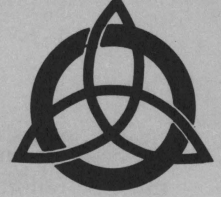


HOME ECONOMICS GUIDE



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Joint Protection For People With Arthritis

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Arthritis literally means inflammation of a joint. However, approximately 100 different conditions causing pain or dysfunction of joints and other connective tissues throughout the body are referred to as "arthritis." The two most common types are Osteoarthritis (degenerative joint disease) and Rheumatoid Arthritis.

Osteoarthritis is often called the "wear and tear" disease that sooner or later affects almost all of us. About 12 million people are affected seriously enough to require medical attention. Osteoarthritis is characterized by degeneration of the cartilage and eventually the bone. This causes pain and stiffness in the affected joints. The joints most commonly affected are the weight-bearing joints, for example the hips and knees and the distal (end) finger joints, neck, and lower back. Often the finger joints become knobby. Unlike other types of arthritis, this condition affects only the joints and occasionally the ligaments surrounding the joint.

Rheumatoid arthritis is an inflammatory disease affecting the joints, often the muscles and blood vessels, and sometimes the lungs and other parts of the body. It is potentially the most crippling form, but with proper treatment the majority of people with rheumatoid arthritis are not severely handicapped by pain or deformity. Although rheumatoid arthritis may strike at any age, the highest incidence of disease is in the 20-60 age group. The incidence of the disease is three times as high among women as it is among men. The disease can begin slowly or abruptly. It may come and go for indefinite periods of time or it may be a continuing, progressive disease from the very beginning. It is characterized by pain and swelling of the joints, particularly of the hands, fingers, wrists, toes, and less frequently other joints, and by prolonged stiffness in the morning. It saps energy, destroys connective tissue, and may cause severe deformities. Although there is no cure, much can be done to



Joint deformity is often the result of rheumatoid arthritis.

lessen the disabling effects of this disease. Therefore, if you have symptoms of rheumatoid arthritis, you should be evaluated by your doctor or a rheumatologist, who is an arthritis specialist.

Because of the many kinds of arthritis, it is important that you have a definite diagnosis by a physician. After the doctor has evaluated you and made a diagnosis, a basic home treatment program of proper medication, rest, prescribed exercise, and good joint protection will help keep the joints limber and muscles strong, reduce inflammation, and decrease pain.

Because of drug therapy or the natural remission of the disease, a person with arthritis may have periods of reduced pain and increased energy. During these times the person may believe that it is unnecessary to continue the basic treatment program. However, continuing the program is essential to prevent a flare-up and joint damage.

The disease affects each person differently, therefore

the basic treatment plan of medication, rest, and exercise must be tailored to meet each individual's needs. However, some basic guidelines are applicable to all:

- Eat a well balanced diet of high quality protein, including milk; fruits; vegetables; and cereal products. (For additional information, see UMC Extension Publication #1918, "Food for Fitness", available at your University Extension Center.)
- Maintain a normal weight. Reduce if you are overweight. Excess weight causes additional strain on weight-bearing joints. (See UMC Extension Publication #1980 "Waist Control", available at your University Extension Center.)
- Get a sufficient amount of rest. Bed rest plus daytime rest periods may total 12 to 14 hours in a 24 hour period.
- Use your body correctly to protect joints, avoid pain, strain, and deformity.

Joint Protection

Joint protection is moving, using, and positioning the body to avoid pressure and strain on affected joints while performing daily tasks. It is important to protect joints because if small joints and muscles are strained, joint ligaments may be stretched. Stretched ligaments result in weaker, less stable joints which can become deformed more easily.

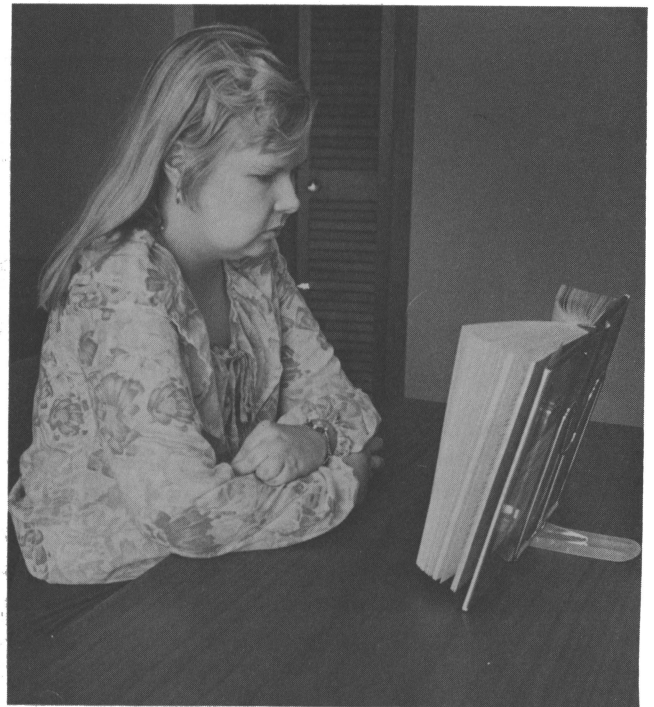
Principles of Joint Protection

- A. Spread stress and strain over several joints to avoid stretching joint ligaments. (Ligaments hold the bones together at the joints.)
- B. Use larger and stronger joints and muscles to do the load of work instead of small or weak ones.
- C. Avoid holding the hands in the same position for long periods of time. This is called static holding.
- D. Limit or avoid activities that put pressure on hands and fingers in a downward or outward position.
- E. Limit or avoid activities that create pressure on any arthritic joint.
- F. Halt any activity if you experience discomfort on any part of the body affected by arthritis.

Employing these principles of joint protection will require changes in work habits, and performance of tasks will be slowed until you are accustomed to the new methods. Severe deformities may be avoided, the crippling process slowed, and pain relieved by proper joint protection.

Homemaking Activities

Except during flares when the joints are swollen, hot, and very painful, most homemaking activities can and should be continued. A homemaker may find it impossible to do some tasks without causing excessive pain and frustration; however, by using adaptive measures and devices, most work can provide light exercise and be good therapy for joints and muscles. UNDER NO CIR-



Use a bookstand or holder for propping items to avoid static hand holding.

CUMSTANCE SHOULD PERFORMANCE OF DAILY TASKS OR ACTIVITIES BE SUBSTITUTED FOR THE INDIVIDUALIZED EXERCISE PROGRAM PRESCRIBED BY YOUR ARTHRITIS SPECIALIST.

Leisure Activities

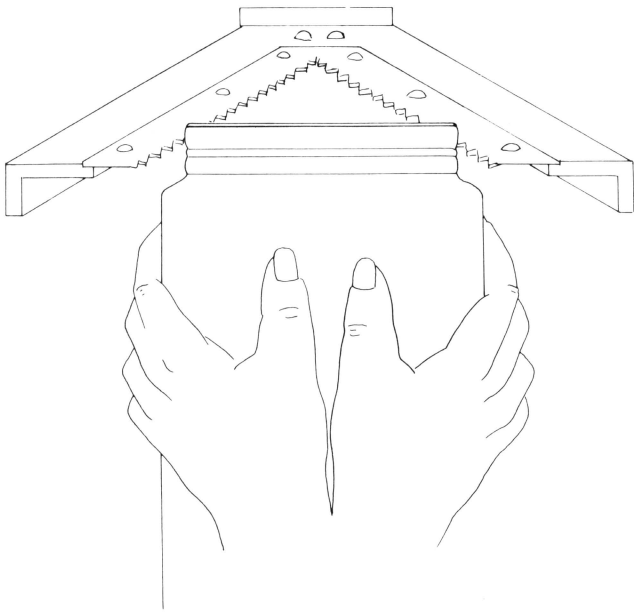
People with arthritis are encouraged to try a variety of crafts and activities. If after working at any activity the joints still hurt for three to four hours after stopping or there is increased pain the next day, you have overdone. Work for a shorter time or substitute new methods or activities.

All activities should be evaluated in view of the amount of pressure on joints. With any hand work or activity, rest the fingers and hands frequently. Limit or avoid activities using downward and outward hand or finger motions, or those applying pressure on affected joints.

General Guidelines

Here are some general suggestions for avoiding strain on affected joints:

- Eliminate unnecessary tasks.
- Simplify tasks by eliminating unnecessary steps.
- Plan a work schedule to alternate heavy tasks with light tasks and rest periods.
- Perform the hardest task when you are rested.
- Plan ahead and space work to allow for adequate rest during or between tasks.
- Do not start an activity unless it can be halted when you begin to experience discomfort.



Use a wedge-shaped jar opener for screw-type jar lids or bottle caps.

- During an activity involving the hands and fingers, stop frequently, extend the fingers and stretch to relax them.
- Assemble all ingredients, tools and equipment before starting a task. This saves steps and energy.
- Never try to lift or carry heavy loads.
- Use a wheeled cart for moving heavy items or for gathering several objects at one time to reduce the number of trips and avoid having to carry them.
- Slide items along a counter or table to avoid lifting.
- Use a lightweight basket that can be carried on the arm instead of carrying items in the hands.
- Sit to work; prolonged standing puts stress on the lower extremities.
- Use both arms and hands when picking up or pouring from a heavy container. This reduces stress on joints.
- Movement of hands should always be toward the body.
- Choose tools with large handles or build up the handles of knives, peelers and other often-used items with rubber tubing, sponge, or cloth to avoid the need for a closed hand.
- Hold tools with fingers comfortably spread apart and completely grasped around the handle with the thumb extended to meet the fingers.
- Do not hold a tool or utensil handle between the fingers. This forces the fingers toward the little finger, which will lead to deformity.
- Avoid static holding. Anchor food to be pared, cut or chopped on a special board with nails or prongs; prop the newspaper or magazine instead of holding it; set all items down rather than holding them.
- Select easy-to-open containers when grocery shopping.

- Use canisters with easily removed lids for often-used staples such as flour, sugar, and salt.
- Use an electric can opener that can be operated with the palm of the hand.
- Never use a manual can opener that requires turning the handle toward the little finger side.
- Use a wedge-shaped, wall-mounted jar opener for opening screw-top jars.
- Use lightweight mixing bowls, sauce pans and dishes.
- Use a wet cloth, sponge cloth, or rubber mat under bowls or pans on the counter when stirring or mixing to keep the container from sliding.
- Use long-handled measuring cups that can be grasped by the whole hand.
- Use wooden spoons for stirring or mixing.
- Use rubber scrapers for easy removal of food from bowls, pans or dishes.
- Use a lightweight, long-handled dipper for ladling liquids to avoid lifting heavy teakettles or full pans of food.

Joint Protection—Homemaking Activities

When hands start to draw or become deformed they usually do so in the direction of the little fingers. Proper work habits must be formed to prevent this outward drawing of the hands and further joint damage.

Turn all knobs (e.g. door); and controls (e.g. range) counterclockwise or toward the thumb when using the right hand (clockwise when using the left hand). For controls that turn in one direction only (clockwise for the “on” position and counterclockwise for the “off” position), learn to use the left hand to turn on and the right hand to turn off so the hands always turn toward the thumb and body.

Always stir counterclockwise (toward the thumb) when stirring with the right hand. Stir clockwise (toward the thumb) when using the left hand. Alternate hands frequently to rest them. Slip a large sponge (for example, a large sponge hair roller) or rubber tubing onto the spoon handle or wrap a cloth around the spoon handle to avoid a tight grip.

The handle of the spoon should be held vertically (parallel to the knuckles), with the fingers spread apart and comfortable while stirring. Never allow a tool to slip between the fingers, which would force them to the little finger side.

Opening Jars

Use a wedge-shaped, wall mounted jar opener, such as Zim Jar Opener, (see references 1 and 2) for opening screw-type jar lids or bottle caps. This type of opener can be ordered from most hardware stores or from some of the firms listed at the end of this publication. Rotate the jar clockwise, using both hands to avoid strain to finger and



With fingers extended, use palm of hand to guide sponge for cleaning tasks.

wrist joints. If this type opener is not available, avoid unnecessary strain on the fingers by placing the palm of the right hand flat on top of the jar—push down and turn.

A damp cloth or piece of rubber under the jar will help keep it from slipping. For good downward pressure, the jar can be placed on the cloth or mat in the sink. Tighten jar lids with the left hand, turning toward the thumb or clockwise.

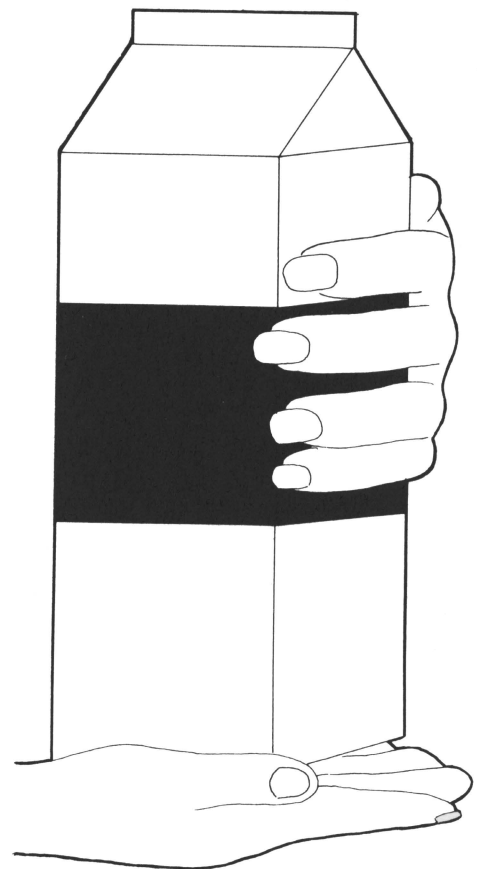
Keeping Hands Flat

Keep wrists straight and fingers comfortably extended while resting as well as while working. Avoid tasks that cause the wrist and hands to be pulled downward.

Avoid excessive strain on the fingers. For example, never try to remove a stubborn spot by scrubbing it with the tips of the fingers. A better method is to use the palm of the hand to hold a large sponge or a large flat scouring pad for most cleaning tasks so the hands can be kept flat. Dishes can be cleaned with less effort and stress by using a plastic pad or a ball of nylon net. Excess water can be removed from the sponge and pads with the palm of the hand by placing it on the sink and pressing down with the flat of the hand. Never squeeze or wring a sponge or cloth in the usual manner because this tends to force the fingers in the direction of the little finger and stresses the joints unnecessarily.

Spreading Fingers When Lifting

Spread fingers apart when lifting objects. This spreads the weight of the item out over a larger area.



Use both hands to carry a heavy item.

Using Both Hands

Use both hands and arms to lift a heavy item, such as a quart of milk. When carrying a heavy item, it is better to place one hand under the object. Also, remember to spread the fingers apart to distribute the weight.

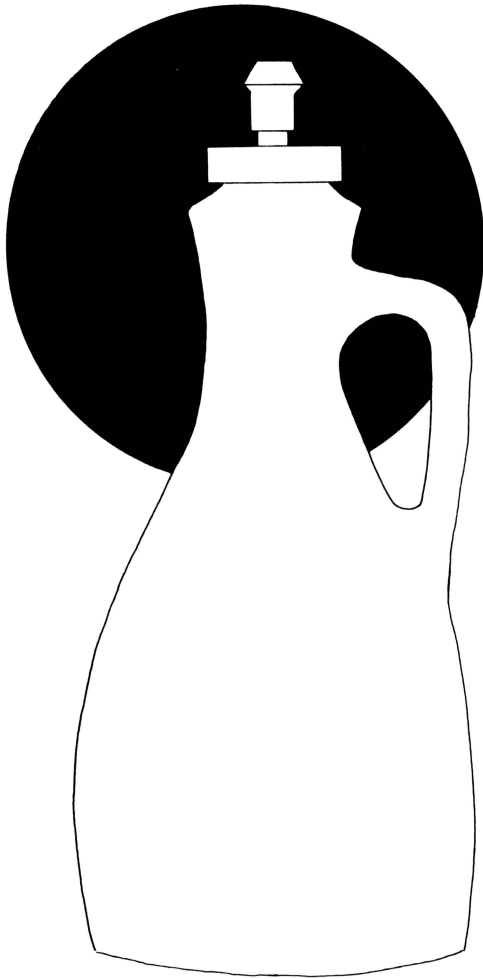
Sitting To Work

A person with arthritis in the lower extremities should sit down to work. A Utility Lift Chair (see reference 5) or an adjustable counter stool with back support (such as those available from Cosco Home Products) are good choices. If you have a comfortable chair you wish to use, leg extenders can raise the seat up as much as eight inches.

Because sitting and rising again is tiring, sitting to work can be a nuisance if all materials aren't at hand. So gather all equipment and materials first, then sit down to complete a task.

Selecting Proper Containers

When shopping, select containers that will be less likely to damage the joints. Purchase the smaller size, even though the dollar cost per unit of the product may be greater. Handling the heavier object will result in joint damage which may require costly corrective surgery. One can buy larger sizes of items such as oil and syrup and have



Use pull-up spouts on lightweight plastic containers for liquids.

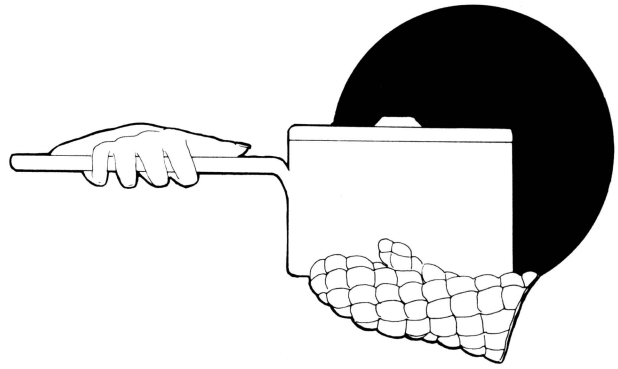
someone else transfer the contents to smaller containers. Lightweight plastic containers are preferable to heavier cardboard boxes or glass. Instead of containers with screw-on caps, buy the ones with pull-up spouts, such as those found on some syrup bottles. The spout can be left up and the liquid poured without having to remove the cap. This is an example of eliminating an unnecessary step.

Moving Heavy Items

Do not grip the handle of a heavy saucepan or try to lift it with one hand. Slide dishes, pans and equipment along the counter instead of lifting. If a container must be lifted, use both hands with fingers extended and spread. By using large pot holders or long oven mitts to handle hot pans or objects, the wrists and forearms can help support the object. (These can be ordered from Miles Kimball.) Use a wheeled cart for transporting heavy items and a light-weight basket over the arm for moving many lightweight objects.

Developing Sit Down Work Surfaces

A board, such as a chopping board, may be placed on a pulled-out drawer and used as a work surface if the drawer



Use pot holder or oven mitt to support heavy containers.

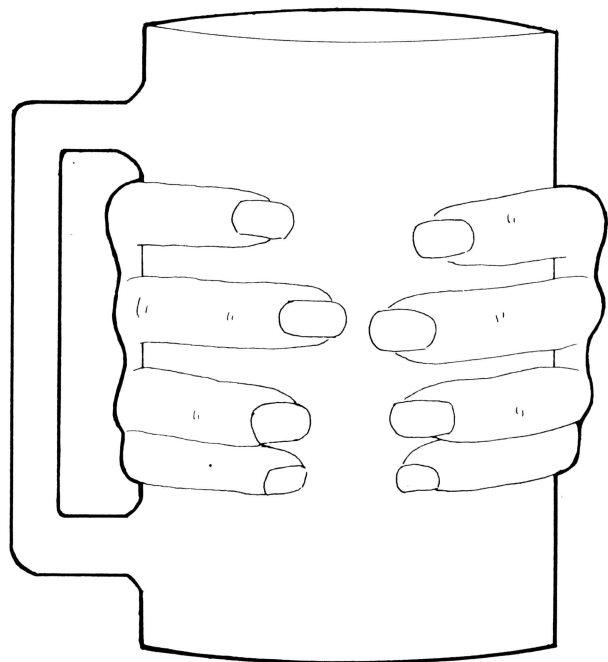
is the proper height. The drawer should go over the thighs when seated and the top of the drawer should be low enough so the hands are a little below the elbow when working.

Holding Cups

An insulated plastic cup with a very large handle is suggested for beverages. The handle should be wide enough to allow all four fingers to slip through so the weight of the cup can be partially supported by the palm of the hand. The weight could be further distributed by holding the cup with both hands.

Opening Containers

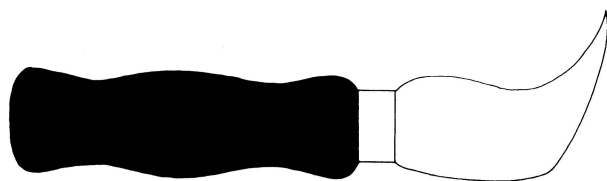
Opening packages can be one of the most difficult tasks for a person with arthritis. When grocery shopping, try to select easy-to-open containers. Fold-top boxes (e.g., cereal), and containers with pouring spouts (e.g., salt) should be opened with a table knife or other tool instead of thumb and fingers. A table knife is also used to open milk



Support thermal beverage cups with both hands.



Open flip-top boxes with hand and arm, not the fingers.



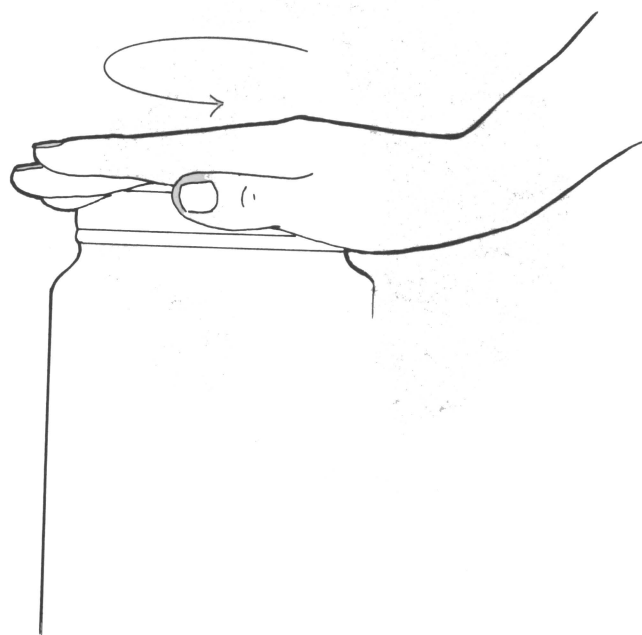
A linoleum knife is a useful tool for many tasks.

cartons. Lay the carton on its side. Wrap the hand firmly around the knife and use the blade to separate the lips. Set the carton up and finish opening it with a knife blade. Then with the heels of the hands, not the fingers, press the spout open.

Boxes with pull-strips or perforated indentations should not be opened with the thumb or fingers as the direction on the boxes state. This will weaken the joints by stretching the ligaments. It is better to lay the box down and use a linoleum knife to slit the top open.

The linoleum knife, which has a sharp, curved blade and a large handle, is also useful for opening frozen food cartons and many other tasks.

Flip-top boxes can be opened easily by laying the box down and pushing the lid open with the whole hand and

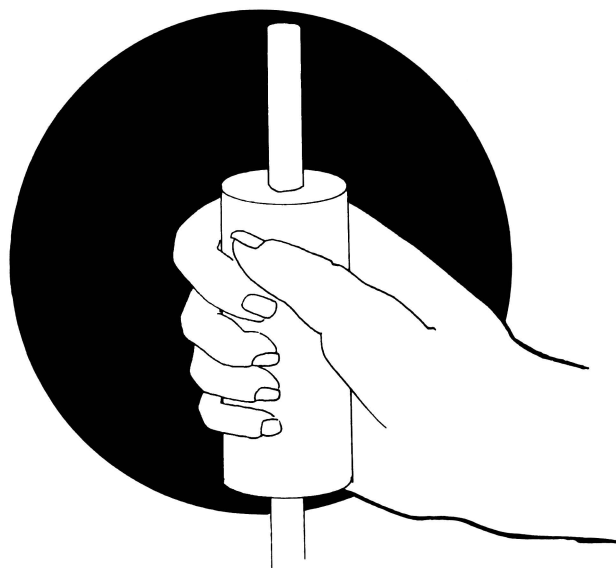


Keeping fingers straight, use palm of hand to open jar lid, turn toward thumb.

arm. Never pry with the fingers because it can cause further joint damage.

Limiting, Altering or Avoiding

There are some activities that the person with arthritis should limit, alter or avoid. Operating a canister or tank-type vacuum cleaner for carpeting where the cleaning efficiency is primarily dependent on downward pressure on the vacuum cleaner handle is one example. Pressure is put on the wrist and finger joints and the hand is drawn in a downward and outward position. This strains finger and wrist joints and will hasten deformity. An automatic, self-propelled vacuum cleaner for use on carpets will be less harmful to hand and arm joints.



Avoid tight grip by building up handles with sponge or cloth.



Avoid tight grip; use palm to turn knobs and controls toward thumb.



Automatic, self-propelled vacuum cleaners are less harmful to hand and arm joints.

A stick-type vacuum cleaner, sometimes called the electric broom, will be easier on joints for cleaning hard surface floors than a broom or dust mop.

Joint Protection—Leisure-Time Activities

Some activities such as sewing, knitting, or crocheting may need to be re-evaluated. A person who can no longer crochet fine thread may be able to crochet yarn.

Some who can no longer crochet or knit may find needlepoint, rug hooking, and/or liquid embroidering an enjoyable and creative activity.

Hand sewing and cutting fabric with regular scissors causes pressure on the wrist and finger joints. The use of electric scissors or using both hands with regular scissors will help reduce stress. An electric sewing machine with many automatic features will eliminate much hand sewing. By reducing pressure and stress to the wrist and fingers, a person with arthritis can continue this activity with more comfort and less potential damage to the joints.

Regardless of what you are doing, it is important to remember that prolonged or static holding of items is harmful to joints. Stop, straighten the fingers and elbows, relax the shoulders, rotate the head, and rest frequently. If even short periods of an activity cause increased pain, it must be avoided.

Summary

If you have symptoms of arthritis, see your doctor or an arthritis specialist. **DO NOT TRY TO DIAGNOSE YOURSELF!**

Follow a home treatment program of medication and exercise prescribed specifically for you by your doctor to help reduce pain and inflammation, keep joints limber and muscles strong, and prevent deformity.

Eat a balanced diet, reduce weight if necessary, and get sufficient rest to help control the disabling effects of arthritis.

Use joint protection measures while performing homemaking tasks, hobbies, and other activities, to reduce pain and joint damage.

For more information about arthritis, or to learn the location of your nearest Arthritis Treatment Center, contact either of the following regional chapters:

Eastern Missouri Chapter
The Arthritis Foundation
P. O. Box 1144
St. Louis, MO 63188

or

Kansas City Chapter
The Arthritis Foundation
2727 Main Street
Kansas City, MO 64108

or the National Office:

The Arthritis Foundation
3400 Peachtree Drive, N.E.
Suite 1101
Atlanta, GA 30326

Many of the special items mentioned in this bulletin are available from large hardware stores, housewares departments of department and variety stores, or may be ordered from catalogs from supply houses such as:

1. FashionAble
Rocky Hill, NJ 08553
2. Fred Sammons, Inc.
Box 32
Brookfield, IL 60513
3. Miles Kimball
41 West Eighth Avenue
Oshkosh, WI 54091

4. Cosco Home Products
2525 State Street
Columbus, IN 47201
5. Ortho-Kinetics, Inc.
P. O. Box 436
Waukesha, WI 53186

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