

# NIH News in Health

National Institutes of Health • Department of Health and Human Services • [newsinhealth.nih.gov](https://newsinhealth.nih.gov)

**Inside News:** 3 Edema 4 Antioxidants and Dementia 4 Hepatitis 4 Evaluating Online Health Information

## Having Kids Later in Life Healthy Pregnancies as You Age

There are many reasons you might wait to have kids. You may want to focus on your career. Or save some money first. About 20% of women in the U.S. now have their first child after age 35.

You may have heard that getting pregnant can be more difficult as you age. Or that it's riskier for both the mom's and the baby's health. While these can be issues when having children later in life, many concerns are manageable.



**Getting Pregnant** • It can be more difficult to get pregnant with age. There are many reasons for that. One is that fertility decreases as you get older—for both men and women.

Women are born with a set number of eggs. Each month, a woman's ovary releases an egg to be fertilized. This process is called ovulation. But before that, her body recruits many eggs in preparation for this process. A handful of eggs are developed and matured, but usually only one makes it to ovulation.

"As women age, they're still fertile, but their odds of pregnancy are decreased because they're not making as many good eggs that will fertilize and divide normally and turn out to be an embryo," explains Dr. Alan Decherney, an NIH fertility expert.

After age 30, a woman's fertility decreases every year. The number and quality of her eggs goes down until she reaches menopause.

Menopause usually happens around age 45 to 55. During that time, women stop having their periods and are no longer fertile.

Older men may make fewer sperm or lower-quality sperm. The age-related decline in egg and sperm quality is associated with a higher chance of the child developing certain health conditions. This includes autism spectrum disorder, Down syndrome, and schizophrenia.

But most healthy women who give birth in their 30s and 40s have healthy babies.

**Pregnancy Problems** • If you're over 35 and haven't gotten pregnant after trying for six months, talk with your health care provider. You may

be experiencing issues with infertility. Infertility is when a couple can't get pregnant or a woman hasn't been able to carry a pregnancy to term.

NIH-funded researchers are studying the causes of infertility for both men and women. There are many reasons for infertility.

"The most common cause of infertility in

women is related to ovulation abnormalities," says Dr. Esther Eisenberg, who oversees reproductive medicine and infertility research at NIH.

Many factors influence your ovulation cycle. Being older is one of them. You may not ovulate regularly, or sometimes not at all.

Another cause of infertility is endometriosis. This is a disease in which tissue normally found in the uterus (womb) grows outside it. Endometriosis can cause painful periods, urination, or bowel

*continued on page 2*

**Subscribe** @



[newsinhealth.nih.gov](https://newsinhealth.nih.gov)

*continued from page 1*

movements. It accounts for at least a third of infertility in women. It's more common for women in their 30s and 40s.

Fibroids are also more likely as you age. These are abnormal growths made from the uterus's muscle cells. They can grow inside or outside of the wall of the uterus. These growths can prevent a woman from getting pregnant. Most women get at least one fibroid in their lifetime. But they're most common between the ages of 40 to 50.

Other causes of infertility can be treatments for certain health conditions. "Women who have been treated for cancer might have a reduced number of eggs," Eisenberg says. "If you've had other conditions that require surgery to remove an ovary or fibroids—in which you've had surgery on the uterus—that might impact your fertility as well."

**Seeking Help** • "If being able to have a child becomes an issue, there are treatments," Eisenberg says. "The majority of women are able to have a child with help."

Treatments for infertility depend on the cause. Endometriosis and fibroids can be treated with drugs, surgery, and other methods. Medicines can help stimulate ovulation. These are called fertility drugs. Some are taken orally and others are injected.

Other options may be assisted reproductive technologies. Examples include in vitro fertilization (IVF) and intracytoplasmic sperm injection (ICSI). These procedures help you get pregnant using different methods of fertilizing an egg.

Decherney's group studies egg preservation, which involves freezing eggs. It may help some women facing health conditions that can reduce fertility. "But it's expensive," he notes.

**Staying Healthy** • Infertility isn't the only issue older couples face.

"Whether a woman can have a baby as she ages also depends on her health," Decherney says. "The chances of having diabetes or high blood pressure—which are the two major diseases that impact pregnancy—are higher."

Obesity, heart conditions, and cancer can also interfere with a woman's ability to get pregnant or stay pregnant. They can lower men's fertility, too.

Talk with your health care provider before becoming pregnant. They can help you plan for a safer pregnancy.

Being older when you're pregnant also makes you more likely to experience health problems from being pregnant or giving birth. These include heart disease, infection, bleeding, high blood pressure, and blood clots.

High blood pressure puts pregnant women at higher risk for

preeclampsia. Preeclampsia is a serious medical condition that can cause you to go into labor early. It can also lead to death.

No matter your age, you have a better chance of getting and staying pregnant by living a healthy lifestyle. See the Wise Choices box for tips. ■



## Wise Choices For a Healthy Pregnancy

No matter your age, certain things can help you have a healthier pregnancy:

- Talk with your health care provider about your nutrition, medications, and any health conditions. Get prenatal check-ups regularly.
- Take folic acid supplements. Get at least 400 micrograms of folic acid daily.
- Do not use alcohol, tobacco, or drugs such as marijuana.
- Avoid exposure to toxic substances, like lead, radiation, or chemicals called solvents that are used in many workplaces.
- Follow a healthy diet and maintain a healthy weight.
- Avoid certain foods that could be dangerous during pregnancy, such as raw fish, undercooked meat, deli meats, and unpasteurized cheeses.
- Get enough physical activity. Talk with your doctor about what's safe for your pregnancy.
- Limit caffeine intake.
- Get regular dental checkups.
- Take steps to prevent infections that can affect your pregnancy.

## NIH News in Health

ISSN 2375-6993 (Print) ISSN 1556-3898 (Online)

**Editor** Harrison Wein, Ph.D.

**Managing Editor** Tianna Hicklin, Ph.D.

**Graphics** Alan Defibaugh (illustrations),  
Bryan Ewsichek (design)

**Contributors** Tianna Hicklin and Sharon Reynolds

Use our articles and illustrations in your own publication. Our material is not copyrighted. Please acknowledge *NIH News in Health* as the source and send us a copy.

[newsinhealth.nih.gov](https://newsinhealth.nih.gov)



**National Institutes of Health**  
*NIH...Turning Discovery Into Health®*

Office of Communications & Public Liaison  
Building 31, Room 5B52  
Bethesda, MD 20892-2094  
email: [niHnewsinhealth@od.nih.gov](mailto:niHnewsinhealth@od.nih.gov)  
phone: 301-451-8224



**Web  
Links**

For more about reproductive health and aging, see "Links" in the online article: [newsinhealth.nih.gov/2022/07/having-kids-later-life](https://newsinhealth.nih.gov/2022/07/having-kids-later-life)

# When Body Parts Swell

## Taking a Closer Look at Edema

Swelling in the body can happen for many reasons. Summer heat can cause your arms or legs to swell if you've been sitting or standing for a while. Body parts can also swell from overuse or an injury. But sometimes, swelling is a sign of an underlying medical condition.

More than half your body is made of water. Much of it flows around in your bloodstream. Water also makes up a lesser-known fluid called lymph. Lymph travels through the lymphatic system, which is made up of the tissues and organs that produce, store, and carry **immune cells**.

When your body fluids build up in one place, it can lead to swelling. This is called edema. You can get edema anywhere in your body—your

feet, legs, ankles, hands, or even face. It can appear in one place or in many body parts at the same time.

Sometimes it's only temporary. Pregnancy can lead to swelling in the legs and ankles from the pressure of the baby. Eating too much salt can cause you to retain water. So can certain medications, like some used for high blood pressure.

"Edema can cause problems with moving around, discomfort, infections, and difficulty with wound healing," says Dr. Dhruv Singhal, a surgeon who treats lymph system problems at Harvard University. "So any kind of swelling should be looked at by a health care provider."

Edema may be a sign of a serious medical condition. A dangerous type of blood clot called a deep vein thrombosis, or DVT, can cause sudden edema. Heart, liver, or kidney problems can also lead to swelling.

In a disease called congestive heart failure, the heart has problems pumping blood around the body. This can cause fluid to pool in the legs. With liver or kidney damage, fluid can't pass through them quickly and can build up in the limbs.

Trauma to the body can also trigger edema. Singhal treats a type of edema caused by damage to the lymphatic system. This is called lymphedema. In the U.S., lymphedema is most often caused by cancer surgery.

Treatment for edema depends on the cause. If the swelling is caused by a drug, switching to a different type of medication may help. People with edema caused by a blood clot usually receive a blood thinner to break up the clot. Drugs called diuretics may be used for conditions like heart failure. These help your body get rid of excess fluid.



"We also have certain treatments that almost all patients get, no matter what the cause of their edema is," Singhal says. These include compression garments: stockings, sleeves, or gloves that help reduce swelling. They can help reduce discomfort even if the cause of edema is something that can't be treated. See the Wise Choices box for more tips for living with edema.

If you experience sudden swelling in one or more limbs, or minor swelling that's getting worse over time, see a health care provider right away. Early treatment for many types of swelling can reduce symptoms in the long term, Singhal explains. ■



### Wise Choices

#### Living With Edema

Help reduce discomfort from swelling:

- **Wear loose clothing and shoes that aren't too tight.** The exception is when your doctor recommends compression garments. These are meant to be tight.
- **Prop up swollen legs.** Raise your feet up when sitting or lying down if you have edema in your legs. Keep them above the level of your heart if you can.
- **Exercise gently.** Moving the part of your body with swelling can help with symptoms. Ask your health care provider for safe exercises to do.
- **Limit salt in your diet.** The sodium in salt can cause the body to retain fluid. Check food labels for sodium content.
- **Take medications as prescribed.** If your doctor prescribes medication for edema, take it exactly as instructed.



### Definitions

#### Immune Cells

Cells that protect your body from invading viruses, bacteria, and other microscopic threats.



### Web Links

For more about edema, see "Links" in the online article: [newsinhealth.nih.gov/2022/07/when-body-parts-swell](https://newsinhealth.nih.gov/2022/07/when-body-parts-swell)



## Health Capsules

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

### Certain Antioxidants May Lower Dementia Risk

Antioxidants are a type of compound found in vegetables and fruits. They help protect your cells from a certain type of damage. Eating lots of produce can help lower your risk of heart disease and other health problems. A new study found that certain antioxidants in these foods may also reduce the risk for Alzheimer's disease and other dementias.

Dementia, including Alzheimer's disease, harms your ability to remember, think, and make decisions. Studies have found several lifestyle factors that may help lower the risk of getting dementia. These include

eating a healthy diet, being physically active, and socializing with others. Getting enough sleep and doing activities that challenge your brain may also help.

Studies of antioxidants' effects on dementia have had mixed results. Some have found that they protect the brain. Others have not. These studies asked people to remember what types of foods they'd eaten over a long period of time.

In a new study, researchers measured antioxidant levels in blood samples from more than 7,000 people. Participants were between

the ages of 45 and 90. They were part of a nationwide study tracking their health over 16 years.

Blood levels of certain antioxidants were linked with a lower risk of developing dementia. These included lutein and zeaxanthin, which are found in green, leafy vegetables. They also included beta-cryptoxanthin, which is found in some orange-colored fruits.

"Further studies are needed to test whether adding certain antioxidants to the diet can help protect the brain from dementia," says NIH's Dr. May Beydoun, who led the study. ■

### What Causes Hepatitis?

Hepatitis has been in the news a lot lately. New cases have been showing up in children around the world. Doctors aren't sure why. Hepatitis is inflammation of the liver. Inflammation is the body's protective response to injury or infection. What causes hepatitis isn't always known.

Viruses are the most common culprit. There are five known viruses that cause the condition: hepatitis A, B, C, D, and E. Hepatitis A and E are usually spread through contaminated

food or water. Hepatitis B, C, and D are contracted through exposure to infected blood and possibly other body fluids.

Other viruses may also cause symptoms of hepatitis. Usually, your body can fight off these types of infections. But sometimes, they become chronic, or long lasting.

Other causes of hepatitis include heavy alcohol use, toxins, certain medications, and autoimmune diseases. Autoimmune diseases

happen when the body's protective response to illness or disease goes awry. This can cause your body to attack your own cells and organs, like the liver.

Chronic hepatitis can have serious complications. It can damage your liver and lead to liver failure. It can also cause liver cancer.

Learn more about viral hepatitis at [go.usa.gov/xJKTV](https://go.usa.gov/xJKTV) and [go.usa.gov/xJKTM](https://go.usa.gov/xJKTM). For autoimmune hepatitis, visit [go.usa.gov/xJ5JZ](https://go.usa.gov/xJ5JZ). ■



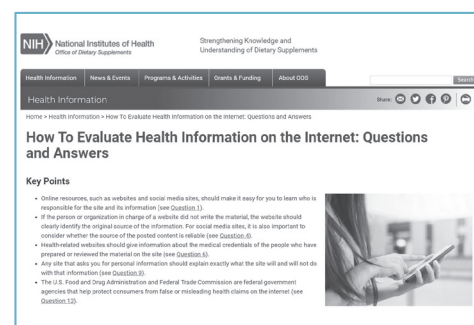
### Featured Website

How To Evaluate Health Information on the Internet

[go.usa.gov/xJBhs](https://go.usa.gov/xJBhs)

The internet makes finding health information easy and fast. But, it can also lead you to a lot of false and misleading information.

Learn how to decide whether the health information you find on the internet is reliable.



### How to get NIH News in Health

Subscribe online.

Visit [newsinhealth.nih.gov](https://newsinhealth.nih.gov)

Subscribe

Get it in print.

Contact us (see page two) to get print copies free of charge by mail for display in offices, libraries, or clinics within the U.S.

