

OSU Sports Medicine



Exercise is Medicine

What if there was one prescription that could prevent and treat dozens of diseases?



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Physical inactivity is a fast-growing public health problem in this country and contributes to a variety of chronic diseases and health complications, including obesity, coronary artery disease, diabetes, high blood pressure, cancer, depression and anxiety, arthritis and osteoporosis. In addition to improving a patient's overall health, increasing physical activity has proven effective in the treatment and prevention of chronic disease.

A recent survey conducted of the public by the American College of Sports Medicine found that nearly two-thirds of patients (65%) would be more interested in exercising to stay healthy if advised by their doctor and given additional resources. Four out of 10 physicians (41%) talk to their patients about the importance of exercise, but don't always offer suggestions on the best ways to be physically active. Patients (25%) look to their doctor first for advice on exercise and physical activity. They turn next to fitness and health Web sites (24%).

The field of Sports Medicine has a vital role to play in the Nation's overall health and wellness. At the OSU Sports Medicine Center, we see an important role for exercise and physical activity in the promotion of health, and treatment and prevention of disease and injury. Our entire staff is dedicated to the concept that 'Exercise is Medicine'. Beyond the care of active individuals and those who want to be more active, we are engaged in research and education that promotes health and wellness and safety in sport and physical activity. We invite you to join our team as we share with you how we incorporate exercise into a personalized care program for you.



Julie Bishop, MD
Orthopaedic Surgeon, OSU Sports Medicine

I truly believe that prevention is always the best medicine and I am fully supportive of research and techniques that embrace this motto. As a sports medicine doctor I try to incorporate exercise as prevention into how I live my own life and I do believe that as doctors, we should try to express this to

our patients. However, as a surgeon, I primarily see patients when they are past the point of prevention. They present to me with tendon tears in the shoulder or cartilage tears in the knee that often require surgical intervention. Interestingly, I see a common misconception among many patients that exercise actually caused their problem. After they recover, they are hesitant to return to sporting activities for fear of injuring themselves again. This is exactly the attitude I try to change in my patients, as I believe staying fit will instead prevent the return of the problem.

When injuries occur they can be due to age-related wear and tear, or just taking the wrong step at the wrong time and falling. If the injury is surgical, the appropriate surgery is undertaken and the appropriate rehabilitation program is chosen for the postoperative course. Once recovery is complete, it is vital to build a long-term exercise program for the patient, which takes into account their specific injury. Patients who undergo repairs of tendon tears in the shoulder need to maintain good shoulder health! Keeping their shoulders strong and limber is the best medicine to prevent future problems. However, their exercise program needs to be tailored to their unique injury. Maybe they can't go back to extreme power lifting, but, they can certainly maintain a strengthening program at a lower level. A patient with cartilage tears in the knee needs to keep that knee moving and strong after surgery. Inactivity can lead to weakness, atrophy and poor joint nutrition. This is a setup for future problems. Perhaps marathon running is not the best choice for this patient, but there are many other great exercise choices which will help them accomplish the same goal.

In essence, our goal for our patients postoperatively is to return to a level of fitness that they can enjoy. Having a surgical sports injury is not a sentence to a life of inactivity. However it does inspire us to determine why the injury may have occurred and then design a fitness program that will be protective and beneficial to that body part. So although they may have suffered a setback, we hope they can come back stronger and better and learn good solid habits to prevent future injuries.

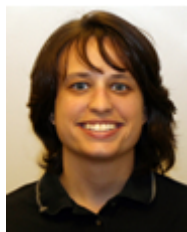


Renee Speigler, PT
Physical Therapist, OSU Sports Medicine & Rehabilitation

Patients seek physical therapy due to a variety of musculoskeletal, cardiovascular, and/or neurological diagnoses. Regardless of the diagnosis, exercise plays a key role in helping patients optimize their function. Inactive patients place greater stress on their joints due to limited range of motion, reduced strength in the surrounding musculature, and inefficient function. These deficiencies contribute to many of the musculoskeletal conditions such neck and low back pain, osteoarthritis, tendonitis/bursitis in addition to many other conditions seen in physical therapy. It is crucial that in order for a patient to be successful in physical therapy, he/she must commit to their rehabilitation program in the clinic and at home. Long-term compliance to their home program empowers the individual to help self manage their symptoms making each patient an integral part of their personalized medical care.

Physical therapists see a multitude of sports related injuries throughout the year. Soccer players often receive lower extremity injuries to the knees and ankles. Swimmers are at risk for shoulder and other upper extremity injuries. Lacrosse players may see a variety of injuries. Gymnasts are prone to back problems. As a result of any kind of injury or trauma, there is a loss in range of motion, strength and function. Placing those injured structures through a prescribed personalized progressive exercise program is critical to proper rehabilitation. Regardless of the sport, athletes need to follow a proper stretching, strengthening and functional rehabilitation program which helps them return to their sport

with the knowledge required to minimize future injury and optimize their performance. Whether you are an athlete or simply living life to the fullest, personalized medicine, which incorporates exercise into your rehabilitation program, is critical to success on and off the field.



Becky Daniels, ATC
Athletic Trainer, OSU Sports Medicine

As an athletic trainer, I am often the first medical professional to see an injury as well as the last line of defense in the return to play decision. In sports medicine we try to get athletes back into the game as soon as possible. However, the return to play decision following an injury should not be taken lightly. Returning safely is the key. To accomplish that task most effectively, the team approach is essential. Every aspect of sports medicine involves a team, in this case involving physicians, physical therapists, athletic trainers and the coaches. Not one day goes by where I don't communicate in some way with just about every member of the sports medicine professional and coaches. Athletic trainers can be the mediator between the medical staff, the parents and the coaches. Minimum requirements for return to play include a normalized range of motion for the injured body part and normal strength. Lack of either could lead to a re-injury. Working with rehabilitation professionals can help to recover the basic elements first, and then the focus will turn towards sport-related activities in a controlled environment.

It's important to involve the physician and the athletic trainer to safely transition the athlete back to sport. One of the ways to do this is with functional sport specific drills. For example, a basketball player following an ankle injury needs to be able to run, jump, and cut without any signs of favoring the injured limb in order to return to play. Performing some basic pass and shoot drills with controlled jump shots could help the athlete get more comfortable with the transition back to the court. As an athletic trainer, I work very hard to integrate elements of the sport into the entire rehabilitation process. Just because the basketball player has sprained her ankle, it doesn't mean she cannot do ball handling drills while sitting in a chair. Integrating sport skills is crucial with return to play decisions; it helps to get the athlete ready mentally and physically. The same concept can be applied to virtually any sport. For example, a golfer would want to make sure that he feels good both on the putting green and the driving range before attempting to play nine holes again. The key is to start gradually and not push the body beyond what it can handle, especially after getting clearance from the physician.