded that work capacity can be enhanced through intensified physical education.**
- AUTHOR** | **Eason RL; Smith TL; Cavan F;**
TITLE | **Adapted physical activity: From theory to application.**
SOURCE | ***Human Kinetics: Champaign, IL*, 1983:360.**
- ABSTRACT** | **Focuses on understanding the special physical, psychological, and sociological needs of physically and educationally disabled persons.**

AUTHOR Fox NR;
TITLE **Junior national wheelchair championships: Records tumble as rookies triumph.**
SOURCE *Sports 'n Spokes* 1991 Sep/Oct;17(3):14-19.

ABSTRACT A review of the 8th Annual National Junior Wheelchair Championships held in June of 1991 at Princeton University. Events included: track, swimming, field, archery, table tennis, and weight lifting. Awards and honors are listed.

AUTHOR Hendrick BN;
TITLE **The effect of wheelchair tennis participation and mainstreaming upon the perceptions of competence of physically disabled adolescents.**
SOURCE *Therapeutic Recreation Journal* 1985;19(2):34-46.

ABSTRACT A study of 19 adolescents with physical disabilities to determine the effect of participation in a wheelchair tennis program on self-perceptions of cognitive, social and physical competence. Results indicate participation in this type of program can significantly improve self-perceptions of competence in adolescents with disabilities. Implications for mainstreaming adolescents with disabilities into recreational and physical education programs are discussed.

AUTHOR Hofmann AD; Greydanus DE;
BOOK *Adolescent Medicine.*
SOURCE Addison-Wesley: Menlo Park, CA, 1983:448.

ABSTRACT This book is divided into four main sections. "Orientation" includes the usual discussion of growth and development but adds a section on seeing teenagers in the office setting. "General Medical Disorders" reviews numerous diseases by organ system. "Special Adolescent Issues" covers the traditional domain of adolescent medicine: sexuality, STDs, sports medicine, substance abuse, legal issues, and also adolescent nutrition concerns and management of chronic illness. "Psychosocial Issues" provides information on counseling, psychosomatic illness, suicide, and other issues.

AUTHOR Hopper C; Santomier J;
TITLE **Self-esteem and aspirations of wheelchair athletes.**
SOURCE *Humboldt Journal of Social Relations* 1984 Fall;12(1):24-35.

ABSTRACT A study of 87 wheelchair athletes examining four psychosocial consequences of sport involvement: occupational, athletic and educational aspirations; and occupational self-esteem. Results showed relatively high scores for athletic and occupational aspirations and self-esteem. Of interest were the specific characteristics of wheelchair athletes; most were male, under age 30, and had acquired their disability before the age of 20.

AUTHOR Horvat M; French R; Henschen K;
TITLE **A comparison of the psychological characteristics of male and female able-bodied and wheelchair athletes.**
SOURCE *Paraplegia* 1986 Apr;24(2):115-22.
ABSTRACT This study demonstrates that male and female wheelchair athletes fit the "Iceberg Profile" described by WP Morgan for able-bodied athletes. The Profile of Mood States (POMS) was used to identify the emotional states experienced by the athletes. Differences were noted between the profiles of male and female athletes irregardless of their disability status.

AUTHOR Jackson RW; Davis GM;
TITLE **The value of sports and recreation for the physically disabled.**
SOURCE *Orthopedic Clinics of North America* 1983 Apr;14(2):301-15.
ABSTRACT A brief review of the history, development, and benefits of sports and recreation for individuals with disabilities. The physiological and psychosocial benefits of exercise are addressed as well as classification of disability in sports, methods of fitness assessment, and response to training programs. The importance of sports in promoting social integration and re-entrance into the mainstream is stressed.

AUTHOR Jansma P; Krasnavage P;
TITLE **Progressive inclusion of the handicapped into community youth football.**
SOURCE *The Physical Educator* 1982 Mar;39(1):30-5.
ABSTRACT An article discussing the need for inclusion of adolescents with disabilities into youth football programs. A program model is presented which provides a hierarchy of participation options for athletes with low, moderate, and advanced athletic ability. Also presented is a similar program model called SCAM (Second Classification Age Maturity), a program developed by the New York State Public High School Athletic Association.

AUTHOR Kelley JD; Frieden L;
TITLE **Go for it! A Book on sports and recreation for persons with disabilities.**
SOURCE Harcourt Brace Jovanovich: Orlando, FL, 1989:236.
ABSTRACT A comprehensive overview of sports and recreation opportunities available to individuals with disabilities. Chapters cover team sports, individual sports, outdoor sports and recreation, aquatics, track and field, winter sports, dance, recreational games, and fitness. Competitions, modifications, techniques, and programs are discussed.

AUTHOR Kennedy SO; French R; Henderson HL;
TITLE **The due-able process could happen to you. Physical educators, handicapped students, and the law.**
SOURCE *Journal of Physical Education, Recreation & Dance* 1989 Oct;60(8):86-93.
ABSTRACT A discussion of the rights of children with disabilities to receive physical education under federal regulations and the role of physical educators in this process. Included is discussion of parental advocacy, procedural safeguards, responsibilities of public agencies, rights of parents, responsibilities of hearing officers, and suggestions for physical educators when preparing and presenting testimony.

AUTHOR Klapwijk A;
TITLE **The multiple benefits of sports for the disabled.**
SOURCE *International Disability Studies* 1987;9(2):87-9.

ABSTRACT A review of the benefits of sporting activities for persons with disabilities. Four areas are discussed: therapeutic or somatic value, psychological benefits, social benefits, and influence on motor and overall development. The primary values of sports for persons with disabilities are seen as fun in movement, joy and pleasure in competition, and satisfaction from achievement. International developments are reviewed.

AUTHOR Latinis-Bridges B; Jorgensen RA;
TITLE **Exercise and sports for children with specific chronic illnesses.**
SOURCE *Nurse Practitioner* 1985 May;10(5):22-4, 22-30.

ABSTRACT The authors present specific guidelines for sports participation by children with allergies, asthma, convulsive disorders, cardiovascular problems, or diabetes. The importance of team sports as a developmental childhood task is highlighted.

AUTHOR Lavay B; Depaepe J;
TITLE **The harbinger helper. Why mainstreaming in physical education doesn't always work.**
SOURCE *Journal of Physical Education, Recreation & Dance* 1987 Sep;58(7):98.

ABSTRACT A discussion of the variety of planning factors illustrated as the harbinger approach which need to be considered before students are mainstreamed into physical education. Components of the harbinger approach are the mainstreaming concept, the special and regular physical education teachers working together, program scheduling and facilities, the student to be mainstreamed, and the mainstreamed class.

- AUTHOR** | **Madorsky JG; Curtis KA;**
TITLE | **Wheelchair sports medicine.**
SOURCE | ***American Journal of Sports Medicine* 1984 Jan;12(2):128-32.**
- ABSTRACT** | **Review of principles, preparticipation screening, injury prevention, management of injuries and classification of wheelchair competitors.**
- AUTHOR** | **Mitchell JS;**
BOOK | ***See me more clearly: Career and life planning for teens with physical disabilities.***
SOURCE | **Harcourt Brace Jovanovich: New York,1980:284.**
- ABSTRACT** | **This book is a basic guide for adolescents on living with disabilities and planning for the future. A chapter on sports contains a listing of sports and games for adolescents with disabilities. Eighteen activities are included with descriptions, materials, and modifications.**
- AUTHOR** | **Paciorek MJ; Jones JA;**
TITLE | **Sports and recreation for the disabled: A resource manual.**
SOURCE | **Brown and Benchmark, a Division of Wm. C. Brown Communication, Inc., 2460 Kerper Blvd., Dubuque, IA 52001, 1989:250.**
- ABSTRACT** | **A handbook for persons with disabilities, their families, and professionals on information about sport adaptations, equipment, modifications, and suppliers. Fifty-four individual and team sports are presented with descriptions covering equipment, medical conditions, national and local governing bodies, and contact persons. Activities are subdivided to provide current material in the seven major disability groups represented by the Committee on Sports for the Disabled. (For ordering information, call 1-800-338-5578.)**
- AUTHOR** | **Reid G; Sherrill C; Ulrich DA;**
TITLE | **Adapted physical activity quarterly (APAQ).**
SOURCE | **Human Kinetics: Champaign, IL.**
- ABSTRACT** | **Adapted Physical Activity Quarterly (APAQ) is a multidisciplinary journal which includes reports of practical case studies and techniques for adapting equipment, facilities, methodology, and/or settings for special populations (For information: 1-800-747-4457).**
- AUTHOR** | **Schaefer RS; Proffer DS;**
TITLE | **Sports medicine for wheelchair athletes.**
SOURCE | ***American Family Physician* 1989 May;39(5):239-45.**
- ABSTRACT** | **A brief review of common injuries experienced by athletes who are in wheelchairs.**

AUTHOR Sherrill C;
TITLE **Adapted physical education and recreation: A multidisciplinary approach. Third edition.**
SOURCE Wm. C. Brown: Dubuque, IA;1986:635.
ABSTRACT This book is a resource for educators on adapted physical education and recreation. It provides information on writing individualized educational plans. The author includes learning activities that contain information about how to learn more about persons with disabilities and recreation programs. Extensive references and bibliographies are found at the end of each chapter.

EDITOR Sherrill C;
TITLE **Sport and disabled athletes (1984 Olympic Scientific Congress Proceedings, Vol. 9).**
SOURCE Human Kinetics: Champaign, IL, 1986:320.
ABSTRACT Selected proceedings from the 1984 Olympic Scientific Congress. This volume contains 19 presentations plus nine papers that address history, philosophy, and the current status of sport for elite athletes with disabilities. The book is organized into six areas: History and Philosophy; Sport Classification for Equalizing Competition; Exercise Physiology Research; Biomechanics Research; Sport Sociology and Psychology Research; and Applied Research. The volume also contains extensive appendices concerning classification systems as well as supplemental information. (Available from the publisher: 1-800-747-4457)

AUTHOR Sherrill C; Gilstrap T; Richir K;
TITLE **Use of the personal orientation inventory with disabled athletes.**
SOURCE *Perceptual and Motor Skills* 1988 Aug;67(1):263-6.
ABSTRACT A report of two studies which examined the reliability of oral administration of the Personal Orientation Inventory as a measure of self-actualization in athletes with disabilities. Findings indicate that the inventory is a reliable instrument when administered orally and can be used with athletes with disabilities to aid individual understanding of strengths and weaknesses and to set goals for self-actualization.

AUTHOR Sherrill C; Hinson M; Gench B; et al.;
TITLE **Self-concepts of disabled youth athletes.**
SOURCE *Perceptual and Motor Skills* 1990 Jun;70(3, Part 2):1093-8.
ABSTRACT A study examining the self-concept of 158 youth athletes with disabilities who competed in the first Pan American Victory Games for youth with disabilities. Results showed that mean self-concept scores for this population fell within or close to the ranges found in testing youth without disabilities. Results of this study were used to begin a database on self-concept of youth athletes with disabilities.



- AUTHOR** | Sherrill C; Silliman L; Gench B; et al;
TITLE | **Self-actualization of elite wheelchair athletes.**
SOURCE | *Paraplegia* 1990 May;28(4):252-60.
- ABSTRACT** | A study to examine self-actualization in elite wheelchair athletes in comparison to athletes without disabilities. Results indicate male wheelchair athletes are more self-actualized than male athletes without disabilities and that female wheelchair athletes are similar to female athletes without disabilities.
- AUTHOR** | Silliman LM; Sherrill C;
TITLE | **Self-actualization of wheelchair athletes.**
SOURCE | *Clinical Kinesiology* 1988 Jul;43(3):77-82.
- ABSTRACT** | This article describes the use of the Personal Orientation Inventory (POI) with elite athletes with disabilities. Athletes with disabilities were found to have a similar self-actualization profile to athletes who are able-bodied. The Wheelchair Athlete Profile is recommended as an appropriate reference group for use with athletes with disabilities in sports psychology counseling.
- AUTHOR** | Society for Adolescent Medicine;
TITLE | **Position statement on sports participation for adolescents with handicaps.**
SOURCE | *Journal of Adolescent Health Care* 1984 Oct;5(4):310.
- ABSTRACT** | Position paper endorsing sports participation with appropriate guidance to minimize health risks.
- AUTHOR** | Steadward RD;
TITLE | **Sport and training for the physically disabled.**
SOURCE | *The Australian Journal for Health, Physical Education and Recreation* 1981 Fall;91:9-11.
- ABSTRACT** | An overview of the value and benefits of sport for individuals with disabilities. The need for training centers to provide programs, training, and research for athletes with disabilities and their coaches is discussed and a training center in Canada is evaluated.
- AUTHOR** | Toon CJ; Gench BE;
TITLE | **Attitudes of handicapped and nonhandicapped high school students toward physical education.**
SOURCE | *Perceptual and Motor Skills* 1990 Jun;70(3):1328-30.
- ABSTRACT** | A study of 381 students with and without disabilities to examine their attitudes towards physical education in mainstreamed classrooms. Results show students without disabilities were significantly more positive in their attitudes toward physical education classes than their peers with disabilities. No significant sex differences were noted.

AUTHOR Walker P; Edinger B; Willis C; et al;
TITLE *Beyond the classroom: Involving students with disabilities in extracurricular activities at Levy School.*
SOURCE TASH Newsletter, June 1991.
ABSTRACT This report describes a variety of strategies used in a middle school in Syracuse, New York to involve students with disabilities in activities such as volleyball, cross country skiing, basketball, and the Spanish club. Available from: The Center on Human Policy, 200 Huntington Hall, Syracuse University, Syracuse, NY 13244-2340; (315) 443-3851 (Cost: \$3.30)

AUTHOR Winnick JP;
BOOK *Adapted physical education and sport.*
SOURCE Human Kinetics: Champaign, IL, 1990:496.
ABSTRACT A comprehensive text for teaching exceptional children which emphasizes physical education and sport and combines developmental and community-based approaches. Written by a group of national experts, the 27 chapters are divided into five parts: Foundation issues in Adapted Physical Education; Learning and Teaching, Children and Youth with Unique Needs; Developmental Aspects of Adapted Physical Education; and Activities for Students with Unique Needs. The book provides extensive coverage on organizing and managing adapted physical education and sport programs.

B. MENTAL RETARDATION

AUTHOR Biery MJ; Kauffman N;
TITLE *The effects of therapeutic horseback riding on balance.*
SOURCE *Adapted Physical Activity Quarterly* 1989 Jul;6(3):221-9.
ABSTRACT This study found a significant increase in both standing balance and quadruped balance for individuals with mental retardation following a 6-month period of therapeutic riding. The subjects served as their own controls by having a 6-month waiting period between the first evaluation and the riding program. The subjects were also evaluated prior to and after the riding program.

AUTHOR Bundschuh EL; Cureton KJ;
TITLE *Effects of bicycle ergometer conditioning on the physical work capacity of mentally retarded adolescents.*
SOURCE *American Corrective Therapy Journal* 1982 Nov/Dec;36(6):159-63.
ABSTRACT A study to determine the effect of a quantified individually-prescribed program of stationary bicycle riding on 14 adolescents with mental retardation. Subjects did not experience significant increases in measured levels when compared to a control group. Implications and future directions are discussed.

- AUTHOR** Cuvo AJ; Ellis PJ; Wisotzek PJ; et al.;
- TITLE** **Teaching athletic skills to students who are mentally retarded.**
- SOURCE** *The Journal of the Association for Persons with Severe Handicaps (JASH)* 1983 Win;8(4):72-81.
- ABSTRACT** A series of two experiments to evaluate the procedures necessary to teach athletic skills to students with moderate and severe mental retardation. Experiment 1 formatted the task analysis necessary to teach the standing long jump to adolescents with moderate mental retardation. Experiment 2 formatted the task analysis necessary to teach the 50-yard dash to three young adults with severe mental retardation. The study validated instructional procedures using task analysis for teaching two different track and field skills to students with moderate and severe mental retardation.
- AUTHOR** Douglas J; Douglas A; Hett G;
- TITLE** **Exercise programs for special needs students: Automated contribution from the operant laboratory.**
- SOURCE** *B.C. Journal of Special Education* 1989 ;13(2):119-25.
- ABSTRACT** A case study examining procedures and equipment necessary to establish an exercise program requiring minimal teacher supervision which an adolescent with moderate mental retardation would actively use. Use of behavior modification techniques is discussed.
- AUTHOR** Eberhard Y; Eterradosi J; Rapacchi B;
- TITLE** **Physical aptitudes to exertion in children with Down's syndrome.**
- SOURCE** *Journal of Mental Deficiency Research* 1989 Apr;33(part 2):167-74.
- ABSTRACT** In this study, children with and without Down syndrome were compared to determine any physiological differences after exercising on a bicycle ergometer. Children with Down syndrome were found to have: lower heart rate, shorter endurance, lower work load, lower oxygen consumption, and irregular blood pressure. Researchers concluded that the lack of motivation for physical exercise by children with Down syndrome may have a physiological component.
- AUTHOR** Eichstaedt CB; Lavay BW;
- TITLE** **Physical activity for individuals with mental retardation. Infancy through adulthood.**
- SOURCE** *Human Kinetics: Champaign, IL*;1992:528.
- ABSTRACT** A comprehensive movement-oriented text that covers the life span of people with mental retardation. The text is divided into three parts: Foundations and Implications of Mental Retardation, Program Development and Implementation, and Physical Activity for a Life Span. Realistic instructional strategies are presented combining theory with practice. An excellent text for graduate or undergraduate course instruction as well as a reference for teaching individuals with mental retardation.

- AUTHOR** Ellis DN; Cress PJ; Spellman CR;
TITLE Using timers and lap counters to promote self-management of independent exercise in adolescents with mental retardation.
SOURCE *Education and Training in Mental Retardation* 1992 Mar;27(1):51-9.
ABSTRACT A study of five adolescents with moderate to severe mental retardation to examine the potential of using a timer or lap counter to self-manage/control the duration or amount of unsupervised aerobic exercise in a public school setting. Results demonstrated these students were able to self-manage the duration of aerobic exercise and respond appropriately to a cueing system of timers and lap counters.
- AUTHOR** McGimsey JF; Favell JE;
TITLE The effects of increased physical exercise on disruptive behavior in retarded persons.
SOURCE *Journal of Autism and Developmental Disorders* 1988 Jun;18(2):167-79.
ABSTRACT This study presents information on the use of twice-daily exercise programs to control aggressive and hyperactive behavior. Eight of the 10 participants showed significant decreases in aggressive and hyperactive behavior following initiation of the exercise program. There often was a several day delay before decreases in the problem behavior were noted following the initiation of the program.
- AUTHOR** O'Conner YM; Cuvo AJ;
TITLE Teaching dancercise to persons who are mentally handicapped: Programming transfer of stimulus control to a community setting.
SOURCE *Behavioral Residential Treatment* 1989;4(4):289-311.
ABSTRACT A study to teach an age-appropriate athletic skill—dancercise—to three adolescents with mild mental retardation living in a transitional residential center. The study also attempted to transfer the stimulus control to other trainers, settings, and dancercise programs in the community. Results showed skill acquisition occurred only after training, and performance did not generalize across settings.
- AUTHOR** Schmidt G; McLaughlin J; Dalrymple N;
TITLE Teaching students with autism. A sport skill specialist's approach.
SOURCE *Journal of Physical Education, Recreation & Dance* 1986 Sep;57(7):60-3.
ABSTRACT A discussion of the process of teaching students with autism sports skills. The importance of establishing a routine suitable to the environment and the individual, desensitization, and use of a progressive assistance hierarchy are examined.

C. CHRONIC ILLNESSES

Asthma

- AUTHOR** American Academy of Pediatrics Committees on Children with Disabilities and Sports Medicine;
TITLE The asthmatic child's participation in sports and physical education.
SOURCE *Pediatrics* 1984 Jul;74(1):155-6.
- ABSTRACT** Policy statement stressing benefits of exercise with appropriate medical supervision.
-
- AUTHOR** American Academy of Pediatrics Sections on Allergy and Immunology and Diseases of the Chest;
TITLE Exercise and the asthmatic child.
SOURCE *Pediatrics* 1989 Aug;84(2):392-3.
- ABSTRACT** Recommendations for teachers, coaches, parents, and physicians regarding exercise and a child with asthma.
-
- AUTHOR** Chryssanthopoulos C; Maksud MG; Gallen WG; et al.;
TITLE Cardiopulmonary responses of asthmatic children to strenuous exercise.
SOURCE *Clinical Pediatrics* 1984 Jul;23(7):384-8.
- ABSTRACT** Study of eight youths with asthma, ages 12-16 years, and seventeen healthy controls, ages 11-14 years, demonstrating potential for normal aerobic capacity in persons with asthma.
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- AUTHOR** Coughlin SP;
TITLE Sport and the asthmatic child: A study of exercise-induced asthma and the resultant handicap.
SOURCE *Journal of the Royal College of General Practitioners* 1988 Jun;38(311):253-5.
- ABSTRACT** This article describes the incidence of exercise-induced asthma. Only 26 percent of the participants reported never or rarely having attacks. A substantial number of the children were not adequately treating their attacks of exercise-induced asthma or using prophylaxis, a finding that has important implications for patient education by the general practitioner.

- AUTHOR** Oseid S;
TITLE Asthma and physical activity.
SOURCE *Scandinavian Journal of Social Medicine Supplement* 1982;29:227-34.
- ABSTRACT** A review of the literature and current theories on exercise-induced asthma (EAI). The incidence and response patterns of EAI are examined as well as causal relationships, reaction mechanisms and drug treatment potentials. The effect of EAI on the physical and psychosocial development of adolescents is discussed and considerations for treatment are listed.
- AUTHOR** Paul GH; Fafoglia BA;
TITLE Exercise, sports and asthma.
SOURCE *School Nurse* 1989 Oct;5(3):39-42.
- ABSTRACT** An overview of exercise-induced asthma (EIA), its causes, clues to look for in diagnosis, and treatment/control. An example of a 15-year-old athlete is used to describe difficulties in diagnosis and success of treatment.
- AUTHOR** Rimmer JH;
TITLE A vigorous physical education program for children with exercise-induced asthma.
SOURCE *Journal of Physical Education, Recreation & Dance* 1989 Aug;60(6):91-5.
- ABSTRACT** A review for physical education instructors of important guidelines to follow when developing programs for youth with asthma.
- AUTHOR** Szentagothai K; Gyene I; Szocska M; et al.;
TITLE Physical exercise program for children with bronchial asthma.
SOURCE *Pediatric Pulmonology* 1987 May/June;3(3):166-72.
- ABSTRACT** The authors studied a group of children with asthma during a long-term swimming program. They found that the swimming program had positive effects. For example, hospitalizations decreased; there was decreased use of corticosteroids; and the use of other medications decreased. The authors emphasize the importance of participating in an exercise program.
- AUTHOR** Wolf SI; Lampl KL;
TITLE Pulmonary rehabilitation: The use of aerobic dance as therapeutic exercise for asthmatic patients.
SOURCE *Annals of Allergy* 1988 Nov;61(5):357-60.
- ABSTRACT** This article describes an "Aerobics for Asthmatics" program. This program was devised to replace a breathing exercise program for intercostal and diaphragmatic muscles which was seldom utilized. Participants in the aerobics program gained confidence and looked forward to more active lifestyles.

Cystic Fibrosis

AUTHOR Cerny FJ; Pullano TP; Cropp GJ;
TITLE **Cardiorespiratory adaptations to exercise in cystic fibrosis.**
SOURCE *American Review of Respiratory Disease* 1982 Aug;126(2):217-20.

ABSTRACT A study of 21 adolescents with cystic fibrosis and a matched control group to determine the efficiency of cardiorespiratory adaptations to incremental exercise and to examine the relationship between these adaptations and severity of lung disease. Results indicate that subjects with cystic fibrosis and abnormal pulmonary functions ventilate excessively and inefficiently at all work levels compared with other subjects. The exercise limitation of this group is pulmonary and not cardiovascular in origin.

AUTHOR Edlund LD; French RW; Herbst JJ; et al.;
TITLE **Effects of a swimming pool on children with cystic fibrosis.**
SOURCE *American Journal of Diseases of Children* 1986 Jan;140(1):80-3.

ABSTRACT A study of 20 children with cystic fibrosis to examine the physiologic and clinical effects of a 12-week, progressive, aerobic swimming exercise program. Results showed an increase in exercise tolerance and a statistically significant improvement in the clinical status of cystic fibrosis in the subjects. Also noted was an apparent improvement in self-image and self-confidence of subjects.

AUTHOR Kolberg H;
TITLE **Cystic fibrosis and physical activity: An introduction.**
SOURCE *International Journal of Sports Medicine* 1988 Feb;9(Suppl. 1):2-5.

ABSTRACT This article presents a short overview of cystic fibrosis and the use of physical exercise as part of the treatment plan for cystic fibrosis. Some guidelines for physical activity are presented along with some psychological considerations.

AUTHOR Rose J; Jay S;
TITLE **A comprehensive exercise program for persons with cystic fibrosis.**
SOURCE *Journal of Pediatric Nursing* 1986 Oct;1(5):323-34.

ABSTRACT The authors present a comprehensive exercise program for persons with cystic fibrosis. They discuss breathing, chest mobility, posture and aerobic exercise. Motivation, discipline, goal setting and prioritizing are also discussed. Photos and descriptions of the exercises are presented. Emphasis is on integrating exercise into a person's daily life.

AUTHOR Stanghelle JK;
TITLE Physical exercise for patients with cystic fibrosis: A new review.
SOURCE *International Journal of Sports Medicine* 1988 Feb;9(Suppl. 1):6-18.

ABSTRACT This is an extensive review of exercise and cystic fibrosis. The author reviews several short-term and long-term training studies. An extensive literature review on the response to exercise of patients with cystic fibrosis is also presented. Practical suggestions for setting up an appropriate exercise program are provided.

AUTHOR Strauss GD; Osher A; Wang CI; et al.;
TITLE Variable weight training in cystic fibrosis.
SOURCE *Chest* 1987 Aug;92(2):273-6.

ABSTRACT This study assesses the impact of variable weight training on numerous parameters of a small group of young adults with cystic fibrosis. A six-month trial of variable weight training, a form of anaerobic exercise, resulted in weight gain, increased muscle size and strength, and improvement on some measures of pulmonary function.

Cerebral Palsy

AUTHOR McCubbin JA; Shasby GB;
TITLE Effects of isokinetic exercise on adolescents with cerebral palsy.
SOURCE *Adapted Physical Activity Quarterly* 1985 Jan;2(1):56-64.

ABSTRACT A study to determine the effects of isokinetic resistance exercise and repetitive movement exercise with no resistance on 30 adolescents with cerebral palsy. Results concluded that isokinetic resistance exercise affected neuromuscular performance on both movement time and torque development, results similar to youth with cerebral palsy and adolescents without disabilities. Implications are discussed and recommendations for further research are outlined.

AUTHOR Resnick M;
TITLE The teenager with cerebral palsy.
BOOK *Chronic Illness and Disabilities in Childhood and Adolescence.*
EDITOR Blum RW;
SOURCE Grune and Stratton: NY;1984:299-326.

ABSTRACT This chapter discusses sociological and psychological issues of adolescents with cerebral palsy. Topics include: the influence of disability on development; use of leisure time; peer group relationships; family relationships; sports, exercise, and physical activity; and chores and household responsibilities.

Diabetes

AUTHOR Blackett PR;
TITLE **Child and adolescent athletes with diabetes.**
SOURCE *The Physician and Sportsmedicine* 1988 Mar;16(3):133-4,139-43,146,148-9.

ABSTRACT This article covers several aspects of young athletes with diabetes. It discusses methods of controlling glucose, including methods of insulin delivery. Hypoglycemia and preparations necessary for endurance sports are also discussed. A brief discussion of the three phases of muscle fuel supply is also presented.

AUTHOR Brink SJ;
BOOK *Pediatric and adolescent diabetes mellitus.*
SOURCE Year Book Medical Publishers, Inc.: Chicago, 1987:454.

ABSTRACT This book focuses on issues surrounding diabetes mellitus that are unique to children and adolescents and how professionals can best meet the needs of these patients. Topics covered include: epidemiology, immunology, genetics, associated syndromes, exercise, nutrition, drug use and abuse, psychosocial support, and developmental issues. The Appendix includes the New England Diabetes and Endocrinology Center guidelines.

EDITOR Castells S;
TITLE **Juvenile diabetes.**
SOURCE *Pediatric Clinics of North America* 1984 Jun;31(3):521-753.

ABSTRACT Symposium on juvenile diabetes that includes chapters on pathogenesis and etiologies, growth and maturation of patients, complications, effects of exercise, psychological and family factors, nutrition therapy and education, the insulin pump, and pancreas transplants.

AUTHOR Dorchy H; Poortmans J;
TITLE **Sport and the diabetic child.**
SOURCE *Sports Medicine* 1989 Apr;7(4):248-62.

ABSTRACT This article extensively describes energy metabolism and adaptation to physical activity in the healthy child and the child with diabetes. The authors state that, in principle, with the insulin dose correctly adjusted, injection site chosen correctly and all nutritional precautions taken, there is no limit on the choice of sporting activities. However, physical activity which is progressive and spread out over several hours is recommended.

- AUTHOR** | Kevorkian GA;
TITLE | **Diabetes and exercise.**
SOURCE | *Journal of Visual Impairment & Blindness* 1986 May;80(5):732-4.
- ABSTRACT** | This article discusses some of the complications of diabetes, including arteriosclerosis, peripheral vascular disease, and infection. The benefits of aerobic exercise which reaches a training effect are described. Precautions and modifications are also discussed.
- AUTHOR** | Marrero DG; Fremion AS; Golden MP;
TITLE | **Improving compliance with exercise in adolescents with insulin-dependent diabetes mellitus: Results of a self-motivated home exercise program.**
SOURCE | *Pediatrics* 1988 Apr;81(4):519-25.
- ABSTRACT** | This study describes the use of audio and video tapes as a part of a self-motivated home exercise program for adolescents with diabetes. The adolescents showed an increased level of physical fitness following the 12-week exercise program. The authors provide information on setting up a similar program.
- AUTHOR** | Rowland TW; Swadba LA; Biggs DE; et al.;
TITLE | **Glycemic control with physical training in insulin-dependent diabetes mellitus.**
SOURCE | *American Journal of Diseases of Children* 1985 Mar;139(3):307-10.
- ABSTRACT** | Study of patients documenting little effect of regular exercise on metabolic control but stressing its psychosocial benefits.
- AUTHOR** | Stratton R; Wilson DP; Endres RK;
TITLE | **Acute glycemic effects of exercise in adolescents with insulin-dependent diabetes mellitus.**
SOURCE | *The Physician and Sportsmedicine* 1988 Mar;16(3):150-3, 156-7.
- ABSTRACT** | This study compares the level of glucose decline in subjects following both structured aerobic exercise and recreational exercise. Blood glucose levels fell following exercise with no significant difference between the two groups. The magnitude of the decline was dependent on the pre-exercise level.

Epilepsy

- AUTHOR** | American Academy of Pediatrics Committees on Children with Handicaps and Sports Medicine.
TITLE | **Sports and the child with epilepsy.**
SOURCE | *Pediatrics* 1983 Dec;72(6):884-5.
- ABSTRACT** | Brief position statement, including guidelines for participation safety.

AUTHOR | Korczyn AD;
TITLE | **Participation of epileptic patients in sports.**
SOURCE | *Journal of Sports Medicine and Physical Fitness* 1979;19(2):195-8.

ABSTRACT | Review of physiologic alterations affecting seizure threshold and the need to individualize risk vs. benefits.

AUTHOR | O'Donohoe NV;
TITLE | **What should the child with epilepsy be allowed to do?**
SOURCE | *Archives of Disease in Childhood* 1983 Nov;58(11):934-7.

ABSTRACT | A review of the risks and benefits various sports and recreational activities have for children with epilepsy. The consequences of overprotection and the importance of increasing knowledge of this topic for parents and physicians is discussed.

Other Chronic Illnesses

AUTHOR | Grennan-Fowler E; Powell C; Varni JW;
TITLE | **Behavioral treatment of adherence to therapeutic exercise by children with hemophilia.**
SOURCE | *Archives of Physical Medicine and Rehabilitation* 1987;68(12):846-9.

ABSTRACT | A study of 10 children with hemophilia to evaluate the effects of a behavioral treatment program on adherence to therapeutic exercise. From an initially low baseline (50 percent), adherence during the treatment phase increased to 94 percent across measured parameters. Adherence declined to 64 percent during follow-up phases as explicit reinforcement decreased. Issues of adherence to therapeutic exercise are discussed and suggestions are made for future research.

AUTHOR | Pearson HA;
TITLE | **Sickle cell trait and competitive athletics: Is there a risk?**
SOURCE | *Pediatrics* 1989 Apr;83(4):613-4.

ABSTRACT | The author states that, due to the lack of data, the risk of sudden death from sickle cell trait associated with student athletic competition cannot be determined. The author proposes several means of acquiring more data but believes that, at the present time, restriction of athletic competition is not indicated.

AUTHOR Thoren CA;
TITLE Exercise studies of children with chronic diseases.
BOOK International series on sport sciences (Vol. 10).
EDITOR Berg K; Eriksson BO;
SOURCE University Park Press: Baltimore, MD;1980:263-76.

ABSTRACT A presentation of the problems encountered in exercise testing of children and adolescents with chronic illness. Five areas of chronic illness are reviewed, including asthma, diabetes, cerebral palsy, and congenital heart disease. Limiting and influencing factors are presented for each chronic illness, and the importance of exercise testing for therapy and rehabilitation is stressed.

D. VISUAL IMPAIRMENTS

AUTHOR Arnhold Jr. RW; McGrain P;
TITLE Selected kinematic patterns of visually impaired youth in sprint running.
SOURCE *Adapted Physical Activity Quarterly* 1985 Jul;2(3):206-13.

ABSTRACT A study of 27 students with visual impairments to determine which set of selected kinematic variables affect their speed in sprint running. Results showed two significant variables that accounted for 93 percent of the variance in running speed—cycle length and hip range of motion. Implications for physical education teachers and coaches are discussed.

AUTHOR Mastro JV; Montelione TL; Hall MM;
TITLE Wrestling. A viable sport for the visually impaired.
SOURCE *Journal of Physical Education, Recreation & Dance* 1986 Nov/Dec;57(9):61-4.

ABSTRACT An article promoting wrestling as a viable sport for youth with visual impairments. Included are discussions of athletes with and without visual impairments, orientation of coaches and coaching principles, and accommodation of rules.

AUTHOR Sherrill C; Rainbolt W; Ervin S;
TITLE Attitudes of blind persons toward physical education and recreation.
SOURCE *Adapted Physical Activity Quarterly* 1984 Jan;1(1):3-11.

ABSTRACT In this study, adults with visual impairments were interviewed about their attitudes toward physical education and recreation during childhood, adolescence, and adulthood. Males had a more positive attitude than females and most of the subjects remembered an active childhood. Almost two-thirds of the subjects reported not engaging in competitive sports while in high school.

AUTHOR Sherrill C; Pope C; Arnhold R;
TITLE Sport socialization of blind athletes: An exploratory study.
SOURCE *Journal of Visual Impairment & Blindness* 1986 May;80(5):740-4.

ABSTRACT This study looked at 133 athletes at the 6th National United States Association of Blind Athletes games (USABA). The social learning approach of Bandura and Kenyon/McPherson was used to identify the social system which contributes to sport role learning. The influence of home and family was markedly decreased in athletes with a visual impairment. Athletes with blindness are often introduced to sports at a later age than children with normal vision.

AUTHOR Shindo M; Kumagai S; Tanaka H;
TITLE Physical work capacity and effect of endurance training in visually handicapped boys and young male adults.
SOURCE *European Journal of Applied Physiology and Occupational Physiology* 1987 Aug;56(5):501-7.

ABSTRACT This article reports on two Japanese studies: the first compared the physical fitness of 37 male adolescents with visual handicaps to standard values for Japan; the second looked at the effects of training on the physical fitness of a subset of 10 of the boys with visual handicaps. Results indicated that the visually impaired boys were less physically fit than other boys their age, and this appears to be due to chronic inactivity. Physical training improved physical and psychic symptoms as determined by the Cornell Medical Index.

E. FITNESS

Physical Disabilities

AUTHOR Abell DE;
TITLE Circuit training: Total physical fitness for persons with disabilities.
BOOK *The Bradford papers, vol. III. Proceedings from the 1982 institute on innovations in camping and outdoor education with persons who are disabled.*

EDITOR Robb GM;
SOURCE ERIC;1983:52-62.

ABSTRACT A presentation of a circuit training program adapted to meet the needs of persons with disabilities. Diagrams and descriptions of 10 station set-ups plus stretching exercises are included. A brief description of considerations for various disabilities is also presented. (Available through EDRS, ED# 231 565. To order, call 1-800-443-3742.)

AUTHOR Compton DM; Eisenman PA; Henderson HL;
TITLE Exercise and fitness for persons with disabilities.
SOURCE *Sports Medicine* 1989 Mar;7(3):150-62.

ABSTRACT This literature review focuses on the status of fitness and exercise for persons with mental retardation, mental illness and physical disabilities by examining the benefits of exercise for improved muscular strength and endurance, cardiovascular fitness, body composition, aerobic training, and psychological well-being. Despite the lack of valid research in this area, there is support for physical exercise as rehabilitation for persons with physical and mental disabilities.

AUTHOR Davis GM; Shephard RJ;
TITLE Cardiorespiratory fitness in highly active versus inactive paraplegics.
SOURCE *Medicine and Science in Sports and Exercise* 1988 Oct;20(5):463-8.

ABSTRACT This study evaluates the differences in the cardiorespiratory response to upper body exertion between active individuals with paraplegia and inactive individuals with paraplegia. The authors note a difference in the pattern of response between the two groups. The active individuals had a more central response, while the inactive individuals had a greater peripheral response.

AUTHOR Kofsky PR; Shephard RV; Davis GM; et al.;
TITLE Muscle strength and aerobic power—a study of lower-limb disabled males.
SOURCE *International Rehabilitation Medicine* 1985;7(4):151-5.

ABSTRACT A study of 35 wheelchair-bound males with disabilities to determine the relationship between arm strength and aerobic power. Findings suggest that the extent to which arm strength is developed has a significant impact on cardiovascular performance. Implications for therapy and rehabilitation are discussed.

AUTHOR Oppelt K; Ward M;
TITLE Ice skating: A way to achieve fitness that can be exceptional fun for all.
SOURCE *Journal of Physical Education, Recreation & Dance* 1980 Jan;51(1):32-3, 59-60.

ABSTRACT This article describes a program for teaching ice skating to persons with disabilities. The "Walking Method" is used along with extensive volunteer help (often one on one) to teach the participants to skate. The authors report both physical and social benefits from such a program.

AUTHOR Shephard RJ;
TITLE **Fitness in special populations.**
SOURCE **Human Kinetics: Champaign, IL;1990:360.**

ABSTRACT **A complete compilation of research on fitness assessment, programming, and performance for people with various forms of physical disability, including spinal cord injury, amputations, blindness, deafness, cerebral palsy, muscular dystrophies, and mental retardation.**

AUTHOR Winnick J; Short F.
TITLE **Physical fitness testing of the disabled: Project UNIQUE.**
SOURCE **Human Kinetics, Champaign, IL;1985:184.**

ABSTRACT **A book for physical education teachers on the physical fitness development, testing, and instruction of students with and without disabilities. Developed from Project Unique Physical Fitness Test, the book provides an overview of the project and includes criteria for test items, administration guidelines and assessments, with modifications for specific impairments. Pictures and drawings to illustrate proper techniques and adaptations are included, as are charts and tables.**

Mental Retardation/Developmental Disabilities

AUTHOR Fernhall B; Tymeson G; Millar L; et al;
TITLE **Cardiovascular fitness testing and fitness levels of adolescents and adults with mental retardation including Down syndrome.**
SOURCE **Education and Training in Mental Retardation 1989 Jun;24(2):133-8.**

ABSTRACT **A study to evaluate outcomes of maximal exercise testing in 38 persons with mental retardation including Down syndrome. Results showed lower than normal cardiovascular fitness levels for all subjects and lower than anticipated maximal heart rates. Results also indicated persons with Down syndrome can safely engage in rigorous exercise programs provided they are prescreened for exercise contraindications.**

AUTHOR Fernhall B; Tymeson GT; Webster GE;
TITLE **Cardiovascular fitness of mentally retarded individuals**
SOURCE **Adapted Physical Activity Quarterly 1988 Jan;5(1):12-28.**

ABSTRACT **A literature review on cardiovascular fitness in individuals with mental retardation. The review contains three sections: descriptive field studies, descriptive laboratory studies, and training studies. Each section separates research by age group—children, adolescents, and adults. In general, individuals with mental retardation possess CVF levels 20-40 percent below individuals without mental retardation, regardless of age. Adolescents with mental retardation were the only group which has not shown increases in CVF with training; reasons for this are as yet unknown. Suggestions for future research are made.**

- AUTHOR** Halle JW; Gabler-Halle D;
TITLE **Effects of peer-mediated aerobic conditioning program on fitness measures with children who have moderate and severe disabilities.**
- SOURCE** *The Journal of the Association for Persons with Severe Handicaps (JASH)* 1989 Spr;14(1):33-47.
- ABSTRACT** This article presents an extensive analysis of an aerobic fitness training program for students with mental retardation. The fitness program was peer-mediated and occurred in an integrated setting. Nine of 12 students showed an improvement in fitness following the program. An extensive discussion section deals with issues of maintenance, practical implications, and clinical significance.
- AUTHOR** James TN; Trotter F; Carten K;
TITLE **Posture training for special needs students.**
- SOURCE** *B.C. Journal of Special Education* 1986;10(3):257-65.
- ABSTRACT** A study exploring the importance of fitness training and posture development in students with mild mental retardation. The study supports the position that posture development aids in normalization and should be an integral part of an individualized education plan.
- AUTHOR** Montgomery DL; Reid G; Seidl C;
TITLE **The effects of two physical fitness programs designed for mentally retarded adults.**
- SOURCE** *Canadian Journal of Sport Sciences* 1988 Mar;13(1):73-8.
- ABSTRACT** The purpose of this study was to compare two physical fitness programs for individuals who are mentally retarded. Through the use of the Canadian Standardized Test of Fitness, researchers found that both programs increased the general physical fitness of individuals who are mentally retarded although aerobic fitness was increased only in the program that emphasized intensity and duration of aerobic activity.
- AUTHOR** Reid G; Montgomery DL; Seidl C;
TITLE **Performance of mentally retarded adults on the Canadian Standardized Test of Fitness.**
- SOURCE** *Canadian Journal of Public Health* 1985 May;76(3):187-90.
- ABSTRACT** This study examined the physical fitness of workshop employees with mental retardation. Researchers discovered that the employees with mental retardation had a significantly lower level of physical fitness than those individuals who did not have mental retardation. Given that physical fitness of individuals with mental retardation is related to vocational rehabilitation, the development of physical fitness programs is of high priority.

AUTHOR Tomporowski PD; Ellis NR;
TITLE **The effects of exercise on the health, intelligence, and adaptive behavior of institutionalized severely and profoundly retarded adults: A systematic replication.**
SOURCE *Applied Research in Mental Retardation* 1985;6(4):465-73.
ABSTRACT Adults with severe and profound mental retardation participated in an aerobic exercise program to determine the effects on physical fitness, intelligence and behavior. Results indicate a significant increase in cardiovascular physical fitness, but no change in intelligence or adaptive behavior.

Chronic Illnesses

Asthma

AUTHOR Cochrane LM; Clark CJ;
TITLE **Benefits and problems of a physical training programme for asthmatic patients.**
SOURCE *Thorax* 1990 May;45(5):345-51.

ABSTRACT This article describes an exercise program for persons with asthma. In comparison to the control group, several improvements in cardio-respiratory function were made. Important factors in determining the outcome of the training program included the symptoms score on the training day, the subjects' motivation, and the initial level of fitness. Medical supervision was provided so that treatment could be adjusted as needed.

AUTHOR King JT; Bye MR; Demopoulos JT;
TITLE **Exercise programs for asthmatic children.**
SOURCE *Comprehensive Therapy* 1984 Nov;10(11):67-71.

ABSTRACT This article describes the need for exercise programs for children with asthma. The need to develop life-long fitness and the use of exercise to develop self-esteem is discussed. Several methods to make such an exercise program are presented.

AUTHOR Nickerson BG; Bautista DB; Namey MA; et al.;
TITLE **Distance running improves in asthmatic children without pulmonary complications or changes in exercise-induced bronchospasm.**
SOURCE *Pediatrics* 1983 Feb;71(2):147-52.

ABSTRACT A study to determine the safety and physiologic effects of a distance-running program on 15 children with severe asthma. Results indicate that for therapy, distance running is safe and has measurable physiologic benefits.

AUTHOR Strunk RC; Mrazek DA; Fukuhara JT; et al.;
TITLE **Cardiovascular fitness in children with asthma correlates with
psychologic functioning of the child.**
SOURCE *Pediatrics* 1989 Sep;84(3):460-4.
ABSTRACT Cardiovascular fitness was examined in 90 adolescents with asthma. Researchers correlated disease severity and youth's behavior and psychological adjustment to their likelihood of fitness. Data suggest adjustment to disease is at least as important as severity when determining youth's fitness level.

AUTHOR Strunk RC; Rubin D; Kelly L; et al.;
TITLE **Determination of fitness in children with asthma.**
SOURCE *American Journal of Diseases of Children* 1988 Sep;142(9):940-4.
ABSTRACT The authors use a standardized test (HRFT) to determine the fitness of hospitalized adolescents with severe asthma. Deficits were found in the areas of endurance and skinfold thickness. Following a structured exercise program which lasted three months, the authors noted an improvement in endurance. The authors advocate determining the fitness level early in the disease process so remediation can occur.

Cerebral Palsy

AUTHOR Short FX; Winnick JP;
TITLE **The performance of adolescents with cerebral palsy on measures of
physical fitness.**
BOOK *Sport and disabled athletes (1984 Olympic Scientific Congress
Proceedings, Vol. 9).*
EDITOR Sherrill C;
SOURCE *Human Kinetics: Champaign, IL;1986:239-44.*
ABSTRACT A study examining the effects of gender and age on the fitness of 396 adolescents with cerebral palsy (CP) and comparing that, where appropriate, to 1192 adolescents without disabilities. Results indicated that adolescents with CP were significantly behind adolescents without disabilities on all performance measures. Age was found to be a significant variable in fitness measures within both groups, while gender influence varied across measures and across groups.

Cystic Fibrosis

AUTHOR Holzer FJ; Schnall R; Landsau LI;
TITLE **The effect of a home exercise programme in children with cystic fibrosis and asthma.**
SOURCE *Australian Paediatric Journal* 1984 Nov;20(4):297-301.
ABSTRACT A study of 155 children with asthma and cystic fibrosis to investigate the effects of an unsupervised home exercise program on pulmonary functioning. Data indicate no significant changes in pulmonary functioning, although subjects lack of compliance with the program may have contributed significantly to the failure to show significant results. The importance of physical fitness and regular exercise is discussed.

AUTHOR Stanghelle JK; Winnem M; Roaldsen K; et al.;
TITLE **Young patients with cystic fibrosis: Attitude toward physical activity and influence on physical fitness and spirometric values of a two-week training course.**
SOURCE *International Journal of Sports Medicine* 1988;9(Suppl. 1):25-31.
ABSTRACT A study of 13 children and adolescents with cystic fibrosis to determine the effects of a training course on physical fitness, pulmonary function, and attitude toward physical activity. Findings indicate subjects had a positive attitude toward physical exercise and that physical training can greatly improve physical fitness and lung function; in some cases enough to replace lung physiotherapy.

Diabetes

AUTHOR Campaigne BN; Landt KW; Mellies MJ; et al.;
TITLE **The effects of physical training on blood lipid profiles in adolescents with insulin-dependent diabetes mellitus.**
SOURCE *The Physician and Sportsmedicine* 1985 Dec;13(12):83-9.
ABSTRACT This study involved a 12-week training program for 14 adolescents with insulin-dependent diabetes. The authors found a decrease in low-density lipoprotein cholesterol (LDL-C) in the experimental group following the training program. There was no change in glycoemic control. As high levels of LDL-C are associated with atherosclerosis, regular exercise is recommended.

AUTHOR Huttunen NP; Kaar ML; Krip M; et al;
TITLE **Physical fitness of children and adolescents with insulin-dependent diabetes mellitus.**
SOURCE *Annals of Clinical Research* 1984;16(1):1-5.
ABSTRACT This study looks at the physical working capacity of adolescents with and without insulin-dependent diabetes mellitus. The authors found a reduced working capacity for males with diabetes. There was an increase in the discrepancy with increased age of the adolescent males. There was no statistically significant difference between females with or without diabetes.

AUTHOR Landt KW; Campaigne BN; James FW; et al.;
TITLE **Effects of exercise training on insulin sensitivity in adolescents with Type I diabetes.**
SOURCE *Diabetes Care* 1985 Sep/Oct;8(5):461-5.
ABSTRACT A study of 15 adolescents with Type I diabetes to investigate the effects of an exercise training program on physical fitness, glycemic control, and insulin sensitivity. Results concluded that exercise training alone does not improve glycemic control although it improves physical fitness and insulin sensitivity and, thus, is a valuable adjunct in managing Type I diabetes.

AUTHOR Marrero DG; Patton A;
TITLE **Fitness for teens.**
SOURCE *Diabetes Forecast* 1987 May;40(5):42-6.
ABSTRACT An overview of the importance of exercise for teens with diabetes. Discusses common complaints and difficulties as well as the benefits of exercise and suggestions for getting started. A list of safety tips is provided. (Available through the American Diabetes Association, 1660 Duke St., Alexandria, VA 22314; (703) 549-1500.)

AUTHOR Stratton R; Wilson DP; Endres RK; et al.;
TITLE **Improved glycemic control after supervised 8-week exercise program in insulin-dependent diabetic adolescents.**
SOURCE *Diabetes Care* 1987 Sep/Oct;10(5):589-93.
ABSTRACT A study of an 8-week supervised exercise program for 8 adolescents with insulin-dependent diabetes mellitus (IDDM) and a matched unsupervised control group. Results showed improved glycemic control and cardiorespiratory fitness in the group with IDDM. No changes were noted in the unsupervised control group.

Epilepsy

AUTHOR Bjorholt PG; Nakken KO; Rohme K; et al;
TITLE Leisure time habits and physical fitness in adults with epilepsy.
SOURCE *Epilepsia* 1990 Jan/Feb;31(1):83-7.

ABSTRACT This study examined the physical fitness of 44 people with uncontrolled epilepsy. They were found to be only half as active physically as the general population. The authors found that though the subjects lived near excellent facilities offering a more active lifestyle, the subjects chose passive, sedentary activities. There was a greater decrease in aerobic capacity with age of the subjects.

AUTHOR Nakken KO; Bjorholt PG; Johannessen SI; et al.;
TITLE Effect of physical training on aerobic capacity, seizure occurrence, and serum level of antiepileptic drugs in adults with epilepsy.
SOURCE *Epilepsia* 1990 Jan/Feb;31(1):88-94.

ABSTRACT This study evaluates a physical training program for persons with epilepsy. While precautions need to be followed, the authors found that most persons benefitted from the regular, intensive exercise. One person did have epileptic seizures with exercise. The authors present several areas for future study, including the effect of exercise on the metabolism of anticonvulsant medication.

Hemophilia

AUTHOR Koch B; Galioto FM; Kelleher J; et al.;
TITLE Physical fitness in children with hemophilia.
SOURCE *Archives of Physical Medicine and Rehabilitation* 1984 Jun;65(6):324-6.

ABSTRACT This study used bicycle ergometry to measure several fitness parameters in 11 boys with hemophilia. Fitness parameters included total work, mean power, maximum work load, and physical working capacity. The authors found both strength and endurance to be significantly less in the subjects than the population without hemophilia. The authors recommend that physicians prescribe individualized exercise programs to promote physical fitness in children with hemophilia.

Vision and Hearing Impairments

AUTHOR Hanna RS;
TITLE Effect of exercise on blind persons.
SOURCE *Journal of Visual Impairment & Blindness* 1986 May;80(5):722-5.

ABSTRACT This article presents a literature review on the physical fitness status of students with visual impairments or blindness. The author also presents reviews on physical education and recreation programs. Suggestions are included on how to successfully include students with visual impairments in regular physical education classes and recreational programs.

AUTHOR Hopkins WG; Gaeta H; Thomas AC; et al.;
TITLE Physical fitness of blind and sighted children.
SOURCE *European Journal of Applied Physiology and Occupational Physiology* 1987 Jan;56(1):69-73.

ABSTRACT In this study, children with and without blindness were compared to determine any differences in physical fitness. After exercising on a treadmill, it was discovered that children with blindness had a lower oxygen intake, lower activity levels, lower scores on the step test, and greater skinfold thickness. Researchers concluded that children with blindness are less fit than children without blindness partially because of their lower level of physical activity.

AUTHOR Lee M; Ward G; Shephard RJ;
TITLE Physical capabilities of sightless adolescents.
SOURCE *Developmental Medicine and Child Neurology* 1985 Dec;27(6):767-74.

ABSTRACT This study investigated the physical fitness of a group of students who are blind. They participated in four 45-minute adapted physical education classes a week at a residential school. Their fitness level was found to be comparable to that of normal, sighted children. Additional training produced only minor changes.

AUTHOR Short FX; Winnick JP;
TITLE The influence of visual impairment on physical fitness test performance.
SOURCE *Journal of Visual Impairment & Blindness* 1986 May;80(5):729-31.

ABSTRACT The authors used the UNIQUE test of physical fitness to determine the level of physical fitness in students with visual impairments. Students with vision impairments were significantly less fit than their peers with normal sight. The consistent finding of significant differences between children with normal sight and those with visual impairments indicates that national norms for a sighted individual cannot be used with the population having visual impairments.

- AUTHOR** Titlow LW; Ishee JH;
TITLE **Cardiorespiratory testing of persons who are visually impaired.**
SOURCE *Journal of Visual Impairment & Blindness* 1986 May;80(5):726-8.
- ABSTRACT** This article investigates the differences in three tests of cardiorespiratory endurance in adolescents with vision impairments. The tests were 600 yard run/walk, step test, and bicycle ergometer. The authors found the 600 yard run/walk and the bicycle ergometer allocated subjects into similar fitness classifications. The step test tended to underestimate the subjects' fitness levels.
- AUTHOR** Weitzman DM;
TITLE **Motivation: The key to physical fitness in the blind adult.**
SOURCE *Journal of Visual Impairment & Blindness* 1986 May;80(5):745-8.
- ABSTRACT** The author discusses some of the forces working against physical fitness for individuals who are blind. Several motivational tools are also described. They include psychological counseling; brutal confrontation; personal monitoring and goal setting; sexual motivation; ego and self-esteem as motivators; role models; and physiological motivation.
- AUTHOR** Winnick JP; Short FX;
TITLE **Physical fitness of adolescents with auditory impairments.**
SOURCE *Adapted Physical Activity Quarterly* 1986 Jan;3(1):58-66.
- ABSTRACT** This study uses the UNIQUE test, a six-item battery, to test the fitness of children without auditory impairments and children with auditory impairments. Except for the sit-up test, there were no significant differences between adolescents who hear and those with hearing impairments or deafness. However, differences were noted between age groups and gender for both groups.

II. TRAINING AND EDUCATIONAL MATERIALS

- TITLE** Carol Johnson
SUPPLIER Coronet/MTI
ADDRESS 108 Wilmot Road, Deerfield, IL 60015
PHONE (708) 940-1260
DATE 1980
- ABSTRACT** Born with one arm, Carol Johnson nevertheless became a champion gymnast. This moving film includes footage of both the private Carol, coping with college life, and the public Carol, performing in a nationally televised competition and dealing with a knee injury that occurs on film. Available in videotape (1/2" VHS) or film (16 mm). Rental is \$75.00. Purchase: \$300.00.

TITLE Crossbar
SUPPLIER University Film & Video
ADDRESS 1313-5th Street S.E., Suite 108, Minneapolis, MN 55414
PHONE (612) 627-4270
PRODUCER Learning Corporation of America
DATE 1979

ABSTRACT A true story of a young man whose athletic career supposedly ends when he loses his leg in an accident. When denied the opportunity to compete, he and his parents challenge the decision. Rental: \$23.00 plus Shipping and Handling. Call 1-800-847-8251 to order out of Minnesota.

TITLE Epilepsy and Sports Participation
SUPPLIER Epilepsy Education
ADDRESS 5775 Wayzata Blvd., Ste. 255, Minneapolis, MN 55416
PHONE (612) 627-4477
PRODUCER John Gates, M.D.; Susan Whalen, R.N., B.S.N.
DATE 1981

ABSTRACT This brochure provides the information necessary to assist in making decisions about physical activity and participation in sports. Cost: \$.30 per copy.

TITLE The Fitness Program
SUPPLIER Learner Managed Designs, Inc.
ADDRESS 2201-K West 25th, Lawrence, KS 66045
PHONE (913) 842-9088
PRODUCER Schiefelbusch Institute for Life Span Studies, University of Kansas
DATE 1992

ABSTRACT These materials provide a comprehensive physical fitness training curriculum. An Instructor's Guide for teacher trainers provides masters for transparencies and all information needed to present the seven module program as a workshop or part of a course. A Teacher's Guide is available and serves as the text of the workshop or course. It includes information that teachers would need to begin a fitness program for their classes and also includes masters (for photocopying) of consumable charts and data sheets used by students in the program. The Teacher's Guide could also be used by parents to design fitness programs for their children. Included are two videotapes for use by students—one aerobic exercise and one on strength-building. Cost for complete package is \$359.00. Components can also be purchased individually.

TITLE | **Keep Fit While You Sit**
SUPPLIER | **The Disability Bookshop**
ADDRESS | **P.O. Box 129, Vancouver, WA 98666**
PHONE | **(206) 694-2462 or 1-800-637-2256**
DATE | **1990**

ABSTRACT | **This exercise program is targeted for persons who have limited use or no use of their lower body. Designed by a physical therapist, it uses aerobic exercises that work the torso, arms, neck, and shoulders. These exercises help to improve cardiovascular endurance and upper body strength. Purchase price: \$29.95.**

TITLE | **An Introduction to Fitness with Persons Who Are Disabled**
SUPPLIER | **Vinland National Center**
ADDRESS | **3675 Induhapi Road, P.O. Box 308, Loretto, MN 55357**
PHONE | **(612) 479-3555**
PRODUCER | **Christopher C. Roland, Ed. D. Larry Partridge**
DATE | **1985**

ABSTRACT | **This manual is designed to encourage persons who have disabilities as well as health care, recreation, and education professionals to begin implementing or expanding fitness training programs. The Vinland Center has also produced manuals for other types of activities. Cost: \$6.95 (\$2.00 Shipping & Handling)**

TITLE | **Survival Run**
SUPPLIER | **University Film & Video**
ADDRESS | **1313-5th Street S.E., Suite 108, Minneapolis, MN 55414**
PHONE | **(612) 627-4270**
PRODUCER | **Pyramid Films**
DATE | **1981**

ABSTRACT | **Blind since the age of 19, Harry Cordellos tackles northern California's notorious footrace guided only by the voice and arm of his sighted partner. Tension builds as the pair meet and conquer Dipsea's challenges. Beginning the narrow, unpaved twisting course, they climb 671 treacherous steps—half the distance to the top of the Empire State Building. They run down the 45-degree slope of Suicide Hill, up 1,400 feet to the top of Mount Tamalpais, then down to the ocean for an exhilarating finish. Rental: \$21.50 (plus Shipping & Handling) Call 1-800-847-8251 to order out of Minnesota.**

TITLE 3 Track
SUPPLIER National Film Board of Canada
ADDRESS 1251 Avenue of the Americas, 16th Fl., New York, NY 11020-1173
PHONE (212) 586-5131
PRODUCER Taylor GW; Hopkins D; Fox B

ABSTRACT A short, live-action film about a ski school for pupils with physical disabilities. These ski devotees are coached by dedicated volunteer instructors from the Canadian Ski Alliance. They have worked together to accomplish what for some might seem an impossible task: to master the sport of skiing. Available VHS or 16 mm. Actual purchase price depends on the type of medium selected.

III. RESOURCES

The following are sources of information about athletic programs and activities for persons with disabilities:

- ◆ **Exceptional Parent Magazine 1991 Apr/May;21(3),26:36-8.**

This issue contains a resource section that has an extensive list of suppliers of adaptive fitness, sports and recreational equipment, and a directory of national recreation organizations.

- ◆ **The Institute for Rehabilitation and Research (TIRR)**
1333 Maursund
Houston, TX 77030
713/797-5945

TIRR's education department maintains a computerized database and can provide information about educational resources (films, videos, etc.).

- ◆ **National Handicapped Sports**
4405 East-West Highway, Ste. 603
Bethesda, MD 20814
1-800-966-4NHS

NHS sponsors a variety of sports and recreation activities through a network of community-based chapters. Special outreach programs are performed for children, and scholarships to offset program costs are available for children with disabilities whose parent is a Vietnam veteran (Agent Orange Class Assistance Program).

- ◆ **North American Wheelchair Athletic Association (NAWAA)**
Mainstreaming for the Future
P.O. Box 26
Riverdale, NY 10471

NAWAA's corporate packet and fact sheet gives detailed information regarding their various programs, including workshops and clinics, referral sources, and competitive sports teams. NAWAA is committed to sports for children with disabilities.

- ◆ **Sports 'n Spokes**
5201 North 19th Ave., Ste. 111
Phoenix, AZ 85015
602/246-9426

A bimonthly magazine that covers wheelchair competitive sports and recreation for persons with spinal cord injury, spina bifida, amputation, and some congenital defects. Each issue lists a variety of sports associations.

CYDLINE Reviews

Please copy and share the contents of this publication. We ask that you credit the National Center for Youth with Disabilities as the source of information.

National Center for Youth with Disabilities/Society for Adolescent Medicine

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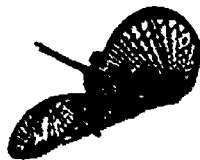
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