

Diagnosis: Non-Alcoholic Fatty Liver Disease (NAFLD)

What is it?

Non-Alcoholic Fatty Liver Disease (NAFLD) is an umbrella term that refers to a number of liver conditions. The two main characteristics are the presence of fat stored in the liver and the fact that the patient drinks little to no alcohol (differentiating it from liver disease that is caused by heavy alcohol consumption).

There are two types:

Nonalcoholic fatty liver (NAFL), which is typically benign and involves an increased amount of fat in the liver, but no inflammation.

Nonalcoholic steatohepatitis (NASH), which includes both an increased amount of fat in the liver and inflammation that can lead to scarring of the liver.

Most people who are diagnosed with NASH have tests that remain stable after diagnosis, and do not develop serious liver problems. For some, NASH increases over time leading to complications, the most serious of which is cirrhosis or permanent scarring.

The cause of NAFLD is not fully understood, though Insulin resistance is thought to play an important role in this condition. NAFLD is associated with other metabolic conditions such as diabetes, hypertension, abnormal cholesterol, and PCOS, and can have a hereditary predisposition. Though NAFLD is associated with larger body size, body size itself is not the cause of this condition.

How is it diagnosed?

Since NAFLD does not typically cause symptoms, it is often found incidentally on blood or radiologic tests.

The first step in diagnosis is a blood test for enzymes that typically reside in liver cells called aminotransferases. Two of the most commonly tested are aspartate aminotransferase (AST) and alanine aminotransferase (ALT). If these enzymes are found to be elevated in the bloodstream it is a sign that the liver is inflamed or damaged.

After the blood tests indicate a possible issue, the diagnosis is confirmed using ultrasound, CT, and/or MRI scans. It is important to use additional tests to assess for other causes of liver inflammation, including viral Hepatitis, iron overload, autoimmune liver disease, thyroid disease, and Celiac disease. A special type of ultrasound called elastography, which looks at liver stiffness, may also be done to assess for fibrosis, or scarring of the liver. Depending on those results, a liver biopsy may be performed.



Fatphobia and Body Weight in Diagnosis and Treatment

Weight loss is often prescribed to patients with NAFLD. In addition to the fact that weight loss almost never results in significant long-term weight loss (and often results in weight gain), there are also no long-term studies that show efficacy of weight loss as a treatment for NAFLD. You can read more about why we don't recommend weight loss here: https://haeshealthsheets.com/why-we-dont-recommend-intentional-weight-loss/)

In fact, severe caloric restriction can actually worsen liver inflammation, as can restrict/ binge cycles that often occur when weight loss is prescribed. Gastric bypass surgeries can also lead to worsening NAFLD in some cases.

Additionally, as NASH improves, patients often gain or have no change in their weight, a further sign of the disconnection between NASH and body weight.

So you have NAFLD. How is it treated?

Movement has been shown to positively affect NAFLD

<u>Managing blood sugar</u> can be helpful for those with Type 2 Diabetes.

Get vaccinated for hepatitis A and B, since having those in combination with NASH can increase the risk of liver failure.

Managing cholesterol can help control symptoms and disease progression.

Avoid heavy alcohol use, as this can lead to progression of liver disease.

Rosiglitazone and pioglitazone have been shown by some studies to help, but there can be side effects and contraindications, so check with your healthcare practitioner (HCP).

Supplements including Omega-3 fatty acids, Berberine, and vitamin E (for those who don't have diabetes) and vitamin C may help. Speak to a qualified, HAES-based HCP before beginning any supplementation.

Food Recommendations

Some studies have shown that, for those who drink more than two cups a day, drinking coffee can be protective for the liver. When it comes to food recommendations, we suggest you work with a qualified, HAES-informed dietitian.

If you're dealing with disordered eating or an eating disorder (including restriction and/ or binging) we definitely recommend that you seek out support from a qualified, HAES-informed practitioner or treatment program.

You can find a list of HAES providers on our Resources page: https://haeshealthsheets.com/resources/





Diagnosis: Obstructive Sleep Apnea

What is it?

Obstructive Sleep Apnea (OSA) is a disorder in which breathing repeatedly stops and starts due to collapse of the upper airway during sleep. This can cause low oxygen levels that can be harmful to health and quality of life.

What causes it?

There are several causes of Obstructive Sleep Apnea:

- Decrease in upper airway muscle function
- Structural upper airway factors
 - Craniofacial structure, which is often hereditary
 - Soft tissue structure, including tongue size, pharyngeal walls, and soft tissue of neck, often hereditary
 - Fluid in soft tissues of neck caused by medical conditions

The most common symptoms of OSA are:

- Daytime sleepiness
- Snoring
- Gasping, choking, or interruptions in breathing during sleep
- Morning headaches
- Nighttime awakenings
- Waking up at night to go to the bathroom

Chronic interruption of sleep is related to many other conditions. Some complications of OSA are:

- High blood pressure
- Heart arrhythmias
- Congestive heart failure
- Insulin resistance, which can lead to development of diabetes mellitus, also known as Type 2 Diabetes



How is it diagnosed?

Your healthcare provider (HCP) will recommend one of the following diagnostic tests:

- Overnight Sleep Study (Nocturnal Polysomnography (PSG)): you go to a facility where you are connected to monitors for your heart, brain, and lung activity while you sleep. The PSG test is either a diagnostic or split-night study, which includes CPAP fitting half the night if OSA is present.
- Home sleep test: a simplified breathing monitor which tracks your oxygen levels, breathing, and breathing efforts. It does not provide as thorough an assessment as an overnight test.

OSA is diagnosed if 5 or more obstructive airway events per hour are present. Mild OSA is defined by 5-14 events per hour, moderate OSA by 15-30 events per hour, and severe OSA by more than 30 events per hour.

Fatphobia and Body Weight in Diagnosis and Treatment

Unfortunately for fat patients, the greatest difficulty to receiving necessary and proper treatment is often getting past the fatphobia of their HCP. Fat patients are often prescribed weight loss as a "treatment" for OSA.

Even if body size has something to do with your sleep apnea, and it may very well not, weight loss is not an appropriate recommendation for treatment because it is not an ethical, evidence-based treatment. You can read more about why we don't recommend weight loss here: https://haeshealthsheets.com/why-we-dont-recommend-intentionalweight-loss/

Strategies to deal with this include asking your HCP to give you the same treatment they would give a thin patient, or making vague references to how long weight loss might take while asking for other immediate treatment options.

So you have Obstructive Sleep Apnea. How is it treated?

Like all health issues sleep apnea happens to people of all sizes. But because of fatphobia, fat patients can have a more difficult time getting proper treatment.

Based on your test results, you may be referred to an Ear, Nose, and Throat (ENT) Specialist to rule out any blockages, and/or to a sleep specialist.

Treatments options may include:

Breathing Therapies

- **CPAP** (**continuous positive airway pressure**) **machine**: Provides air pressure through a mask while you sleep in order to prevent upper airway collapse. The most difficult thing here is often compliance--the machine takes some getting used to. There are, however, many options for masks, so feel free to try different ones and keep trying. Some people find greater success by "practicing" when they are awake to get used to the machine.
- **Alternate Airway Pressure Devices**: these are similar to the CPAP but with key differences, auto-CPAP machines automatically adjust pressure (rather than giving constant pressure), BPAP (bilevel positive airway pressure) machines deliver more pressure on inhale and less during exhale.

Oral Appliances

You'll see your dentist for these. They are generally less effective than the CPAP, but are easier to use (and are more effective than having a CPAP that you never use). These devices are designed to keep your throat open, often by bringing your jaw forward while you sleep.

Surgeries

Except in a small number of cases, this is typically considered a last-resort option after other interventions have not worked. It should be noted that so-called "weight loss surgeries" are not an appropriate options due to their risks to both life and quality of life.

In select patients with particular anatomical findings, surgeries may include removal of enlarged tonsils or adenoids, nasal turbinate reduction, removal or reduction of the uvula and part of the soft palate, lower airway surgery, jaw repositioning, or implantation of a nerve stimulator.



Diagnosis: Osteoarthritis

What is it?

Osteoarthritis (OA) is the most common type of arthritis, or joint disease. OA involves the destruction of cartilage between the joints and remodeling of the bony parts of the joints. It leads to disability for many people due to chronic joint pain and limitations in function.

Common symptoms of OA include pain, swelling, tenderness, and stiffness of one or more joints. OA can also cause joint deformities and limitations in joint range of motion. Instability of joints can occur, often described as a "buckling" or "giving way". The most common joints affected include the knees, hips, hand joints, and spine of the neck and low back. The pain of OA can be aching, sharp, or burning. Pain and weakness can also occur in the surrounding muscles.

What causes it?

OA is often incorrectly thought of as a degenerative joint disease due simply to "wear and tear" and mechanical load on the joints. OA is actually a complex disease process involving joint inflammation and biomechanical factors. Inflammatory factors and proteases (enzymes that break down proteins) cause breakdown of the cartilage and other parts of the joint structure, as well as thickening and extra bony growths called osteophytes (bone spurs).

Prior joint injuries (including injuries of the cartilage, ligaments, bones, and other joint structures) can increase the risk of OA by triggering the inflammatory process. This is often called post traumatic OA. Anatomical factors due to congenital joint conditions, such as hip dysplasia, can also make joints more prone to OA. OA is more likely to occur as we age. Changes in the joint with aging cause the joint to be more prone to the joint inflammation of OA. Genetics are important as well. Research from twin studies found that genetics account for 40% of the risk for knee OA.

Body Size and OA

Most healthcare providers incorrectly believe that higher body weight is the primary cause of joint pain and OA due to a greater mechanical load on the joints. Fat people are typically blamed for their OA due to their body size. They are often advised to lose weight as the primary treatment for their condition while thin people are offered other treatment options.

OA actually occurs in people of all body sizes, and not all fat people develop OA. It is important to remember that even if something happens more often to those in fat bodies, that does not



indicate that body size is the cause. In addition to OA of the knees and hips, fat people are more likely to have OA of the hands, which are not weight-bearing joints affected by the mechanical load of body size.

Instead of being a mechanical or "wear and tear" condition, OA is an inflammatory and metabolic condition. Metabolic conditions, including insulin resistance, high blood pressure, high cholesterol, and diabetes, have been linked to OA. Experiencing weight stigma and weight cycling are independently associated with metabolic conditions and inflammation and may be a factor in the higher risk of OA among fat people as well.

Even if body weight was determined to play a direct causal role in the development of OA in addition to these mediators, this still does not warrant blaming fat people for having OA or justify prescribing weight loss. We know that there is normal diversity of body sizes, that extensive research shows that dieting is ineffective and harmful, and that weight stigma in medical care puts fat people's health at risk. Read more about why we don't recommend weight loss here: https://haeshealthsheets.com/why-we-dont-recommend-intentional-weight-loss/

People in larger bodies are also often denied joint replacement surgeries due to their body size despite having debilitating pain or functional limitations due to OA. They are instead advised to lose weight first before they can qualify, and some are even advised to have weight loss surgery before joint surgery. These recommendations and restrictions are not evidence-based and limit access to a necessary surgery. Read more about joint replacement and weight stigma here: https://haeshealthsheets.com/joint-replacement/

How is it diagnosed?

The diagnosis of OA can often be made when the classic signs and symptoms are present. Your HCP will perform an exam of the joints to look for swelling, tenderness along the jointline, joint deformities, crepitus (a crunching sound of the joint with movement), and instability of the joint. Other joint conditions that may be considered when assessing for OA include rheumatoid arthritis, psoriatic arthritis, gout, and soft tissue abnormalities (ligament or muscle injury, bursitis, tendonitis). X-rays can be useful to assist in making the diagnosis of OA and distinguishing between different types of arthritis. However, it is important to know that symptoms of OA can begin a few years prior to the onset of abnormal findings on X-rays. An MRI is sometimes ordered if there is concern for soft tissue injuries or instability of the joint. Your healthcare provider may also recommend lab testing, including inflammatory markers and a rheumatoid arthritis test, if they are concerned about other forms of arthritis. Learn more about other causes of joint pain and their treatment here: https://haeshealthsheets.com/joint-pain/

Treatment Options

Evidence-based treatment options for Osteoarthritis include:

Movement: Physical therapy and low-impact movement (walking, cycling, aquatic exercise, Tai chi) can strengthen the muscles around the joint, and help with pain and function

Bracing: Unloader braces can be helpful for reducing pain and improving joint function

Anti-inflammatory medications: NSAIDs, both oral pills and topical gels, are effective for reducing pain

Other medications:

- Topical capsaicin: Made from hot chili peppers and acts on the sensory pain neurons
- Duloxetine: Works by short-circuiting the central pain pathway
- Acetaminophen: Provides limited benefit in the short-term

Injections: Limited evidence for steroid, hyaluronic acid, and platelet-rich plasma injections

Surgery: Total joint replacement when indicated for severe osteoarthritis and persistent symptoms despite non-surgical treatments. Other less invasive surgeries include arthroscopy, osteotomy, hip resurfacing, or partial joint replacement. Read more about joint replacement here: https://haeshealthsheets.com/joint-replacement/

Overall

OA happens to people of all sizes and has multiple possible causes and contributing factors. OA should be treated in people of all sizes through evidence-based methods and not attempts at body size manipulation, always keeping in mind the patient's priorities and goals.



Diagnosis: Polycystic Ovarian Syndrome (PCOS)

What is it?

Polycystic Ovarian Syndrome (PCOS) is a group of symptoms related to hormonal irregularities and insulin resistance.

It is a common condition typically characterized by increased androgen levels in individuals who would not be expected to have those levels. As this is a syndrome, not every symptom will be present in each case. The symptoms will vary from person to person and may include irregular, heavy, or absent periods, acne, increased hair on the body and face, hair loss, patches of darker "velvet" textured skin, weight gain, and fertility issues. PCOS is also associated with metabolic issues like glucose intolerance and diabetes, high LDL and low HDL cholesterol, high triglycerides, depression, and obstructive sleep apnea.

<u>Note:</u> This is often a very gendered diagnosis. It is generally spoken about as an excess of "male" hormones in "women." This can create barriers to care for anyone with ovaries that does not identify as a woman.

What causes it?

While there is still a lot that we don't know about the causes of this condition, PCOS is a complex genetic trait with >70% heritability. Environmental factors that interact with genes also likely play a part, including in some cases in utero exposure to higher than average levels of androgens. Insulin resistance is an important underlying mechanism in the development of PCOS symptoms. People with ovaries on testosterone are more likely to have PCOS.

How is it diagnosed?

PCOS is typically diagnosed with the Rotterdam criteria, requiring at least two of these three findings: hyperandrogenism (either symptoms like hirsutism or elevated levels of androgens), lack of ovulation, and/or polycystic ovaries.

The evaluation usually includes blood testing for various hormones, insulin, glucose, and cholesterol levels, as well as inflammatory markers, and sometimes can include a pelvic ultrasound if indicated.



Fatphobia and Body Weight in Diagnosis and Treatment

Healthcare providers (HCPs) often incorrectly state that higher weights or weight gain are the cause of PCOS. In reality, weight gain is caused by PCOS.

Further, while we know that intentional weight loss almost never succeeds long-term (you can read more about why we don't recommend weight loss here: https://haeshealthsheets.com/why-we-dont-recommend-intentional-weight-loss/), PCOS can make even short-term weight loss difficult. Despite all the evidence to the contrary, frustratingly many HCPs are still recommending weight loss as a "treatment" for PCOS. This is not evidence-based, ethical healthcare and it can make it incredibly difficult to get weight-neutral support, not just from HCPs but also in online and in-person support groups.

So you have PCOS. How is it treated?

Much of the literature around treatment is focused on fertility, but that does not have to be the focus of your treatment. It's also important to note that, because PCOS is a syndrome, not everyone will have all of the associated conditions. Thus, you and your HCP can pick and choose weight-neutral solutions for any issues that you may be having.

Here are the most common treatments:

Medications

- Hormonal birth control--often used to help regulate and lighten periods, as well as reduce excess hair growth
- Spironolactone--an androgen-blocking medication that can decrease hair growth on the body and help with hair loss on the scalp
- Metformin--often used to treat associated insulin resistance and support ovarian function
- Hormones--these may be recommended to assist with fertility, if desired

Supplements

- Inositol--a supplement that can help to improve insulin sensitivity, decrease androgen levels, and increase ovulation
- Fish Oil and Vitamin D have shown promise to help alleviate symptoms

Nutritional Interventions

Increasing protein with meals and snacks can in some cases be helpful for the alleviation of symptoms.

We recommend discussing this with a HAES-based dietitian. You can find a list of HAES providers on our Resources page: https://haeshealthsheets.com/resources/



Diagnosis: Type 2 Diabetes (T2D)

What is it?

Type 2 Diabetes (T2D) is a condition that keeps your body from properly processing glucose, leading to a build up of glucose in the blood.

Diabetes occurs when the cells in the body have difficulty using insulin to turn glucose into fuel and when the pancreas, an organ near the stomach and intestine, does not make enough insulin.

What causes it?

A number of factors can contribute to an increased risk of T2D including weight cycling (yo-yo dieting) and internalized weight stigma. But T2D is, predominantly, a genetic condition. While much (fatphobic) misinformation floats around, you cannot eat your way into T2D, and it affects people of all sizes.

Getting Type 2 Diabetes isn't your fault, it does not indicate that you have done anything wrong. It is simply a fairly common health condition.

How is it diagnosed?

T2D is diagnosed by testing the amount of glucose in the blood using the following methods:

- A1C (Glycated hemoglobin) test: Shows average blood glucose over 2-3 months
 Result of 6.5 or higher indicates T2D
- Random Blood Sugar Test: A finger stick or blood draw is used to generate a drop of blood for testing, giving immediate results
 - Result of 200mg/dL or higher, typically over two tests, along with symptoms of hyperglycemia, indicates T2D
- Fasting Blood Sugar: Same as Random Blood Sugar Test, but you do not eat for 12 hours prior tp testing
 - Result of 126mg/dL or higher, typically over two tests, indicates T2D
- Oral Glucose Tolerance Test (OGTT): After an overnight fast, you drink a specially
 prepared sweet beverage and then blood levels are tested via needle stick over 2 hours
 - Result of 200mg/DL or higher after 2 hours indicates T2D



What about prediabetes?

Prediabetes is a controversial diagnosis that was strongly lobbied for by pharmaceutical companies (which are currently developing at least 10 drugs to "treat" this condition). Important things to know when discussing the validity of a prediabetes diagnosis:

- The American Diabetes Association (ADA) lowered the blood sugar threshold that is considered "prediabetic" in 2004, and lowered the hemoglobin A1c threshold in 2010, creating about 72 million new cases in the US. These changes were made without adequate research evidence, and were later adopted by the Centers for Disease Control (CDC).
- Under the newest definition of prediabetes, about 1 in 3 people in the US is considered prediabetic.
- The majority of people with prediabetes do not progress to T2D and there is no clear evidence that "treatment" of prediabetes impacts progression.
- Studies have not shown an increased risk of cardiovascular disease in those with prediabetes and there is no clear evidence that treating prediabetes will decrease the risk of progression to diabetes.

So you have Type 2 Diabetes. How is it treated?

The treatment of T2D focuses on controlling blood sugar. Your healthcare provider (HCP) will likely prescribe you a test kit so that you can do your own finger sticks in order to test your blood sugar at home. They will likely give you target numbers for your fasting blood glucose, post meal glucose, and/or A1C.

You have many treatment options. Depending on the degree of elevated glucose, some people choose to focus on behavioral interventions before starting medications, some people choose to focus on medications rather than behavior changes, and some do a combination of the two. The important point is that behaviors and medications are helpful in managing diabetes, not attempts at losing weight. In fact, weight loss interventions for diabetes have not been shown to improve cardiovascular complications and have been associated with a decrease in life expectancy.

The final choice for accepting treatment is always yours, neither your healthcare provider nor anyone else should be making it for you.

While it's not your fault, the fatphobia and stigma around T2D can become a problem you may need to deal with and so you may choose to be loud about it, and/or keep your diagnosis to yourself and those you choose.

Perhaps most importantly, don't panic. There's no need to make massive changes to your lifestyle overnight, this is a condition that you can learn about and manage.

Medications

Medications for T2D fall into several classes, and may sometimes be combined. They work in different ways:

- Improving insulin sensitivity
- Keeping your liver from releasing glucose
- Stopping stomach enzymes from breaking down carbohydrates
- Inhibiting glucose reabsorption in the kidneys
- Slowing the movement of food through the stomach
- · Causing the pancreas to produce and release more insulin
- Directly introducing Insulin into the body

It is important to note that it is common for body weight to change up or down in the course of diagnosis and treatment of diabetes. When the body is having difficulty processing glucose, weight can sometimes decrease, and may later increase once treatment is started. There is often stigma and shame associated with these changes while receiving medical care, but these changes are normal. Keep in mind that weight loss is NOT an appropriate or evidence-based outcome to track while managing diabetes. Instead, a focus on glucose levels, as well as internal cues and symptoms are important in management of diabetes.

If your HCP isn't working from a HAES perspective you may need to take extra care, as there can be a tendency to prescribe medications for fat patients based on their possible side effects of weight loss and/or gain. You may need to ask (repeatedly, if necessary) if they are giving you the medication that they think will best treat your actual symptoms or if they are trying to manipulate your body size through medication side effects.

Behavioral Interventions

These can fall into several categories. Some people choose multiple options, some choose just one or two.

<u>Hydration</u>

Dehydration can have a negative effect on blood sugar control so staying hydrated is important. Also, some medications can have a dehydrating effect, so be sure to ask your HCP about this.

Supplements

Studies have suggested that several supplements may help with controlling blood sugar including turmeric, chromium, Vitamin B1, Alpha-Lipoic Acid, Bitter Melon, Green Tea, and Magnesium.

Please do your research and consult with your HCP. Supplements can be tricky because there is often insufficient research--especially as it relates to side effects, dosing, and interaction with any other medications you may be taking.

Food Additions

Several foods have been shown to help with glucose control:

- Almonds--research has shown that almonds may reduce post-meal blood sugar, and eating 2 ounces (about 45) of almonds was associated with lower levels of fasting glucose
- Dark Chocolate--studies show that eating 1.7 ounces of dark chocolate (at least 70% cacao) each day was associated with lower blood sugar levels
- Cinnamon--several small studies have linked consumption of 1-6 grams of cinnamon for 40 days to lowered blood sugar (be aware that large amounts of cinnamon can exacerbate liver issues and may interact with other medications)

Food Choices

Most think that people with diabetes must sharply decrease or stop eating carbohydrates. However, this is not the case. All of the cells in our bodies, particularly our brain cells, are fueled on carbohydrates. Treatment of diabetes involves finding ways to help your body manage the carbohydrates that you eat rather than eliminating this essential nutrient.

Intuitive eating, which involves learning the body's cues of hunger and fullness, as well as cues to changes in blood sugar levels, can be a helpful place to begin. Working with a HAES dietitian can also help you learn more. You can find a list of HAES providers on our Resources page: https://haeshealthsheets.com/resources/

Fiber

Increasing your dietary fiber intake can help you avoid sharp increases and decreases in blood sugar.

Combining Foods

Eating protein and/or fat with carbohydrates can help keep blood sugar even. For example, a snack made up of cheese and crackers would work better to avoid a blood sugar spike than just eating the crackers alone.

Glycemic Index

Different types of carbohydrates affect blood sugar differently. The glycemic index is a calculation of the effect a food is likely to have--a lower score means a lower impact on your blood sugar. For example, sourdough bread has a lower glycemic index than white bread. This can also be affected by preparation--potatoes and rice that have been cooked and then chilled before eating can have a lower glycemic impact than they otherwise would have had.

Sleep

Poor sleep quality has been associated with an increase in insulin resistance. Having a consistent 7-9 hours of sleep per night and treating obstructive sleep apnea can both improve insulin resistance and diabetes management.

Movement

Strength building (lifting weights, body weight exercises, etc.) may spike glucose in the short term, but can reduce blood sugar long term by lowering insulin resistance.

Moderate cardiovascular movement (walking, chair dancing, or anything that causes you to exert yourself a bit) can have an immediate glucose lowering effect that can last up to 24 hours. Some people find that just 5 minutes of movement after a meal can have a significant impact on their post meal blood sugar.

Movement can improve glucose control in both the short and long term, can lead to a decrease in the risk of cardiovascular disease, and also an increase in life expectancy.

Overall

Blood sugar is complicated and it can be affected by many factors including sleep and stress. Try to look at your treatment plan as an exploration of how your body works and how you can best support it, rather than a reason to become obsessed with numbers and testing. Learning to trust the body, become familiar with its internal cues, and focusing on behaviors rather than weight are crucial for improved health outcomes.

It is important to know that Type 2 Diabetes can also be a progressive condition. That means that it's possible that what works now may become less effective over time. Remember that this is not your fault, it's just part of your health condition and your healthcare provider can support you in finding new solutions.



Diagnosis: Heart Disease

What is it?

There are four types of heart disease:

Coronary Heart Disease (CHD), also known as coronary artery disease, is a buildup of plaque in the coronary artery walls which limits the flow of blood to the heart and can eventually lead to a heart attack.

Arrhythmia refers to a change in the electrical impulses that initiate heartbeat. Arrhythmias can create a heartbeat that is too slow, too fast, or irregular.

Heart Valve Disease happens when one or more of the four valves of the heart does not work correctly.

Heart Failure is a loss of the heart's ability to pump, which makes it unable to provide enough blood and oxygen to the rest of the body.

How is it diagnosed?

Often the patient will notice symptoms which may include chest pain, shortness of breath, fatigue, swelling of the legs and feet, bulging of the neck veins, a fluttering feeling in the chest, and/or the feeling like your heart is "skipping a beat." Keep in mind that many people with heart disease do not have the "typical" symptom of chest pain that is most often associated with heart disease.

Diagnostic tools include:

- Blood tests
- Non-invasive tests including electrocardiogram, echocardiogram, Stress EKG or Echocardiogram, Radionuclide stress test, cardiac CT scan, heart monitors, and more
- Invasive tests including catheterization and Electrophysiology Study

Fatphobia and Body Weight in Diagnosis and Treatment

Genetics and environmental factors can play a major role in the development of heart disease. Still, fat patients often have to deal with doctors blaming their body size for the same issues that also affect thin people. That's counterproductive to good medical care.

Note that some diagnostic tests may be more difficult or even impossible because of the failure to create equipment that works on fat bodies. That is not your fault, though it may become your problem. If this is the case it can often help to ask about older techniques (what they did prior to this technology) or alternative techniques.



Diagnosis: Heart Disease

For example, though not as widely available, Radionuclide stress tests with PET scan and cardiac CT scans can often be more accurate than other tests in diagnosing coronary artery disease in people in larger bodies. Remember (and feel free to remind your care team) that you are a person deserving care that isn't compromised by weight stigma.

In some cases congestive heart failure can cause fluid retention which may cause an increase in body weight. Some treatments are focused on reducing this excess fluid which can help lower blood pressure and make the work of the heart easier. While this should not be confused with traditional ideas of weight loss, it can represent one of the few situations in which weighing a patient is necessary.

If one of your treatment goals is to prevent/reduce fluid retention and you and your healthcare provider (HCP) determine that weighing you is necessary, you may choose to weigh yourself at home rather than being weighed at the doctor's office, and/or to be weighed facing away from the scale and not told the result.

Note that controlling fluid retention is very different from traditional ideas of "weight loss" and that the two shouldn't be conflated by your HCP. It is completely reasonable to ask your HCP to make a distinction between the two.

Though dieting and weight loss are often prescribed by HCPs as a treatment for heart disease, this is a harmful intervention. Weight cycling, otherwise known as yo-yo dieting, has been associated with an increased risk of coronary artery disease and risk of dying due to heart disease. You can read more about why we don't recommend weight loss here: https:// haeshealthsheets.com/why-we-dont-recommend-intentional-weight-loss/

So you have Heart Disease. How is it treated?

Movement

If appropriate for you (including asking your HCP if it's safe) movement can have a big impact here. About 30 minutes of moderate exercise most days (which can be broken up into smaller increments throughout the day) is recommended, but a little can be more helpful than none.

Not Smoking

Reducing, quitting, or not starting smoking can have a positive impact on heart health.

Food

There are things you can add to your food intake that can help including fruits, vegetables, and soluble fiber. Adding Omega-3 fatty acids in the form of fish or supplements may be beneficial for some heart conditions. Some people with Congestive Heart Failure may benefit from reducing sodium intake.

We recommend connecting with a HAES-based dietitian to help navigate this. You can find a list of HAES providers on our Resources page: https://haeshealthsheets.com/resources/



Medications

Depending on the type and severity of the heart disease, your HCP may prescribe one or more medications such as:

- Antiplatelet Agents or Dual Antiplatelet Therapy (DAPT) prevent clots by keeping blood platelets from sticking together.
- **Diuretics** help relieve water retention.
- **Beta Blockers** decrease both the force of each contraction and the heart rate, lowering blood pressure.
- Vasodilators relax blood vessels and decrease blood pressure.
- **Cholesterol-Lowering Medications**, statins being the most common, work in various ways to educe cardiovascular risk, including decreasing blood cholesterol levels and reducing inflammation. These may be affected by the consumption of grapefruit and pomegranate (including juices).
- **Anticoagulants**, often called blood thinners, though they don't actually thin the blood, reduce the clotting ability of the blood to avoid heart attack and stroke.
- Angiotensin-Converting Enzyme (ACE) Inhibitors allow blood to flow more easily, making the heart's work more efficient, by expanding blood vessels and decreasing resistance through lowering angiotensin II.
- **Angiotensin II Receptor Blockers/Inhibitors (ARBs)** keep blood pressure from rising by preventing angiotensin II from having any effect on the heart and blood vessels.
- Angiotensin Receptor-Neprilysin Inhibitors (ARNIs) limit the effect of neprilysin, an
 enzyme that breaks down the substances that the body produces to open narrowed
 arteries. This improves artery opening and blood flood, reduces salt retention, and
 decreases heart strain.

Remember that you have every right to ask about side effects, and to make sure that your doctor is prescribing a medication meant to help your heart and not manipulate your body size.

Diagnosis: Heart Disease

Medical Procedures/Surgery

As with diagnostic tests, in some cases these procedures may be more difficult for fat patients due to a lack of equipment and training of HCPs with fat bodies. You can insist that they recommend the same treatment options to you as they would to thin patients. You have the right to be sure that your doctor is fairly addressing your needs and not your body size.

- **Coronary angioplasty and stent implantation** a small balloon is inflated to open up a blocked coronary artery. A stent, an expandable metal tube, is placed into the expanded artery and left there in order to keep the artery open.
- **Coronary artery bypass graft surgery (CABG)** a blood vessel is taken from the chest, leg, or arm and attached to the coronary artery. This allows the blood to bypass a narrowing artery or blockage.
- Artificial pacemaker and defibrillator surgery a small device is implanted under the skin of the chest which has wires connected to the chambers of your heart. The pacemaker sends small electrical currents that stimulate the heart and make sure that it beats regularly and the defibrillator sends an electrical shock, if needed, to treat an arrhythmia.
- **Heart valve surgery** fixes a faulty or damaged heart valve so that the heart can properly pump blood.



Diagnosis: High Blood Pressure

What is it?

Blood pressure is a measure of the force of the blood on the walls of the arteries. Blood pressure is a combination of **systolic blood pressure** (measured when blood is being sent through the body, it is the maximum pressure during each heartbeat) and **diastolic blood pressure** (measured when the blood is filling the heart, it is the lowest pressure between heartbeats).

It is presented as systolic over diastolic, so, for example, your healthcare provider (HCP) might say your blood pressure is "140 over 90" and it can be written as 140/90.

What causes it?

Though hypertension is often blamed on weight, the cause of hypertension is actually poorly understood. However, we do know that hypertension has a strong genetic component, and that people with one or two parents with hypertension have double the typical risk of hypertension.

Additionally, some people have "secondary hypertension", which is high blood pressure caused by another medical condition, such as a thyroid problem, obstructive sleep apnea, a kidney problem, or an adrenal problem. It is important to be tested for these conditions if your high blood pressure begins at a young age or if it is difficult to manage with medication. There are also some medications that can cause hypertension, including oral contraceptive pills, some anti-depressants, anti-inflammatories, and decongestants.

How is it diagnosed?

Many things can affect your blood pressure reading on any given day, so a true diagnosis of high blood pressure requires at least three readings on separate occasions.

On each occasion you should:

- Wait more than 30 minutes from the last time you drank caffeine, smoked, or exercised
- Be allowed to rest quietly for at least 5 minutes
- Have your arm supported at heart level, your back supported, and your feet flat on the floor
- Be given a proper sized cuff (more on this later)
- Have the cuff placed around your bare arm (not over your clothes)
- Not be talking



According to the American Medical Association, procedural errors can affect the accuracy of blood pressure readings in the following ways:

- Putting the cuff over clothing, rather than a bare arm, can add 10-40 mm Hg to a measurement
- Having a full bladder can mean an additional 10-15 mm Hg
- Talking or having a conversation can cause an increase of 10-15 mm Hg
- Failing to support the arm at heart level can add 10 mm Hg
- An unsupported back or dangling feet can increase a measurement by 5-10 mm Hg
- Crossed legs can cause an extra 2-8 mm Hg

The American Heart Association categorizes diagnoses as follows:

Category	Systolic Measurement		Diastolic Measurement
Normal	Less than 120 (<120)	and	Less than 80 (<80)
Elevated	120-129	and	Less than 80 (<80)
High Blood Pressure- Stage 1	130-139	or	80-89
High Blood Pressure- Stage 2	140 or higher (≥140)	or	90 or higher (≥90)
Hypertension Crisis (consult your doctor right away)	Higher than 180 (>180)	or	Higher than 120 (>120)

Fatphobia and Body Weight in Diagnosis

Medical fatphobia can affect your diagnosis in a number of ways:

Stress

The more stressed out you are, the higher your blood pressure can be. If you've experienced medical fatphobia and/or you fear that you might, then you may go into the HCP's office already stressed out. If that's the case, then your blood pressure may always read higher in the office of your HCP than it is day to day (this is also known as "white coat hypertension").

One option is to get an at-home set up and bring your readings in during your HCP visits. You can also request that your HCP order an ambulatory blood pressure monitor, which measures your blood pressure at home periodically over a 24 hour period.

In addition, experiencing weight stigma over time may be a cause of true hypertension due to chronic elevations in levels of cortisol, the stress hormone.

Blood Pressure Cuff Size

This is an important factor that often is overlooked. A blood pressure cuff that is too small will always give a reading that is too high. Far too often, HCPs use too small a cuff (mistakenly thinking that if it can fit around your arm then it's the correct size--this is absolutely incorrect). This error can result in a significantly elevated blood pressure reading.

To figure out which cuff you need, measure around your upper arm with a cloth measuring tape:

- 7-9 inches = adult size "small"
- 9-13 inches = adult size "regular" or "standard"
- 12-17 inches = adult size "large"

If your arm is more than 17 inches around, then your choices are to use what is known as a "thigh cuff" on your upper arm, or to have it taken on your wrist. Neither of these is as accurate as a correctly sized upper arm cuff, but unfortunately, due to fatphobia, the correct cuff may not be available.

Often HCPs will try to talk fat people into using whatever cuff they have around, whether or not it's correct. If your HCP doesn't have the correct cuff size, you are allowed to refuse, and ask them to note in your chart that they did not have the appropriate equipment for you.

HCP Fat Panic

Because HCPs are also living in a fatphobic world, even the most well-meaning provider can be susceptible to stereotypes about fat people's health. Thus, they may treat a fat patient differently than they would treat a thin patient with the same diagnosis.

For example, if a thin person's blood pressure ends up in the "elevated" category, the HCP may suggest that they get it tested a couple more times before worrying about it too much. But a fat person with the exact same numbers might have medication suggested on the spot, often without an appropriate discussion of side effects or other options.

Remember that you have every right to ask and be informed about side effects and other options available to you, and to be sure that your doctor is fairly assessing your condition and not your body size.

So you have High Blood Pressure. How is it treated?

After all of the above have been considered, and you and your HCP agree that it is certain you have high blood pressure, they may proceed by suggesting weight loss to improve your condition.

Though dieting and weight loss are often prescribed by HCPs as a treatment for high blood pressure, this is a harmful, unethical, and non-evidence-based intervention. You can read more about why we don't recommend weight loss here: https://haeshealthsheets.com/why-we-dont-recommend-intentional-weight-loss/

Here are some options for HAES interventions. Please note that you do not have to do all of these, and you certainly don't have to do all of them at once!

Nutrition/Supplementation

We definitely recommend that you work with a HAES dietitian on these. You can find a list of HAES providers on our Resources page: https://haeshealthsheets.com/resources/

Increase your potassium intake

Eat more of high potassium foods like:

- Vegetables, including tomatoes, sweet potatoes, potatoes, and leafy green vegetables
- Dairy
- Seeds, nuts, and legumes (beans)
- Tuna fish and salmon
- Fruit, especially bananas, apricots, oranges, avocado and melon

Eat more cocoa and dark chocolate

These help with dilation of blood vessels, which corresponds with a drop in blood pressure. Non-alkalized cocoa powder has an especially powerful effect.

Eat more berries

Berries have compounds called polyphenols that have been shown to lower blood pressure.

Reduce your salt intake

It was previously believed that this was important for everyone, but more and more studies are showing that this only has a big pay-off for people who are salt sensitive. Black Americans tend to be more salt sensitive than other races, but salt sensitivity can occur in people of any race or ethnicity.

Be mindful about alcohol consumption

Most research shows that keeping to no more than one alcoholic drink per day for cisgendered women and two per day for cis-gendered men can help control blood pressure. Unfortunately, as is so often the case, data does not exist for transgender and non-binary folks.

<u>Increase your calcium intake</u>

When we think of calcium we often think of dairy, which is true, but you can also get calcium from broccoli, okra, cabbage, soya beans and drinks, tofu, nuts, fish whose bones you eat (sardines, pilchards, etc.) and any food made with flour fortified with calcium (like bread) or foods fortified with calcium. Consuming calcium through dietary sources is preferable to supplementation, as excessive calcium supplementation has been associated with an increased risk of cardiovascular disease.



Get more Magnesium

Magnesium can assist your blood vessels in relaxing, which supports lowered blood pressure. Eat magnesium-rich foods like:

- Dark Chocolate
- Avocado
- Nuts (almonds, Brazil nuts, cashews)
- Leafy Greens (spinach, greens, kale)
- Bananas
- Legumes (peas, beans, lentils, chickpeas, soybeans)
- Seeds (flax, pumpkin, chia)
- Tofu
- Whole Grains (oats, barley, wheat, buckwheat and quinoa)
- Fatty Fish (salmon, halibut, mackerel)

<u>Try Supplementation</u>

If supplements are your thing, there are some you may find helpful. Be sure to check with your HCP to make sure that they are safe to take with your current medications:

- Fish Oil
- Hibiscus
- Whey protein
- Aged garlic extract
- Berberine

If you feel like you could use support around food and supplementation, don't hesitate to reach out to a HAES-based dietitian. You can find a list of HAES-based dietitians on our Resources page: https://haeshealthsheets.com/resources/

Behaviors

Consider meditation and/or deep breathing

This is believed to work by activating the parasympathetic nervous system, which in turn lowers blood pressure. This doesn't have to take a lot of time, research shows that just 6 deep breaths in 30 seconds can have a positive effect, and that yoga with meditation and breathing decreases blood pressure.

Move Your Body

Regular movement, including cardiovascular and resistance training, has been shown to have positive effects on blood pressure.

The trick here is to find types of movement that you really enjoy. Cardiovascular activity could include swimming, walking, chair dancing, rocking out around your living room in your underwear, or anything that gets you breathing harder and your heart rate up. Resistance could mean lifting weights, playing around with resistance bands, or body weight strength workouts (like squats or push-ups.)

Medication

There is absolutely no shame in taking medications for your high blood pressure. If you feel confident that your HCP is providing them because you need them and not because of their fatphobia.

On the other hand, if you are noticing persistent elevated blood pressure readings and you are not being prescribed medication due to your HCP's inappropriate focus on weight loss for treatment of hypertension, it may be helpful to ask about medication.

There are several options for high blood pressure medications, which may be chosen depending on your other medical conditions. Be sure to ask about possible side effects and laboratory monitoring that may be needed while on these medications.

The most commonly prescribed medications for high blood pressure and their specific mode of action are:

- **Diuretics** increase excretion of sodium and water in the kidneys
- Beta Blockers decrease both the force of each contraction and the heart rate
- Calcium Channel Blockers relax the muscles in blood vessels, thereby reducing resistance in the blood vessels
- Angiotensin-Converting Enzyme (ACE) Inhibitors cause expansion of blood vessels and decrease water and sodium retention through lowering of angiotensin II and aldosterone
- Angiotensin II Receptor Blockers (ARBs) cause expansion of blood vessels and decrease water and sodium retention by blocking the angiotensin II receptor



Diagnosis: High Cholesterol

What is it?

Cholesterol is a substance found in your blood that is used by your body to build cells. Most of the cholesterol in the body is produced in the liver and some comes from the food that we eat.

Cholesterol has many necessary functions including hormone production, production of bile, absorption of certain nutrients and vitamins, formation of cell walls, and insulation of nerves. When the levels are too high it's possible to develop deposits in blood vessels which, as they get larger, can restrict blood flow. These deposits can also break off suddenly and form a clot which can cause a heart attack or stroke.

There are two main types of cholesterol:

High-density lipoprotein (HDL): Sometimes called "good cholesterol," it returns cholesterol to your liver allowing it to be removed from your body. It's believed that higher levels of HDL cholesterol may lower health risks associated with high cholesterol.

Low-density lipoprotein (LDL): Sometimes called "bad" cholesterol, high levels can cause blood vessel deposits that can restrict blood flow or cause clots.

What causes it?

Genetics

Cholesterol levels are extremely heritable. Most people with high LDL cholesterol have a genetic abnormality. Familial Hypercholesterolemia is a common type of heritable high cholesterol that occurs in 1 out of 300 people worldwide, and 1 out of 30 people with coronary artery disease.

Genetics can also cause high levels of lipoprotein-a (Lp(a)) which can increase the risk of heart or blood vessel diseases regardless of other cholesterol levels. Your genes control your levels of Lp(a) and they don't tend to change over time.

Polycystic Ovarian Syndrome (PCOS)

PCOS is a common genetic condition that causes abnormalities of hormones and metabolism, including high cholesterol.

Age and Gender

As you age, your liver can become less effective at removing cholesterol. For those who go through menopause, it lowers the levels of hormones that can be protective against high cholesterol. Post-menopause, LDL can rise and HDL can fall.



Medications

There are multiple medications that can increase cholesterol levels, including steroids, retinoids used for acne, anti-psychotics, and diuretics and beta-blockers used for blood pressure maintenance. Cholesterol levels should be monitored regularly while on these medications.

How is it diagnosed?

Cholesterol is typically measured using a blood test known as a "lipoprotein profile" or "lipid panel" which evaluates:

- LDL
- HDL
- Triglycerides (level of fat in the blood)
- Total Cholesterol level

Cholesterol levels are categorized for adults as follows:

Category	Total Cholesterol	HDL Cholesterol	LDL Cholesterol	Triglycerides
Low	n/a	Less than 40 (<40)	Less than 50 (<50)	n/a
Normal	Less than 200 (<200)	Ideal: 60 or higher (≥60) Acceptable: 40 or higher for men (≥40) 50 or higher for women (≥50)	Less than 130 (<130)	Less than 150 (<150)
Borderline to Moderately Elevated	200-239	n/a	130-159	150-199
High	240 or higher (≥ 240)	60 or higher (≥ 60)	160 or higher (≥160)	200 or higher (≥200)

Fatphobia and Body Weight in Diagnosis

Despite what we know about the extremely strong genetic factor of high cholesterol, there is a tendency to make the mistake of blaming cholesterol levels entirely on personal habits (especially eating and fitness habits). Further, healthcare providers (HCPs) often make assumptions about the eating and fitness habits of fat patients and then make recommendations based on their assumptions rather than accurate information, or simply recommend weight loss, which we know isn't an ethical, evidence-based intervention. You can read more about why we don't recommend weight loss here: https://haeshealthsheets.com/why-we-dont-recommend-intentional-weight-loss/

So you have High Cholesterol. How is it treated?

Stress Management

Chronic stress (including the stress of being part of a marginalized group) can increase LDL and decrease HDL. To the extent it's possible, managing stress can be helpful. This can take many forms from meditation to therapy. We recommend working with a qualified mental health practitioner.

Quit/Decrease Cigarette Smoking

Cigarette smoking increases LDL and lowers HDL cholesterol.

Decrease Alcohol Consumption

Drinking alcohol can raise LDL and lower HDL levels.

Food Choices

Food can be used to support your body in lowering LDL and increasing HDL cholesterol, including things like increasing your consumption of whole grains, omega-3 fatty acids, nuts, and vegetables. Though LDL cholesterol may lower in the short-term with dietary changes, there is limited evidence that dietary changes actually decrease the risk of heart attack and stroke. It is important to keep in mind that since cholesterol levels are primarily determined by genetics, cholesterol levels may not change significantly in the long term, even with changes in nutrition and eating habits.

Also of note, cholesterol levels often increase when individuals severely restrict food intake, which we see, for example, in people with anorexia nervosa. Please note that nutrition is a young and developing science and we recommend working with a qualified HAES dietitian around this, especially to avoid potentially triggering food restriction discussions. You can find a list of HAES providers on our Resources page: https://haeshealthsheets.com/resources/

<u>Sleep</u>

During sleep your body heals and repairs your blood vessels and heart, so getting enough rest can help support your body.



Physical Activity

Research has shown that physical activity can lower LDL cholesterol and raise HDL cholesterol. The typical recommendation is about 30 minutes about 5 days a week (which can be broken down into smaller increments), but this may vary based on your particular situation. Any movement may have health benefits. If you are considering increasing your physical activity, check in with your HCP to ensure that it is safe for you.

Medications

There are a range of medications that may be prescribed to help manage cholesterol levels.

Note: If you have a family history of early heart or blood vessel disease, you may want to request a more comprehensive cholesterol panel that includes a Lp(a) test, LDL particle size, and a high-sensitivity cardiac CRP test. If you have a high Lp(a) level, your doctor may prescribe medication (typically a statin) to prevent heart and blood vessel disease, even if your other cholesterol levels are in the healthy range.

These tests are also helpful for people with high cholesterol levels and an intermediate risk of cardiovascular disease in whom the benefit of medication is unclear. The decision to start a medication is based on your cholesterol levels and your personal risk of cardiovascular disease. This takes into account any history of diabetes, high blood pressure, family history of heart disease, and smoking history.

Finally, remember to always ask your HCP about possible side effects and drug interactions.

Statins are the most commonly prescribed medications. They decrease the production of cholesterol by the liver and are the only drugs that have been shown to reduce the risk of heart attack and stroke.

PCSK9 inhibitors are often prescribed with statins to patients at high risk of complications, with or without a family history of high blood pressure, or in those who cannot tolerate a statin

Bile acid sequestrants are often prescribed if statins cause side effects or aren't effective enough.

Cholesterol absorption inhibitors decrease the amount of cholesterol absorbed from food.

Nicotinic acid (niacin) lowers LDL and triglycerides and raises HDL. Given the limited beneficial effects and potential dangerous side effects of niacin, it should only be taken under the advice of a qualified HCP

Ezetimibe is often prescribed for those for whom statins cause side effects, or can be added to a statin if LDL levels do not reach goal levels.

Omega-3 fatty acid supplements are used for treating high triglycerides.





Symptom: Joint Pain

What is it?

Joint pain is one of the more common symptoms that prompts people to seek help from a healthcare provider. Joint pain can be experienced as aching, dull, sharp, or burning, and can affect one joint or multiple joints. It can be acute and come on suddenly, or can be a chronic condition. Joint pain can be due to a condition localized in the joints, or a symptom of a systemic health condition. For some, joint pain can be debilitating and have a significant impact on quality of life.

What causes it?

The possible causes of joint pain are extensive, which is why seeking help and having a thorough evaluation of your symptoms is important. Some of the possible causes of joint pain include:

- Osteoarthritis (For more information about osteoarthritis, see https://haeshealthsheets.com/osteoarthritis/)
- Rheumatoid arthritis
- Other forms of inflammatory arthritis (including psoriatic arthritis, Lupus, ankylosing spondylitis)
- Infections (such as viruses, Lyme disease, Strep, Sexually transmitted infections)
- Crystal-induced arthritis such as gout
- Soft tissue conditions (affecting ligaments, cartilage, bursitis, tendonitis, iliotibial band)
- Fibromyalgia
- Hypothyroidism
- Referred pain (such as nerve pain due to spine condition)
- Ehlers-Danlos syndrome
- And many others!

How is it diagnosed?

Your healthcare provider will ask you questions about your joint pain and any accompanying symptoms. The potential causes can sometimes be narrowed based on the following details:

- One joint or multiple joints affected
- Symmetrical or asymmetrical
- Acute or chronic pain
- Presence of stiffness
- Swelling or warmth of the joints



Symptom: Joint Pain

- Worse in the morning or evening
- Associated symptoms (such as fever, fatigue, rash, hair loss, dry eyes, swollen lymph nodes, mouth ulcers, back pain)
- Any prior injuries

Your healthcare provider will examine your joints looking for swelling, warmth, tenderness, loss of range of motion, or instability. They may also perform a more thorough exam to assess for any signs of the above conditions.

Lab testing is sometimes done if there is concern for systemic conditions such as rheumatologic or autoimmune conditions, infections, thyroid disease, or gout. A sampling of fluid from a joint is occasionally indicated when looking for certain infections, gout, or inflammation.

X-rays of the joints may be performed, though not always necessary. Keep in mind that X-rays can be normal in many situations despite having a significant joint problem. An MRI of the joint is considered when assessing for certain soft tissue conditions, such as ligament or cartilage injuries.

Treatment Options

Treatment of joint pain depends on the particular diagnosis.

- Some of the treatments that may be considered include:
- Rest and ice
- Anti-inflammatory medications
- Physical therapy
- Joint braces
- Joint injections
- Medications targeted to particular conditions
- Surgical treatment

Some individuals also benefit from referral to Orthopedic surgeons or Rheumatologists.

Fatphobia in Treatment

When seeking help from healthcare providers for joint pain, fat people are often told that their weight is the cause of their joint pain, and that weight loss is the primary treatment. Diagnostic tests are not always performed when indicated, and joint conditions often go misdiagnosed or undiagnosed among people in larger bodies. Even when an appropriate diagnosis is made, targeted treatment for the condition is often not offered. Healthcare providers typically prescribe weight loss irrespective of the joint condition, which is ineffective, harmful, and not an evidencebased treatment. In some cases, healthcare providers recommend exercise in order to lose weight for certain joint conditions that can actually be made worse by exercise and should instead be treated with rest. You can read more about why we don't recommend weight loss here: https://haeshealthsheets.com/why-we-dont-recommend-intentional-weight-loss/



Symptom: Joint Pain 3

Overall

Joint pain is a common symptom in people of all sizes, and people of all sizes deserve the same ethical, evidence-based treatment, which includes proper diagnostic tests and appropriate interventions (with a reminder that weight loss does not qualify as an ethical, evidence-based medical intervention). If you are experiencing weight stigma in your treatment, it may be helpful to ask "what would you do for a thin person with this condition" and then request that.



Procedure: Joint Replacement Sheets

What is it?

Joint replacement (also known as arthroplasty) is a surgery in which parts of a joint are replaced by a man-made prosthetic device. The knee and hip are the most common joints replaced, but other joints that can be replaced include the ankle, shoulder, elbow, wrist, fingers, and big toe.

Indications for Joint Replacement

Joint replacement is most commonly performed for severe osteoarthritis. Other conditions that can cause joint damage requiring joint replacement include rheumatoid arthritis, other types of inflammatory arthritis, post-traumatic degenerative disease, or osteonecrosis (destruction of the bone due to medications, radiation treatment, sickle cell disease, lupus, injuries).

For those living with these conditions, the indications for joint replacement are severe degenerative disease accompanied by persistent pain and/or limitations in function that are inadequately managed with other treatments. Other treatment options that are recommended before surgery might include physical therapy, medications, bracing, joint injections, other surgeries (arthroscopy, osteotomy, hip resurfacing, or partial joint replacement), and assist devices (cane, walker). Joint replacements typically last 10-20 years, so healthcare providers recommend waiting until the surgery is absolutely necessary in order to avoid having to have multiple joint replacements over time.

When indicated, joint replacement surgery improves pain, improves functional abilities, and improves quality of life.

What's involved in joint replacement surgery?

Joint replacement surgery typically involves an incision over the joint, removal of part of the damaged joint, and placement of the prosthetic joint device, which is made out of metal, ceramic, and/or plastic. The knee joint is a hinge joint, and part of the femur (thigh bone) and tibia (shin bone) are replaced by a prosthetic hinge joint. For the ball-and-socket hip joint, the prosthetic "socket" is placed within the pelvic bone, and the prosthetic "ball" is placed at the top of the femur bone.

If you have joint replacement, you will likely be in the hospital for a few days. Potential complications of this surgery include infections, blood clots, or failure of the joint device.



Preventive measures are taken to help avoid these complications including antibiotics prior to surgery to prevent infections and blood thinners and compression stockings/boots to prevent blood clots. You will be given pain medication while in the hospital and to take at home. Some people may stay in a rehabilitation center after surgery, and others may go straight home. Physical therapy after joint replacement is crucial in the recovery process. It may take up to 6 weeks to return to normal activities after knee replacement, and up to 6 months after hip replacement.

Weight Stigma and Joint Replacement Surgery

Many people with severe OA and associated pain and functional limitations are denied joint replacement surgery due to their BMI being above a certain threshold. They are instead advised to lose weight first before they can qualify, and some are even advised to have weight loss surgery before joint surgery.

The reason cited for denial of joint replacement surgery for people with a high BMI is concern for a greater risk of surgical complications. Though the research does generally show a greater chance of infections after surgery among people in larger bodies compared with smaller bodies, the absolute risk is still low (about 1% risk in "normal" weight people vs about 2% risk in higher weight people). Research also shows that people in larger bodies have the same or better outcomes in terms of improvement in joint pain and function after joint replacement.

The technical aspects of joint replacement surgery among people in larger bodies, including longer operative time, are cited as reasons for the higher rate of infections. Some joint implant devices are not designed to accommodate the mechanical load of all bodies and may also lead to higher joint replacement failure rates. Weight bias in the development of surgical equipment and techniques is an underlying problem in surgical outcomes rather than body size itself.

The recommendation for weight loss prior to joint replacement surgery is not evidence-based. Studies of weight loss interventions prior to joint surgery have found either no difference in surgical infections or a higher risk of infections with weight loss interventions. Similarly, bariatric surgery prior to joint replacement surgery does not decrease the risk of surgical complications, and in some studies increases the likelihood of complications. Malnourishment at the time of surgery causes problems with healing and greater infection risk, irrespective of one's body size.

Fat people can be counseled about the potential for a higher chance of complications after surgery, but this should not preclude them from having this necessary surgery that can significantly improve quality of life. Medical and surgical care should be designed to accommodate and benefit all bodies rather than asking people to make their bodies conform to a certain size in order to receive treatment.

If you are being denied joint replacement surgery due to body size, the resources here may be helpful: https://bit.ly/DwFlointReplacement

Overall

Joint replacement surgeries are one of the areas of medicine which are most greatly impacted by weight stigma. It can help to remember that people with sports injuries are very often given these surgeries even if they actually did cause their injuries, and even though their replacements are likely to fail sooner due to the wear and tear of them returning to sports. Regardless, people of all sizes deserve equity in healthcare, including joint replacement when they are necessary with all of the quality-of-life improvement they can bring.