

# NIH News in Health

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## Building Social Bonds Connections That Promote Well-Being

Strong, healthy relationships are important throughout your life. Your social ties with family members, friends, neighbors, coworkers, and others impact your mental, emotional, and even physical well-being.

“We can’t underestimate the power of a relationship in helping to promote well-being,” says NIH psychologist and relationship expert Dr. Valerie Maholmes.

Studies have found that having a variety of social relationships may help reduce stress and heart-related risks. Strong social ties are even linked to a longer life. On the other hand, loneliness and social isolation are linked to poorer health, depression, and increased risk of early death.

As a child you learn the social skills you need to form and maintain relationships with others. But at any age you can learn ways to improve your relationships.

NIH funds research to find out what causes unhealthy relationship behavior. Researchers have created community, family, and school-based programs to help people learn to have healthier relationships. These programs also help prevent abuse and violence toward others.

**What Is Healthy?** • Every relationship exists on a spectrum from healthy to unhealthy to abusive. One sign of a healthy relationship is feel-



ing good about yourself around your partner, family member, or friend. You feel safe talking about how you feel. You listen to each other. You feel valued, and you trust each other.

“It’s important for people to recognize and be aware of any time where there is a situation in their relationship that doesn’t feel right to them or that makes them feel less than who they are,” Maholmes advises.

It’s normal for people to disagree with each other. But conflicts shouldn’t turn into personal attacks. In a healthy relationship, you can disagree without hurting each other and make decisions together.

“No relationship should be based on that power dynamic where someone is constantly putting the other partner down,” Maholmes says.

If you grew up in a family with abuse, it may be hard as an adult to know what healthy is. Abuse may feel normal to you. There are several

kinds of abuse, including physical, sexual, and verbal or emotional. Hurting with words, neglect, and withholding affection are examples of verbal or emotional abuse.

In an unhealthy or abusive relationship, your partner may blame you for feeling bad about something they did or said. They may tell you that you’re too sensitive. Putting you down diminishes you and keeps them in control.

In a healthy relationship, however, if you tell your partner that something they said hurt your feelings, they feel bad for hurting you. They try not to do it again.

Abuse in an intimate relationship is called domestic or intimate partner violence. This type of violence involves a pattern of behaviors used by one person to maintain power and control over someone that they are married to, living with, or dating now or in the past. A pattern means it happens over and over.

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In an unhealthy or abusive relationship, you may not be allowed to spend time with family, friends, and others in your social network.

“One of the signs that’s really important in relationships where there is intimate partner violence is that the partner that is being abused is slowly being isolated from family and friends and social networks,” Maholmes says. “Those social networks are protective factors.”

**Social Ties Protect** • Studies have shown that certain factors seem to protect people from forming unhealthy relationships over their lifetime. The protection starts early in life. NIH-supported research has shown that the quality of an infant’s emotional bond with a parent can have long-lasting positive or negative effects on the ability to develop healthy relationships.

“The early bond has implications that go well beyond the first years of life,” says Dr. Grazyna Kochanska, an NIH-funded family relationships researcher at the University of Iowa. The goal of Kochanska’s research projects is to understand the long-

term effects of that early bond and to help children develop along positive pathways and avoid paths toward antisocial behaviors.

A family that functions well is central to a child’s development. Parents can help children learn how to listen, set appropriate boundaries, and resolve conflicts. Parents teach children by example how to consider other people’s feelings and act in ways to benefit others.

Secure emotional bonds help children and teens develop trust and self-esteem. They can then venture out of the family to form other social connections, like healthy friendships. In turn, healthy friendships reduce the risk of a child becoming emotionally distressed or engaging in antisocial behaviors.

On the other hand, having an unhealthy relationship in the family, including neglect and abuse, puts a child at risk for future unhealthy relationships.

“One caring adult can make a huge difference in the life of kids whose family structures may not be ideal or whose early life is characterized by abuse and neglect,” says Dr. Jennie Noll of the Center for Healthy Children at Pennsylvania State University. “That caring adult could be an older sibling, or a parent, or someone else in the family, a teacher—the kind of people who have a large influence in communicating to the child that they matter and that they’re safe, and that they have a place to go when they are needing extra support.”

Healthy friendships and activities outside of the home or classroom can play protective roles during childhood, too. In fact, everyone in a community can help support the development of healthy connections. Adults can serve as good role models for children, whether the children



## Wise Choices

### How to Help Someone in an Unhealthy Relationship

- Let them know that you’re worried about them.
- Listen without judging or blaming.
- Tell them that it’s not their fault.
- Offer to go with them to talk to someone who can help.
- Visit [www.thehotline.org](http://www.thehotline.org) for more tips on how to help.

are their own or those they choose to mentor.

**Helping and Getting Help** • At any age, your relationships matter. Having healthy relationships with others starts with liking yourself. Learn what makes you happy. Treat yourself well. Know that you deserve to be treated well by others.

Having an unhealthy or abusive relationship can really hurt. The connection may be good some of the time. You may love and need the person who hurts you. After being abused, you may feel you don’t deserve to be in a healthy, loving relationship.

With help, you can work on your relationship. Or, sometimes in an abusive relationship, you may be advised to get out. Either way, others can help.

If you or a friend needs help with an unhealthy relationship, contact the National Domestic Violence Hotline at [www.thehotline.org](http://www.thehotline.org) or 1-800-799-SAFE. If you know a child who may need help, find resources at the Child Welfare Information Gateway at [www.childwelfare.gov](http://www.childwelfare.gov). ■

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**Web Links**

For more about healthy relationships, see “Links” in the online article: [newsinhealth.nih.gov/2018/04/building-social-bonds](http://newsinhealth.nih.gov/2018/04/building-social-bonds)

# Tick Tock: Your Body Clocks

## Understanding Your Daily Rhythms

Did you know that your body has its own internal network of clocks? These biological clocks help you feel alert during the day, hungry at mealtimes, and sleepy at night. Keeping your body's daily cycles, or circadian rhythms, in sync is important for your health.

“Circadian rhythms are big influencers in the body,” explains NIH’s Dr. Michael Sesma, an expert in circadian biology. “They affect almost every part of your physiology in one way or another. Learning how the rhythm is generated is critical for understanding health.”

Our natural daily rhythms are synchronized with the sun. A “master clock” in the brain receives direct input from the eyes and coordinates all the biological clocks in the body. During the day, it sends signals to other brain regions to make **hormones** that will help keep you awake, boost your heart rate, and give you energy. In the evening, when less light enters your eyes, it triggers production of a hormone called melatonin. Melatonin makes you feel drowsy and helps you stay asleep.

“Many of your body’s functions and normal daily activities—like sleeping, waking, eating, and going to the bathroom—are patterned around this 24-hour cycle,” Sesma explains.

Your biological clock’s “settings” are determined by specific genes. These settings can affect body temperature, blood pressure, activity level, inflammation (your body’s protective response to injury or infection), fertility, mood, and



brain functions. Even the timing of health-related events can be related to your biological clocks. For instance, heart attacks are more likely to occur early in the morning, when the level of a hormone called cortisol starts its daily rise.

Circadian rhythms can influence eating habits, digestion, and metabolism (how our body uses and stores energy), too. Researchers have found that eating later in the day, closer to when melatonin is released, can disrupt the body’s natural rhythms. This can lead to increased body fat and weight gain, which are often associated with obesity, heart disease, and diabetes.

Time of day has also been shown to impact the effectiveness and side effects of certain medications, including those used to treat cancer.

Be mindful about how you may be altering your circadian rhythms. “Our around-the-clock society creates challenges for our internal clocks,” Sesma says. “There are

lots of modern situations that can disrupt our rhythms, and some may contribute to health problems.”

For instance, shift workers who must be on the job after the sun goes down are at odds with their biological clocks. They may be tired at work and have trouble falling or staying asleep during daylight hours after work. Studies show that shift workers have increased risk for heart disease, digestive disturbances, cancer, depression, and other health problems.

Traveling across time zones can also disrupt your circadian rhythms. The brain has trouble adjusting when the time of day suddenly changes. The result is jet lag.

“Researchers are considering time of day and how to sync up with the body’s clocks in all aspects of health, even the best time to have surgery on specific parts of the body,” Sesma says. These studies may lead to new insights for a range of clock-related disorders, from insomnia and jet lag to diabetes. ■



### Wise Choices

#### Keep Your Inner Clocks on Track

- Stick to a regular sleep schedule every day of the week.
- Sleep in a dark, quiet, and comfortable place.
- Avoid heavy meals two to three hours before bedtime.
- Avoid caffeine, nicotine, and alcohol late in the day.
- Exercise daily, but not within two hours of bedtime.
- Limit the use of electronics with bright screens before bedtime.

## Definitions

### Hormones

Substance produced in one part of the body to signal another part to react a certain way.



### Web Links

For more about internal body clocks, see “Links” in the online article: [newsinhealth.nih.gov/2018/04/tick-tock-body-clocks](https://newsinhealth.nih.gov/2018/04/tick-tock-body-clocks)





## Health Capsules

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

### Surgery May Help More People After Stroke

Brain imaging advances are helping doctors better treat patients who have a stroke.

The most common types of strokes are caused by a clot that blocks a blood vessel in the brain. These are called ischemic strokes.

Strokes are a medical emergency. When blood can't deliver nutrients and oxygen, the brain tissue in the area begins to die. Doctors must restore blood flow to the brain as fast as possible to lessen the damage.

Certain drugs, surgery, and other methods can restore blood flow. Surgery to remove a blockage, called

a thrombectomy, was approved for up to six hours after a stroke. A research team tested whether it could help for up to 16 hours after a stroke.

Using a brain imaging technology called perfusion imaging, they identified 182 patients who might benefit from clot-removing surgery between 6 and 16 hours after a stroke. About half the patients were randomly chosen to have clot-removing surgery. The other half had the standard medical treatment.

Patients who had the surgery were less likely to die. They were also

likely to be more independent after their recovery. NIH ended the study early because of the success of the surgery.

"These striking results will have an immediate impact and save people from life-long disability or death," says Dr. Walter Koroshetz, director of NIH's National Institute of Neurological Disorders and Stroke. After the study's results were released, the American Heart Association and American Stroke Association issued new stroke treatment guidelines. ■

### Learn About Obesity and Cancer Risk

Doctors can't always explain why one person gets cancer and another doesn't. But research has shown that certain risk factors may increase a person's chance of getting cancer. One risk factor is obesity, or having too much body fat.

Many studies have found links between obesity and certain types of cancer. Most of these studies have compared differences between large

groups of people who developed cancer with those who didn't. Many of these studies found that people who develop certain types of cancer are more likely to be obese than those who don't develop these cancers.

That doesn't mean obesity is the cause of these cancers. People who are obese or overweight may differ from lean people in ways other than their body fat. It's possible that these

other differences might explain different cancer risks.

Yet, studies have consistently linked obesity with an increased risk for several types of cancer. Researchers are now exploring what biological mechanisms might link obesity and cancer.

You can learn more about obesity and cancer by visiting [cancer.gov/obesity-fact-sheet](http://cancer.gov/obesity-fact-sheet). ■



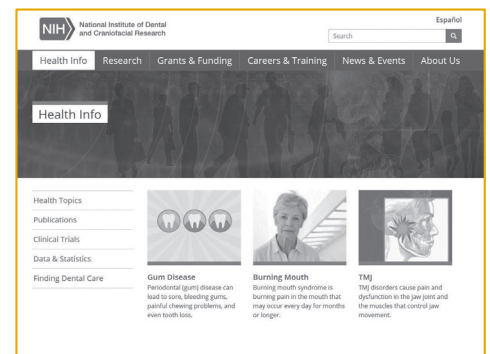
### Featured Website

Healthy Teeth, Gums, and Mouths

[nidcr.nih.gov](http://nidcr.nih.gov)

Have questions about oral health? It's now easier to use your mobile or desktop device to find credible, reliable information about tooth decay, gum disease, mouth cancer,

and many other oral health topics. This newly redesigned website will help you find answers to your biting health questions.



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