

January 2016

Exercise Helps Control Asthma



Asthma affects the daily lives of nearly 19 million adults in the United States. Typical asthma symptoms include shortness of breath, tightness in the chest, coughing and wheezing. Physiologically speaking, these symptoms are due to a **lack of airflow** through the lungs due to triggers—such as allergens, diet, pollution, smoking and weather—that cause inflammation, mucus buildup or narrowing of the airways.

While there is no cure for asthma, various medications—including anti-inflammatory drugs and bronchodilators—can be used to effectively control, relieve and prevent symptoms. If you suffer from asthma, a multidisciplinary treatment plan comprising **physical therapy** and medication (as directed by your physician) may allow you to achieve one of the main goals of asthma treatment: a normal, healthy lifestyle that includes exercise and physical activity.

Before starting an exercise program, it is important that you become adept at **monitoring and responding** to your asthma symptoms and understand how your asthma medications work. Once your asthma is properly treated and well controlled, physical therapy can help you enjoy the **mental and physical rewards of exercise**.

Some types of exercise that are best for people with asthma include activities involving **short, intermittent periods of exertion**, such as swimming, volleyball, gymnastics, baseball, biking, aerobics and walking.

While activities involving longer periods of exertion (such as soccer, long-distance running and basketball) and cold-weather sports (such as ice hockey, skiing and ice skating) may pose some challenges, we can create an individualized program that will allow you to **engage fully in these activities**. If sports are not for you, we can design a program that encourages you to work out at an appropriate level. We will also teach you effective warm-up and cool-down routines to help prevent or lessen symptoms that may arise during or after physical activity.

Asthma should not discourage you from exercising. Schedule an appointment to get started on an exercise plan that allows you to enjoy the **benefits of exercise** without experiencing asthma symptoms.

January 2016

Laying Down a New Surface on Your Shoulder



Osteoarthritis is a degenerative joint disease that occurs when cartilage that cushions the joint wears down, causing pain and swelling as the ends of two bones rub together. Although you may be more familiar with arthritis in the knee and hip, it can also affect the shoulder.

Although most of us know someone who has had a hip or knee replaced, it is also possible for the shoulder to degenerate to the point that replacement is necessary. However, in many cases physicians opt for a resurfacing of the shoulder—specifically, the head of the humerus.

The shoulder joint is made up of the upper arm bone, or humerus, which ends in a ball that fits into the circular depression, or socket, of the scapula bone. (The socket itself is called the glenoid.) Nonsurgical treatments for shoulder osteoarthritis include rest, **range-of-motion exercises** and over-the-counter pain medications. Some cases, however, require **surgical intervention** in the form of humerus resurfacing. In this procedure, the physician replaces either all or part of the head of the humerus with a smooth metal ball. Unlike a total shoulder replacement, resurfacing surgery preserves the glenoid and some of the head of the humerus.

Following humerus resurfacing surgery, you will likely wear a sling for about four weeks. During that time, we will work with your physician to develop a program of gentle range-of-motion exercises to begin the **healing and recovery** process. Over the next several months, we will gradually add exercises designed to **build strength** in your arms and get you back to your daily routine.

Surgical treatment of shoulder arthritis is generally very effective in reducing pain and restoring range of motion. If your physician tells you that you are a good candidate for shoulder resurfacing, we will work with you and your physician to ensure that your **road to recovery** is a smooth one, and that you are back to performing daily activities as soon as possible.

January 2016

Build Up Your Middle to Reduce Knee Pain



Knee arthritis is the single greatest cause of chronic disability among adults in the United States. Many factors can lead to knee pain—arthritis, excessive foot pronation, muscle fatigue, even injury—but we have good news for you: Most chronic knee pain is preventable. The *New England Journal of Medicine* recently found evidence suggesting that **exercise and physical therapy** can be as effective as surgery in treating chronic, arthritis-related knee pain.

When muscles are forced to compensate for others that are weak or overused, injuries and chronic pain often occur. By strengthening and stretching key muscles and joints that support your knees, you can ultimately **relieve and prevent knee pain**. But the key to successfully preventing knee pain may surprise you: **strengthening your core**. An overall weak and inflexible core can impair arm and leg function, thus leading to knee pain and injury.

Your core consists of more than just your abdominals; it's made up of **all your torso muscles**, including those in your back, hips and upper thighs. Abdominal weakness may cause your leg bones to shift inward while your pelvis tilts forward, creating excessive lower-back curvature. Strengthening your core will also help keep your back in a neutral spine position, thus avoiding painful joint compression.

Increased core strength offers many benefits beyond reduced knee pain. You may notice improved posture, better balance, reduced back pain, easier breathing, increased range of motion and perhaps even weight loss or maintenance.

Whether you suffer from chronic knee pain or are recovering from a recent injury, we can design a core routine that's right for you. We will teach you how to use proper form to do some exercises safely and effectively on your own. Although it may be a challenge to get started, once you begin strengthening your core, you will notice an improvement in the way you look, feel and move throughout your day.

January 2016

Fit Over 50: Weight Training for Older Adults



Do the words “weight training” bring to mind sweaty 20-somethings in tank tops pumping iron? It may surprise you to hear that the group that benefits most from weight training is actually senior citizens, especially those who are sedentary or in poor health.

As we age, our muscles slowly begin to atrophy, a process called sarcopenia. Muscle atrophy progresses rapidly after the age of 50,

when we start to lose about 10% of our muscle mass each decade. The result is a loss not only in strength, but also in balance and coordination, putting you at a higher risk for falls, injuries and a less-active lifestyle. The good news is that **regular resistance and weight training** can slow or even reverse this process, while helping reduce ailments that tend to strike in the second half of life, such as arthritis, osteoporosis and even depression.

Weight training is considered so important for older adults that the American College of Sports Medicine has come out with specific recommendations for this age group. Their advice:

- Perform resistance training exercises two to three times per week to work the arms, legs and core muscles.
- Use an appropriate weight that allows you to do 10 to 15 reps per session before becoming fatigued.
- Incorporate both aerobic and strength training into your routine, with 20 to 60 minutes of aerobic activity three to five times per week, and 20 to 40 minutes of weight training two to three times per week.

Studies suggest that weight training after age 50 can reduce body fat, strengthen your bones and speed up your metabolism. But it’s important to begin cautiously when starting a weight-training program, especially if you’ve never participated in one before.

We can help you adopt a **healthy strengthening program** that is muscle saving and challenges your body without putting you at risk for strain or injury. Let us help you get started today, and before you know it you might be sporting a tank top of your own.

January 2016

Can TENS Relieve Low-back Pain?



If you have suffered from acute or chronic pain—including tendinitis, bursitis, osteoarthritis, fibromyalgia or recurrent back pain—you may have been treated with transcutaneous electrical nerve stimulation (TENS). This frequently used treatment is widely considered safe for many conditions. In fact, you may have even seen inexpensive units marketed for home use. Can at-home electrical stimulation be the ticket to safe, effective relief for low-back pain? The most likely answer: not completely.

TENS units use electrical stimulation and electrothermal therapy to deliver short-term pain relief by placing electrodes on the skin and delivering a low-voltage electrical current. While researchers are not sure how the therapy relieves pain, they believe the electricity stimulates nerves, confusing the brain and **blocking pain signals** from getting through.

These units can be purchased for at-home use, and they can be effective in the short term for many conditions. However, they are not a substitute for **addressing the root cause** of pain. Simply controlling pain is rarely the best course of treatment. In fact, after reviewing studies on the treatment of low-back pain lasting three months or longer, the official position of the American Academy of Neurology is that TENS has not been shown to be effective at reducing chronic low-back pain.

Talk to us before you purchase an at-home TENS unit. If you suffer from low-back pain or another ailment, make an appointment so we can assess your symptoms and the causes of your pain. The most effective long-term treatment will almost always include **a course of exercises** that you can perform at home.

We can design an **individualized program** of strengthening and stretching exercises, and guide you through the exercises here in our office. Performing these regularly will not only speed recovery but also keep your muscles, joints and discs healthy, lessening the chance of future back-pain episodes.