

Weight, Obesity and Joint Health

What you're feeling

Your joints feel more than just heavy. High body mass index raises your risk of wear-and-tear arthritis in your knees and hands, no matter your metabolic health. This happens because obesity is a systemic disease with profound inflammatory consequences on joint health. It extends beyond its role as a mechanical burden on the knee. Fat distribution also matters. Central obesity is significantly associated with the risk of glenohumeral joint osteoarthritis. This link is especially evident in secondary glenohumeral joint osteoarthritis and normal body mass index populations.

You may notice pain that flares after activity or wakes you at night. Simple tasks become difficult. You might struggle with reaching behind your back to fasten a bra or tucking in a shirt. These movements stress the shoulder and hip joints. Your doctor knows that obesity and preexisting osteoarthritis are known risk factors for predicting poor outcomes and conversion to arthroplasty after knee arthroscopy. However, modern hip arthroscopy patients demonstrate improved patient-reported symptoms at the time of surgery.

Despite these challenges, your doctor can help manage your condition. Body mass index does not affect clinical outcomes following arthroscopically assisted posterior latissimus dorsi tendon transfer for irreparable posterosuperior rotator cuff tears. There are no significant differences observed between above-average and below-average body mass index groups. Body mass index was not correlated with clinical improvements following this procedure. Modern surgical practices and implant designs may have mitigated traditional obesity-related risks. This results in minimal impact on loosening and mechanical failure in total knee arthroplasty. You can move with confidence knowing that management of preoperative comorbidities and custom surgical planning can achieve outcomes comparable to those of patients with normal body mass indices at ambulatory surgical centers.

What's actually happening

Your body fat is not just extra weight. It is active tissue that releases inflammatory chemicals into your bloodstream. This creates a systemic disease state that harms your joints directly. The damage goes far beyond the simple mechanical burden of carrying extra pounds on your knee.

High body mass index raises your risk of wear-and-tear arthritis in both your knees and hands. This happens regardless of your metabolic health. In fact, the link between high body mass index and knee arthritis is often stronger in people who are metabolically healthy. Your doctor also notes that where you carry fat matters. Central obesity significantly increases the risk of shoulder joint arthritis, even if your overall body mass index is normal.

This inflammation can speed up joint damage after certain injuries. For example, if you have a tear in the knee's shock-absorbing meniscus, a higher body mass index leads to faster arthritis progression after repair. Similarly, obesity and existing arthritis are known risk factors for poor outcomes after knee arthroscopy. These factors may lead to a higher chance of needing joint replacement later.

However, modern surgery has changed the landscape. Your doctor can achieve excellent results for obese patients using total hip or knee replacement. Advanced surgical planning and implant designs have reduced traditional risks. There is minimal impact on implant loosening or mechanical failure in these cases. Even with a body mass index greater than 40, early complications are not necessarily higher in ambulatory settings.

Some specific procedures show different patterns. For irreparable shoulder tendon tears, body mass index does not affect clinical outcomes after tendon transfer. For robotic-assisted knee replacement, severe obesity shows a nonsignificant trend toward higher complications, while low body mass index is linked to a significant increase in arthrofibrosis (stiffness). Overall, obesity increases the risk of revision after partial knee replacement and early complications in revision surgery, but it does not automatically rule out successful joint replacement.

What we can do about it

Obesity is a systemic disease that causes inflammation, which harms your joints beyond just adding weight. Managing this requires a mix of mechanical, metabolic, and immune health strategies. Your doctor will tailor these to your specific needs to help preserve your joint function.

Start with self-management through lifestyle changes and physiotherapy. Regular exercise helps maintain movement and strength without overloading your joints. Give this approach time to work, as consistent effort is key to seeing improvements in pain and mobility.

If lifestyle changes are not enough, your doctor may discuss medical management options. This can include pain medications or anti-inflammatories to reduce swelling and discomfort. For some patients, hormone therapy or other treatments might be considered to address underlying metabolic issues. Your doctor will weigh the benefits of these treatments against potential risks to find the right balance for you.

When symptoms remain severe despite these efforts, it is time to seek specialist input. Your primary doctor may refer you for a deeper assessment by an orthopaedic specialist. In some cases, after careful evaluation, a procedure might be considered to address the root cause of your pain. This decision is based on your specific condition and how well you have responded to earlier treatments.

When to see someone

See your GP if you have persistent joint pain that does not improve with rest. Ask for a specialist review if you experience weakness, instability, or locking in your joints. Seek care if symptoms interfere with your sleep or work. Sudden worsening of pain is also a reason to consult your doctor. Obesity increases the risk of wear-and-tear arthritis in the knee, hand, and shoulder. This risk exists even if you are metabolically healthy. High body mass index is a known factor in joint health. Early evaluation helps manage these risks before they lead to severe damage or the need for joint replacement surgery.