



JUVENILE ARTHRITIS

DEFINITION:

Juvenile arthritis is a general term for all types of arthritis that occur in children. An estimated 285,000 children under age 17 are affected by juvenile arthritis, and juvenile rheumatoid arthritis (JRA) affects up to 50,000 children.

Juvenile rheumatoid arthritis is the most prevalent form of arthritis in children. There are three major types of JRA:

- Pauciarticular
- Polyarticular
- Systemic

The signs and symptoms of JRA vary from child to child. The arthritis must be present consistently for six or more consecutive weeks before a diagnosis of JRA can be established. The type of arthritis is determined according to the symptoms experienced during the first six months of the disease. The most common features of JRA are:

- Joint contracture, which results from holding limbs in a flexed position for an extended period, causes tendons to tighten and shorten.
- Joint damage caused by long-lasting inflammation that erodes joint surfaces. Altered growth may result from joint inflammation that speeds up or slows down the growth centers in bones.
- Inflammation of the synovium lining of the joint causes heat, pain, swelling and stiffness. This can cause limitation in range of motion, joint tenderness and pain.

ADAPTED PHYSICAL ACTIVITY:

Regular exercise plays the crucial part in the treatment of JRA. The goals of regular participation in physical activities are:

- To enhance social integration
- To keep joints mobile or regain lost motion
- To keep muscles strong or regain strength
- To make everyday activities like walking, dressing or eating easier
- To improve general fitness and endurance
- To have fun while taking part in family, school or community based activities

Participation in physical activities should be carefully monitored by a "motor team" consisting of the individual's Adapted Physical Education Teacher, Physical Therapist, Occupational Therapist, Recreational Therapist and Physician. Participation in leisure, recreation and sport activity is important for students with JRA to develop confidence in their physical abilities, develop self-concept, and enhance health and wellness.

Learners should be encouraged to choose sport or activity of their interest with guidance for maximum joint protection. Activities that exercise joints and muscles without putting too much stress on joints, like swimming, should be encouraged.

SUGGESTED ACTIVITIES:

- Swimming
- Water Walking
- Aqua Aerobics
- Deep Water Jogging
- Bicycling and stationary cycling
- Weight Training

Strength training is important for students with JRA, but you must consider safety. Do not put too much stress on joints, use light weights with repetitions, and machines that keep weight constant, avoiding sudden stress when weight is picked up or moved.

Aquatic programs through YMCA:

The YMCA, in cooperation with the Arthritis Foundation, designed an aquatic program to improve flexibility, strength and cardiovascular fitness (contact your local YMCA).

GUIDELINES FOR ACTIVITY TO ENSURE MAXIMUM BENEFIT AND SAFETY

- Be consistent
- Build up gradually
- Exercise when symptoms are least distressing
- Do not overdo
- Listen to body signals
- If the joint feels hot, avoid exercise
- Set realistic goals
- Avoid bouncing or jerky motions
- Exercise in smooth and steady rhythm
- Alternate rest with activity

Taken from Carol Eustice (About.com) ‘Guide to Arthritis’

RECOMMENDED WEB SITES:

[American Juvenile Arthritis Organization \(AJAO\)](#)

AJAO provides exceptional guidelines for teachers and parents of students with JRA to ensure successful and appropriate education. This AJAO School Web Page is designed to provide teachers, school administrators, school personnel and parents information about children with juvenile arthritis in the school setting.

[Arthritis Foundation](#)

Merck Manual

This content was created by Martin Kudlacek, Doctoral Student in Adapted Physical Education, Texas Woman's University, Fall, 1999.

Information on this sheet contains only suggested guidelines. Each student must be considered individually, and in many cases, a physician's written consent should be obtained.