

Knee Arthritis

Diagnosis Explanation:

Knee arthritis is the degeneration of cartilage in the knee joint, leading to pain, stiffness, swelling, and reduced mobility. The most common type is **osteoarthritis**, which occurs due to wear and tear over time. Other types, such as **rheumatoid arthritis**, involve inflammation. Symptoms worsen with activity and prolonged standing but may improve with movement and proper treatment.

Specific Work Modifications:

- **If your job requires standing or walking:** Wear cushioned, supportive shoes and take breaks to sit when possible.
- **If your job involves lifting:** Use proper lifting techniques, avoiding excessive bending at the knees.
- **If your job is desk-based:** Keep feet flat on the floor and take breaks to stand and stretch.
- **Avoid:** Prolonged standing, deep squatting, heavy lifting, and excessive stair climbing.

Specific Activity Modifications:

- **If you run or play sports:** Switch to lower-impact activities like swimming, cycling, or elliptical training.
- **If you hike:** Use trekking poles, avoid steep inclines, and choose softer trails.
- **If you do weightlifting:** Avoid deep squats, heavy lunges, and leg presses. Focus on controlled, low-impact movements.
- **Avoid:** High-impact exercises, running on hard surfaces, jumping, and repetitive knee stress.

Recommended Supplements:

- **Glucosamine & Chondroitin** - 1500mg/1200mg daily for cartilage support.
- **Collagen Peptides** - 10g daily to promote joint repair.
- **Omega-3 Fatty Acids** - 1000mg daily to reduce inflammation.
- **Turmeric (Curcumin)** - 500-1000mg daily for pain relief.
- **Vitamin D3 + Calcium** - 1000 IU/500mg daily for bone and joint health.

Recommended Nutrition and Hydration:

- **Eat Anti-Inflammatory Foods** (salmon, leafy greens, berries, turmeric, nuts).
- **Increase Lean Protein** (chicken, fish, eggs, tofu) to support joint and muscle health.
- **Consume Hydrating Foods** (cucumber, watermelon, citrus) to maintain tissue

lubrication.

- **Limit Processed Foods & Sugars** to reduce joint inflammation.
- **Hydration:** Drink **8-10 cups of water daily** to maintain joint lubrication and prevent stiffness.

Home Exercise Prescription:

Early Phase (Reducing Pain & Improving Mobility):

- **Quadriceps Sets** - Tighten thigh muscle, hold for 5 seconds, repeat **10x, 3x/day**.
- **Heel Slides** - Gently slide heel toward buttocks to maintain knee flexibility, **10 reps, 3x/day**.
- **Seated Knee Extensions** - Slowly extend knee, hold for 5 seconds, repeat **10 reps, 2x/day**.

Strengthening Phase (Improving Stability & Function):

- **Glute Bridges** - Lie on your back, lift hips, hold for 5 seconds, repeat **10 reps, 2x/day**.
- **Mini Squats (No Deep Bending)** - Bend slightly at the knees, keep weight on heels, **10 reps, 2x/day**.
- **Step-Ups** - Step onto a low platform, push through the heel, repeat **10 reps, 2x/day**.

Advanced Phase (Enhancing Mobility & Returning to Activities):

- **Stationary Cycling** - Low resistance for **10-15 minutes/day**.
- **Balance Exercises** - Stand on one leg for **10-20 seconds**, increase as tolerated.
- **Water Aerobics or Swimming** - Reduces joint impact while strengthening muscles.

Helpful Books:

1. *Arthritis Without Pain: The Miracle of Cartilage Regeneration* - William Arnold, MD.
2. *The Knee Owner's Manual: Expert Advice for Treating Knee Pain* - Jordan Metzl, MD.

Click here for more orthopedic patient information.

Contact a Key West orthopedic clinic or reach out to Dr. Jason Pirozzolo.