

**Mary Pack Arthritis Program
Occupational Therapy**

PATIENT EDUCATION: JOINT PROTECTION AND ENERGY CONSERVATION

The goals of treatment in arthritis are to maintain function, decrease pain, control the inflammatory process, and maintain muscle strength and joint mobility. These goals can be accomplished by:

- medication
- adequate rest
- exercise
- joint protection
- energy conservation

JOINT PROTECTION

- At rest – a method of supporting a joint in a comfortable and well-aligned position.
- During activity – a method of performing an activity that does not cause pain or permit harmful forces to strain the supporting structures and weight-bearing surfaces of the joint.

WHY?

- To reduce pain in a joint.
- To decrease joint damage and deformity.
- To decrease wear and tear on joint surfaces.

WHEN?

- When a joint is painful, swollen and warm.
- When ligaments have been stretched resulting in an unstable joint.
- When a joint is painful and stiff in degenerative arthritis.

HOW?

- Respect pain

Pain is an important warning sign. If an activity causes pain, which lasts more than an hour or two, you should change the way you do that activity or the duration of the activity.

- Local rest

Provide rest to a painful, inflamed joint by limiting movement and maintaining a good position. Supporting a joint with splints and braces can provide local rest.

- Avoid repetitive movements and static hold

Avoid repetitive movements and activities requiring a static hold since these may increase joint symptoms. It is important to take regular rest periods and change position often.

- Use Good Body Mechanics

Use the strongest or largest joint for the job and maintain good posture.

- Maintain muscle strength and joint range of motion

Do your exercise program regularly to maintain muscle strength and joint movement. Strong muscles help to support a joint and reduce stress on it. Lack of mobility can lead to a joint contracture, which can make normal function difficult.

- Use adapted equipment

Tools and utensils that have padded handles, non-slip gripping surfaces and long, levered handles are easy to use and put less stress on the small joints of the hands.

- Use light-weight equipment

Whenever you are shopping for a new tool, kitchen utensil or appliance, select one that is lightweight and comfortable to use.

- Use labour saving devices

Take advantage of as many labour-saving devices as you can.

Here are some suggestions for protecting your joints, both at rest and during activity:

Neck

Your neck should be in neutral alignment with your spine whether you are sitting, standing or lying down.

At Rest

- Have a firm, supportive mattress and use one down or qualofil pillow.

During Activity

- Work heights and storage shelves should be at the best height for you, to avoid excessive bending of your neck. Chairs should be comfortable and at the right distance from the work area.

- Use a soft collar to support your neck if it is painful.
- Avoid lying on your stomach
- Wear a firm collar if movement aggravates your neck.
- Use care when lifting and carrying; and avoid lifting heavy objects.
- Avoid leaning over your work (neck flexion) or looking up (neck extension) for prolonged periods.

Shoulders / Elbow

At Rest

- If a painful shoulder or elbow is keeping you awake at night, try supporting your arm on a pillow.
- 2" thick foam on top of the mattress accommodates painful bony prominence at the shoulder and elbow.
- An elbow-resting splint can reduce pain in an inflamed elbow.

During Activity

- Avoid weight-bearing on arms to push up from a low chair, toilet or bottom of tub.
- Lift and carry items close to your body or use shoulder bag and pockets to carry items.

Wrist / Fingers

At Rest

- Wear a resting splint at night or when resting to protect inflamed, painful joints and help reduce pain.
- If you have splints for both hands, wear them on alternate nights, to leave one hand free if switching off the lights and pulling up blankets.

During Activity

- Use two hands to carry an object instead of one.
- Use traction for a firmer grip e.g. jar opener, wet cloth.
- Use leverage to reduce the force needed e.g. tap turner, chef's knife.
- Use large handles e.g. build-up with rubazote, foam or "good grip" utensils.
- Avoid tight grip.
- Avoid prolonged static grip e.g. driving, knitting. Take frequent breaks.
- Wear a wrist working splint to support a painful or inflamed wrist.

Hips / Knees

At Rest

- Rest in bed with knees out straight. Do not use pillows under your knees.
- Stop a painful knee or hip from rolling with a pillow on either side of the leg (or a pillow between the legs in side lying).
- Use a leg resting splint if the knee is very painful.

During Activity

- Use a cane on the opposite side of your painful hip or knee, especially when walking outdoors.
- If stairs are difficult, use railings and go up stairs one at a time, using your strong leg first to "step up" and your weaker leg first to "step down".
- Use raises on chairs and toilet to avoid low surfaces when sitting.
- Use a bath bench or bath chair or stand to shower.
- If you are overweight, you can reduce stress on hips and knees by losing weight.
- Sit to work when possible
- Save steps if possible, plan ahead.
- Avoid putting weight on a flexed knee (kneeling, squatting, resisted bicycling)
- A knee brace may help to reduce pain during activity.

Ankles / Feet

At Rest

- Rest in bed with a pillow supporting the soles of the feet.
- The pillow at the foot of the bed can also help lift the weight of the blankets off painful feet.
- If the ankle is extremely painful or swollen a resting splint can be made.

During Activity

- Wear supportive insoles to support painful joints and provide proper alignment.
- Reduce ankle pain by wearing a supportive ankle brace or high-top boots.
- Wear supportive shoes with:
 - a supportive arch
 - laces at instep
 - adequate toe depth and width
 - strong heel cup
- Sit to work when possible
- Save steps when working

ENERGY CONSERVATION

A method of planning and performing activities so that less effort is needed and fatigue can be reduced by balancing rest and activity.

WHY?

- To help combat fatigue and decrease the possibility of a flare-up.

WHEN?

- It is always important to get adequate rest and to use your energy wisely. When your disease is active, plan more rest breaks in your day.

HOW?

- Use efficient work methods

Analyse each task before you start to see if you can simplify the steps needed to complete it.

- Pace yourself

If you are fatigued, take a rest or change to an activity that uses different joints and muscles than the ones you have been using.

It makes sense to stop and rest before you get tired. Try to learn your capacity for work and if you want to extend it, do it in gradual steps.

- Plan ahead

Organize your schedule so heavy tasks are not all done on the same day.

- Plan storage and work areas

You can save steps by using work stations (store all items necessary for a task in close proximity). To avoid unnecessary bending and reaching, store frequently used items at convenient heights, within easy reach.

- Ask for assistance

If you know an activity is going to be too tiring for you, try to share the load.

- Prioritize your tasks

Do the most important jobs first. If you are tired, the remaining tasks can be left until you have rested or until another day. You may come to feel that some tasks can be eliminated.