

**Physical and Occupational Therapy**

# **Methods to Protect the Hands in the Presence of Rheumatoid Arthritis**



## **METHODS TO PROTECT THE HANDS IN THE PRESENCE OF RHEUMATOID ARTHRITIS**

The aim of this guide is to teach you that the joints in the arthritic hand can be damaged by continued stress of everyday use and that you can learn to protect them.

After you learn the principles of joint protection you will recognize the damaging stress to your hands caused by everyday activities. Then you can begin to do something positive to help yourself.

In some instances, it may be suggested that you accept help or stop the activity entirely, if there seems to be no way to accomplish it by protective methods. It should be understood by you and your family that it is better to have their assistance than to struggle through some stressful activity by yourself. Persistence can promote joint damage when exercised at the wrong time or with poor judgement. The often heard advice of "you should do it because it is good for you," is a destructive one, if the way and the extent to which you must do it requires you to struggle and to have lasting pain.

You should not get involved in prolonged activities which tax you beyond your endurance. Start everything with the understanding that you can take time out, quit or get help to finish the job. This will require some planning. Remember that work and rest must be in sensible proportions. You can get too involved in processes such as cooking complicated meals, or driving too far by yourself, or by trying to keep pace with family and friends in recreational activities, shopping, etc. You should think twice before entertaining the whole family on holidays.

Why should you be concerned about the manner in which you use your hands?

It is known that continued and rather constant use of the hands in natural ways puts stress on arthritic joints and the tissues that support them. This kind of use can contribute to deformity. Deformity can lead to limitation in the use of the hand, with loss of dexterity and skills.

### **STRESSES TO AVOID:**

**Avoid using tight grasp.** This happens when you carry heavy objects such as handbags, shopping bags, pails and baskets by the handles. It also happens when you use screwdrivers, shears and pliers. Learn to hold everything no tighter than necessary. Tight grasp contributes to ulnar deviation (shifting of the fingers toward the little finger side of the hand) and dislocation of other joints.

**Avoid pressures against the lateral side (thumb side) of each finger.** This encourages ulnar deviation of the fingers. You contribute to this deformity when you prop your chin on the side of your fingers; when you push against them in the same way to get up from a chair; when you turn a key in a lock; when you push a drawer shut with the side of your fingers.

**Avoid all pressure against the backs of your fingers.** This contributes to dislocation of the large joints between the palm and the fingers (metacarpalphalangeal joints). You contribute to this dislocation if you push against the backs of your fingers when you arise from a chair and also if you prop your chin on them in the same way.

**Avoid excessive and constant pressure against the pad of the thumb.** This happens when you must pinch too hard to manipulate small objects with force. Examples would include pressure to open a car door, sewing through tough fabric, and pushing against the thumb when arising to a standing position. All this pressure contributes to dislocation of the thumb joints. The thumb is necessary for all skills of the hand.

**Avoid prolonged periods of holding the same position.** This can be related to holding a book or sitting or standing too long at one time.

### **KEEP THESE PRINCIPLES IN MIND:**

1. Always use the strongest and/or the largest joint possible to do the task. This means instead of using your fingers, use your wrist; instead of using your wrist, use your elbow; instead of using your elbow, use your shoulder.  
**Example:** Use your arm to stir food in a bowl, not your wrist.
2. If you must lift an object, scoop it up in both hands with your palms upward. You will be lifting with your wrists, elbows, and shoulders instead of with your fingers.  
**Examples:** Handling dishes, coats, packages, books, laundry, etc.
3. Use your entire body to move heavy objects.  
**Examples:** Opening and closing heavy doors, drawers, and pushing and rolling objects on counters and floors.
4. Slide all objects which will slide and put whatever is practical on wheels.  
**Examples:** Slide pots and pans across stove and counter to sink. Use a kitchen cart for carrying foods and dishes and a laundry cart for laundry.
5. Add leverage to appliances and fixtures to reduce the force to operate them.  
**Examples:** Lengthen the lever of the can opener (electric), put an extension on the water faucet, put a lever on the door, car key, etc.

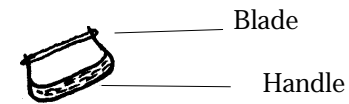
6. Hold all handles straight across the palm - never diagonally.  
**Examples:** Hold your knife and fork for cutting in an over-hand grasp and hold a mixing spoon the same way.

**Remember** to put your weight on the palm and never on the thumbs and sides or backs of your fingers when arising to your feet.

The following is a list of suggestions and articles which could reduce stress in your activities:

1. Cut meat with a **steak knife** or **paring knife**. Hold knife and fork handles straight across the palm with the sharp ends coming out by the little finger. To cut, you will be using your shoulder for motion and force. Try a **pizza wheel**, too. They can be purchased in supermarkets and houseware departments.
2. Lift a **dinner plate** with both palms upward.
3. Lift a **coffee cup** with both hands.
4. Press **washcloth** with your hand using the little finger side. (It is OK to allow the washcloth to drip.)
5. Squeeze **toothpaste** by pushing down on the tube with little finger side of your hand.
6. Use an **extension** on the **water faucet**. Push it on and off with the palm of your hand.
7. With rotary **phones** dial with a pencil held straight across your palm.
8. Use an **extension** on your **door** and **car key** and rotate it with the palm of your hand.

9. If opening the **car door** is difficult, use an aid to press the button.
10. **Twist** a jar cap off and on with the **palm of your hand**. Get help in loosening new jars and ask the family not to screw them on too tightly. There are several good jar opener aids (wrenches) on the market, available in houseware departments, supermarkets, and hardware stores. **Rubber mats** can aid in stabilizing the jar or opening the lid.
11. **Peel** the skin off potatoes and carrots with a **vegetable peeler**. They come in two styles. The better style for you has a handle that your fingers slip into. (See diagram)



12. **Vegetable paring** and **cutting boards** can be made at home using two aluminum nails or they can be ordered from a medical supply store. It can be used to hold the vegetable (on the nails) while you peel and slice it. You can also use a food processor.
13. **Stir mixtures** in a bowl by holding the spoon straight across the palm and stir with your shoulder.
14. **Slide pots and pans** on kitchen counter to stove and sink. Select only your lightest weight cooking dishes to use. Do not try to handle heavy iron skillets. Cooking dishes with loop handles on both sides are easier to handle.
15. When you get some new **everyday dishes, try plastic ones**. Since they are not heavy, you will find them easier to wash and handle.
16. Use a **high kitchen stool** with a swivel seat and good

supportive back, so you can sit for some jobs at the counter and sink. It is a good idea to sit if the job is going to take more than ten minutes.

17. Try a bent coat hanger for an **oven hook**. Use it to pull the shelf or pan out far enough to check your cooking. This helps if you cannot bend over easily.
18. Use an **electric can opener**. You can add length to its lever to reduce the force needed in pushing down. **Never use** the kind which you must twist between your index finger and thumb and at the same time hold very tightly in your other hand.
19. **Use a crank-type flour sifter**. The one with the spring-squeeze handle is not for you. You can also stir flour through an ordinary sifter.
20. Use **mitt potholders** since they enable you to lift hot pans with your palms.
21. **Rock your body forward three times** to assist you to rise from a chair.
22. Use another **pan for a prop** when pouring batter out of a **bowl** into a **pan for baking**.
23. Add a **belt for a loop** on any door at home that is difficult to open. This could be the refrigerator or oven door. Slip your arm into it up above your wrist and pull. It takes stress off your hands and wrists.
24. **When reading**, rest the book on the table.
25. A **lightweight reacher** helps you get things beyond your reach either in the cupboard or on the floor. It can help

sometimes in making the bed. A dressing stick can be used to lift a dress and hanger off the closet rod, to pull down the window shade and to push off your shoes and socks (hose) and lift straps up over your shoulder. Dressing sticks can be ordered through a medical supply store.

26. If your **electric iron** seems heavy, try a **travel iron**. It is suitable for limited pressing and weighs only 1-3/4 lbs. Whenever you iron, slide the iron to and from the article you are ironing rather than lifting it. You probably should not be doing a large amount of ironing. If you must do a lot, sit to do it. There are **adjustable height ironing** boards that are designed to give you room for your legs when you sit. As you purchase new clothes, buy as many drip-dry ones as you can, especially for children. Do not bother to iron sheets.
27. **Lightweight brooms** are usually available in the grocery stores if you look around a bit.
28. A **Flexi-Mop** is a **dust mop** with a flexible handle which allows dusting under furniture with less stooping and bending.
29. A **tank vacuum cleaner** with rotating top allows you to clean in every direction around it without moving the tank.
30. Use a **kitchen cart** to save steps and carrying in the kitchen. Use it to move foods from the refrigerator to the counter, to the sink, stove, and table. Use it to set and clear the table.
31. Use a **laundry cart** to transport laundry to and from the washing machine and clothesline. Never carry a heavy load

of laundry in a basket. If you do not use a cart, scoot a small basketful across the floor with your foot. Remember that dampness adds weight to the laundry.

32. Getting the **groceries** from the car into the house is a strenuous task and even more difficult if you must climb steps. Park the car as near the kitchen door as possible. If there is no one to help you, carry only the very perishable foods into the house yourself and leave the rest for someone else to bring in. You can always keep a few extra bags in the car into which you can transfer the amounts you can carry without stress in your arms.
33. There are **dustpans** which have long handles for persons who cannot bend over. They are sold in some houseware departments or hardware stores.