What is Osteoarthritis?

- Osteoarthritis is a progressive destruction of cartilage in joints and the formation of bone at the margins of the joint\(^1,2,3\)
- Development of osteoarthritis is not considered part of the normal aging process\(^1\)
- Osteoarthritis is worldwide one of the leading causes of pain and disability\(^1,3\)
- More than 20 million people are affected in the United States\(^1\)
- Widespread condition in adults over 65 years of age\(^1\)
- More common in women over 50 years of age\(^1\)

Benefits of Exercise

- Exercise is widely recommended for osteoarthritis symptom relief\(^2\)
- Exercise decreases pain, increases strength, and helps to improve function\(^2\)

Safety

- Always consult with your physician before starting any exercise program\(^4\)

Signs & Symptoms

- Morning Stiffness\(^1,2\)
- Joint Pain\(^1,2\)
- Swelling\(^1,2\)
- Loss of range of motion of one or more joints (not all joints are affected equally)\(^1,2\)
- Bone deformity\(^1\)
- Osteoarthritis does not always affect both sides of the body\(^1\)
- Symptoms do not always match the severity of the disease\(^1\)
- Most common affected joints: Hips and knees\(^2\)

Risk Factors

- Age\(^1\)
- Severe childhood trauma\(^1\)
- Repetitive microtrauma\(^1\)
- Obesity\(^1\)
**Exercise Recommendations**

### Aerobic Exercise
- Recommendation: 3-5 days per week for 20-30 minutes of moderate intensity aerobic exercise
- Begin with short bouts of light to moderate exercise, slowly increasing in intensity and time to 20-30 minutes per day
- Perform adequate warm up and cool down periods of 5-10 minutes
- Avoid vigorous-intensity exercise during acute flare ups or periods of inflammation
- Participate in activities that have low joint stress
- Walking, cycling, and swimming are all activities that cause minimal stress to joints

### Resistance Exercise
- Recommendation: 2-3 days per week
- Begin resistance exercise with low intensity weights and gradually increase over weeks to months
- Perform 1-3 sets involving 10-15 repetitions per exercise
- Avoid moderate to heavy resistance training during acute flare ups and periods of inflammation
- Some discomfort during or immediately after exercise can be expected

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References: