Get stronger, live better

Benefits of weight training

No matter how well you take care of yourself, age will take a toll on the amount and quality of muscle in your body. Weaker muscles and loss of muscle mass can contribute to many health problems, such as increased risk of falls, decreased bone strength and weight gain.

With declining strength, you also may notice that things get harder to do. As a result, you may cut back on or stop a favorite physical activity, hire someone to mow the lawn, or have to say no to grandkids who are begging you to play.

But don’t give up hope and blame it all on getting old. Studies have found that only about 30 percent of the difference in strength between young adults and older adults is due to aging. That means about 70 percent of the strength people lose is related to other factors, most notably a decline in physical activity.

But this 70 percent loss doesn’t have to occur — and if it has already occurred, the loss can be regained. Older adults often experience remarkable improvement in strength.
Within weeks or months of starting a strength training program.

You may be surprised at how easy it is — and how little time it takes — to maintain or get back the strength you need to improve your health and to maintain active independence.

Muscle matters

If you’re not planning to enter a bodybuilding contest or to start playing professional football any time soon, why should you bother with strength training exercises?

The quick answer is that muscles are responsible for every movement that you make, and strong muscles make it easier to live a full and productive life. Strong muscles influence your health in other ways, as well. For example, strength training can:

- **Improve bone health** — Strength training increases bone density and reduces your risk of osteoporosis.
- **Promote weight control and reduce body fat** — Muscle is lost as a natural part of aging. Muscle burns calories, and muscle gains through strength training help you burn more calories, making it easier to reduce body fat and control your weight. Strength training initially may not result in much weight loss, because muscle weight gains may offset losses in fat weight. However, you’re still likely to be leaner and may experience reductions in measurements such as waist size.
- **Reduce your risk of injury** — Strength training can contribute to better balance, coordination and agility, reducing your risk of falls and injuries. Strengthening makes joints — such as your knee joint — more stable and gives your muscles a greater role in absorbing stresses exerted on joints.
- **Alleviate back pain and arthritis pain** — Strengthening lower back muscles is a proven way to ease back pain. Strengthening often is a critical component of alleviating joint pain, as well.

- **Promote diabetes control** — Strength training helps reduce body fat, which lowers the risk of diabetes. Strength training also improves your body’s ability to process the sugar in your blood.
- **Improve cognition** — A recent study found that strength training activities once or twice a week improved cognitive function in a group of older women.

With no strength training and little physical activity, age-related muscle loss and weakness can quickly become a downward spiral. Declines in muscle strength, power and endurance lead to increased difficulty in handling everyday tasks, increased risk of falls and fractures, and increased fatigue and difficulty with exercise.

As physical activity gets harder, you may do even less of it — which leads to further declines in strength and an increased risk of developing a disability.

Getting started

First, get your doctor’s OK to begin a strength training program. Then consider scheduling time with a physical therapist or certified trainer who can help you design a resistance program and advise you on safety issues. This is practically a must if you’re a beginner or if you’ve been inactive or you have medical issues — such as arthritis — that may affect recommended strength training activities.

When you start strength training, take it slow. It’s not about how much you can do in one day. It’s about gradual and consistent improvement over time. When you’re starting out, it’s better to err on the side of selecting weights that are too light.

Aim to complete one set of exercises for each of your major muscle groups — including your shoulders, chest, arms, back, abdominals and legs. In addition, exercise opposing muscles in a balanced way, such as exercising the chest muscles and the muscles of the upper back. Two to three strength training sessions a week lasting just 20 to 30 minutes are adequate for most people.

You can do strength training at home or at a gym. Consider using:

- Your body weight to do exercises such as push-ups, sit-ups, leg squats, or side- or back-strengthening bridges
- Resistance tubing, which can be found at most sporting goods stores
- Free weights, such as barbells or dumbbells
- Weight machines

Begin by warming up with five to 10 minutes of gentle exercise.
Health tips

Buying sunglasses

Sunglasses offer your eyes protection from the sun’s damaging ultraviolet (UV) rays. Long-term exposure to UV rays can contribute to cataract formation and damage the cornea, lens and other parts vital to vision. Look for sunglasses that:

■ **Offer maximum UV protection** — Look for sunglasses that block 99 to 100 percent of both UVA and UVB light. Sometimes, labels say that all light below 400 nanometers is blocked. This is the same as 100 percent UV protection.

Since UV coating is colorless, a dark lens doesn’t necessarily mean increased UV protection. In fact, a dark pair of sunglasses that doesn’t block 99 to 100 percent of UV light may actually increase your UV exposure. Darker glasses reduce the amount of light your eye receives. A natural response is that your pupils dilate to let in more light. As a result, the pupils also let in more UV light.

■ **Wrap your eyes in protection** — The more closely sunglasses fit to your face, the better. Your eyes can be damaged from UV rays that are scattered and reflected into the eye area from beyond the edges of sunglass lenses. Wraparound sunglasses give more complete protection.

Regular prescription glasses also can offer UV protection with the addition of chemicals during the manufacturing of the lenses or with the addition of a UV lens coating.

A few more tips

When you’re strength training, keep these do’s and don’ts in mind:

■ **Use proper form** — Learn to do each exercise correctly. If you’re unable to maintain good form, decrease the weight or resistance or the number of repetitions.

■ **Don’t rush** — Move the weight in an unhurried, controlled fashion. Taking it slow helps you isolate the muscles you want to exercise and keeps you from relying on momentum to lift the weight.

■ **Don’t overdo it** — Select appropriate weight or resistance levels, stop at the point of fatigue, maintain good form, and opt for only one set of a given exercise.

■ **Don’t work through the pain** — If an exercise causes pain, stop. Try again in a few days, try it with less weight or resistance, or ask a knowledgeable trainer if there’s something you’re doing wrong.

■ **Rest** — Avoid exercising the same muscles two days in a row.

Remember, you don’t need to strive for the look of a bodybuilder to reap the benefits of strength training. Gains you make in strength may be felt more than seen, whether it’s being able to walk farther or faster, feeling sturdier on your feet, or having the stamina to do what you want.
Fluid increase in the brain

Normal-pressure hydrocephalus

A good walk is one of life’s pleasures. Lately, though, you’ve felt as if your feet aren’t in tune with your body. It’s as if they lag behind. Instead of relaxing during your walk, you find yourself thinking about picking up your feet.

Your doctor suggested several tests to determine what might be causing this change. Brain scans show the problem is an abnormal fluid increase inside your brain. The medical term is normal-pressure hydrocephalus (NPH).

Although NPH can occur at any age, it’s most common among older adults. Its symptoms can be similar to other conditions associated with aging, which can make NPH challenging to recognize. Once NPH is identified, treatment may help improve symptoms, although there are varying degrees of success.

Pressure points

Normally, your brain and spinal cord are cushioned in a constant bath of clear fluid called cerebrospinal fluid. This fluid also occupies four large open structures (ventricles) that reside deep inside your brain. The fluid is absorbed into the bloodstream.

With normal-pressure hydrocephalus, absorption or movement of cerebrospinal fluid is affected. Why this happens isn’t always apparent, but it results in the ven-
tricles gradually accumulating too much fluid and becoming enlarged.

**Signs of trouble**

Sometimes NPH develops after an injury, such as trauma to the head. It may occur as a result of other health problems. Some adults who have NPH have large heads, suggesting they may have been born with undetected hydrocephalus that produces symptoms in later life. However, in many instances, a cause can’t be determined.

It’s thought that a pressure effect within the ventricles results in changes that produce certain symptoms typical of NPH. These may not occur all at once, and sometimes only one or two of the following are present:

- **Problems with walking** — In the early stages of NPH, difficulty walking is often the most common symptom. Your stance may become wider, and your footsteps may become slower and closer together.
- **Mild dementia** — Changes may be mild enough to go unnoticed or be accepted as part of aging. There may be short-term memory loss. You might lose interest in daily activities or become forgetful.
- **Problems with bladder control** — In milder cases, urinary frequency and urgency may occur. Complete loss of bladder control (urinary incontinence) may develop in more-severe cases of NPH.

**Challenging to diagnose**

Identifying NPH is often a process of eliminating other possible disorders — such as Parkinson’s disease and Alzheimer’s disease — that can have symptoms resembling those of NPH. Neurologists and neurosurgeons who specialize in this area can help make the diagnosis.

If NPH is suspected, brain scans — particularly magnetic resonance imaging (MRI) and computerized tomography (CT) — can help de-

**Treatment considerations**

Treatment for NPH typically involves surgery to place a drainage system — called a ventricular shunt — in the brain’s ventricles. The shunt directs excess fluid through a thin tube (catheter) into another area in the body, most typically the abdomen, where it can be reabsorbed. The treatment goal with ventricular shunting is to improve walking.

Results from shunt placement can’t be clearly determined ahead of time. However, NPH is more likely to respond to a shunt if walking difficulty appears first in the disorder and is the most prominent symptom. Careful discussion with your neurologist and neurosurgeon can help determine whether a shunt procedure is advisable for you. Consideration is given to your current health and to what the expected outcomes might be.

Shunt placement is done under general anesthesia. After surgery, the entire shunt system is within the body. None of it is exposed to the outside. Even in an experienced surgeon’s hands, shunt complications are quite frequent. Headaches are common. Shunt blockage may occur, necessitating surgical revision. Among other possible complications are buildup of fluid or blood around the brain (subdural collection), infection within the shunt, and seizures.

**A final word**

Living with a shunt means being alert to any possible complications. Recurring NPH symptoms after improvements need to be evaluated for possible malfunction of the shunt itself.

Shunt surgery isn’t a guaranteed “fix” for NPH. But those who have the surgery and experience reduced NPH symptoms may enjoy significant changes in quality of life. Still, as with any surgery, there are risks.
Malaria

Risks for travelers

If you’re planning to travel to tropical locations such as central South America, Haiti, sub-Saharan Africa or south Asia, discuss malaria-preventing recommendations with your doctor a couple of months before you leave.

Your doctor can prescribe drugs to take before, during and for some weeks after your trip to help protect you from malaria.

Malaria is a parasitic disease spread by mosquitoes. It can lead to serious illness, and sometimes death. About 1,500 cases are diagnosed in the United States each year. Most occur in travelers who didn’t take preventive measures.

A vexing disease

Malaria is caused by microscopic parasites that are transmitted most commonly by mosquito bites. If an infected mosquito bites you and malaria is transmitted, the parasites travel to your liver where they lie dormant. Dormancy can last up to a year, but is usually about 10 days to four weeks.

When the parasites mature, they leave the liver and infect red blood cells. This is when malaria signs and symptoms typically develop.

If an uninfected mosquito bites you at this point, it will become infected and can spread malaria to others. You can also be infected from exposure to infected blood, such as through a blood transfusion.

Malaria is estimated to kill about 1 million people worldwide each year. Most of these deaths are of young children in Africa. Adult residents of a malaria region still get sick from malaria, but they may be exposed to the disease so frequently that they acquire a partial immunity. This can lessen the severity of malaria. However, when residents of malaria regions move to an area where they’re no longer exposed to the parasite, that partial immunity can disappear.

Fevered pitch

Malaria infections are categorized as either uncomplicated or severe. Signs and symptoms of uncomplicated malaria are similar to the flu and include moderate to severe chills and shaking, high fever, profuse sweating, headaches, nausea, and vomiting. These bouts of illness may go away and recur.

If uncomplicated malaria isn’t promptly treated, it can become a life-threatening medical emergency. Severe malaria may involve swelling of the brain, breathing problems as fluid accumulates in the lungs, kidney and liver failure, rupture of the spleen, severe damage to red blood cells, and dangerously low blood sugar.

If you experience a high fever while traveling or living in a part of the world with malaria, talk to a doctor. In addition, talk to your own doctor promptly if you experience a high fever within a year after returning from a part of the world with malaria. If you have severe signs and symptoms, seek emergency care.

Diagnosis of malaria is made through laboratory analysis of a blood sample. A microscopic exam may also reveal the species of malaria parasite that has infected you.

Treatment of malaria involves one or more antimalarial drugs, including chloroquine (Aralen), hydroxychloroquine (Plaquenil), mefloquine (Lariam), or the combination of atovaquone and proguanil (Malarone). Drug choice and aggressiveness of treatment is determined by factors such as the malaria parasite species where you’ve traveled, your age and the severity of your disease. Drug choice is important, as some types of malaria have evolved to be resistant to certain drugs, such as chloroquine.

Effective treatment can cure malaria. However, the disease can continue if it’s not treated or treated with the wrong drug. Drugs used to treat the disease are generally the same ones used to prevent it.

If you’ll be traveling to a location with limited access to medical care, discuss a self-treatment plan with your doctor ahead of time. □
Nightmares

Sometimes, an adult dilemma

In recent months, you’ve been jolted out of sleep numerous times because of nightmares. Lately, the thought of sleep is sometimes crowded by worry that you may encounter another nightmare.

Nightmares are common. Although they can begin at any age, nightmares typically start early in childhood and tend to decrease after about age 10. However, some people have them as teens or adults, or throughout life. Occasional nightmares generally aren’t cause for concern. But if they’re becoming more frequent, routinely disrupting your sleep or causing fear prior to sleep, talk with your doctor.

Heady dreams

Normally, you go through four to five sleep cycles a night. For the most part, nightmares occur during rapid eye movement (REM) sleep, one of the stages occurring in each of the sleep cycles. Nightmares are more likely during the latter half of your night, when the REM stages tend to last longer.

While everyone has bad dreams, nightmares tend to become more disturbing as they unfold. They’re also distinguishable because you:

■ Are awakened by the dream
■ Can think clearly when awakened and often recall dream details
■ Feel fear or anxiety, anger, sadness, or disgust from your dream
■ May find it difficult to return to sleep following a nightmare

Cause and effect

What triggers an escalation in nightmares isn’t always clear. Factors may include:

■ Stress and anxiety — Stresses of daily life may trigger nightmares for some. Major life changes, such as the death of a loved one or a move, can do the same.

■ Trauma — Nightmares are common after a traumatic event, such as an accident or injury, and they’re prominent in post-traumatic stress disorder (PTSD). Trauma-related nightmares may occur as you’re drifting off to sleep and in earlier, non-REM stages of sleep.

■ Medications — Some drugs may trigger nightmares, especially those that affect norepinephrine, serotonin and dopamine, which are chemicals in the brain called neurotransmitters. Examples include drugs that contain levodopa — such as carbidopa/levodopa (Sinemet) — and reserpine (Serpalan), as well as beta blockers and some antidepressants. Withdrawal from potentially addictive drugs, such as opioids and barbiturates, can also produce nightmares. Specific drugs, such as the antimalarial mefloquine (Lariam) and certain antibiotics may produce nightmares in some people.

■ Sleep-related breathing disorders — Breathing problems such as sleep apnea may contribute to nightmare occurrence.

■ Substance use — Substance use, including drinking alcohol, can trigger nightmares. Alcohol use — especially heavy binge drinking patterns — can lead to awakenings as alcohol’s effect wears off. Alcohol use is associated with more intense dreaming as well as more recall of dream content.

New lease on sleep

Nightmares associated with an underlying medical or mental health condition can generally be managed by treating the underlying problem.

Your doctor may suggest you keep a sleep diary to track sleep patterns and daytime factors that may affect your sleep. Typical factors are caffeine and alcohol consumption, whether a heavy meal is eaten close to bedtime, activity levels, and medications taken.

If stress or anxiety seems to be a factor, your doctor may suggest stress-reduction techniques, counseling or therapy. For sleep that’s severely disrupted, an overnight sleep study may be recommended.

Treatment for nightmare disorder associated with PTSD may include drug therapy with prazosin (Minipress). Studies have found this high blood pressure medication may help increase sleep time.

Another treatment is cognitive behavioral therapy. When used to treat anxiety disorders, cognitive behavioral therapy helps alter and correct distorted thinking and behavior patterns. One approach is repeated exposure to the nightmare’s content with a goal of desensitization. Although studies suggest desensitization can be effective in treating nightmares in general, its effectiveness for those with PTSD-associated nightmares has yet to be evaluated.

Another approach for nightmares that repeat is imagery rehearsal therapy. This involves recalling the nightmare in order to rewrite and practice a more positive storyline. For instance, you might change the ending, change the characters or create an entirely new dream sequence to displace the nightmare. The new dream can be mentally rehearsed several times a day. Studies have found imagery rehearsal therapy to be significantly helpful in relieving nightmares, whether or not they’re related to PTSD.

Prepare to sleep well

Simple relaxation techniques before bedtime may be all you need to slip into a good night’s sleep. You might treat yourself to a warm and relaxed bath or practice some deep breathing. Try shifting your focus to your breath and away from whatever’s on your mind. You also may find that meditation is helpful.

[7]
Second opinion

Q: I’m bothered by heat rash. Do you have tips for preventing it?

A: Heat rash — also known as prickly heat and miliaria — occurs when sweat ducts become blocked, trapping perspiration under the skin. It isn’t always clear what causes this blockage.

In adults, heat rash usually develops in skin folds and places where clothing causes friction.

Certain prescription drugs have been linked to heat rash. These include the bladder medication bethanechol (Urecholine), the hypertension drug clonidine (Catapres) and the chemotherapy drug doxorubicin (Adriamycin).

There are different forms of heat rash. The mildest form — miliaria crystallina — produces tiny blisters on the skin’s topmost layer that aren’t itchy and usually clear up on their own. Heat rash that occurs deeper in the skin’s outer layer (epidermis) is miliaria rubra. It typically produces red bumps along with an itchy or prickly feeling in the rash area, which explains the common name of prickly heat.

In general, the best treatment for any form of heat rash is to cool down, preferably in an air-conditioned building.

See your doctor if heat rash lasts longer than a few days, the rash seems to be getting worse, or you experience signs and symptoms of infection — such as fever, chills or increased pain, swelling, redness, or warmth in the affected area.

Miliaria crystallina, left, produces tiny blisters on the skin’s topmost layer. Miliaria rubra, right, occurs deeper in the skin’s outer layer (epidermis). It typically produces red bumps.

Q: I regularly use NSAID pain medications for my arthritis pain, but I’m concerned about them increasing my risk of having a heart attack or stroke. Is there an NSAID that’s less risky from this perspective?

A: A recent large study suggests that naproxen (Aleve, Naprosyn) is the safest type of commonly used nonsteroidal anti-inflammatory drug (NSAID) in terms of heart attack risk.

Ibuprofen (Advil, Motrin, others) was at an intermediate level in terms of raising heart attack risk. The riskiest NSAID drugs in terms of heart attack appear to be diclofenac ( Cataflam, Voltaren) and celecoxib (Celebrex).

All of these drugs — including naproxen — raised stroke risk.

With diclofenac, celecoxib and ibuprofen, heart attack and stroke risks generally increase if you’re taking higher daily doses. In addition, ibuprofen appears to interfere with the ability of noncoated, low-dose aspirin to prevent heart attack or stroke. If you take both, take the ibuprofen at least 30 minutes after or eight hours before taking aspirin.

This study supports past research that has found similar results, and it highlights the need for caution as you seek ways to manage your pain. Work closely with your doctor to explore medication options that offer relief with the lowest possible risks to your health.

Often, appropriate doses of acetaminophen (Tylenol) are considered the safest option for pain relief. There are many other pain-relieving drugs that may be helpful, depending on your circumstances. In addition, some of the most powerful pain-relieving tools include physical therapy, counseling, stress management, treatment for depression, good sleep, physical activity, and complementary therapies such as acupuncture and massage.

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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