



Hip & Knee Step by Step

How to Best Prepare for Surgery

A resource designed for patients managing pain to understand:

- How the Body Controls Pain
- Physical Activity
- Emotional Wellness
- Relaxation Therapy
- Complementary Pain Management
- Coping Mechanisms for Dealing with Pain
- Nutrition and Weight Management
- Smoking Cessation
- Physical and Occupational Therapy
- Assistive Devices
- Joint Injections

How the Body Controls Pain

Pain signals travel through a system of nerves located throughout your body. Pain information goes from your joint to several parts of the brain. The parts of your brain that recognize pain also help control mood, sleep, and hormones.

That's why having chronic pain can affect so many areas of your body and your daily life. Different factors, such as your own thoughts and emotions, can either make pain worse or help your body to produce pain-relieving chemicals.

A comprehensive pain management plan should include:

- Education about the pain mind-body connection
- Coping mechanisms and complementary/alternative therapies for dealing with arthritis pain
- Relaxation techniques to support physical and emotional relief from arthritis pain

Goals of Treatment and Physical Activity



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By working with your health care team, you can shape the right treatment program for you. A treatment program can help decrease pain and stiffness, improves movement, and increases your ability to do everyday activities.

The goals of treatment are:

- Controlling pain
- Improving and preserving joint function
- Slowing down the progression of wear and tear in the joint
- Maintaining a healthy body weight or losing weight (if overweight)
- Maintaining your muscles which act as “shock absorbers”
- Improving overall health and well-being

Your plan should include a combination of treatments including regular physical activity, weight control, stress reduction, physical/occupational therapy, and complementary and alternative treatments.

Keep a health log or diary so you’ll be prepared to talk about your joint pain, medications, weight, mental health and the success of your treatment plan with your health care team.

Physical Activity

One of the most beneficial things you can do to manage your pain is to simply move. Exercise is a treatment s and slows the progression of wear.

Your health care team can help create an easy-to-follow activity plan. The plan will also teach you how to protect your joints while staying active.

Try to incorporate the following three types of regular physical activity into your routine:

Flexibility and balance exercises. Slow, gentle stretches can help prevent joint stiffness and make it easier to get moving. Always stretch muscles while they are warm to reduce injury. Add balance exercises to help reduce the risk of falls. Yoga and tai chi are both good for stretching and balance.

Aerobic activity. Any activity that gets your heart rate going will strengthen your heart and lungs. Water exercise, walking and riding a stationary bicycle are good options.

Strengthening exercises. Activities that maintain or build muscle strength are important for your joints. Hand-held weights, exercise bands and/or weight machines can help build muscle strength.



Emotional Wellness & Mind-Body Connection

You can learn to manage your pain by thinking of pain as a signal that can be changed by taking positive actions. Small changes in attitude and outlook about the pain you experience can help reframe your mindset, which supports more successful treatment outcomes.

A few exercises to strengthen your emotional wellness and mind-body connection are listed below.

Keep a positive attitude.

Don't allow pain to control your life. Work to control your pain by:

- Thinking positive thoughts
- Having a sense of humor
- Eating a balanced diet
- Exercising regularly
- Surrounding yourself with positive people
- Enjoying activities with friends and family

Distract yourself: The amount of time you spend thinking about pain has a lot to do with how much pain you feel. One way to take your mind off pain is to focus on something else. The more you focus on a hobby or other activity, the less you'll think about pain.

Shift your perspective: Think of pain as your body's message to do something different. For example, if your pain is worse after sitting for a long time, your body may be telling you to get up and move around.

Practice positive self-talk: What we say to ourselves often affects what we do and how we look at life. Practice turning your negative statements around. Instead of saying "My knees are killing me," say "Going for a walk usually loosens them up, I'll try that."

Remember the factors that worsen pain symptoms:

- Less activity
- Emotional and physical stress
- Focusing on pain
- Fatigue and poor sleep
- Anxiety
- Depression

Change your habits

Try doing something positive in place of an old pain-escaping habit. Instead of reaching for another dose of pain medicine, reach for an ice pack or warm compress.

Keep track of what works and what doesn't

Make a chart or journal of the pain-control methods you've tried and track ones that work best for you



Relaxation Therapy for Pain

Intense levels of pain and stress can exacerbate your pain. Relaxation therapy can help you manage the physical pain as well as emotional tension.

Stressful situations cause an increased perception of pain. Without proper management of stress, your pain perception can worsen. Using body-mind strategies will help to encourage you to be active in your pain management.

Diaphragmatic breathing

- Sit comfortably, with your knees bent and your shoulders, head and neck relaxed.
- Place one hand on your upper chest and the other just below your rib cage.
- Breathe in slowly through your nose so that your stomach moves out against your hand. The hand on your chest should remain as still as possible.
- Tighten your stomach muscles, letting them fall inward as you exhale through pursed lips. The hand on your upper chest must remain as still as possible

Progressive muscle relaxation

- While inhaling, contract one muscle group (for example your upper thighs) for 5 seconds to 10 seconds, then exhale and suddenly release the tension in that muscle group.
- Give yourself 10 seconds to 20 seconds to relax, and then move on to the next muscle group (for example your buttocks).
- While releasing the tension, try to focus on the changes you feel when the muscle group is relaxed. Imagery may be helpful in conjunction with the release of tension, such as imagining that stressful feelings are flowing out of your body as you relax each muscle group.
- Gradually work your way up the body contracting and relaxing muscle groups.
- Start with your hands, arms, upper body and then lower body



Complementary and Alternative Pain Management

Controlling pain is the hardest part of managing a chronic illness. Pain can lead to a vicious circle of inactivity, which leads to greater pain and muscle weakness, and thus greater inactivity. Pain may affect your ability to do daily tasks and can also lead to depression.

Most people feel their symptoms get better with physical activity and exercise. Your doctor may also recommend medications to help control your pain enough to start an exercise program.

However, the complex nature of pain and its unique interpretation by the brain of each patient means that complementary and alternative pain management strategies should be explored and incorporated into your personal pain management plan.

Coping Mechanisms for Dealing with Pain



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Complementary and alternative medicine (CAM) therapies are usually combined with conventional treatments to manage pain and enhance emotional and mental health. These include supplements, touch therapies (e.g., massage, physical therapy), therapeutic exercise (e.g., yoga and tai chi), acupuncture, biofeedback therapy, meditation and relaxation techniques. CAM therapies are usually combined with medical treatments to manage pain and improve mood and coping strategies.

In addition to exercising, staying active and losing weight, you can fight pain with some tried-and-true remedies, including:

Acupuncture, the practice of inserting fine needles into the body along special points, has been shown to control pain. The needles may stimulate nerves to block pain signals.

Biofeedback uses sensitive equipment to help you become more aware of your body's reaction to stress and pain. If you practice relaxation while using biofeedback, you can learn to control some of your body's responses to pain.

Hot and cold treatments can reduce the pain and stiffness. Cold packs numb the sore area and reduce inflammation and swelling. Cold is especially good for joint pain caused by a flare. Heat relaxes your muscles and stimulates blood circulation. We always say, "Heat before, ice afterwards." Usually applied directly to the painful joint, heat may be more useful for chronic pain or for "warming up" before exercising. Cold packs may provide relief from acute pain or for after exercising.

Massage can help soothe pain, improve joint function, and ease stress and anxiety. It brings warmth and relaxation to the painful area. You can massage your own muscles, or you can go to a massage therapist.

Ultrasound uses high-energy sound waves to bring comfort to painful joints and muscles.



Nutrition and Weight Management

Another key to managing your pain is achieving and staying at your recommended weight. Benefits include:

- Easing pain by reducing stress on your joint
- Enhancing your overall feeling of well-being

The basic rule for losing weight is to eat fewer calories and increase your physical activity. Your healthcare team can help you develop a safe, simple weight-loss program.

- Try to eat only low glycemic foods. The glycemic index is a system of assigning numbers to carbohydrate-containing foods according to how much each food raises your blood sugar. Low glycemic food raise your blood sugar less than high glycemic foods.
- Replace one or two meals per day with a high-protein supplement (aim for 20mg of protein)

Do:

- Count calories--try to stay under 1800 calories per day
- Keep a food/calorie/activity log
- Use a measuring cup and/or food scale for portion sizing
- Weigh yourself daily and record a log

Move:

- Use a pedometer and or activity monitor
- Get 10,000 steps per day
- Record your activity on your log

Every week strive to improve on one thing that you need to change. Long lasting changes are best accomplished when we make slow, gradual changes.

Stick to you goals

- Make the good choice the easy choice.
- Don't go hungry--good decisions are easier if you are not hungry. Keep an apple, orange, or other healthy snack easily available.
- Plan ahead--look at a menu prior to arriving at the restaurant so you know what the healthy choice are
- When bad things go wrong--remember, everyone has a bad day or makes a bad choice, Do NOT let this one moment derail you and your progress.



Smoking Cessation

How to Quit Smoking Cigarettes

How can you quit smoking? To give up smoking your body has to stop craving nicotine. It is hard to quit, but most people can do it. Keep in mind there are many health benefits to quitting smoking. Using treatment can double or triple your chances of quitting. Tools that you can include:

- Medicines that reduce your cravings or withdrawal symptoms
- Support Groups
- Counseling from doctors, pharmacist, dentist, therapist, or nurses.

How do you make a plan to quit?

1. **Get Ready**
 - Choose a quit date that works for you. Do not try to quit during high-stress times
 - Get rid of your cigarettes ashtrays, and lighters. Clean your house and clothes to get rid of smoke smell
 - If you live with someone who smokes, discuss quitting together. If this is not an option, talk to the person(s) and not smoking around you. When you can, avoid places where others are smoking
2. **Make a plan for quitting**
 - Decide what times are the hardest for you, such as when you are restless or around others who smoke. Plan how you will handle your cravings during these times.
 - Change the routine. Avoid those things that make you reach for a cigarette.
 - Find ways to cope. For example, take a walk after dinner instead of having a cigarette.
 - Find ways to cut down in stress in the first few weeks of quitting.
3. **Get support**
 - Ask loved ones or people who used to smoke for support and tips.
 - Get counselling. People who use phone, internet, group, or one-on-one counseling are much more likely to stop smoking.
 - Join a support group for people who smoke. Find internet chat room for 24-hour support.
4. **Use Medicine**
 - Medicines reduce your craving and withdrawal symptoms. Talk to your doctor or pharmacist about the options
 - Nicotine replacement therapy (NRT). You can buy nicotine gum, patches, and lozenges without a prescription.



Interventions for Pain Relief

Physical and Occupational Therapy

You may find that pain limits your ability to exercise, walk, bathe, dress, climb stairs and do household chores. Physical and occupational therapists can help improve your ability to perform these activities. The therapist can help you by designing a program that may include:

- Improving your joint range-of-motion and muscle strength
- Providing and fitting assistive devices to make daily activities easier
- Showing you how to use heat and cold therapy
- Teaching you how to protect your joints

Assistive Devices

Assistive devices can help decrease your pain and improve your ability to move. They may include canes and walkers. Braces are not usually suggested as they may cause muscle weakness.

Joint Injections

There are several types of joint injections that can help manage the pain caused by arthritis talk to your doctor about options.

Cortisone injections work by treating the inflammation that can cause knee pain, swelling, and warmth. The effects of a cortisone injection can last from 3 weeks to 3 months, and occasionally longer.

A hyaluronic acid injection delivers lubricating fluid into the knee joint. The goal is to temporarily lubricate the knee joint, thereby decreasing knee pain and inflammation, improving knee function, and perhaps even slowing the degeneration process.