

## **Obesity and Your Joints**

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It is probably obvious that obesity puts extra strain on your joints, especially the joints of the lower back and legs, which carry the additional weight. This additional wear and tear increases the risk of joint pain and degeneration (osteoarthritis) and the joints at greatest risk are the knees, especially in women, the joints of the feet and the lower back. But this “wear and tear” is not the whole story, as the chemical, hormonal, and inflammatory effects of obesity also influence joint pain and joint deterioration. On the other hand, greater strength of the muscles that move and support the joints appears to reduce this damage.

The knees are the joints most affected by obesity and weight gain, with a 4-5 fold increase in the risk of developing osteoarthritis (OA). Weight loss reduces the risk of developing OA, knee pain and progression of OA. Modest weight loss in association with muscle strengthening exercises can reduce pain, improve function and reduce the ongoing mechanical forces on the joints.

Foot pain is experienced by more than 50% of obese Australians. The risk is greater with higher weight and with the “apple” distribution of body weight rather than the “pear” distribution. Foot pain is often more persistent in those with poor mental health. The pain can be nonspecific or related to a range of known causes such as chronic heel pain, bunions, tendon inflammation, flat feet or OA of the joints. There is some evidence that surgical weight loss reduces the pain, but specific foot care and advice may be needed to reduce pain and improve mobility.

Obesity and lower back pain are both very common complaints within the general community. The value of weight loss as a therapy for back pain is unclear, but weight loss is advised especially in those with severe obesity, as an addition to the appropriate care for the back condition and pain. Weight loss surgery has been shown to improve functional capacity and have a moderate influence in reducing back pain.

Gout, a specific cause of acute and chronic arthritis related to raised blood uric acid levels, is more common with increasing levels of obesity. It is readily manageable with diet, lifestyle interventions and specific medication. Weight loss is advised to assist in reducing attacks of gout and to reduce the risk of high blood pressure, diabetes and heart disease that also accompany high uric acid levels.

Hip and knee joint replacement are commonly needed to replace irreparably damaged joints and generally overweight and obese people do very well, with results comparable to those of people of normal weight. However, severely obese Australians should obtain advice regarding weight loss from orthopaedic and weight management experts prior to joint replacement. It would appear to be a myth that replacing the joint enables weight loss following surgery – the obesity and joint issues need separate treatment.