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## Build Social Bonds to Protect Health

### The Power of Personal Connections

From an early age, we learn that nutritious foods and physical activity can help us stay healthy. Growing evidence now suggests that social connections may also be key to good health.

Socially connected people tend to live longer. They're at lower risk for serious health problems. Social bonds are also linked to our mental health, eating habits, and much more.

Despite the links between our social ties and health, there's been a troubling increase in social disconnection around the world. About 1 in 3 adults nationwide report feeling lonely. About 1 in 4 say they lack social and emotional support.

**Social Bonds** • Many factors can contribute to a person feeling lonely. These include the quality of your personal relationships, your community, and society in general. Your personal health, life stage, and personality can also have an impact.

People who are socially isolated or feel lonely are more likely to have heart disease, obesity, high blood pressure, depression, or anxiety. They're also at increased risk for Alzheimer's disease or other types of dementia, and for early death.

Recently, the COVID-19 pandemic affected our relationships and feel-



ings of isolation. But the breakdown of social bonds was growing long before the pandemic. Over the past few decades, fewer people have been joining community groups or faith-based organizations. There's also been a rise in single-person households. Digital technologies have made it easier to connect with others. But they can also expose us to harms like bullying.

Scientists are working to better understand the links between social bonds and our health. And they're looking for ways to counteract the effects of loneliness and social isolation.

"Humans are a social species. We are highly dependent on others from birth," says Dr. Elizabeth Necka, an NIH expert on social and behavioral science. "So feeling socially isolated can make you feel as though you're in a very stressful situation. And stress has been associated with chronic **inflammation**, which can have effects on cardiovascular health."

Long-lasting inflammation has also been linked to cancer and other health problems. And our ability to biologically respond to stressors weakens with age.

Necka notes that there's a difference between social isolation and loneliness, but the two are related. Social isolation means you have few connections or contacts with others. Loneliness has to do with how you feel about being alone, or your perception.

"Some people can be objectively socially isolated but not feel lonely. They may enjoy the solitude," Necka explains.

"Others can be surrounded by people and yet feel very lonely because those relationships aren't satisfying to them." Both loneliness and social isolation can be harmful to health. Even people who feel OK about being socially isolated are at increased risk for poorer health.

**Who's at Risk?** • Everyone feels lonely now and then. But certain factors can raise the likelihood of persistent loneliness or social isolation. These include living alone, having trouble walking or moving, or having problems with vision or hearing. Other risk factors include

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## Definitions

### Inflammation

Heat, swelling, and redness caused by the body's protective response to injury or infection.

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financial struggles and mental health issues. Living in a rural, unsafe, or hard to reach neighborhood also raises your risk. So do major life changes like retirement or the death of a loved one.

Many studies have found that older adults are especially likely to feel lonely or socially isolated. But a recent analysis of more than 128,000 people from over 20 countries reports that young adults are also vulnerable. “Over the course of the adult lifespan, we found that loneliness is higher in young adulthood and older adulthood. It dips during mid-life,” says psychologist Dr. Eileen Graham at Northwestern University.

Graham and others have found that “generativity”—the urge to nurture younger people—can play a protective role. “People who are high in generativity are more socially resilient,” Graham says. “They feel they’re contributing to society, and they’re teaching new generations. It promotes well-being.” And it may help buffer against the harms of social isolation and loneliness.

“There’s an interesting thing that happens in late life,” Necka adds.

“People tend to focus more on relationships that are high quality and on the positive and meaningful impacts of those relationships. There’s less focus on relationships that are a bit more casual. Research suggests that tendency in late life actually can be protective for older adults.”

**Coupling Up** • “Marital status, or intimate relationships, are also an important feature of our social networks,” says Dr. David Sbarra, a psychologist and researcher at the University of Arizona. Married people tend to live longer and have other health benefits compared to the unmarried. But the quality of the relationship, whether supportive or fraught, can have an impact. “In a high-quality relationship, your needs are taken under consideration, and you perceive that your partner cares for you,” Sbarra says. “This perceived responsiveness, or empathy, is key to intimacy.”

Sbarra’s team has found that divorce and separation are linked with changes to structures deep within cells called telomeres, which are associated with aging. Such changes are linked to health problems, including cancer and shorter life.

The team is now using brain imaging and smartphone apps to assess the quality of couples’ relationships. They’re studying whether repetitive negative thoughts in one partner leads to stress and health problems for both.

**New Connections** • “If you’re feeling lonely or socially disconnected, it can feel intimidating to try to form new connections,” Necka says. “High-quality connections are best. But even brief interactions can make a difference. It can be a first step.”

For example, you might go to the grocery store at the same time every week and see the same clerk. You can smile and strike up a brief conversa-

tion. Or you notice that someone at your regular bus stop always wears purple. You could chat about favorite colors. Over time, you might feel more comfortable connecting with others in different ways.

“If you see someone in your community, maybe an older adult who lives alone or a single parent, check in and ask what they might need. Let them know that you’re available,” Graham adds. “Offer to bring them dinner, play cards, or other things. We can reach out and help each other connect.” See the Wise Choices box for more tips, and in the process improve your health. ■



## Wise Choices

### Connect With Others

- **Learn something new.** Join a group interested in a hobby, such as knitting, hiking, birdwatching, painting, or wood carving.
- **Volunteer.** Consider helping out at a school, library, museum, hospital, or animal shelter.
- **Stay in touch with family, friends, and neighbors.** Connect in person, online, or by phone.
- **Share your knowledge.** Teach a favorite pastime or skill, like chess or baking, to a new generation.
- **Take the stage.** Take part in a local theater troupe, sing in a community choral group, or play in a local band or orchestra.
- **Help others.** Run errands for people with limited mobility or access to transportation.
- **Get moving.** Take a class in yoga, tai chi, or other physical activity.
- **Be more active in your local community.** Take part in community or senior center events. Join a faith-based organization that aligns with your beliefs.

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## Web Links

For more about social connections and health, see “Find More Information” in the online article: [newsinhealth.nih.gov/2025/03/build-social-bonds-protect-health](https://newsinhealth.nih.gov/2025/03/build-social-bonds-protect-health)

# An Ounce of Prevention

## Pros and Cons of Disease Screenings

Lots of diseases start silently. Conditions like high blood pressure, high cholesterol, and even cancer may have no symptoms at the start.

Screening refers to looking for signs of disease in seemingly healthy people. Finding problems early can help you start treatment and make helpful lifestyle changes as soon as possible. Some screening tests have been shown to improve health and are widely recommended.

“We have great screening tests that have really lowered our rates of death and disease,” says Bob McNellis, a public health expert at NIH. Teams of experts develop guidelines for who should be screened with these tests, and how often.

A new study looked at how screening contributed to help lower cancer deaths in the U.S. over the last five decades. “We found that 8 out of 10 cancer deaths averted over the last 45 years were due to prevention and screening efforts,” says Dr. Katrina Goddard, a cancer control expert at NIH. Screening was the main cause of the drop in deaths from cervical cancer and colorectal cancer.

But screenings don’t always make sense for everyone. Some tests may have potential downsides, or harms.

“These could be physical harms. They can also be things like stigma or psychological stress,” McNellis explains. For example, a test may suggest that you have a disease when you actually don’t. This is called a false positive result and can lead to stress and unnecessary follow-up testing that may come with a risk of side effects. Other times, tests may miss cases of a disease. These are called false negative results.

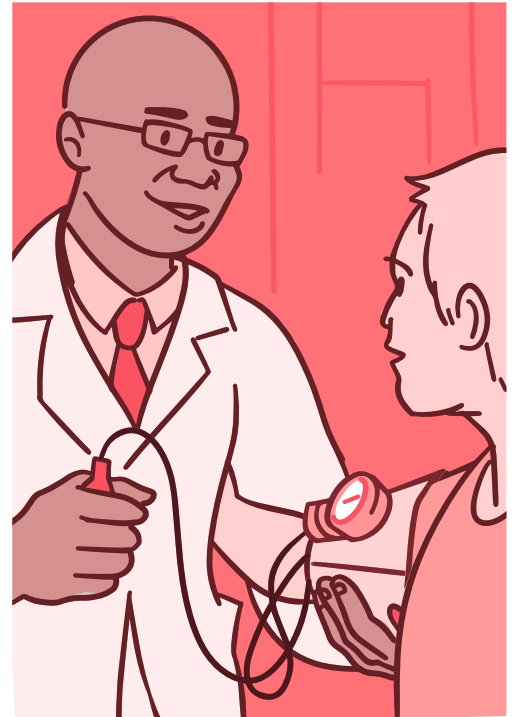
Sometimes, a screening test finds a real disease that never would have caused issues over the person’s lifetime. But that person may receive treatment because of the test results. This is called overdiagnosis and overtreatment. “Basically, there are no perfect tests,” McNellis notes.

Experts continue to track the impact of screening tests over time and adjust recommendations. For example, screening tests for prostate cancer used to be common for older men. But studies found high levels of overdiagnosis. This led to many men having major surgery they didn’t need. So prostate cancer screening is not commonly recommended for men 70 and older.

“Screening guidelines do change over time,” Goddard explains. This happens because new research is always being done. For example, guidelines now suggest that many people start screening for colorectal cancer at age 45 instead of 50. Cancer rates have been rising in younger people, “and we have new evidence that they may benefit from colorectal cancer screening,” McNellis says.

Your doctor will take many factors into account when recommending screening tests. These include your age, overall health, and personal preferences. Talk with your doctor before having a screening test.

Questions to ask can include: What are the potential harms of the test? How often do they occur? What’s



the chance of finding a disease that wouldn’t have caused a problem? How effective are the treatment options if you find something? Am I healthy enough to have treatment if you discover a disease?

Many screening tests need to be repeated regularly to get the most accurate results, McNellis says. So even if you’ve been given a clean bill of health, let your doctor know if you experience any worrisome symptoms in between tests. ■



### Wise Choices Health Screenings

Talk to your doctor about the benefits and harms of screening tests. Common tests look for:

- High blood pressure.
- Elevated blood lipids, including cholesterol.
- Diabetes and prediabetes, including during pregnancy.
- Depression and anxiety.

- Sexually transmitted infections and blood-borne diseases, including HIV, syphilis, hepatitis B and C, gonorrhea, and chlamydia.
- Cancer, including colorectal, cervical, breast cancer, and lung cancer in some current and former smokers.
- Substance use disorders.
- Reduced bone density (osteoporosis).

*Adapted from the U.S. Preventive Services Task Force.*



### Web Links

For more about health screenings, see “Find More Information” in the online article: [newsinhealth.nih.gov/2025/03/ounce-prevention](https://newsinhealth.nih.gov/2025/03/ounce-prevention)





## Health Capsules

For links to more information, please visit our website and see these stories online.

### How To Assess Aging?

Medical advances are helping people around the world live longer. But longer life is linked to a gradual loss of physical abilities. Strength, balance, and walking skills may weaken. It's been unclear how each of these features decline with age.

To learn more, an NIH-supported research team assessed these abilities in 40 healthy people. Half were between ages 50 and 64. The rest were ages 65 or older. Each participant underwent a series of tests in a motion analysis lab.

The researchers found that walking patterns were not much

different with age. Sex differences were seen in strength but not other measures. Grip strength was 30% higher in men than in women, and knee strength was 27% higher in men. But in both sexes, strength declined at similar rates over time. Grip strength in the dominant hand dropped by nearly 4% per decade of age. Knee strength declined by about 1% per decade.

Balance showed the greatest decrease with age, especially the ability to stand on one leg for at least 30 seconds. Single-leg standing time on the non-dominant leg dropped

by 21% per decade of age. On the dominant leg, it dropped by 17% per decade. When standing on both feet, people who were older tended to move or sway more.

The findings suggest that how long a person can stand on only a non-dominant leg may be an easy and reliable way to assess health in aging populations.

“Changes in balance are noteworthy. If you have poor balance, you're at risk of falling,” explains Dr. Kenton Kaufman of the Mayo Clinic. “Falls are a severe health risk with serious consequences.” ■

### Get Clarity on Kidney Stones

Kidney stones are common. They affect about 11% of men and 6% of women at least once in their lives. A sharp pain in your back, lower abdomen, or groin may be the first sign. Other signs include blood in your urine, pain while peeing, or a constant urge to pee.

Kidney stones can arise when high levels of certain minerals are in your urine. These minerals can create pebble-like fragments in one or both of your kidneys. The resulting kidney stones can be smooth or jagged. Their

size can range from as small as a grain of sand to as large as a pea.

Small kidney stones can pass out of the body in your urine with little or no pain. But larger ones may get stuck and block the flow of urine. This blockage can be painful. Treatment is usually based on the size, location, and type of mineral that made the kidney stone.

Health care providers might suggest that you drink plenty of liquid to see if that helps to move the kidney stone along. If a kidney stone

is stuck, doctors may try to break it into smaller pieces. One technique called lithotripsy uses powerful sound waves to shatter kidney stones so they can pass with your urine. Other techniques can also break up or remove large kidney stones.

Once you've had kidney stones, you're at risk for getting them again. Dietary changes, drinking more liquid, and taking certain medications can help prevent stone formation. Learn more at [go.nih.gov/NIHNiHMar25Kidney](http://go.nih.gov/NIHNiHMar25Kidney). ■



### Featured Website

#### Bone Mineral Density Tests

[go.nih.gov/NIHNiHMar25BoneDensity](http://go.nih.gov/NIHNiHMar25BoneDensity)

Bones can become less dense as we age or if we develop certain medical conditions. This can lead to weak and brittle bones, called osteoporosis. Learn about

medical tests that measure bone mineral density. Find out what the resulting numbers reveal about your bone strength and risk of fractures.

#### Bone Mineral Density Tests: What the Numbers Mean



##### What is a bone mineral density test?

A bone mineral density (BMD) test measures calcium and other minerals in bone. Bones containing more minerals are denser, so they tend to be stronger and less likely to break.

Bones can become less dense as we age or if we develop certain medical conditions. When too much bone is lost, osteoporosis can develop. Osteoporosis causes bones to become weak and brittle, which increases the risk of fractures (broken bones).

##### Bone mineral density testing can:

- Identify and diagnose osteoporosis.
- Measure the risk of fractures (broken bones).
- Monitor the effectiveness of osteoporosis treatment.

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