# Leading Cause of Knee Replacement, Infertility, Liver Failure

Analysis by Dr. Joseph Mercola ✓ Fact Checked

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## STORY AT-A-GLANCE

- Rates of obesity are skyrocketing around the globe, bringing with them associated health problems like infertility, liver failure and knee osteoarthritis leading to an increase in knee replacement surgery
- Obesity is associated with an increased risk of undergoing knee replacement surgery
- Women in the most severe obese category (class 3) were more likely to have knee replacement surgery at a younger age — 7.2 years earlier than normal weight women
- Close to 90% of people who undergo primary knee replacement in Australia are overweight or obese
- Children and adolescents who were overweight or obese tended to have smaller testicles compared to their normal weight peers; maintaining a healthy body weight in childhood could help prevent male infertility later in life
- Ultraprocessed foods high in fructose and "vegetable" oils are driving up rates of obesity and nonalcoholic fatty liver disease (NAFLD)

Rates of obesity are skyrocketing around the globe, bringing with them associated health problems like infertility, liver failure and knee osteoarthritis leading to an increase in knee replacement surgery.[1] In 1975, an estimated 6.4% of women and 3.2% of men were considered obese,[2] but this has risen dramatically.

In 2017, the prevalence of obesity in the U.S. reached 41.9%, with severe obesity reaching 9.2%.[3] Heart disease, stroke, Type 2 diabetes and certain types of cancer are all considered obesity-related conditions,[4] while knee osteoarthritis, a common cause of pain and disability, is also linked to obesity.

Now, with people developing obesity at younger ages, knee replacement surgery — a questionable medical procedure — is also becoming more popular at younger ages.[5]

### Rising Obesity Driving Knee Surgery at Younger Ages

In Australia, close to one-third of adults are obese.[6] In a study comparing data from the Australian Bureau of Statistics' 2017 to 2018 National Health Survey with data from the National Joint Replacement Registry, researchers revealed that obesity is associated with an increased risk of undergoing knee replacement surgery.

Out of the 56,217 patients in the study who received knee replacement due to osteoarthritis, 31.9% were overweight and 57.7% were obese. The risk of knee replacement increased with body mass index (BMI) category, such that obese women between the ages of 55 and 64 were 4.7, 8.4 and 17.3 times more likely to have a knee replacement if they had class 1, class 2 or class 3 obesity, respectively, compared to women of normal weight.

What's more, those in the most severe obese category (class 3) were also more likely to have knee replacement surgery at a younger age — 7.2 years earlier than normal weight women. While the mean age that women of normal weight have knee replacement is 71.3 years, those with class 3 obesity had the surgery at a mean age of 64.1 years.

Men with class 3 obesity were also 5.8 times more likely to undergo knee replacement than normal weight men, and also had the surgery 7.3 years earlier.[7] Overall, the researchers noted that close to 90% of people who undergo primary knee replacement in Australia are overweight or obese. As for why obesity increases the risk of knee osteoarthritis (OA), they explained:

*"The contribution of obesity to the development of knee OA is multifactorial. Not only does obesity cause excessive loading of joint surfaces, but dyslipidemia and adipose tissue inflammation increase cytokine production, which also contributes to the aetiology of OA."*

### Knee Surgery No Better Than Placebo

Addressing the underlying obesity that's driving up rates of osteoarthritis is essential to protecting your knees. Yet, surgery is a commonly recommended solution in conventional medicine. You should know that multiple studies have shown, however, that knee surgery may be no better than placebo.

The meniscus inside your knee is a thin crescent-shaped disc of cartilage that serves as a cushion between your femur and tibia and helps stabilize your knees.

Over time, your meniscus can develop tears, especially if you have arthritis. The standard orthopedic surgeons intervention for meniscal tears is performing an arthroscopic partial meniscectomy. In fact, arthroscopic surgery on the meniscus is the most common orthopedic procedure in the U.S.,[8] but one study conducted in Finland found that arthroscopic knee surgery for degenerative meniscal tears provides no more benefit than "sham surgery".[9]

A landmark study conducted in 2002 also looked at arthroscopic surgery for knee osteoarthritis, and found the real surgery had no benefits over the sham procedure.[10] While the surgery did not work better than placebo, it's been found that arthroscopic knee surgery with meniscectomy increases the risk of future knee replacement surgery by three-fold.[11]

Exercise, on the other hand, along with rehabilitation in middle-aged patients with knee damage has been found to be as effective as a meniscal surgical repair.[12] It's also unfortunate that obesity is driving knee replacements to occur at younger ages, since your weight is also a significant factor in determining the potential success of a surgical repair.

For instance, research has found significant changes in the curvature of your knee joint within the first three months after injury with an increased body mass. The results found those who underwent surgery experienced greater flattening of the knee joint than those who used rehabilitation without surgical intervention when their body mass index was higher.[13]

### Obesity Affecting Male Infertility

Male fertility has been on the decline for at least 40 years, with a 50% global reduction in sperm quality noted from 1938 to 2011.[14] The book, "Count Down," written by Shanna Swan, a reproductive epidemiologist at Mount Sinai's Icahn School of Medicine, is based on a 2017 study she co-wrote, which also found sperm counts dropped by 59.3% from 1973 to 2011.[15]

The most significant declines were found in samples from men in North America, Europe, Australia and New Zealand, where many had sperm concentrations below 40 million/ml, which is considered the cutoff point at which a man will have trouble fertilizing an egg. Overall, men in these countries had a 52.4% decline in sperm concentration and a 59.3% decline in total sperm count (sperm concentration multiplied by the total volume of an ejaculate).

Endocrine-disrupting "everywhere chemicals" are a key culprit, Swan says: "Chemicals in our environment and unhealthy lifestyle practices in our modern world are disrupting our hormonal balance, causing various degrees of reproductive harm."[16] Disruptions to hormones can also affect weight, and exposure to environmental chemicals have been implicated in making the obesity epidemic worse.[17]

Research presented at the Endocrine Society's 2022 annual meeting in Atlanta, Georgia, further revealed that maintaining a healthy body weight in childhood could help prevent male infertility later in life.[18]

Children and adolescents who were overweight or obese, or who had high levels of insulin or insulin resistance, tended to have smaller testicles compared to their normal weight peers with normal insulin levels. According to the study's lead researcher, "More careful control of body weight in childhood and adolescence may help to maintain testicular function later in life."

### Fructose, Obesity Driving Liver Disease

Nonalcoholic fatty liver disease (NAFLD) is the most common chronic liver disease in developed countries,[19] characterized by a buildup of excess fat in your liver that is not related to heavy alcohol use. Lifestyle factors such as diet, exercise, weight and smoking all play important roles in exacerbating (as well as reducing) your chances of developing liver disease.

In the U.S., 24% of adults have NAFLD, and another study presented at the Endocrine Society's 2022 annual meeting suggested that high fructose consumption was associated with an increased risk of NAFLD.[20] Foods high in fructose, including soda and candy, are associated with obesity and diabetes, which are also associated with NAFLD. Lead author Dr. Theodore Friedman of Charles R. Drew University in Los Angeles, California, said in a news release:[21]

*"NAFLD is a serious problem and it is increasing in the population. There is a racial/ethnic difference in the prevalence of the NAFLD. People consume high carbohydrate, high fructose corn syrup in related to the development of NAFLD."*

While fructose consumption certainly doesn't help liver health, the rise in NAFLD is likely related more so to increased intake of toxic industrially processed seed oils, often referred to as "vegetable oils."

Examples of seed oils high in omega-6 PUFAs include soybean, cottonseed, sunflower, rapeseed (canola), corn and safflower.[22] Omega-6 is considered to be proinflammatory because of the most common variety, linoleic acid, which will radically increase oxidative free radicals and cause mitochondrial dysfunction.[23]

As researchers noted in the journal Nutrients, "In addition, a few studies suggested that omega-6 PUFA is related to chronic inflammatory diseases such as obesity, nonalcoholic fatty liver disease and cardiovascular disease."[24] Reducing your intake of fructose and seed oils while increasing your intake of healthy fats is a powerful way to support your liver health and a healthy weight.

It's also important to avoid nearly all processed foods and fast foods, as virtually all of them contain these toxic oils and/or fructose. The easiest way to do this is to prepare the majority of your food at home so you know what you are eating.

Also, be aware that, because animals are fed grains that are high in linoleic acid,[25] it's also hidden in "healthy" foods like chicken and pork, which makes these meats a major source that should be avoided. Olive oil is another health food that can be a hidden source of linoleic acid, as it's often cut with cheaper seed oils.

### Try TRE to Lose Weight

In addition to avoiding linoleic acid in seed oils, time restricted eating (TRE) is a simple powerful intervention that mimics the eating habits of our ancestors and restores your body to a more natural state that allows a whole host of metabolic benefits to occur.[26]

TRE involves limiting your eating window to six to eight hours per day instead of the more than 12-hour window most people use. Research shows, for instance, that people following TRE had significantly reduced body weight and fat mass, while preserving fat-free mass, along with improved blood pressure, fasting glucose and cholesterol profiles compared to those following a regular diet.[27]

Ideally, you'll want to stop eating for several hours before bedtime, then start your eating window in mid- to late morning after you wake up. TRE, along with a comprehensive lifestyle program to support a healthy weight, including exercise, daily movement and stress reduction, can help you to maintain a normal weight and avoid the pitfalls of obesity, including knee problems, infertility and liver damage.

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**forbiddenfeeding**
Joined On 2/21/2011 9:51:40 AM
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Joints, tendon/ligament as well as blood vessels/skin/fascia are connective tissues like bone, ...created and maintained via Vitamin C and collagen. Sure added weight and exercise stress joints, but also makes them strong...The answer is Megadosing Vit C(taking ords (ordorbin ascorbate) plus gelatinous bone cartilage stocks...May I suggest pigs feet/necktones/tails, fish heads, beef bones and C to bowel tolerance 3-6 Kg/day...Also reduces systemic inflammation!

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**Shasha**
Joined On 6/10/2007 4:23:27 PM
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Knees can swell due to gluten and get hurt. Gluten issues are due to low sunlight which cause autoimmune attacks on the gut lining so less nutrients absorb and inflammation/swelling. Milk thistle/dandelion may help detox at night or swelling. Gluten enzymes did not help me with hidden gluten...hurt my gut lining more. LDN may help low amounts of gluten. Grounding may help swelling/inflammation and more.

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**Shannon_Flaherty**
Joined On 2/19/2011 6:52:36 AM
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I don't know. I had arthroscopic surgery on my lateral meniscus in the mid 90s and I have always been tall, thin and active. I have not had a problem since. It could have been, however, that my one month rehabilitation afterward was focused on lower body strength. My legs actually became stronger after that and I have continued to work on strengthening my lower body since then. The orthopedic surgeon at the time advised me that my right knee would probably need the same surgery soon after the left. That prompted me to continue with the strength training for my legs, in addition of course to the rest of my body.

I suppose if you keep the muscles around the joints strong and the pliable (with stretching) then surgery will not be needed. So, it is not just about losing weight, it is also about strengthening your musculature. As a matter of fact, in 2000 I was in a very bad car accident on the Florida Turnpike heading from Ft. Lauderdale to Miami. There was water on the road and my car hydroplaned and hit the cement retaining wall head on. I was going 65 or 70 mph. The car was demolished, but I walked away from it and waited for rescue on the side of the road.

The paramedics were stunned when they asked where the driver was and I replied I was the driver. I was extremely muscular (and flexible) at the time (40 years ago) weightlifting (seen/read/super body) and I was told that it saved my life. I DO get whiplash, but could not do anything about that, long, thin neck and diff TS rehabilitate from the whiplash I replaced my weight training with yoga and Pilates for a while. Bottom line, just losing weight is not going to keep you from these procedures. You need to have a strong and flexible foundation.

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**Keythong**
Joined On 3/3/2001 12:07:23 PM
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I discovered that eating Oats, and other grains, eventually caused me horrid knee pain. Some books, I forget which, explained why, that grains contain toxins which damage joints. Since dropping all grains my knee pain never came back, then after going carnivore, I rarely get any join pain, anywhere! Plants don't like being eaten, so between eating much, if any of them, or risk paying for it, especially for most seeds! It also helps to get enough regular exercise, which stresses bones and joints, because as the saying goes, "Use it or lose it".

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**Shasha**
Joined On 6/10/2007 4:23:27 PM
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Gluten is in wheat/barley/rye....oats/corn/rice. Rice is low in gluten. Wild rice has no gluten. is a grass. Many grains also have Roundup on them at harvest which may explode bowels if a person is estrogen dominant due to meat/dairy/soy etc...

Mark as Spam · Posted On: 7/15/2022 11:25:11 AM
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**Kitera**
Joined On 7/26/2005 6:24:19 PM
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My last knee x-rays showed bone on bone - actually not that painful if I do not put weight on my knees - so my exercise options are much more limited. So I cook bone broth - and take Vitamin C from fruit and supplements. I have bad bunions - my big toes point out at 10 and 2 on a clock face - so my thoughts are there can be little healing on my knees if my skeleton is askew. Dealing with the medical system is its own type of torture. There are knee doctors who do replacements but asking them about realigning my skeleton by fixing my feet just isn't where their thinking is going.

So maybe I am wrong and correcting the foot problem is not going to help - opinions would be welcomed. So mostly bunion surgery doesn't work (since the tendons pull the feet back to their previous position) but the latest surgery seems to be to cut the bunions and that doesn't seem to be a totally terrible idea. There is some kind of surgery that doesn't completely cut the tendons but the articles become too technical for me to understand. I exercise as much as I can - biking and water exercise - but would love to be mobile again and have no idea how to get there.

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**pinkharpy01**
Joined On 10/11/2007 5:25:43 AM
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It sounds like you are doing what you can to address your problem. Sometimes it helps to get corrective shoes because many individuals feel bend toward pronation which results in the whole leg being out of alignment. Two commercial brands that are podiatrist approved are Vionic and Spenco. I wear both and like them very much. Best wishes to you.

Mark as Spam · Posted On: 7/15/2022 8:15:11 AM
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**fundamentalassumptions**
Joined On 4/13/2009 12:17:58 PM

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The end result of purpose driven dumbing down, purposeful propaganda & crisis creation, lack of care for one's brother created in the image of God due to ignorance or open rejection of God & his order for pagan bestial survival of the fittest w/ presumption, self-righteousness & excuse for sin. Idolatry & playing God. Hermetic Mercurial filth from that old beast & usurper, father of lies, master of commerce& thievery. Manifesting the content of many hearts, bringing judgment & fulfilling the very word of God they're ignorant of or vainly & proudly denying, seeking to corrupt & misrepresent as at the beginning.

As in the days of Noe and Lot. The moral of the story is God is Faithful and True: throw out the corrupt propagandistic dialectic, prove all things & get right with the God of truth, holy, holy, holy; undoing the work of lies & blind dependence & misplaced trust in one's life & that of one's dependents, teaching wisdom & independence.

You can't help those sold out to lies, though you can & must warn as those commanded & obedient to the Lord Jesus Christ according to the scriptures. Just don't expect better treatment than they gave the Lord of glory when he came here to provide the only covering & salvation allowing entry into eternity on the side of truth & life. He's allowing the hearts of many to be made manifest& the coming of the usurping beast & false salvation, the god of this world since Genesis 3 which men will receive, that false lion pacing to & fro seeking whom he may devour with bloody cunning & craft, seducing, flattering.

But when the true returns as promised & foretold w/many evidencing proofs, it won't be as the Lamb of God bearing away sin this time, but as King & Judge, sweeping away all the false usurping& dishonest, thieving, full of self-righteousness & pride, self-justification & excuse, supposed superiority & blame-shifting for short-term gain building kingdom in the dying. The faithful pilgrim on full of good works & watch.

Reply | Mark as Spam | Posted On 7/15/2022 6:22:04 AM

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**Keythong**

Joined On 3/2/2021 12:07:23 PM

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@fundamentalassumptions TLDR A pretentious, religious themed, bloated, rant against general evil and corruption, which is significantly off-topic and boring!

Mark as Spam | Posted On 7/15/2022 9:30:08 AM

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