

# NIH News in Health

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## Nurturing Healthy Neighborhoods Communities Affect Health

You probably already know that your genes can affect your health. So can the choices you make, such as getting enough exercise and eating healthy food. But did you know that where you live can affect your health, too?

NIH-funded researchers are looking at how the environment around us, from how many trees we can see to how far we have to travel to get fresh food, influences our health.

**Green Spaces** • Studies show that green spaces, such as parks or woods, seem to affect your health for the better. Dr. Francine Laden, an epidemiologist at the Harvard T.H. Chan School of Public Health, analyzed data from a huge national study to look at how green space affected people's lives. She found that those who lived near green spaces were less likely to die over an 8-year period.

No one knows exactly why living close to green space has this effect. The plants themselves may be part of the reason. Plants pull pollutants out of the air and cool the neighborhood. Or it may be that green space creates a place to meet other people and help build social connections. Strong social ties have been linked to a longer life.

Simply being exposed to nature has been shown to improve mood, reduce anxiety, and enhance self-esteem. People who see greenery every day may have better mental health and be less stressed. Stress



increases your risk of heart disease, diabetes, and other diseases.

In one NIH-funded study, researchers cleaned up vacant city lots and planted grass and trees. Other vacant lots in the same city were left alone. People who lived near the newly green lots said they felt less depressed and better about themselves after the change. In poorer neighborhoods, crime also fell near the green lots.

Living near a busy road can affect your health, too. Laden and her colleagues analyzed data on a group of women who were using in vitro fertilization to help get pregnant. The women who lived more than a quarter mile from a major road were more likely to eventually have a baby than those who lived within a few hundred feet of a major road.

Roads and highways are noisy to live near. Studies have found that noise can increase the risk of heart

disease and depression. That may be because noise can cause stress or interrupt your sleep. People who live near a busy road may also breathe in more air pollution, which increases the risk of lung cancer, heart disease, and other conditions.

**Getting Active** • Your neighborhood can also affect how easy it is for you to exercise. People in urban and suburban areas can often walk to a coffee

shop, school, or work. People in rural areas are more likely to have to drive to these places.

“The human body is meant to move. The body works a lot better when people are moving more,” says Dr. Ross Brownson, a public health expert at Washington University in St. Louis.

People who don't exercise are more likely to be overweight or obese and have diabetes, high blood pressure, and many other health problems. People in rural areas may also live along roads with no sidewalks. These factors may be part of why

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people who live in rural areas are more likely to be obese than people who live in urban areas, Brownson says. He has worked on NIH-funded projects that study ways to encourage people in rural areas to exercise more—for example, by promoting the use of walking trails.

If you want to exercise more, Brownson says, figure out what kind of physical activity you enjoy and would be willing to stick with. Then look for opportunities. If you're interested in walking but there's nowhere safe to walk in your area, get together with other people and talk about how to bring about change, he says.

"We've seen this happen in a number of rural communities, where you build a coalition and you come together and say, 'We need safer places for our kids to play and our residents to walk and spend time,'" Brownson says.

There are many ways to make walking in your neighborhood safer and easier, he says. For example, a walking trail could be built around a playground so that children could play while parents walked on the trail. Churches might donate land, or

a trail could go around a ball field or along a creek.

**Eating Healthy** • In some neighborhoods, it's not easy to get healthy food. The U.S. Department of Agriculture calls low-income communities without full-service supermarkets "food deserts."

Food deserts can occur in both urban and rural areas. Food deserts not only lack grocery stores. They are likely to have stores selling cheap snacks that aren't very nutritious.

People with chronic health conditions often get specific instructions from their doctors on what to eat. For example, people with high blood pressure are often told to follow the DASH diet, which emphasizes fruits, vegetables, and whole grains.

"It can be a struggle to follow such a diet if, in the community where you live, it is hard to access such foods," says Dr. Deidra Crews, an expert on kidney disease at Johns Hopkins Medicine. "These may also be people who don't have the financial means to travel outside of their community to access it."

Crews and her team work with African Americans with kidney disease and high blood pressure who live in low-income neighborhoods in Baltimore. People in poor neighborhoods are at greater risk of kidney disease, and so are African Americans.

Crews' team is testing whether giving healthy food directly to participants can help improve their health. They're given \$30 worth of fruits, vegetables, nuts, and beans every week, as well as advice on how to follow a healthy diet.

Farmers markets are one way to bring fruits and vegetables into neighborhoods without grocery stores. If you want to set up a farmers market in your community, ask if others would be interested.



## Wise Choices

### Creating Healthy Communities

Looking for ways to make your neighborhood healthier?

- Create a community garden.
- Bring in a farmers market.
- Talk to store owners about offering healthier foods.
- Attend community planning meetings and talk about creating parks and trails.
- Plant a tree or find other ways to make your neighborhood greener.
- Start a walking group with friends, family, or neighbors.
- Participate in community activities to reduce crime and violence.

You may be able to get help from a community organization or from a local or state government.

"If people can get to them easily by foot, then even better; that's an opportunity to get in some physical activity," Crews adds.

**Creating Change** • Changing your neighborhood can be tough. It may mean getting together with neighbors and talking to local officials about making more walking paths, sidewalks, and bike lanes. You might reach out to local institutions, such as churches and schools, with land that could be used. You might talk to convenience store owners about offering more healthy foods.

"It doesn't all have to be tackled at the same time," says NIH health specialist and researcher Dr. Adelaida Rosario. "Anything that one community feels is relevant and important and that the majority of its citizens can benefit from—if people rally behind it, they can get it in their neighborhood." ■

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**Web Links**

For more about healthy neighborhoods, see "Links" in the online article: [newsinhealth.nih.gov/2018/11/nurturing-healthy-neighborhoods](http://newsinhealth.nih.gov/2018/11/nurturing-healthy-neighborhoods)

# Feeling the Burn?

## Options for Acid Reflux

You've probably felt it. After a meal, a burning sensation rises through your chest, or up to your throat. This feeling can come from reflux: when acid and food rise up from the stomach into the esophagus, which is the tube that connects your stomach to your throat.

Occasional reflux is normal. Most people may not even feel it. Sometimes it's mild, with occasional heartburn after large meals. Reflux can also cause coughing, wheezing, or problems swallowing.

Anyone can experience reflux. But reflux two or more times a week for a few weeks may be gastrointestinal reflux disease (GERD). GERD affects around 20% of people in the U.S. at some point in their lives.

"Reflux becomes GERD when the symptoms start to negatively affect someone's daily quality of life," says Dr. John Pandolfino, an expert on reflux at Northwestern University.



### Wise Choices

#### Ways to Reduce Reflux

- **Maintain a healthy weight.** Even a bit of weight loss can help reduce reflux.
- **Avoid your personal trigger foods.** Some people have foods that make their reflux worse. These can include acidic foods, chocolate, or alcohol.
- **Don't smoke.** Smoking can cause more acid to enter the esophagus.
- **Manage stress.** Stress and anxiety can make reflux feel worse.
- **Stay upright.** Don't lie down for 2 or 3 hours after a meal.
- **Raise the head of your bed.** If you have reflux at night, raise the head of your bed by 6 to 8 inches.
- **Talk to your doctor,** if you have reflux twice or more per week.

GERD usually isn't dangerous. But it can cause discomfort, pain, and fear of eating, Pandolfino explains. Severe GERD can damage the lining of the esophagus, which can raise the risk of esophageal cancer. Although that risk is low, people should discuss reflux symptoms with their doctor.

Fortunately, there are many options for treating reflux and GERD. Some lifestyle choices may simply prevent it. For example, certain foods can trigger reflux in some people. See the Wise Choices box for tips to reduce reflux.

One of the most effective treatments for GERD is weight loss. In Pandolfino's clinic, people with GERD are automatically assigned a health coach who helps them with diet and lifestyle changes.

"We help them lose about 10 to 15 pounds, and then see if we can get them off their medication," he says. "Our success rate has been very good. We can get about a third of people off medication when they lose a little bit of weight. And about 50% experience a dramatic improvement in their symptoms."

But medications can still help many people with GERD. They work in different ways, and you may need a combination to control your symptoms.

Doctors often first recommend antacids to relieve heartburn and other mild symptoms. Drugs called H2 blockers may provide relief if an antacid alone isn't enough. These can stop your stomach from making acid in the short-term.

A type of drug called proton pump inhibitors (PPIs) may be recommended if other drugs don't help control your reflux. PPIs reduce the amount of acid the stomach makes. They're very effective. But people



who take PPIs for a long time or in high doses may be more likely to have side effects. Sometimes, the benefits of these medications can outweigh the side effects. Talk with your doctor about the long-term use of medications for GERD.

If GERD persists despite drugs and lifestyle changes, surgery to strengthen the opening between the stomach and esophagus may be an option. This is especially useful when reflux is caused by a physical problem, like a hernia. A hernia happens when an organ squeezes through a weak muscle in your body.

Researchers are working on developing less-invasive procedures for people who need surgery. Pandolfino and other researchers are also looking for better ways to use existing tests to choose treatments.

"Reflux is such a mixed bag of symptoms and complications. We'd like to be able to better tailor therapy based on these studies," he says. ■



### Web Links

For more about heartburn, see "Links" in the online article: [newsinhealth.nih.gov/2018/11/feeling-burn](https://newsinhealth.nih.gov/2018/11/feeling-burn)





## Health Capsules

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

### Daily Aspirin May Not Benefit Healthy Older Adults

A new study found that, for healthy older adults, taking a low-dose aspirin each day didn't extend life or prevent a first heart attack or stroke.

Heart diseases and stroke are the leading causes of death and disability in older adults in the U.S. These are often caused by blood clots that form in the blood vessels to the heart or the brain.

For people who've had a heart attack or stroke, aspirin can help prevent a second one. Aspirin helps thin the blood to avoid further blood clots. A low dose of daily aspirin has

also been shown to reduce the risk of a first heart attack or stroke for people who are at high risk for these conditions.

To see if aspirin could benefit healthy older adults, too, researchers randomly assigned more than 19,000 healthy older adults to take aspirin or an inactive pill, or placebo. Most participants were 70 and older (65 and older for African-American and Hispanic individuals).

Both groups had similar rates of health problems and deaths. Aspirin didn't reduce the risk of heart

attack, stroke, physical disability, or dementia. Those taking aspirin had an increased risk of bleeding, which was already a known risk of regular aspirin use.

"These initial findings will help to clarify the role of aspirin in disease prevention for older adults," says Dr. Evan Hadley, who oversees clinical aging research at NIH's National Institute on Aging. "But much more needs to be learned."

Talk to your health care provider about your health risks and whether daily aspirin use is right for you. ■

### Oral Health Tips for Caregivers

Do you take care of an elderly parent or other older adult? If so, remember that a healthy mouth can help them enjoy food, chew better, eat well, and avoid pain and tooth loss.

Plaque puts a healthy mouth at risk. It can collect on teeth that aren't brushed well. The buildup can cause bad breath, tooth decay, and gum disease.

Some older adults need to be reminded to brush and floss teeth.

Others may need help actually getting it done.

You can take steps to help make brushing easier. For example, try a power or multiple-sided toothbrush. You can also modify the toothbrush handle to make it easier to hold.

If older adults need help, remember to wash your hands and wear disposable gloves before you begin. Use the "tell-show-do" approach. Tell them what you are

going to do, show them, and then do what you've described.

Regular dental visits are important too. At a dental visit, you can ask for ways to help the person you care for.

NIH has a series of fact sheets to help caregivers learn more about protecting oral health in older adults. To download, visit [www.nidcr.nih.gov/caregivers](http://www.nidcr.nih.gov/caregivers). ■



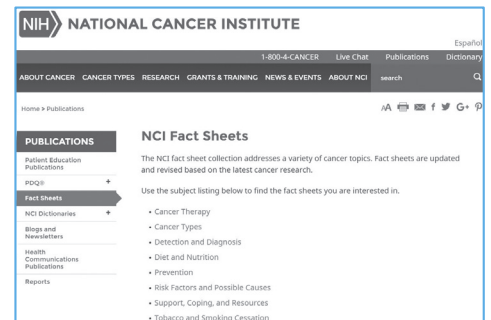
### Featured Website

#### Cancer Fact Sheets

[cancer.gov/publications/fact-sheets](http://cancer.gov/publications/fact-sheets)

NIH's Cancer Fact Sheets answer common questions about more than 70 topics in cancer, including specific cancer types, prevention, detection, treatment, and possible

causes. The fact sheets are available in English and Spanish. They are updated and revised based on the latest cancer research.



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