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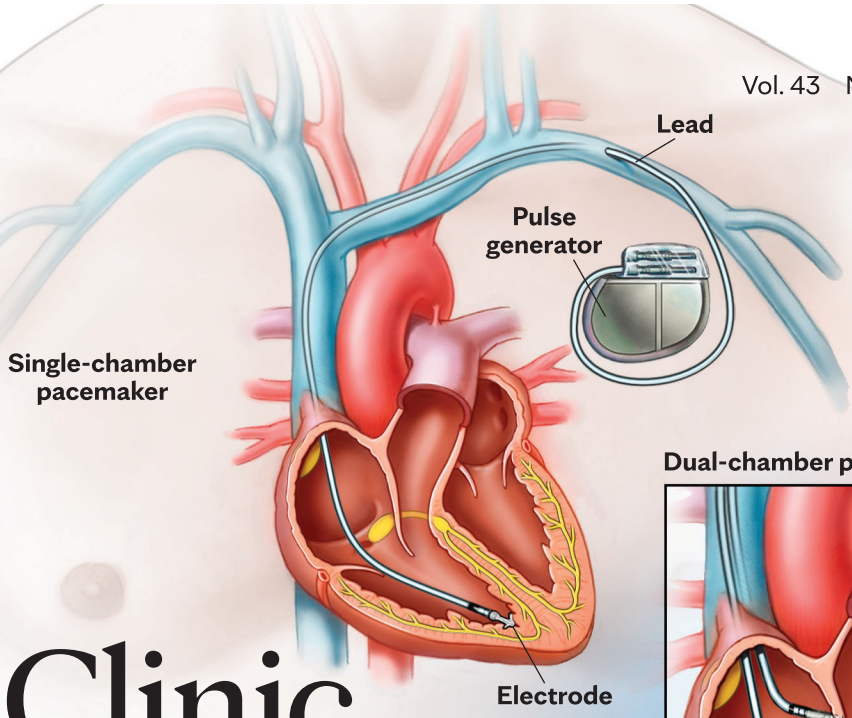
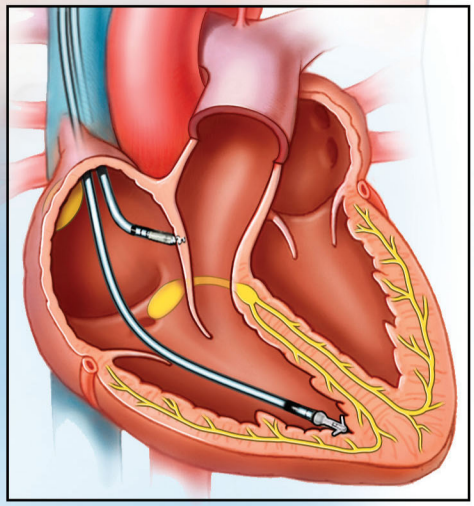


Mayo Clinic Health Letter

Reliable Information for a Healthier Life

Dual-chamber pacemaker



Implanted heart devices

Recent advances have made them safer and more effective than ever

Your heart beats on average 60 to 100 beats every minute. That's 86,000 beats or more a day and at least 31 million beats a year. By your 65th birthday, your heart has squeezed blood through its chambers billions of times.

"All of that can take a toll on the electrical system of the heart," says Abhishek Deshmukh, M.B.B.S., a cardiac electrophysiologist at Mayo Clinic in Rochester, Minnesota.

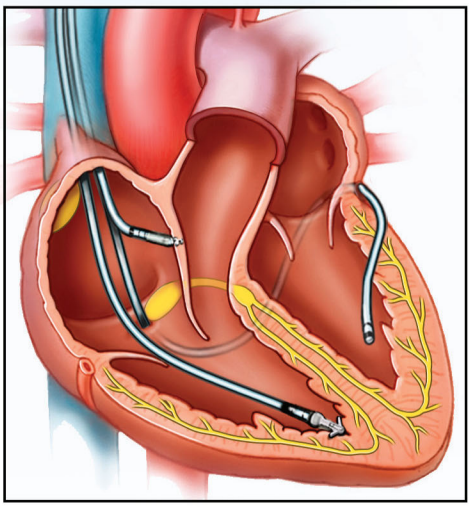
Over time, parts of the heart can wear down. The heart's electrical system can become fatigued, lose cells and fail to generate electrical signals. The heart wall can thicken, and heart cells can deteriorate.

Diseased blood vessels can reduce blood supply to the heart, causing damage to the heart muscle.

Eventually, these changes can increase the risk of erratic, skipped or dangerously slow heartbeats, leading to dizziness, shortness of breath, fatigue, confusion and passing out. In addition, a damaged heart may become weak, thickened, stiff, and unable to contract or relax as needed, a condition known as heart failure.

Decades ago, when a person developed heart failure or an irregular heartbeat (arrythmia), their time was limited — or they were in danger of sudden death. Then, during the mid-1900s, the pacemaker was developed. By delivering electrical impulses to the heart, this implantable device helps the heart beat in a consistent, healthy rhythm. Pacemakers and other life-sustaining implants can now reduce symptoms and add years or even decades to your life.

Biventricular pacemaker



Single-chamber (one lead) and dual-chamber (two leads) pacemakers can effectively restore heart rhythm. A biventricular pacemaker often is used to treat heart failure. By stimulating the two lower chambers of the heart, this device helps the heart squeeze in a more efficient and organized way.

First-generation devices

The first wave of cardiac devices required people to strap a 10-ounce battery-powered pulse generator to their abdomens. It was about the size of a pocket radio. Flexible wires led from the device, through openings in the chest or neck, to the heart. There, electrical impulses from the device helped restore a natural rhythm.

Today's high-tech devices have come a long way and continue to evolve and improve. They're much smaller and lighter. They can be implanted inside the body with no exposed wires or openings. The device's lithium batteries last up to 15 years. In addition, the devices can transmit signals via Bluetooth, allowing a healthcare team to monitor heart rhythm remotely.

These battery-powered, implanted devices include:

- *Single- and dual-chamber pacemakers* — These devices stimulate your heart when your heart's natural electrical system doesn't work as it should. Traditional pacemakers include a matchbook-sized pulse generator that sits just under the skin, near the collarbone. The generator is connected to flexible, insulated wires — known as leads — that carry electrical impulses from the generator to the heart muscle, helping it to beat in a regular rhythm. A single-chamber pacemaker includes only one lead. A dual-chamber pacemaker consists of two leads that stimulate the upper and lower chambers of one side of the heart.
- *Cardiac resynchronization therapy (CRT) devices* — Also called biventricular pacemakers, these devices stimulate the two lower chambers of the heart, called ventricles. This helps the ventricles to beat in synchrony. Often used to treat heart failure, CRT devices help the heart squeeze more efficiently.
- *Implantable cardioverter-defibrillators (ICDs)* — Similar to a pacemaker, these devices also detect life-threatening arrhythmias and shock (defibrillate) the heart back into a natural rhythm when needed.

While implanted cardiac devices can sustain life, they also pose some risks. The leads can become infected, necessitating their removal and replacement. They also can shift out of place. These dislodged leads fail to pace the intended area of the heart. They also can injure parts of the heart or stimulate tissues that aren't part of the heart. For example, if a dislodged lead stimulates the chest's phrenic nerve, it can cause the diaphragm to twitch, triggering chronic hiccups.

Finally, traditional pacing can cause the left side of the heart to weaken. This condition, known as pacing-induced cardiomyopathy, can cause heart failure.

Mayo Clinic is one of many medical centers studying ways to reduce these risks while also increasing the effectiveness of these devices. That research has led to a new generation of devices and techniques to place leads.

Advances in pacing technology

During the past decade, implanted cardiac devices have become increasingly safer and more effective. Here's a look at some recent advances.

LIFE-SUSTAINING DEVICES

Implantable cardiac devices are used to treat the following conditions:

- *Slow heartbeat (bradycardia)* — If the heart's electrical system doesn't work effectively, the heart may get little or no command to pump, leading to a bradycardia or even a stop in the heart's electrical activity (asystole). Bradycardias may be continuous, or they may come and go.
- *Heart failure* — Despite its name, heart failure doesn't mean the heart has come to a stop. Rather, people with heart failure have a weakened heart that can't contract or relax as well as needed. As a result, it may no longer pump enough blood for the body's needs, especially with demands such as movement and exercise.
- *Life-threatening arrhythmias* — When the heart's electrical signals don't work correctly, the heart can beat irregularly. Sometimes, this can lead to a dramatic drop in blood pressure. Someone's breathing and pulse may stop. Without an implantable device, this condition can lead to sudden death.

Mayo Clinic Health Letter

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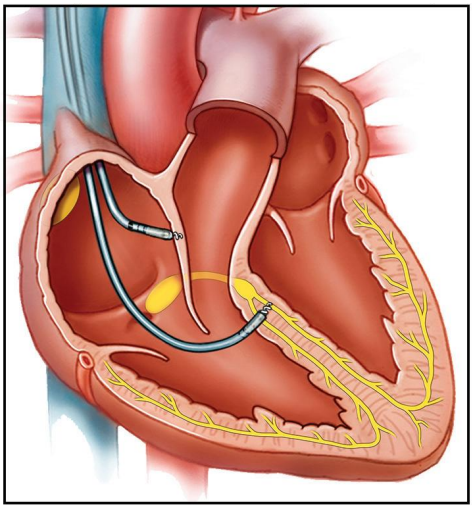
Conduction system pacing

Conventional pacemakers stimulate the lower right side of the heart. As the electrical impulse moves through the heart, there is a slight delay between contraction of the lower right and lower left chambers. "That's an abnormal way to activate the heart," says Dr. Deshmukh.

The contraction delay causes the left side of the heart to work harder than it ordinarily would. Over time, this increases a person's risk of developing pacemaker-induced cardiomyopathy and heart failure.

In contrast, conduction system pacing lowers those risks by stimulating a different area. For this pacing, doctors called cardiac electrophysiologists place leads along an area of the heart that's part of its electrical conduction system. Because this area of the heart evolved to carry electrical impulses through the entire heart simultaneously, stimulating this location activates the heart in a way that is less likely to increase the risk of cardiomyopathy.

"We try to mimic the natural cardiac activation, which has been shown to have better results than conventional pacing," says Dr. Deshmukh.



With conduction system pacing, leads are placed along an area of the heart that's part of its electrical conduction system. Stimulating this location activates the heart in a way that's less likely to increase the risk of cardiomyopathy.

Leadless pacemakers

Leadless pacemakers involve no wires, so there's nothing to potentially shift out of place. The generator and leads are all part of the same pill-sized device. Cardiac electrophysiologists insert these tiny devices by threading a catheter through a vein — typically the leg's femoral vein — and eventually into the heart. Because there's no chest incision, the risk of infection is lower than it is for traditional pacemakers with leads.

Leadless pacemakers first became available nearly a decade ago. However, they were initially used to stimulate only one chamber of the heart, which increased the risk of pacemaker-induced cardiomyopathy. For this reason, medical professionals have begun using dual-chamber leadless devices. When one leadless pacemaker is placed in the upper part of the heart and another in the lower part of the heart, the upper and lower chambers of the heart will beat in synchrony. This reduces the risk of pacemaker-induced cardiomyopathy.

Extravascular implantable cardioverter-defibrillators

To place a traditional transvenous implantable cardioverter-defibrillator, cardiac electrophysiologists insert a catheter into a vein to access the heart. Though the procedure is lifesaving, it comes with a risk of infection and accidental damage to a blood vessel or the heart.

Newer extravascular defibrillators reduce those risks. Additionally, their leads are placed outside of the heart. That allows cardiac electrophysiologists to insert the leads without using a blood vessel. "That has been a game changer in people at a higher risk of infection, such as people who are on dialysis or taking immune suppressing medicatons," says Dr. Deshmukh.

Understanding your options

Though the newest pacing options can lower the risk of complications, they're not the right choice for everyone. For example, leadless pacemakers offer numerous advantages, especially for people in poor health or who may be immunocompromised. During recovery, there also are fewer restrictions on arm movements, making these devices an excellent option for people who use canes or walkers.

But because the battery for a leadless pacemaker is placed inside the heart, it cannot be recharged or replaced. In contrast, the battery for a traditional pacemaker is located just under the skin near the collarbone. To replace it, a doctor makes a small incision, removes the pulse generator and replaces it with a new one. A traditional pacemaker with leads may make more sense for someone who is healthy and likely to outlive the battery life of their device.

It's essential to discuss the risks and benefits of each option with your healthcare team. Ask how your health, heart function, infection risk, age, lifestyle and mobility might affect the benefits and risks of the implantable cardiac devices you're considering. Talk about the reasons behind your care team's recommendations for lead or leadless technology, number of leads, and lead placement.

In addition, find out:

- How long the battery will likely last.
- What to expect during your recovery.
- How you might expect to feel once the device is implanted.
- The health conditions and symptoms the device will and won't solve.
- The follow-up care you'll need and where you can receive it.
- Who will remotely monitor the device.
- The limitations of living with each device.

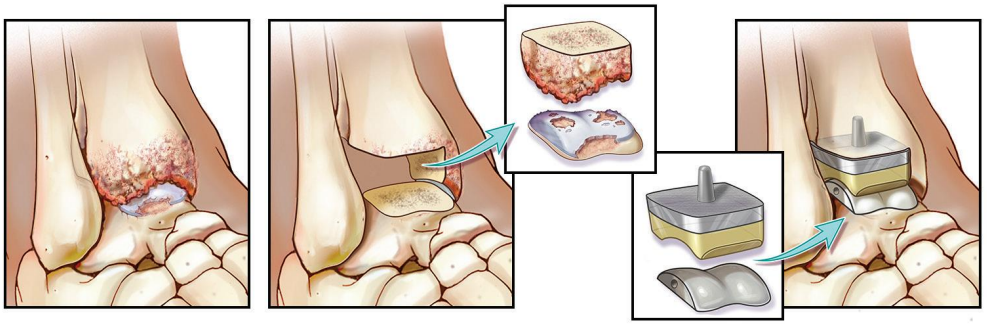
Through this discussion, you can work together to agree on the best option for your specific needs.

It's also a good idea to choose a healthcare team that is experienced in the insertion of cardiac devices. Research shows that the fewest complications occur when surgery is done by cardiac electrophysiologists who insert at least 40 devices a year for 10 years or more. ■

Ankle replacement

Advances in surgery and outcomes

You played a lot of sports growing up. But badly spraining your ankle back in those glory days is a less-than-nostalgic reminder — you're now dealing with painful arthritis. You've tried cortisone injections, creams, massages and more. But the stiffness and swelling still make it hard to walk. Your doctor recommends an ankle replacement. How do you know if it's time?



With a total ankle replacement, the surgery team removes the ends of the damaged bones and replaces them with parts made of titanium and plastic. To allow for regular movement, all of the main tendons and ligaments are left in place.

Is replacement for you?

Over 70 million people globally have ankle osteoarthritis. The pain related to the condition can result in both physical and mental challenges. A total ankle replacement (TAR), also known as ankle arthroplasty, can help people struggling with moderate to severe arthritis of many types.

TAR usually is done when other treatments, such as anti-inflammatory medications or ankle braces, aren't able to relieve daily pain. You may be a good candidate if you:

- Are over 60.
- Don't smoke.
- Are at a healthy weight.
- Don't have jobs and hobbies that require demanding physical labor.
- Have no nerve damage in your feet, such as that caused by diabetes.
- Have healthy ligaments and bones around the ankle.

TAR is typically recommended for people with less active lifestyles so that the new joint doesn't quickly wear out. Less active does not mean sedentary, however. This lifestyle can include low-impact movement such as golfing, swimming, cycling, walking and yoga.

Risks and rewards

Outcomes have improved since TAR was first performed in 1973. The surgery has gained recognition as an effective solution thanks to advancing technology and understanding of ankle biomechanics. But any complex surgery comes with potential risks.

Common side effects of the surgery may include numbness and swelling around the ankle, which can last for a few weeks to months. The anesthesia used in surgery can cause nausea, drowsiness, vomiting and dry mouth for a day or two. There also is some risk of infection and nerve injury and postoperative pain.

Everyone — and every surgery — is different. TAR can be a long-term solution, but the implants can wear out over time. However, new implant designs have reduced this risk.

"Total ankle replacement continues to evolve with new porous metals on the implants and designs to increase bone ingrowth," says Norman Turner III, M.D., an orthopedic surgeon at Mayo Clinic in Rochester, Minnesota. Bone ingrowth is the formation of bone tissue within the surface of an implant, which is essential for the anchoring and success of the artificial joint. "With new implants and careful patient selection, outcomes continue to improve."

Ankle arthrodesis, also known as joint fusion, is another surgical option for arthritis in the ankle. In this procedure, the bones of the ankle are fused together using metal plates and screws. It usually is performed on younger people and those with poor bone quality or severe joint damage. While fusion used to be considered the gold standard surgery and can help with arthritis pain, it reduces joint motion. TAR can better preserve mobility, give you a more typical walking pattern and put less stress on nearby joints.

"Avoiding repetitive high-impact activity is advisable after total ankle replacement, so if you are highly active you may benefit from an ankle fusion instead of replacement," says Taylor Beahrs, M.D., an orthopedic surgeon with Mayo Clinic Health System. "Ankle replacement is a viable surgical alternative to ankle fusion in many people. Advancements in person-specific 3D printed alignment guides have improved our ability to implant ankles in a safe and less invasive way."

Receiving care

Before surgery, your healthcare team examines your ankle with imaging to better understand your needs and form a treatment plan.

The TAR procedure is performed within about two hours. The surgery team removes the ends of the damaged bones and replaces them with parts made of titanium and plastic. Your surgeon chooses the prosthetic devices specifically for you.

This new, artificial joint helps the ankle maintain movement and decreases the chance of arthritis developing in nearby joints. In order for the ankle to continue to bend and straighten, all of the main tendons and ligaments are left in place.

Road to recovery

Most people are able to resume regular daily activities within 3 to 4 months of surgery. The ankle is protected in a splint, cast or boot for 4 to 12 weeks, allowing it to heal properly.

You might use crutches or other mobility aids to help stabilize your movements until you're able to resume weight-bearing activities.

In addition to managing pain and mobility, your healthcare team can help you learn how to care for yourself after surgery. When you return home, caregiver support is recommended for the first 1 to 2 weeks. Keeping your cast elevated above your heart throughout the day can reduce swelling. When you're able, moving around for 10 minutes every hour you are awake can help prevent blood clots.

Try not to get discouraged by the temporary decrease in activity while recovering. There are many ways to remain active and get outside with your new ankle in the years to come with lower impact movement such as walking, dancing, water aerobics and snowshoeing. A physical therapist can create a rehabilitation program that's right for you and your goals.

"People usually have significant improvement in pain and function after the surgery," Dr. Turner says. "The goal is for the implants to last a lifetime." ■

NEWS AND OUR VIEWS

BLEEDING WITH BLOOD THINNERS MAY SIGNAL CANCER'S PRESENCE

Blood thinners, also called anticoagulants, are a common treatment for people who have atrial fibrillation (AFib) — an irregular and sometimes rapid heart rhythm. That's because blood clots and clot-related strokes are common and dangerous complications of AFib. By reducing the blood's ability to clot, stroke risk related to AFib goes down significantly. However, use of blood thinners increases the risk of bleeding, both externally and internally.

But could that bleeding be a sign of another problem? Several studies have reported that a new diagnosis of AFib is often followed by a cancer diagnosis. Now, new research explores how often bleeding after starting anticoagulant therapy is a first sign of cancer, especially in older adults.

In the study, published in a March 2025 issue of *Circulation*, researchers tracked the health data of almost 120,000 people over age 65 with AFib, none of whom had a history of cancer. All participants had started on anticoagulant therapy with either a traditional anticoagulant such as warfarin or a direct oral anticoagulant such as apixaban, dabigatran or rivaroxaban. Over a two-year period, 22% of participants experienced bleeding, and 5% were diagnosed with cancer. Those who had bleeding had four times the incidence of a cancer diagnosis in general and much higher rates of cancer at the site of the bleeding. For example, for those with gastrointestinal bleeding, a diagnosis of colorectal and stomach cancers was more than 15 times more likely than it was for those with no bleeding. Bleeding that occurred in the genital or urinary tract was linked to a tenfold increased finding of prostate, bladder or uterine cancer.

The study's authors note that bleeding after anticoagulation may offer an opportunity for cancer diagnosis at an early stage. This may increase the likelihood of a cure. Mayo Clinic experts advise that you seek medical attention if you experience significant, prolonged or unusual bleeding while taking an anticoagulant. That may appear as:

- Bleeding that doesn't stop after holding pressure for 10 minutes.
- Bleeding from the rectum.
- Red stools or black, tarlike stools.
- Blood in the urine.
- Intense or frequent nosebleeds.
- Heavy bleeding from the gums.
- Unexplained bruising.
- Vaginal bleeding after menopause.

Beyond being a sign of cancer, bleeding with anticoagulants can indicate a number of health risks and may even be life-threatening. Your healthcare team can use imaging and other tests to determine the source of bleeding and recommend a proper treatment. ■

BERBERINE: NATURE'S OZEMPIC?

Lately, there's some buzz surrounding the supplement berberine, which has sometimes been marketed as a natural version of the prescription drug semaglutide (Ozempic, others). The latter has made waves in recent years for helping people lose significant amounts of weight, among other therapeutic effects. But while berberine appears to offer some health benefits, calling it "nature's Ozempic" is misleading.

To start, Ozempic and berberine work differently. Ozempic is a GLP-1 receptor agonist approved by the Food and Drug Administration (FDA). It helps people lose weight by reducing appetite, controlling insulin levels and slowing how quickly food moves through the digestive tract.

Berberine is a type of substance called an alkaloid, which naturally occurs in certain plants. Studies have found that berberine may help improve cholesterol and blood sugar levels by influencing the body's metabolism of blood sugar and fats. However, berberine is not known to act directly on hunger. In some research, participants taking berberine had decreased body mass index (BMI) and reduced waist size, but the results have tended to be inconsistent or not clinically significant. Studies on berberine often have had small sample sizes and have varied in quality. Overall, it doesn't appear to have much impact on weight loss. Because it's a supplement, berberine isn't FDA-approved or strictly regulated the same way medications are, so the quality and consistency of ingredients can vary.

The bottom line: While berberine has some potential to support health, weight-loss benefits are minimal, if any. If you're thinking about using it, talk with a healthcare professional first. Berberine can interact with many medications, including anticlotting drugs and those taken for diabetes and high blood pressure. What Ozempic and berberine do have in common is that they're not magic pills. Weight management relies on an overall healthy lifestyle. ■

Alcohol use and misuse

When does a person's drinking become risky?

Many people drink alcohol during social activities or holidays or to unwind after a long day. More than 70% of adults in the U.S. say they consume one or more drinks a week. But when does moderate drinking become alcohol misuse or dependency?

Pour choices

According to the U.S. Department of Health and Human Services, moderate drinking means consuming no more than one drink a day for women and no more than two drinks a day for men. One drink is defined as:

- 12 fluid ounces of beer.
- 5 fluid ounces of wine.
- 1.5 fluid ounces of hard liquor or spirits.

Although moderate drinking isn't considered misuse, it's not risk-free. Many of these risks — including liver disease, heart disease and accidents — have long been known. According to an advisory released this year from the Office of the Surgeon General, there's also stronger evidence than before that alcohol consumption increases your risk of at least seven types of cancer, including cancers of the mouth, throat, voice box, esophagus, breast, liver, and colon and rectum. New evidence indicates that this risk applies even when you consume alcohol within the advised limits. In short, there is no amount of alcohol consumption that's considered truly safe to avoid increased cancer risk and other health risks.

When it's too much

For women, heavy drinking means consuming eight or more drinks a week — or four or more in one day during a week. For men, it means consuming 15 or more drinks a week — or five or more drinks in one day during a week. Binge drinking for men is generally defined as five or more drinks within two hours. Binge drinking for women is defined as four or more drinks within two hours.

According to the 2023 National Survey on Drug Use and Health, approximately 12% of adults age 65 and older reported binge drinking in the past month. This is especially concerning, as many older adults take medications that can interact negatively with alcohol. These interactions have the potential for causing falls and other accidents.

Alcohol misuse involves drinking in a manner, situation, amount or frequency that could harm you or the people around you. This doesn't necessarily involve alcohol dependency. If you binge drink at social events a few times a year, you're misusing alcohol. But if you otherwise abstain most of the year, you are not considered to have alcohol dependency.

Alcohol use disorder (AUD) is a pattern of alcohol use that leads to significant impairment or distress. Indications of AUD include:

- Drinking in larger amounts or for longer than intended.
- A desire — or unsuccessful efforts — to limit alcohol use.
- Craving and increased tolerance of alcohol.
- Withdrawal symptoms when attempting to stop drinking.
- Alcohol use that results in failure to fulfill obligations at work or home.
- Spending a large amount of time engaged in drinking-related activities — including recovering from alcohol use — and spending less time doing activities not related to drinking.
- Continued alcohol use despite unwanted social, physical or psychological effects.

Beyond the stigma

Alyssa Kalata, Ph.D., L.P., a licensed psychologist at Mayo Clinic, encourages everyone who drinks — in any amount — to have a conversation

SUPPORTING A LOVED ONE WITH ALCOHOL USE

If you have a friend or family member who may misuse alcohol, you may want to voice your concerns. Here are a few tips to keep in mind:

- *Be mindful of timing* — Plan what you would like to communicate to your loved one in advance and make sure that your emotions are regulated for the discussion. If possible, the best time to talk is when your loved one is sober and levelheaded as well.
- *Choose compassion* — During the talk, remain nonjudgmental and focus on specific concerns. Recognize that the message may be difficult to hear.
- *Try again* — If your first conversation doesn't go as planned, don't despair. By starting the discussion, you have revealed your concern and care. This opens up the possibility for discussions that may go differently in the future.

"There is never a bad time for an honest examination of your alcohol use," says Dr. Kalata. Talking to your doctor is a good place to start.

with a healthcare professional about alcohol use as part of routine care. If you are engaged in more-frequent or heavy drinking, your team may be able to help you strategize ways to stop drinking on your own or moderate it to a level that better balances risks with enjoyment.

For people who binge drink, asking for help from a healthcare professional can be daunting. The shame that often surrounds AUD and other substance use disorders can make people want to avoid asking for help or seeking treatment.

Lack of awareness may be another barrier. "I often hear people making comparisons to others in a way that downplays the consumption. They might say, 'I don't drink as much as my other friends' or 'I've never missed work or gotten a DUI.' But this type of thinking can lead to avoidance and serve as a justification for continued use," says Dr. Kalata.

"There is never a bad time for an honest examination of your alcohol use," Dr. Kalata says. Talking to your doctor is a good place to start. If you choose to seek care related to alcohol use, a multidisciplinary team approach is especially helpful. Support groups such as SMART Recovery or Alcoholics Anonymous can further assist those with AUD to get and stay sober.

Road to wellness

"Whether you are just now coming to the realization that your relationship with alcohol is problematic or you have been to treatment half a dozen times and wondering whether it's worth your time to give it another go, know that recovery is possible," Dr. Kalata says. "I have yet to work with someone who I didn't believe was able to have a sober and fulfilling life."

Taking the initiative to start the conversation can help you receive guidance tailored to your needs. Don't be afraid to reach out to your healthcare team with your concerns or turn to a trusted friend or family member for encouragement to do so. ■

HEALTH TIPS

FINDING JOY IN EXERCISE

Another gloomy day. The treadmill downstairs feels so far away from the couch you've sunk into. Then your friend calls asking if you're coming to water aerobics.

Finding motivation, let alone joy, in exercise can be difficult. But Rosalyn Salstrand, RCEP, a registered clinical exercise physiologist at Mayo Clinic, says that when exercise brings joy and variety into your day, it feels less like a task and more like a reward — for both your body and your mind. You can make exercise enjoyable and sustainable with:

- *Exploration* — Switch up your usual path by walking or jogging in a different neighborhood, park or trail out in nature. Listen to a newly released podcast instead of your go-to playlist. These small additions turn exercise into more than just movement — it's a chance to learn, discover and be inspired.
- *Connection* — Connect exercise with what you already love, including your people. Working out with a buddy can help both of you be more likely to stick to your goals by holding each other accountable. Romping with grandchildren or pets can add both delight and purpose to your activities.
- *Variety* — Diversifying your exercise routine not only combats boredom and burnout but also allows for recovery of different joints and muscles while avoiding overuse injuries. Variety helps the body maintain a higher level of metabolism, burn more calories, and balance between higher impact exercises, such as running or hiking, and lower impact exercises, such as swimming, chair aerobics and yoga. Dancing to your favorite music can boost your heart rate and your mood.
- *Energy* — Consider your energy levels and plan a session of movement for when you're at your peak. This could be a full exercise session or a short burst, as your schedule allows.
- *Reflection* — As you exercise, reflect on the wonder of your body — the strength and spirit that go into making each movement that uplifts your health. "I think of exercise as my medicine," says Mariana Pencheva-Yanev, CEP, a clinical exercise physiologist at Mayo Clinic. "Exercise helps me find strength, patience and grace with myself."

At the end of your workout, allow a moment for gratitude and pride. Take a deep breath, smile and reflect on one thing that brought you joy. Celebrate your effort. You've given your body the gift of movement — well done! ■

Second opinion

Q My grandson told me I can use earbuds as hearing aids. Do they really work?

A Your grandson is right. Specifically, Apple's AirPods Pro 2 can be used as hearing aids when paired with an iPhone or iPad running the latest software (iOS 18.1 or later). There are other over-the-counter (OTC) hearing aids on the market, but this is the first time the U.S. Food and Drug Administration has approved software that enables a device that wasn't created as a hearing aid to act as one.

Once your AirPods are paired to your iPhone or iPad, it's relatively easy to set up the hearing aid feature by going to "Settings" then tapping "your AirPods." The software includes an option to take a hearing test using your device, or you can use the results from a professional test. Once you complete the setup and turn on the hearing aid function, you can adjust the amplification, balance between left and right earbud, tone, and ambient noise settings.

Will this work for you? Like other OTC hearing aids, it's a matter of individual needs and preferences. Here are some things to consider:

- *Cost* — AirPods Pro 2 (the only model that currently works with the hearing aid function) cost about $250.
- *Battery charge* — The manufacturer says the AirPods Pro 2 should get about six hours of listening time on a single charge — not long enough to last all day.
- *Comfort* — AirPods were designed as earbuds for listening to music or talking on the phone, so after a few hours, some users may find the AirPods are not as comfortable as OTC or professionally fit hearing aids.

Depending on your preferences, using AirPods as hearing aids may make sense if you are already an Apple device user and are looking for a way to boost your hearing in specific situations — such as at a noisy restaurant — in which you only need to temporarily use the hearing aid feature. If you need help hearing all day, you may want to consider other types of aids. See "Over-the-counter hearing aids" in our July 2025 issue for more information about that particular option. ■

Q Every time I try grooming my pubic area, I get razor burn or ingrown hairs. Is there a way to avoid this?

A People remove pubic hair for a variety of reasons. Some feel cleaner when the area has less hair or want to reduce sweat and odor that can be trapped by hair. Some do it as part of their religion. Others find it more aesthetically pleasing. But the answer to your question may rely on why you want to remove the hair and how motivated you are to lessen it or remove it completely.

Pubic hair does have a purpose. It acts as a natural barrier that reduces friction, traps bacteria and debris, and protects the skin. Removing it completely or aggressively with methods such as shaving or waxing can cause irritation, increase the risk of ingrown hairs and make the skin more vulnerable to infection. Waxing also can lead to burns or skin bleeding.

If you're going to remove your pubic hair and you want to reduce the risk of the usual pitfalls, you can trim the hair with scissors or an electric trimmer outfitted with a guard. Trimming doesn't cut close to the skin, so it's a better option if you have a weakened immune system and increased risk of infection.

If you want a closer shave, shower with warm water or use warm compresses to help soften the hair and open up the pores. Use a clean, sharp razor or body groomer designed for more-sensitive areas. Apply shaving gel or a soapy lather and shave in the direction of hair growth rather than against it, using a mirror to help you see better, if needed. Then rinse with cool water, pat dry with a clean towel, and apply a fragrance-free moisturizer or balm.

To reduce the risk of infection, don't share hair removal products. Removing hair causes tiny tears in the skin, which can allow harmful bacteria and viruses — including sexually transmitted infections — to enter the body. For those who opt for waxing at a salon or spa, be sure the esthetician uses a new application stick every time wax is applied from the pot. Doing so avoids contaminating the wax, which can be a breeding ground for bacteria.

If you've tried the methods listed above and you are still experiencing discomfort, or you would like a longer lasting hair removal solution, talk to a dermatologist about laser hair removal. But keep in mind that this can be pricey and is not always 100% effective. ■

Have a question or comment? We appreciate every letter sent to Second Opinion but cannot publish an answer to each question or respond to requests for consultation on individual medical conditions. Editorial comments can be directed to:

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