

Managing  
ADHD

Liver Cirrhosis  
\*a special report

Psychosis Explained

Pubic Lice  
Infestation

Joint Stiffness  
Causes

Your 24 hours bed-side doctor!

# Health Goodness

June 2015

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Headaches  
Types & Diagnosis

Postmenopausal  
Atrophic Vaginitis

Breathing Difficulties:  
Know Your  
Lung Conditions

Anxiety Disorder

All about  
Flatulence

Seizures Explained

Suffering from  
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table of  
**CONTENTS**

---

**8** **Relieving Dental Distress**  
Dental Health Special (Cover Story)

**17** **Breathing Difficulties**  
Know Your Lung Conditions.

**22** **Live Longer**  
Is Life Extension Possible?.

**27** **Anxiety Disorder**  
Risk Factors, Symptoms..

**31** **Bad Breath**  
How to cope with it!.

**34** **5 Reasons to Scrape Your  
Tongue Every Day**

**36** **Curing Sinus Infection**  
Risks, Symptoms, Diagnosing,  
Treatment..

**39** **All about Flatulence**  
Causes, Health Conditions..

**41** **Full Sleep Study**  
Defining Polysomnography.

**44** **Frequent Urination**  
Causes & Relief.

**46**

**Blackhead  
Removal  
Mechanism**



**Heartburn**  
**48**



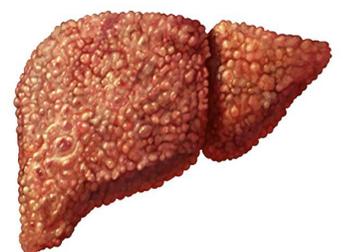
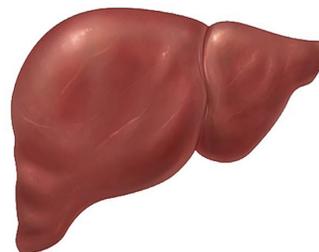
**50**

**Atrophic Vaginitis**



Normal Liver

Liver with Cirrhosis



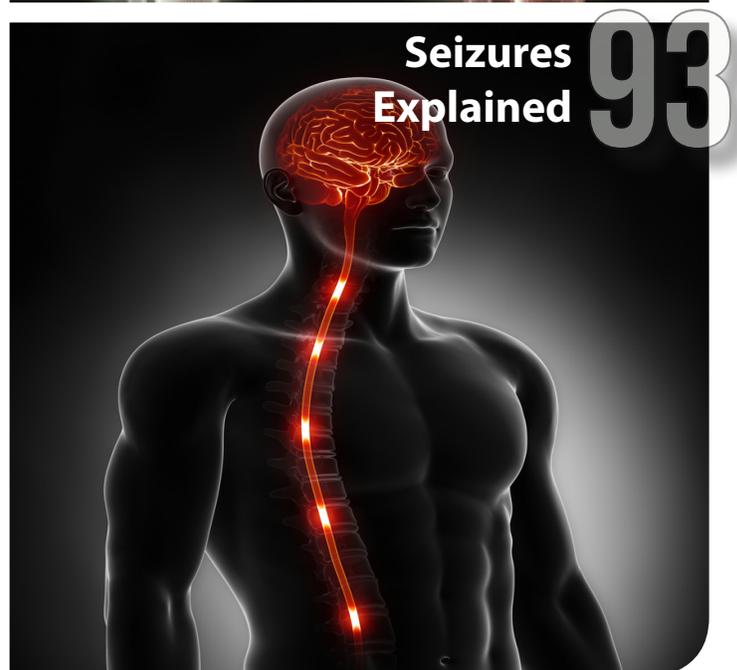
**Liver Cirrhosis**

**53**

# table of CONTENTS

---

- 57** **Managing ADHD**  
Treatment, Medications..
- 60** **Nutritional Deficiencies**  
Types, Causes, Symptoms.
- 63** **Open Heart Surgery**  
Reasons, Surgery Basics, Risks.
- 65** **Psychosis Explained**  
Causes, Types, Psychotic Disorders.
- 68** **Low Back Pain**  
Causes, Tests, Treatment.
- 72** **Pubic Lice Infestation**  
Causes, Symptoms, Diagnosis.
- 74** **Sepsis - Who's at risk?**  
Symptoms, Effects, Causes.
- 76** **Slipped Disk**  
Symptoms, Effects, Causes.
- 78** **Bulging Eyes**  
Causes, Diagnosos, Treatment.
- 80** **Sleep Disturbance**  
Causes, Diagnosos, Treatment.



from  
the  
editor..

## Greetings!

and a warm welcome to our second issue of Health Goodness Magazine!

We couldn't be more excited to have made it to this point. Please take some time to get to know about features as published herein. You can look at one article title at a time, or just peruse the articles from the Table of Contents page to choose which to read first.

This month, we've featured dental care issues as the Cover Story. Other than this, we also present a special report on Liver Cirrhosis, which is a must read. Other major articles are self descriptive on the cover.

When we set out to create an on-line magazine that would promote healthy and deliberate living, one thing we agreed on right away was to steer-away from the glossy images of the too-perfect, product-driven magazines that we all sometimes read. What you will find in the pages of Health Goodness Magazine is a collection of inspired and instructive articles written by real, honest, down-to-earth folks who work hard to live deliberately, but who are not afraid to admit the struggles we sometimes face. We don't always have hours to exercise every day. Our houses aren't perfect. We stay informed and eat as healthy as we can, but we are also realistic and flexible. We try to be great examples for our kids, but we sometimes forget to appreciate every moment. We are honored to share the work of so many committed and thoughtful people.

We appreciate your support and are so happy to have you as a reader of Health Goodness Magazine.

With warmest thanks,

*Manish K Sharma*

Manish K Sharma, Editor.



Health Goodness - Your 24 hours bed-side doctor!

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**Arun Sharma**  
Co-Founder and Chief Executive Officer

**Manish K Sharma**  
Co-Founder, Editor-In Chief & Creative Art Director



# Relieving Dental Distress

## Tooth Anatomy

### What Are the Different Parts of a Tooth?

**Crown:** the top part of the tooth, and the only part you can normally see. The shape of the crown determines the tooth's function. For example, front teeth are sharp and chisel-shaped for cutting, while molars have flat surfaces for grinding.

**Gumline:** where the tooth and the gums meet. Without proper brushing and flossing, plaque and tartar can build up at the gumline, leading to gingivitis and gum disease.

**Root:** the part of the tooth that is embedded in bone. The root makes up about two-thirds of the tooth and holds the tooth in place.

**Enamel:** the outermost layer of the tooth. Enamel is the hardest, most mineralized tissue in the body, yet it can be damaged by decay if teeth are not cared for properly.

**Dentin:** the layer of the tooth under the enamel. If decay is able to progress its way through the enamel, it next attacks the dentin, where millions of tiny tubes lead directly to the dental pulp.

**Pulp:** the soft tissue found in the center of all teeth, where the nerve tissue and blood vessels are. If tooth decay reaches the pulp, you usually feel pain.

## What Are the Different Types of Teeth?

Every tooth has a specific job or function (Use the dental arch in this section to locate and identify each type of tooth):

**Incisors:** the sharp, chisel-shaped front teeth (four upper, four lower) used for cutting food.

**Canines:** sometimes called cuspids, these teeth are shaped like points (or cusps) and are used for tearing food.

**Premolars:** these teeth have two pointed cusps on their biting surface and are sometimes referred to as bicuspid. The premolars are for crushing and tearing.

**Molars:** used for grinding, these teeth have several cusps on the biting surface.

## What Is Good Oral Hygiene?

Good oral hygiene results in a mouth that looks and smells healthy.

This means:

Your teeth are clean and free of debris

Gums are pink and do not hurt or bleed when you brush or floss

Bad breath is not a constant problem. If your gums

do hurt or bleed while brushing or flossing, or you are experiencing persistent bad breath, see your dentist. Any of these conditions may indicate a problem.

Your dentist or hygienist can help you learn good oral hygiene techniques and can help point out areas of your mouth that may require extra attention during brushing and flossing.

## How Is Good Oral Hygiene Practiced?

Maintaining good oral hygiene is one of the most important things you can do for your teeth and gums. Healthy teeth not only enable you to look and feel good, they make it possible to eat and speak properly. Good oral health is important to your overall well-being.

Daily preventive care, including proper brushing and flossing, will help stop problems before they develop and is much less painful, expensive, and worrisome than treating conditions that have been allowed to progress.

In between regular visits to the dentist, there are simple steps that each of us can take to greatly decrease the risk of developing tooth decay, gum disease and other dental problems.

These include:

- Brushing thoroughly twice a day and flossing daily
- Eating a balanced diet and limiting snacks between meals.
- Using dental products that contain fluoride, including toothpaste
- Rinsing with a fluoride mouthrinse if your dentist tells you to.
- Making sure that your children under 12 drink fluoridated water or take a fluoride supplement if they live in a non-fluoridated area.

## How can I take care of my toothbrush?

To keep your toothbrush and yourself healthy, make sure you let it dry out between uses. Toothbrushes can be breeding grounds for germs, fungus and bacteria which after a while can build up to significant levels. After using your toothbrush shake it vigorously under tap water and store it in an upright position so that it can air out.

To prevent cold and flu viruses from being passed between brushes, try to keep your toothbrush from touching others when it is stored. A standard toothbrush holder with slots for several brushes to hang upright is a worthwhile investment in your family's health.



## How often should I change my toothbrush?

Most dentists agree you should change your toothbrush every three months. Studies show that after three months of normal wear and tear, toothbrushes are much less effective at removing plaque from teeth and gums compared to new ones. The bristles break down and lose their effectiveness in getting to all those tricky corners around your teeth.

It is also important to change toothbrushes after you've had a cold, the flu, a mouth infection or a sore throat. That's because germs can hide in toothbrush bristles and lead to reinfection. Even if you haven't been sick, fungus and bacteria can develop in the bristles of your toothbrush, another reason to change your toothbrush regularly.



## How Do I Look for a Dentist?

A good place to start is by asking for a referral from people you trust – your friends, family, acquaintances, work associates, pharmacist or family doctor. Ask them how long they've gone to their dentist, how comfortable they feel asking questions, what type of dentist they go to (general or specialist). It is important that you find a dentist with whom you feel comfortable.

## What Kind of Dentist Should I Look for?

General dentists are trained to do all types of treatment. If you have difficult or unusual problems, your dentist may refer you to one of the following specialists:



Most dental visits are checkups. Regular checkups (ideally every six months) will help your teeth stay cleaner, last longer and can prevent painful problems from developing.

A thorough cleaning Check-ups almost always include a complete cleaning, either from your dentist or a dental hygienist. Using special instruments, a dental hygienist will scrape below the gumline, removing buildup plaque and tartar that can cause gum disease, cavities, bad breath and other problems. Your dentist or hygienist may also polish and floss your teeth.

Pediatric Dentists/Pedodontists specialize in pediatric (children's) dentistry.

Endodontists diagnose and treat diseased tooth pulp and perform root canal work (many general dentists also perform root canals). Prosthodontists specialize in crowns, bridges and dentures. Oral pathologists use laboratory procedures to diagnose diseases of the mouth. They also specialize in forensic dentistry.

Oral/Maxillofacial surgeons perform surgical treatments, such as removing cysts, tumors, and teeth. They can correct fractures or other jaw problems that require surgery, including temporomandibular joint (TMJ). They also use methods similar to those of plastic surgery to treat cosmetic problems of the jaw and face.

Orthodontists correct improperly positioned teeth, using braces and other appliances to move teeth into a better position. Periodontists specialize in the diagnosis and treatment of gum disease.

## What Happens During a Dental Visit?

First, it is important to find a dentist with whom you feel comfortable. Once you've found a dentist you like, your next step is to schedule a check-up – before any problems arise.

On your first visit to a dentist, they

will take a full health history. On subsequent visits, if your health status has changed, make sure to tell them.

A full examination: Your dentist will perform a thorough examination of your teeth, gums and mouth, looking for signs of disease or other problems. His or her goal is to help maintain your good oral health and to prevent problems from becoming serious, by identifying and treating them as soon as possible.

X-rays: Depending on your age, risks of disease and symptoms, your dentist may recommend X-rays. X-rays can diagnose problems otherwise unnoticed, such as damage to jawbones, impacted teeth, abscesses, cysts or tumors, and decay between the teeth.

A modern dental office uses machines that emit virtually no radiation – no more than you would receive from a day in the sun or a weekend watching TV. As a precaution, you should always wear a lead apron when having an X-ray. And, if you are pregnant, inform your dentist, as X-rays should only be taken in emergency situations.

Your dentist may ask for a Panoramic X-ray, or Panorex. This type of film provides a complete view of your upper and lower jaw in a single picture, and helps the dentist understand your bite and the relationship between the different teeth and your arch.

## How Long Should I Go Between Visits?



If your teeth and gums are in good shape, you probably won't need to return for three to six months. If further treatment is required – say to fill a cavity, remove a wisdom tooth, or repair a broken crown – you should make an appointment before leaving the office. And don't forget to ask your dentist any questions you may have-this is your chance to get the answers you need.

## What Is Gum Disease?

Gum disease is an inflammation of the gums that can progress to affect the bone that surrounds and supports your teeth. It is caused by the bacteria in plaque, a sticky, colorless film that constantly forms on your teeth. If not removed through daily brushing and flossing, plaque can build up and the bacteria infect not only your gums and teeth, but eventually the gum tissue and bone that support the teeth. This can cause them to become loose, fall out or have to be removed by a dentist.

There are three stages of gum disease:

**Gingivitis :** This is the earliest stage of gum disease, an inflammation of the gums caused by plaque buildup

at the gumline. If daily brushing and flossing do not remove the plaque, it produces toxins (poisons) that can irritate the gum tissue, causing gingivitis. You may notice some bleeding during brushing and flossing. At this early stage in gum disease, damage can be reversed, since the bone and connective tissue that hold the teeth in place are not yet affected.

**Periodontitis:** At this stage, the supporting bone and fibers that hold your teeth in place are irreversibly damaged. Your gums may begin to form a pocket below the gumline, which traps food and plaque. Proper dental treatment and improved home care can usually help prevent further damage.

**Advanced Periodontitis:** In this final stage of gum disease, the fibers and bone supporting your teeth are destroyed, which can cause your teeth to shift or loosen. This can affect your bite and, if aggressive treatment can't save them, teeth may need to be removed.

## How Do I Know if I Have Gum Disease?

Gum disease can occur at any age, but it is most common among adults. If detected in its early stages, gum disease can be reversed so see your dentist if you notice any of the following symptoms:

- Gums that are red, puffy or swollen, or tender.
- Gums that bleed during brushing or flossing.
- Teeth that look longer because your gums have receded.
- Gums that have separated, or pulled away, from your teeth, creating a pocket.
- Changes in the way your teeth fit together when you bite.
- Pus coming from between your teeth and gums.
- Constant bad breath or a bad taste in your mouth.

## How is Gum Disease Treated?

The early stages of gum disease can often be reversed with proper brushing and flossing. Good oral health will help keep plaque from building up.

A professional cleaning by your dentist or hygienist is the only way to remove plaque that has built up and hardened into tartar. Your dentist or hygienist will clean or “scale” your teeth to remove

the tartar above and below the gumline. If your condition is more severe, a root planing procedure may be performed. Root planing helps to smooth irregularities on the roots of the teeth making it more difficult for plaque to deposit there.

By scheduling regular checkups, early stage gum disease can be treated before it leads to a much more

serious condition. If your condition is more advanced, treatment in the dental office will be required.

## What Is Tooth Sensitivity?

Tooth sensitivity is tooth pain due to a wearing away of the tooth’s surface or gum tissue. The most common cause of sensitive teeth in adults is exposed tooth roots due to receding gums. Because these roots are not covered by enamel, thousands of tiny channels leading to the tooth’s nerve center (pulp) are exposed. When heat, cold or pressure touches these channels, you feel pain.

Ignoring your sensitive teeth can lead to other oral health problems. This is especially true if the pain causes you to brush poorly, making you vulnerable to tooth decay and gum disease.

## How Do I Know if I Have Sensitive Teeth?

If you’ve ever felt a painful sensation in your teeth after drinking or eating hot or cold food and beverages, you’ve experienced tooth sensitivity. And you’re not alone. It’s a condition that affects one out of four adults, often coming and going over time.

## How Do I Treat Sensitive Teeth?

First and foremost, tell your dentist or hygienist.

Sensitive teeth can usually be treated successfully. Your dentist may prescribe a brush-on fluoride gel or a fluoride rinse. You can also try low-abrasion toothpastes with formulations made especially for sensitive teeth. Ask your dentist which anti-sensitivity products are right for you.

Be careful to brush properly or you can cause your teeth to wear away, making them sensitive. Overzealous brushing, the clasp of a partial denture, and braces can also lead to abrasion (loss of tooth surface).



# What Is Halitosis?

Halitosis simply means bad breath, a problem that many people experience at one time or another. Many things can cause bad breath, including:

- Poor oral hygiene (not brushing and flossing properly)
- Gum disease
- Eating certain foods like onions or garlic
- Tobacco and alcohol products
- Dry mouth (caused by certain medications, medical disorders and by decreased saliva flow during sleep hence the term “morning breath”)
- Systemic diseases such as cancer, diabetes, liver and kidney disorders.

# How Do I Know if I Have Halitosis?

One way to test if you have bad breath is to cover your mouth and nose with your hand, exhale, and smell your breath. Another way is to ask someone you trust whether or not your breath smells bad. Keep in

mind that many people experience “morning breath,” which is the result of reduced saliva flow during sleep that allows acids and other debris to putrefy in the mouth. Brushing and flossing thoroughly before bed, and brushing your teeth and tongue first thing in the morning, will usually eliminate morning breath.

# How Can I Help Prevent Halitosis?

In addition to avoiding foods that cause bad breath, you can reduce the chances of bad breath by:

- Brushing thoroughly twice a day and flossing daily to remove plaque and food particles. Brushing your tongue will also help reduce bad breath
- Removing dentures each night and cleaning them well before replacing them each morning
- Visiting your dentist regularly for dental checkups and cleanings.
- If you have persistent bad breath that is not improved with brushing and flossing, see your dentist for a thorough dental examination as this

could indicate a more serious problem. Only a dentist can tell if you have gum disease, dry mouth or excess plaque buildup as a possible cause of bad breath.

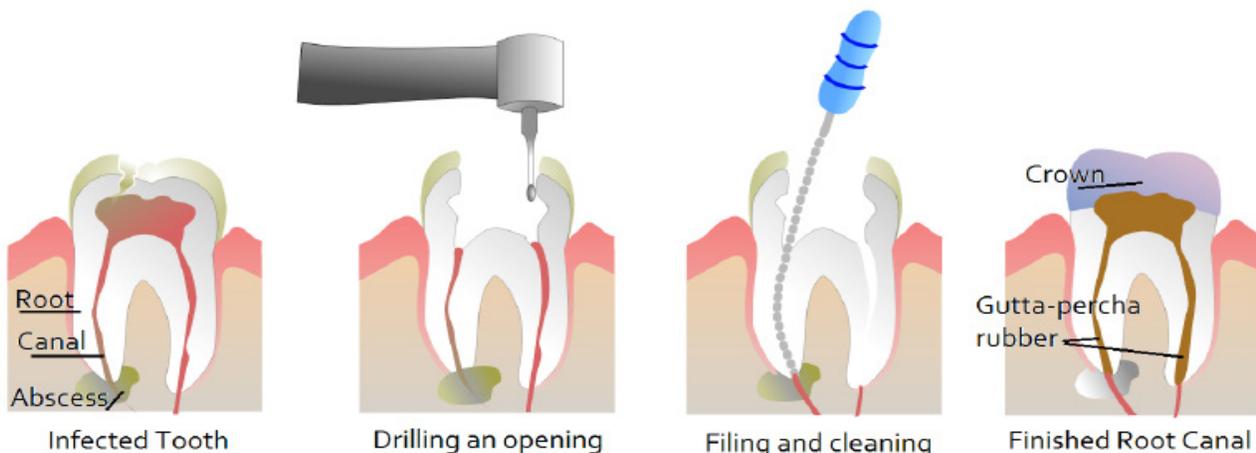
# Treatments

# What is Fluoride?

Fluoride is a natural mineral found throughout the earth’s crust and widely distributed in nature. Some foods and water supplies contain fluoride.

Fluoride is often added to drinking water to help reduce tooth decay. In the 1930s, researchers found that people who grew up drinking naturally fluoridated water had up to two-thirds fewer cavities than people living in areas without fluoridated water.

Studies since then have repeatedly shown that when fluoride is added to a community’s water supply, tooth decay decreases. The American Dental Association, the World Health Organization and the American Medical Association, among many other organizations,



have endorsed the use of fluoride in water supplies because of its effect on tooth decay.

## How Does Fluoride Work?

Fluoride helps prevent cavities in two different ways:

Fluoride concentrates in the growing bones and developing teeth of children, helping to harden the enamel on baby and adult teeth before they emerge

Fluoride helps to harden the enamel on adult teeth that have already emerged.

Fluoride works during the demineralization and remineralization processes that naturally occur in your mouth.

After you eat, your saliva contains acids that cause demineralization a dissolving of the calcium and phosphorous under the tooth's surface.

At other times when your saliva is less acidic it does just the opposite, replenishing the calcium and phosphorous that keep your teeth hard. This process is caused remineralization.

When fluoride is present during remineralization, the minerals deposited are harder than they would otherwise be, helping to strengthen your teeth and prevent dissolution during the next demineralization phase

## How do I Know if I'm Getting Enough Fluoride?

If your drinking water is fluoridated, then brushing regularly with a fluoride toothpaste is considered sufficient for adults and children with healthy teeth at low risk of decay.

If your community's water is not fluoridated and does not have enough natural fluoride in it (1 part per million is considered optimal), then your dentist or pediatrician may prescribe fluoride tablets or drops for your children to take daily. Your dentist or pediatrician can tell you how much fluoride is right for your family, so be sure to ask for his or her advice.

If your water comes from a public water supply, you can find out if it's fluoridated by calling your local water district. If your water comes from a private well, you can have it analyzed by an independent environmental testing company that provides water-testing services.

## What is a Filling?

A filling is a way to restore a tooth damaged by decay back to its normal function and shape. When a dentist gives you a filling, he or she first removes the decayed tooth material, cleans the affected area, and then fills the cleaned out cavity with a filling material.

By closing off spaces where bacteria can enter, a filling also helps prevent further decay. Materials used for fillings include gold, porcelain, a composite resin (tooth-colored fillings), and an amalgam (an alloy of mercury, silver, copper, tin and sometimes zinc).

## Which Type of Filling is Best?

No one type of filling is best for everyone. What's right for you will be determined by the extent of the repair, whether you have allergies to certain materials, where in your mouth the filling is needed, and the cost. Considerations for different materials include:

Gold fillings are made to order in a laboratory and then cemented into place. Gold inlays are well tolerated by gum tissues, and may last more than 20 years. For these reasons, many authorities consider gold the best filling material. However, it is often the most expensive choice and requires multiple visits.

Amalgam (silver) fillings are resistant to wear and relatively inexpensive. However, due to their dark color, they are more noticeable than porcelain or composite restorations and are not usually used in very visible areas, such as front teeth.

Composite (plastic) resins are matched to be the same color as your teeth and therefore used where a natural appearance is



desired. The ingredients are mixed and placed directly into the cavity, where they harden. Composites may not be the ideal material for large fillings as they may chip or wear over time. They can also become stained from coffee, tea or tobacco, and do not last as long as other types of fillings generally from three to 10 years.

Porcelain fillings are called inlays or onlays and are produced to order in a lab and then bonded to the tooth. They can be matched to the color of the tooth and resist staining. A porcelain restoration generally covers most of the tooth. Their cost is similar to gold.

If decay or a fracture has damaged a large portion of the tooth, a crown, or cap, may be recommended. Decay that has reached the nerve may be treated in two ways: through root canal therapy (in which nerve damaged nerve is removed) or through a procedure called pulp capping (which attempts to keep the nerve alive).

**COOL TRUTHS ABOUT THE TOOTH**

- 1 Tooth enamel is the hardest part of the human body.
- 2 One quarter of adults in the US have lost all their teeth.
- 3 Teeth start to form before we are born.
- 4 They're called wisdom teeth because they come in when you're older and wiser.
- 5 We produce 100,000 gallons of saliva in a lifetime which helps prevent tooth decay by moving food away from teeth.
- 6 Tooth decay is the second most common disease after the cold.
- 7 People prefer blue toothbrushes over red.
- 8 A Middle Age custom was to kiss a donkey for toothaches.
- 9 We buy 18 yards of dental floss a year. We should buy 122 yards.
- 10 Visiting the dentist at least twice a year is imperative for dental health.



# Breathing Difficulties

## Know Your Lung Conditions

Breathing difficulty is a broad term that is used to describe discomfort when breathing, and the feeling that you cannot draw a breath. This can develop gradually, or your breathing may suddenly become more labored. Breathing difficulties make you feel as though you cannot get enough air. Mild breathing problems, such as fatigue following an aerobics class, are not a concern.

Breathing difficulty can be caused by a number of different conditions, or it can develop as a result of stress and anxiety.

Frequently occurring shortness of breath or sudden, intense breathing difficulty may be a sign of a serious health issue in need of medical attention.

## Causes

- Breathing difficulties are often caused by simple environmental issues and/or common health concerns. These include:

- Allergies to dust, mold, or pollen, stress and anxiety, blocked air passages from a stuffy nose or throat phlegm.
- Lowered oxygen intake from climbing to a high altitude

According to the experts at the Mayo Clinic, lung and heart conditions are the top two reasons for breathing difficulty (Mayo Clinic, 2010).

## Lung Conditions

There are a number of lung conditions that can cause breathing difficulty. All of these require immediate medical attention, some more immediate than others:

Asthma is an inflammation and narrowing of the airways that can cause shortness of breath, wheezing, chest tightness, and coughing.

Pneumonia is lung inflammation that is caused by infection.

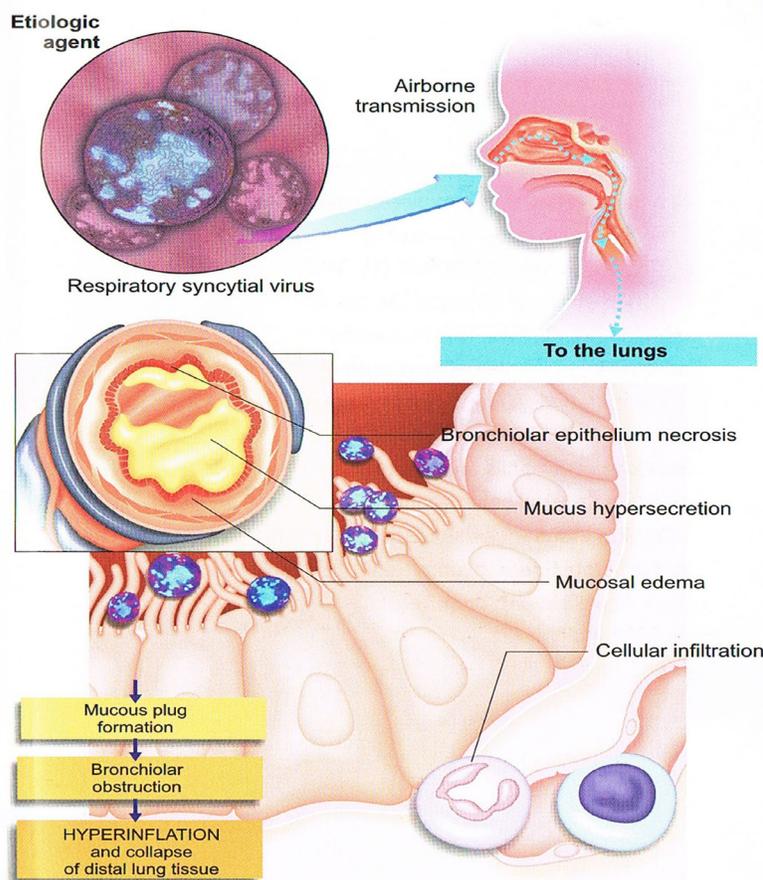
Symptoms may include shortness of breath, cough, chest pain, chills, sweating, fever, muscle pain, and exhaustion. This condition, in some cases, can be life threatening.

COPD (chronic obstructive pulmonary disease) is the term used for a group of diseases that cause difficulty exhaling and other symptoms, such as wheezing, a constant cough, and chest tightness. Emphysema, often caused by years of smoking, is in this category

of diseases.

Pulmonary embolism is a blockage in one or more of the arteries leading to the lungs. This is often caused by a blood clot from elsewhere, often a leg, which has travelled up to the lung arteries. This condition can be life threatening and requires immediate medical attention. Other symptoms include swelling of the leg, chest pain, cough, wheezing, profuse sweating, abnormal heart rate, dizziness, and/or a bluish tint to the skin.

## Bronchiolitis



Pulmonary hypertension is high blood pressure that affects the lung and heart arteries. This condition is often caused by the narrowing or hardening of the lung arteries. Symptoms of this condition are very similar to those of a pulmonary embolism.

Immediate medical attention is needed.

Croup is a respiratory condition caused by an acute viral infection and is known for its distinctively loud, "barking" cough. Make an appointment with your doctor if you

or your child has croup. Children under 5 are more susceptible to more serious complications with this condition (Mayo Clinic, 2010).

Epiglottitis is a swelling of the epiglottis (the tissue that covers the windpipe) due to infection. This is a life-threatening disease that requires immediate medical attention. Other symptoms include fever, sore throat, mouth drooling, blue skin, difficulty breathing and swallowing, strange breathing sounds, chills, and

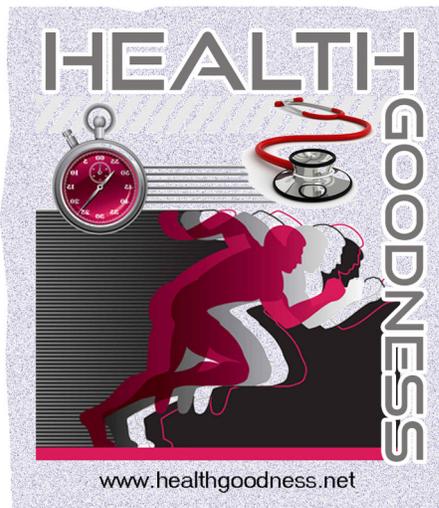
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Read this magazine in any of the following:



hoarseness. There are vaccinations to prevent this condition.

Hiatal hernia is the protrusion of the stomach through the diaphragm into the chest. Individuals with this condition may also experience chest pain, difficulty swallowing, and heartburn. Small hiatal hernias can often be treated with medications and lifestyle changes; larger hernias or smaller ones that do not respond to treatment may require surgery.

## Heart Conditions

You may notice yourself getting out of breath more often if you suffer from a heart condition. This is due to the heart struggling to pump oxygen-rich blood out to the body. Possible conditions that can cause this problem include:

- **Coronary artery disease (CAD):** a disease that causes narrowing and hardening of the arteries connected to the heart. Symptoms also include chest pain (angina) or heart attack.
- **Congenital heart disease:** problems with the structure or functioning of the heart that were present at birth
- **Arrhythmias:** disorders of heart rhythm or heart rate, which can cause an irregular heartbeat or a heart that beats too fast or too slow.
- **Heart attack**
- **Heart failure**

Babies and young children often have breathing difficulties when they suffer from respiratory viruses. Mild symptoms occur because small children do not know how to clear their noses and throats. There are several conditions that can lead to more severe breathing difficulties. Most children recover easily, however. These illnesses include:

- **Croup**

Croup is respiratory illness usually caused by a virus. Children between 3 months and 5 years are most

## Change Your Breathing, Change Your Life

Focusing on your own breathing can have a significant impact on your well-being and stress levels, awakening your mind and body while also lowering blood pressure and reducing anxiety. Here are seven big health reasons to stop and exhale.

- 1 STIMULATE BRAIN GROWTH**  
When controlled breathing is used during meditation, it can actually increase the size of the brain. Meditation that involves focusing one's attention on the breath has the capacity to increase cortical thickness, according to a 2005 Harvard study.
- 2 IMPROVE HEART RATE VARIABILITY**  
Low heart rate variability (the interval of time between heartbeats) has been associated with a greater risk of heart attacks. A 2012 study found that non-yogic deep breathing practices can improve heart rate variability in healthy test subjects.
- 3 LOWER STRESS LEVELS**  
If your breathing is shallow, your body is probably in "fight-or-flight" mode reacting to stress, says Ardito. Taking a minute or two to sit quietly and focus on your breathing helps your body achieve a state of calm, shifting from functioning out of the sympathetic nervous system (characterized by drive, flight and ambition) to the parasympathetic nervous system, which puts the body in a state of "relax and receive."
- 4 ALLEVIATE ANXIETY & NEGATIVE EMOTIONS**  
Many of us have felt short of breath during times of panic or stress. This is the body's natural reaction to a perceived threat, says Ardito. Focusing on breathing can help to alleviate anxiety, symptoms of depression, and other negative emotions. Last year, Australian researchers found that deep breathing 30 minutes before a performance effectively reduced musicians' performance anxiety.
- 5 REDUCE TESTING ANXIETY**  
A 2007 study published in the journal *Teaching and Learning in Medicine* found that students who practiced deep-breathing meditation before an exam reported perceiving less anxiety, self-doubt and concentration loss than the students who did not practice deep breathing.
- 6 LOWER BLOOD PRESSURE**  
Taking slow, deep breaths for just a few minutes a day could help to lower your blood pressure, according to Dr. David Anderson of the National Institutes of Health. While researchers have observed that slow, deep breaths can help to relax and temporarily dilate blood vessels, they don't yet know precisely why deep breathing has the capacity to cause a lasting drop in blood pressure, Anderson tells NBC News.
- 7 ALTER GENE EXPRESSION**  
A recent study found that mind-body practices like yoga, meditation and deep breathing exercises can trigger the body's "relaxation response," a physiological state of deep relaxation that alters the way it responds to stress. This state can counter the negative effects of stress for people with health conditions like anxiety and hypertension, by actually altering the expression of genes in the immune system.

Sources: U.S. National Library of Medicine National Institutes of Health, ScienceDaily.com, Teaching and Learning in Medicine: An International Journal, Harvard University, Ahmouda A. Martins Center for Biomedical Imaging, Harvard Medical School, PLOS ONE, National Institutes of Health, American Heart Association, NBC News  
Photo: Getty

likely to get croup, but it can develop in older children. Croup usually begins with symptoms similar to a cold, but the illness is characterized by a "barking" cough that sounds like a seal. Breathing difficulties can result from frequent coughing. This often occurs at night. Most cases of croup resolve within a week. The first and second nights of coughing are usually the worst. In some cases, a severe bacterial infection can develop in the upper airway.

- **Bronchiolitis**

A viral lung infection, bronchiolitis usually affects babies between 3 and 6 months. The illness may

appear like the common cold at first, but coughing, rapid breathing, and wheezing may follow after a few days. In most cases, babies get well in a week to 10 days.

## Home Care for Your Child

The following may soothe the respiratory symptoms that are causing your child's breathing problems: cool or moist air. Take your child outside into the night air or into a steamy bathroom.

A cool mist humidifier while the child is sleeping acetaminophen (check with your child's doctor for infant dosage)

## When to Call the Doctor

Your child requires medical attention if:

- Breathing difficulty is increased or persistent.
- Breathing is rapid (more than 40 breaths in 1 minute).
- The skin of the chest pulls into the ribs with each breath.
- Your child must sit up to breathe.
- Your child has heart disease.
- Your child was born prematurely.

## Risk Factors

You are at greater risk for breathing problems if you experience constant stress, suffer from allergies, or have a chronic lung or heart condition. Obesity also increases the risk of breathing difficulties. Extreme physical exertion can also put you at risk for breathing problems, particularly when you exercise in intense spurts or at high altitudes.

## Symptoms

You are having breathing problems when you feel as though you cannot breathe in enough oxygen. Here are some specific signs:

- a faster breathing rate
- wheezing (a whistling sound when exhaling and sometimes inhaling)
- blue fingernails and/or mouth
- pale or gray complexion
- head sweat
- flaring nostrils

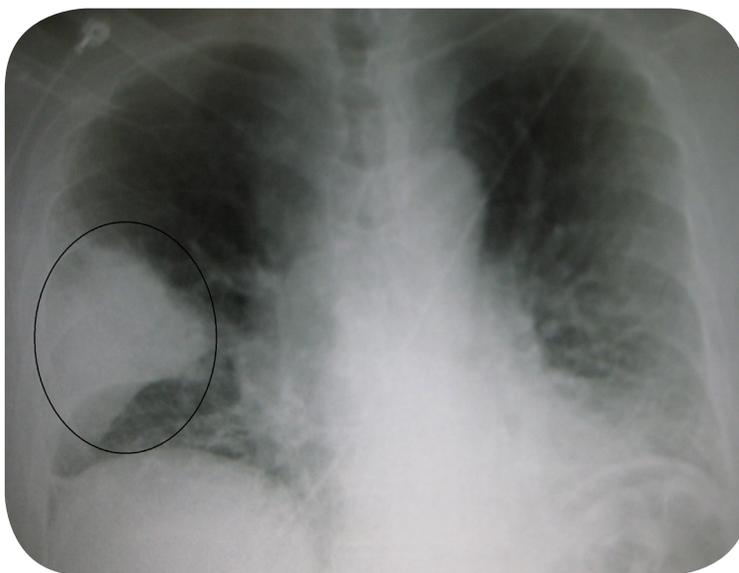
## Emergency Symptoms

Contact an emergency doctor if breathing difficulty comes on suddenly. Seek immediate medical attention for anyone whose breathing appears to have slowed considerably or to have stopped. After you have called 911, perform emergency CPR if you are trained to do so.

The following symptoms, along with breathing difficulty, can indicate a serious problem.

These problems may indicate an angina attack, a lack of oxygen, or a heart attack. Symptoms to be aware of include:

- fever
- pain or pressure on the chest
- wheezing
- tightness in the throat
- a barking cough
- shortness of breath that requires you to sit up constantly
- shortness of breath that wakes you up during the night





# Live Longer

## Can Medical Science Make Us Live Longer By Reversing Aging?

(In continuation from last Issue..)

### Is Life Extension Possible?

The term life extension deals exclusively with a wide variety of approaches that share the goal of extending life. Many of these approaches are simply theories based on our understanding of why we age. Some, however, are more science fiction than science and some can even be classified as outright entertainment.

Currently, theories exist that we are capable of extending the human life span out to as many as 5,000 years by the end of the century using biogenetics. That, of course, on the surface is absurd. As stated above, living a healthy lifestyle and avoiding risks doesn't even guarantee adding years to your life. Here is a summary of some of the latest theories and approaches:

## Calorie Restriction

Much of the damage due to aging in the body is caused by the metabolic process of converting food into energy. If we can limit the amount of food by 30 to 50 percent, then we can limit the damage due to aging. Researchers have been able to almost double the life span of rats in the laboratory through a 30 to 50 percent calorie restricted diet. Studies have also been done successfully in primates that extend life somewhat and prevent many age-related illnesses. No studies have been completed in humans, though there are people who are attempting a calorie-restricted diet. Time will tell if they live longer than average.

## Nutritional Approaches

Supplying the body with more antioxidants and other nutritional elements will help to slow the process of aging. By giving the body more antioxidants, damage by free radicals is lessened. It is not clear whether these approaches slow the actual aging process, or merely reduce an individual's risk of illness. No studies have linked these nutritional approaches with an actual increase in life span though they are linked with a decrease in illness. Supplements have been shown not as effective as eating real food. The oldest advice is still the best advice: Eat Lots of Fruits and Vegetables.

## Hormone Replacement Therapy

As people age, their levels of hormones, especially human growth hormone, testosterone and DHEA, all decline. Hormone replacement therapy gives people doses of these hormones to counteract the effects and impact of aging.

A person taking some hormone replacement therapy will feel better for a time. But the supplements are likely to slow down, not speed up, the body's own ability to make these important hormones. No evidence exists to link hormone replacement therapy with increased life span in humans.

## Body Part Replacement

The human body is like a house, over time, you can replace the roof, change the doors and even redo the kitchen but the house itself survives. Adherents to this theory believe that through human cloning, stem cell research and other new technologies, we will be able to grow and replace body parts as they wear out. We can expect more body part replacement in the future, but this approach is unlikely to counteract aging itself. The wear and tear theory of aging that is behind the logic of body part replacement does not take into account the systemic changes that occur over time.

## Cryonics

If you can stop your life's clock from ticking in an ageless state of suspended animation, then you can wait for new technologies to come along to cure illnesses, replace your organs and keep you living. Cryonics adherents believe that by reducing body temperature in a complex process that prevents freezing but chills the body to extremely low temperatures, one can preserve cells and tissues indefinitely. Very little evidence exists to suggest that cryonics works. No mammal has ever been successful cryo-preserved and brought back to life.

The standard practice with humans is to place a person in a cryogenic state immediately upon death, but before the degeneration of tissues and cells. This is done in the hopes that someday in the future, medicine will not only be able to revive a person from this state, but also be able to treat whatever caused death in the first place.

### Hydrogen Sulfide and Longevity - Life Extension and Hibernation

Can any chemical placed into your body cause a kind of cellular hibernation?

That is what research at the Fred Hutchinson Cancer Research Center is trying to figure out. Researchers have used a chemical known as Hydrogen Sulfide (H<sub>2</sub>S) to put mice into a "reverse metabolic hibernation."



## Life Extension, Longevity and Hydrogen Sulfide

This study takes hydrogen sulfide and put it in nematodes (tiny worms). When the nematodes lived in an environment where the air contained a low concentration of hydrogen sulfide, the worms did not hibernate metabolically, but their life span and heat tolerance still increased. This was repeated 15 times for confirmation and 77% of the exposed worms lived an average of 9.6 days longer than the non-exposed “control worms.” Researchers ruled out some complex explanations involving insulin and other genetic pathways. They now believe that the hydrogen sulfide helps regulate the SIR-2.1 gene, a gene known to be important in longevity. When this gene is “overactive,” it can increase the lifespan of other worms (*c. elegans*) by 20%. While the nematode has enough similarities with humans to be a great research model, there really isn’t any evidence that living in an environment with higher hydrogen sulfide levels will extend life in humans. Researchers are excited about this line of research as a way of potentially “buying time” for critically ill patients by slowing their metabolism while waiting for treatment to take effect. But if you would like your nematodes to live 70% longer, you might consider this.

## Calorie Restriction and Life Extension- Cut Calories, Live Longer?

Calorie restriction is a strategy to increase life expectancy by reducing the total amount of calories consumed daily. Calorie restriction research has been around since the 1930s and recent studies have shown longevity benefits to rats and other animals from a low calorie diet. Calorie restriction is thought to prevent or improve numerous health conditions, especially ones related to cardiovascular disease and diabetes. In calorie restriction, nutritional choices are very important. Calorie-poor, nutrient-dense foods such as vegetables are chosen over sugars, high carbohydrate items and other foods. Anyone using a calorie restriction diet should be well-educated on nutrition and have regular check-ups with their doctor. On average, the typical American consumes between 2000 and 3000 calories per day. Someone practicing calorie restriction may consume between 1500 and 2000 daily calories.

The maximum lifespan of rats has been nearly doubled in some experiments by placing the rats on a nutritious, low calorie diet. Other animals have also been used to prove the benefits of calorie restriction including monkeys, mice, and spiders. Not only do the animals on calorie restriction live longer, they remain more youthful, energetic and healthy.

In humans, calorie restriction has been shown to lower blood pressure, improve the function of heart, veins, and arteries, and lower blood insulin levels. No one really knows if calorie restriction can increase the life expectancy in humans.

## Can Suspended Animation Extend Life?

Suspended animation is the process of slowing metabolism and other activity associated with living through external means (such as applying

cold) without causing death. This idea has led to all sorts of science fiction applications of suspended animation; the most common example is putting the idea of putting astronauts in suspended animation during space flights of incredibly long duration. When people typically think of suspended animation and life extension, they often get confused between suspended animation and the idea of cryonics. In cryonics, a person is literally frozen using liquid nitrogen. The person is, technically, dead. The cryonics proponents believe that, as technology develops, a frozen person could be reanimated, or brought back to life. Some (very rich people) have chosen to have their bodies frozen at the moment of death using cryonics with the idea that, decades or centuries from now, they could be reanimated and the cause of their death can be treated. I would say this is science fiction, expect that the freezing part has already happened; what hasn't happened is that whole reviving and treating part in the future. Suspended animation, however, is an entirely different thing. Doctors are looking into the possibilities of placing a person in a state of suspended animation during certain surgical procedures to, in essence, buy time to fix things. Not only that, but there are other ways to achieve suspended animation than simply making a body cold (such as hydrogen sulphide gas in the correct dosage which suspends that need for oxygen in the body). There has been research in which animals were revived after being in a "technically dead" state for three hours. This line of research is funded by the National Institutes of Health and other scientific organizations. If suspended animation can be developed for use in trauma and other situations, it would have the potential to increase the survival rate from these procedures, thereby extending life.

## Bottom Line

Suspended animation has the potential to extend life in the next decade or so by giving surgeons additional tools to "buy time" to transport patients to the point of care and to allow for longer, more complex, surgical procedures.

## Is Aging in Our Genes?

Some families have a long history of aging well while others seem to have a history of age-related health problems. But is it because the families have "good" or "bad" aging genes? Or is it because families tend to have the same behaviors and habits in each generation? Studying this in humans is really, really difficult. There are too many variables and it takes too long to get data about life expectancy. Worms, on the other hand, are great for this type of study -- specifically a tiny worm called a nematode (you may have dissected these in high school biology class). Nematodes are an amazing research subject for aging and genetics studies because they don't live very long (you don't have to wait a long time for results) and their genome (genetic code) is mapped and not overwhelmingly big.

In aging research, two types of aging are studied: chronological age (the amount of time an organism has lived) and physiological age (how healthy you are). For example, a man can be age 70, but his body may be more like that of a 50-year-old (known as successful aging). Or, he may be 70 and his body functions more like a 90-year-old (poor aging). Trying to figure out the physiological age of people is a multi-million dollar business. Trying to figure out the physiological age of nematodes is simply research.

To test aging in worms, the researchers put the nematodes in dangerous situations that cause the worms to react. The scientists then measured their speed, dexterity, etc. Over time, a database was built that showed the average and extreme reactions of elderly nematodes. Next, researchers took all the data and looked into the DNA and genetics of the nematodes. Looking at genetic information alone, they could predict, with 70% accuracy, the difference between the nematode's chronological age and physiological age.

## Am I Doomed By My Genes?

Nematodes are pretty simple organisms and they all grew up in very controlled environments in the lab. The analogy for people would be to take people and keep them all in the same house, feed them the same food and give them the same amount of activity over their entire lives. Some of them will age well and others will

not and we could determine who had the best genes for that environment. But we live in a world with lots of change and variation. Some people may have a gene for high cholesterol that leads to heart problems only if exposed to a poor diet (but if they were a strict vegetarian, this gene would not be a problem). So the key is to understand the genetic factors and adjust/optimize your lifestyle to minimize risk. We aren't there yet, but expect more genetic health information to come out that impacts aging. Be prepared to make adjustments to your life to accommodate a bad gene here and there. And don't get too caught up in all this genetics and aging talk. You and I both know what we need to do to be healthier: eat right, exercise, de-stress, have more fun and sleep better. These things we can change, but our genetics, we can't.

### **New Scientific Breakthroughs - Mitochondrial and Aging**

## **IS THERE AN AGE LIMIT?**

One hundred and twenty years, as far as we know, is the longest that anyone has ever lived. A man in Japan, Shirechiyo Izumi, reached the age of 120 years, 237 days in 1986, according to documents that most experts think are authentic. He died after developing pneumonia. Long lives always make us wonder: What is the secret? Does it lie in the genes? Is it where people live or the way they live -- something they do or do not do? Eat or do not eat? Most of the scientists who study aging, gerontologists, say the secret probably lies in all of the above -- heredity, environment, and lifestyle.

But gerontologists also ask other and more difficult questions. For example, if the 120-year-old had not finally succumbed to illness, could he have lived on and on? Or was he approaching some built-in, biological limit? Is there a maximum human life span beyond which we cannot live no matter how optimal our environment or favorable our genes? Whether or not there is such a limit, what happens as we age? What are the dynamics of this process and how do they make life spans short, average, or long? Once we understand these dynamics, could they be used to extend everyone's life span to 120 or even, as some scientists speculate, to much greater ages?

And finally for all of us, the most important question: How can insights into longevity be used to fight the diseases and disabilities associated with old age to make sure this period of life is healthy, active, and independent? In *Search of the Secrets of Aging* describes what we know so far about the answers to these questions and what we want to know. It gives an overview of research on aging and longevity, showing the major puzzle pieces already in place and, to the extent possible, the shapes of those that are missing. *The Genetic Connection*

In laboratories around the country, scientists are isolating specific genes, cloning them, mapping them to chromosomes, and studying their products to learn what they do and how they influence aging and longevity. Humans seem to have a maximum life span of about 120 years, but for tortoises it's 150 and for dogs, about 20. What underlies these differences among species are genes, the coded segments of DNA (deoxyribonucleic acid) strung like beads along the chromosomes of nearly every living cell. In humans, the nucleus of each cell holds 23 pairs of chromosomes, and together these chromosomes contain about 100,000 genes. The link between genes and life span is unquestioned. The simple observation that some species live longer than others -- humans longer than dogs, tortoises longer than mice -- is one convincing piece of evidence. Another comes from recent, dramatic laboratory studies in which researchers, through selective breeding or genetic engineering, have been able to raise animals with extended life spans. For example, fruit flies bred selectively have lived nearly twice as long as average.



# Anxiety Disorder

It's normal to feel anxious once in a while. Certain events and experiences can cause anxiety. Very common is worry about the future—if you'll get a promotion, if you're raising your children correctly, if you'll get the loan from the bank to start your own business.

However, if those feelings of worry, nervousness, or unease happen on a seemingly regular basis, and they are brought on by daily stress, you may be part of the estimated 18 percent of the U.S. population with an anxiety disorder.

While some people have the capability to calmly surf through life's worst storms, others react to stress with episodes of anxiety. Anxiety can be hard to describe. It can feel like standing in the middle of a crumbling building with nothing but an umbrella to protect you. It can also feel like you're holding onto a merry-go-round going 65 mph and you can't do anything to slow it down.

Anxiety often manifests as an apprehension about daily life, including finances, job responsibilities, health of loved ones, and so on. Anxiety triggers can be as minor as being late for appointments, car repair responsibilities, or household chores.

People with anxiety can also worry about their performance in work or school—this is a common symptom in children with anxiety. The key to distinguishing anxious feelings from legitimate fear is that the frequency, duration, and intensity of the anxiety greatly outweigh the likelihood of the feared event. The most common type of anxiety is generalized anxiety disorder. This involves frequent anxiety, worry, and apprehension about



different activities, including the daily tasks already mentioned.

Other types of anxiety are related to specific stressors, and include:

- Panic disorder: this type of anxiety is characterized by panic attacks, or bouts of intense fear or terror that

- develop quickly and unexpectedly.
- Social phobia: a fear of being embarrassed in public situations.
- Obsessive-compulsive disorder: this is an anxiety disorder in which people have unwanted and repeated thoughts, feelings, ideas, sensations (obsessions), or behaviors that make them feel driven to do something specific (compulsions).
- Separation anxiety disorder: fear of being away from home or loved ones.
- Anorexia nervosa: the fear of gaining weight.
- Somatization disorder: complaining of multiple physical problems when there is no evidence of physical illness.
- Hypochondriasis: anxiety over having a serious illness.
- Posttraumatic stress disorder: anxiety following a traumatic event, such as death of a loved one, war, or being the victim of a crime.

## Risk Factors

Several factors can increase a person's risks for anxiety. They include:

- Stress: While everyone encounters stress, excessive stress, or allowing it to build up, can increase a person's likelihood of developing chronic anxiety.
- Genetics: If someone in your family, especially a parent, has anxiety, you have a higher risk of developing generalized anxiety disorder.
- Medical Conditions: Anxiety can be a symptom of something else, including depression and other mental disorders.
- Substance Abuse: Caffeine, alcohol, recreational drug use, and other stimulating substances can lead to higher levels of stress and anxiety.
- Medication: Some medications, especially those containing stimulants, like drugs to treat ADHD, can increase a person's risk for anxiety.
- Personality Types: Some people are more prone to anxiety. Busy, high-strung people ("Type A" personalities) are at higher risk of developing anxiety and stress-related disorders.
- Trauma: Enduring trauma, especially adversity or abuse as a child, raises a person's risks of developing anxiety. This could include being a victim of abuse, or witnessing something



- traumatic, like a natural disaster or a scene of violence.
- Illness: A life-altering medical condition, such as cancer, can produce anxiety over the future, regarding health or finances.
- Being Female: Women are twice as likely as men to have general anxiety and other related conditions.

## Symptoms

Anxiety and worrisome thoughts often interfere with a person's ability to concentrate on one single task. It is also often hard for them to stop the worry when it starts.

A person often doesn't recognize or know the source of their anxiety, which can perpetuate the anxiety further, creating feelings of "going crazy," which, in turns, puts a troublesome cycle into motion.

Symptoms of anxiety include:

- inability to cope with stress
- restlessness or feeling "on the edge"
- being easily fatigued (learn about other causes of fatigue)
- difficulty concentrating (learn about other causes of difficulty concentrating)
- irritability (learn about other causes of irritability)
- muscle tension
- shakiness (learn about other causes of shakiness)
- headaches
- disturbed sleep, including difficulty falling asleep,

- or restless sleep
- being startled easily
- cold, clammy hands
- nausea (learn about other causes of nausea)
- diarrhea (learn about other causes of diarrhea)
- feeling of a "lump in the throat"
- symptoms of depression

## Panic Attacks

People who suffer from anxiety may also experience panic attacks, or sudden attacks of unexpected worry or fear. These can be fears that a catastrophe is imminent, such as death, insanity, and losing consciousness, and can often make a person feel trapped.

- physical symptoms of a panic attack include:
- rapid heart beat
- shortness of breath
- shaking
- sweating
- dizziness

These attacks usually last between 10 to 20 minutes, but they can feel endless to the person suffering from them. Following the attack, a person can feel anxious, exhausted, and shaken.

People who often suffer from panic attacks may also have anxiety about these attacks.

## Diagnosis

A diagnosis of anxiety often relies heavily on a





patient's description of the symptoms he or she is experiencing.

Criteria for diagnosing anxiety disorders are listed in the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV), the manual that mental health professionals use when diagnosing mental disorders.

Criteria for diagnosing generalized anxiety disorder, according to the DSM-IV, include:

- excessive anxiety and worry more days than not—for at least six months—about a number of events.
- difficulty controlling the worry.

Anxiety is associated with three of the following six symptoms:

- restlessness
- being easily fatigued
- irritability
- muscle tension
- sleep disturbance
- difficulty concentrating

The symptoms cause significant distress in social, occupational, or other important parts of life. Anxiety is not caused by direct psychological effects of medications or medical conditions.

A review of medical history is often common to rule out any outside causes of your anxiety, including medications and other possible triggers. A physical examination may be ordered to determine if anxiety is a symptom of some other condition, such as a vitamin B12 deficiency, hyperthyroidism, or another condition.

## Treatment

Anxiety is often treated with numerous treatments at once. These can include medications, psychotherapy, and lifestyle changes.

## Psychotherapy

Otherwise known as talk therapy, psychotherapy involves meeting with a trained professional, such as a psychologist, psychiatrist, or counselor, who ultimately helps cure this ailment.



# Bad Breath

## How to cope with it!

Bad breath, also called halitosis or oral malodor, is when an unpleasant odor emanates from the mouth.

## Causes

Many things can cause bad breath. Sometimes it's the result of the foods you eat. And sometimes it can be caused by something more serious, such as a disease.

## Mouth Conditions

Most cases of bad breath are caused by conditions in the mouth. Bad odor from the mouth can be caused by:

- poor oral hygiene. This is the most common cause of bad breath.
- dental problems such as gum disease, cavities, and abscessed teeth

- dentures
- certain foods and drinks such as garlic, onions, and coffee
- tobacco products
- alcohol
- dry mouth
- sinus conditions
- throat infections
- lung infections
- certain medications such as insulin injections, Paraldehyde, and Triamterene
- vitamin supplements
- a foreign body in the nose (usually in children)

## Disease

Some of the diseases that can cause bad breath include:

- diabetic ketoacidosis, a potentially life-threatening condition that occurs when you do not have enough insulin to process the sugars in your body
- some cancers
- gastroesophageal reflux disease (GERD)
- liver disease

- kidney disease
- ozena, a disease that causes the bony ridges and mucous membranes of the nose to deteriorate
- Zenker's diverticulum, a rare disease where a pouch forms at the back of the throat

Some types of unpleasant breath odors may indicate certain health conditions.

## Fruity Breath Odor

A fruity breath odor may indicate ketoacidosis. This is a serious condition. Call your doctor immediately if your breath is persistently fruity.

## Feces Breath Odor

Breath that smells like feces can be caused by prolonged vomiting, especially if you have a bowel obstruction (a blockage in the bowels). It can also be caused by a nasogastric tube (a tube inserted through the nose or mouth and into the stomach to empty the contents of the stomach).

## Ammonia Breath Odor

Breath that smells like ammonia or urine or has a fish smell can be a sign of kidney failure.

Certain factors can increase your risk of having bad breath, including:

- having poor oral hygiene
- smoking or chewing tobacco
- drinking alcohol
- eating pungent foods such as garlic and onions

## Symptoms

The symptom of bad breath is an unpleasant or foul odor coming from your mouth. It can be difficult to assess the smell of your own breath. You may need to ask a friend, family member, or medical professional to tell you if your breath smells bad.

## Diagnosis

A physician will usually diagnose bad breath by smelling your breath. Your healthcare provider may perform exams or tests to diagnose the cause of your bad breath.

Common exams and tests include:

- dental exam to detect gum disease or tooth decay



# Bad Breath (Halitosis) Myths & Facts

Bad breath is hereditary.

Mouthwash cures bad breath.

## MYTH

No "bad breath gene" has been identified by research. Sorry!

## FACT

Chronic halitosis may be a sign of health issues, such as respiratory tract infection, bronchitis, tonsillitis, dry mouth or acid reflux.

## FACT

Bacteria on the tongue is often the most common cause of bad breath, but unclean teeth are also a culprit so keep brushing!

Bad breath signals other health issues.

The tongue is the most common origin for bad breath.

Want to learn more? Visit Flax Dental.

## MYTH

Mouthwash covers up, but doesn't cure bad breath. In fact, alcohol-based mouthwashes cause dry mouth, which can lead to bad breath.

### sources

[http://www.huffingtonpost.com/dr-harold-katz/bad-breath\\_b\\_1668648.html](http://www.huffingtonpost.com/dr-harold-katz/bad-breath_b_1668648.html)  
<http://www.dailymail.co.uk/health/article-2343504/When-mouthwash-actually-make-bad-breath-WORSE.html>  
<http://www.usabcd.com/total-healthguide/change-your-breath-from-bad-to-good>

- physical examination of your mouth and nose to check for abnormalities
- throat culture to detect bacteria

The following tests may be done in rare cases:

- blood tests to diagnose conditions such as kidney failure and diabetes
- esophagogastroduodenoscopy, where a camera is inserted down your throat to examine the esophagus lining
- X-rays of the abdomen or chest to detect stomach or lung problems

## Treatment

The treatment for bad breath depends on the cause of the unpleasant odor. Treatments include:

### Home Treatment

Many cases of bad breath can be treated at home. Home treatment consists of:

- practicing good hygiene by brushing your teeth and cleaning your tongue at least twice a day and flossing your teeth at least once a day
- avoiding tobacco products
- avoiding foods that have pungent odors, such as garlic, onions, and coffee
- not drinking alcohol
- eat parsley and mint to temporarily mask bad breath

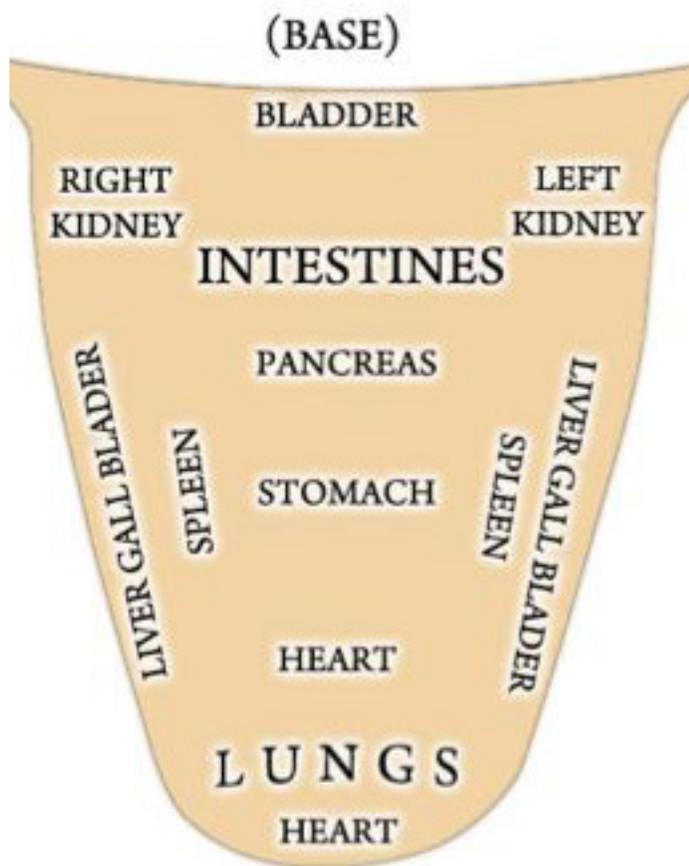


# 5 Reasons to Scrape Your Tongue Every Day

A tongue scraper (also called a tongue cleaner or tongue brush) is an oral hygiene device designed to clean off bacteria, food debris, fungi, and dead cells from the surface of your tongue. The film that develops on your tongue while you sleep is a good indicator of what's going on inside your body. It can be clear, thick, white, yellow, brown, or even green. The bacteria and fungi on the tongue are related to many common oral care and general health problems and can be a leading cause of bad breath for many.

Have you ever heard of a tongue scraper? When I first saw a friend using one, I had no idea why anyone would want to scrape their tongue every day when they wake up. Now, after years of using one, I use one every day, and miss it terribly when I don't have it. What is one of the first things many Eastern doctors or practitioners ask to see? Yes, your tongue.....

Tongue cleaning has been around since ancient times in India. Ayurveda, the Traditional Indian Science



of Medicine, recommends cleaning the tongue as part of your daily self-care regime to remove ama, toxic debris that builds up in the body. During sleep when the body is resting, the digestive system works to detoxify itself. These toxins are deposited on the surface of the tongue via the internal excretory channels, and are responsible for the coating usually seen on the tongue first thing in the morning. Tongue scraping has found its way into Western society as folks discover the benefits of cleaning the tongue every day. This is the tongue scraper that I use.

5 Reasons to Scrape Your Tongue Every Day

## Improves the breath:

Removing the bacteria, food debris, fungi, and dead cells from the tongue significantly reduces the odor from the mouth. You may have been told to use your toothbrush for this purpose, but brushing the tongue does NOT efficiently remove all of the film that develops on the tongue. You will be blown away the first time you do this by the amount of gunk that comes off of the tongue.

## Improves your ability to taste:

Removing build-up from the surface of your tongue will better expose your taste buds. This will lead to better enjoyment of the flavors of your food. Ayurveda teaches that the better we enjoy and savor our food, the better our bodies digest and assimilate, leading to better overall health. Also, Ayurveda teaches that blocked taste buds and tongue receptors interfere with our body's ability to communicate with our brain about what types of foods we need to maintain our health, leading to false cravings.

## Avoid toxins being reabsorbed into your body:

As you sleep, your body is detoxifying. Much of the film on your tongue is toxins excreted from your body. You don't want to re-ingest that do you? NO! Scraping your tongue first thing in the morning will remove this sludge from your tongue and from your body, improving your overall health and improving your immune system.

## Improves dental health:

By removing bacteria and toxins, you are also contributing to better dental health as well, leading to healthier teeth and gums. The bacteria that you remove from your tongue are responsible for things like periodontal problems, plaque build-up, tooth decay, gum infections, gum recession, and even loss of teeth.

## Get to know your tongue:

Did you know your tongue is a mirror reflection of your internal organs? Just like with hand or foot mapping, the tongue is mapped out to reflect various parts of your internal body. You can learn so much about what is going on in particular areas just by looking at your tongue every morning. Also, by scraping your tongue, you are actually stimulating and massaging those corresponding internal organs, just like in acupressure or acupuncture. Pretty cool, huh?



# Curing Sinus Infection

A sinus infection, or sinusitis, is a common condition that affects 31 million people in the United States each year. The infection occurs when your sinuses and nasal passages become inflamed.

The sinuses are small air pockets located behind your forehead, nose, cheekbones, and eyes. The sinuses produce mucus, which is a jelly-like liquid that protects the body by trapping germs. Sometimes, bacteria or allergens can cause too much mucus to form, which blocks the openings of your sinuses.

Excess mucus is common if you have a cold or allergies. This mucus buildup can encourage bacteria and germs to grow in your sinus cavity, leading to a bacterial or viral infection. Most sinus infections are viral, and go away in a week or two without treatment. If your symptoms do not improve within a few weeks, you likely have a bacterial infection and should schedule an appointment with your doctor.

Types

## Acute sinusitis

Acute sinusitis has the shortest duration. A viral infection brought on by the common cold can cause symptoms that last between one and two weeks. In the case of a bacterial infection, acute sinusitis may last for up to four weeks.

# Sub-Acute Sinusitis

Sub-acute sinusitis symptoms can last for up to three months. This condition is most often linked to bacterial infections or seasonal allergies.

# Chronic Sinusitis

Chronic sinusitis symptoms last for more than three months, but they are often less severe. Bacteria are generally not to blame in these cases. Chronic sinusitis is most commonly attributed to persistent allergies or structural nasal problems.

# Risks

Anyone can develop a sinus infection. However, certain other health conditions and risk factors can increase your chances of developing one, including:

- a deviated nasal septum (when the wall of tissue that divides your nostrils is displaced to one side)
- a nasal bone spur (a bone growth in the nose)
- nasal polyps (noncancerous growths in the nose)
- a history of allergies
- recent exposure to mold
- a recent upper respiratory infection
- cystic fibrosis, which causes thick mucus to build up in your lungs
- airplane travel, which can expose you high concentrations of germs and germs that are not native to your home region
- a dental infection
- a weak immune system
- smoking, which can irritate the lining of your nasal passages

# Symptoms

The symptoms of sinusitis are similar to those of a common cold. They may include:

- decreased sense of smell
- fever
- stuffy nose
- headache (from sinus pressure or tension)
- fatigue
- sore throat
- runny nose
- cough

## How To Get Rid Of a Sinus Headache?



### Garlic for Bbacterial Infection

Put water in a pot and boil it for few minutes after it starts boiling, then add crushed garlic cloves into it. Turn off the heat and cover it with a towel. Now inhale the steam which gives instant relief from the sinus by thinning the mucus.



### (ACV) Helps to Clear a Stuffy Nose

Take apple cider vinegar and honey, Mix it well in a cup of warm water and Drink it, Solution two to three times a day to get rid of the sinus infection. Or you can simply use the ACV Tablets or capsules which helps to fight against sinus infection.



### Lemon Balm for Sinus Infection

Take few dried lemon balm leaves and Boil these leaves in water for about 10 minutes. Sieve the mixture and use it as gargle. Take this mixture twice a day to get relief from the pain.



### Turmeric Powder Can Heal a Sinus Infection Clears Airways



Use turmeric in as many ways as possible. You can include in your diet by adding it while cooking food or take a capsule made of turmeric etc. Regular usage of turmeric will helps to get rid of the sinus infection.

### Fenugreek Helps to Cure Sinus Problem

Take some fenugreeks, pour it in a glass of water and Mix it well. Later boil it for few minutes. Try to drink this Repeat the process for several times a day to get relief from sinus problem.



### Eucalyptus Oil Helps to Fight Against the Infection

Pour a drop or two of eucalyptus oil in a fresh handkerchief. Try to inhale its perfume regularly to get relief. Or you can also use eucalyptus oil on pillows where you sleep so that it will help while you are sleeping. Do it regularly to get rid of the sinus problem.



### Tomato Helps to Repair The Mucus Membranes

Boil tomato juice by pouring it in a saucepan. Meanwhile you have to add all the remaining ingredients in it and Mix it well again boil it for few minutes. Drink this homemade tomato juice at least twice in a day to get rid of the problem.



### Onions Acts as Antibacterial for Cures Sinus Problem

Pour this onion pieces into a pot of boiling water. Let it boil for about 5 minutes. Inhale it for few minutes to get relief from the clogged nose and sinus infection. Or you can simply cut the onions into two parts and take one part to inhale. Repeat the process whenever you feel necessary.



### Ginger for Sinus Infection

Take a ginger and cut it into thin slices. Step it in hot water for 10 minutes. Strain it and drink it as tea.



Take More Water, Nutrition & Vitamins  
Clean your home from dust particle

It may be difficult for parents to detect a sinus infection in their children. Signs that can help parents recognize an infection include:

- cold or allergy symptoms that do not improve within 14 days
- a high fever (above 102.2 degrees F)
- thick, dark mucus coming from the nose for longer than 72 hours
- a cough that lasts longer than 10 days
- Symptoms of acute, sub-acute, and chronic sinus infections are similar. However, the severity and length of your symptoms will vary.

## Diagnosing

To diagnose a sinus infection, your doctor will ask about your symptoms and do a physical exam. He or she may check for swelling and tenderness by pressing a finger against your head and cheeks. Your doctor may also examine the inside of your nose to look for signs of inflammation.

In most cases, your doctor can diagnose a sinus infection based on your symptoms and the results of a physical exam. However, in the case of a chronic infection, your doctor may recommend imaging tests to examine your nasal passages and sinuses. These tests can reveal mucus blockages and any abnormal structures, such as polyps. The following tests can be used to help determine the cause of chronic sinus infections:

- CT scan (an imaging test that provides a three-dimensional picture of your sinuses)
- MRI (an imaging test that uses powerful magnets to create images of internal structures)
- a fiberoptic scope (a flexible tube that is passed through your nose and records images of your sinuses)
- an allergy test to identify irritants that may cause an allergic reaction
- a blood test to check for diseases that weaken the immune system, such as HIV

## Treatment

Treatment for Congestion

Congestion is the most common symptom of a sinus infection. To reduce mucus congestion and clear your sinuses:

- apply a warm, damp cloth to your face and forehead several times a day
- drink water and juice to keep you hydrated and help thin the mucus
- use a humidifier in your bedroom to add moisture to the air
- turn on the shower and sit in the bathroom with the door closed to surround yourself with steam
- use over-the-counter decongestants or nasal drops, such as Neo-Synephrine
- Pain Remedies

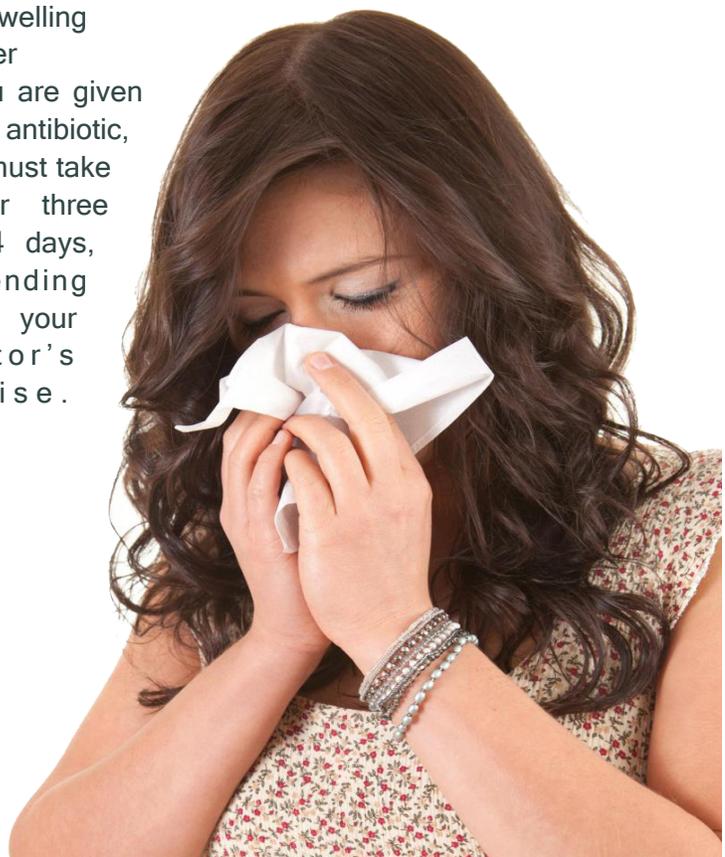
A sinus infection can trigger a sinus headache or pressure in your forehead and cheeks. If you are in pain, over-the-counter medications such as acetaminophen and ibuprofen can help.

## Antibiotics

If your symptoms do not improve within a few weeks, you likely have a bacterial infection and should see your doctor. He or she may give you an antibiotic to help you fight the infection if you have:

a runny nose, congestion, or a cough that does not improve after three weeks  
facial pain or headaches  
eye swelling  
a fever

If you are given an antibiotic, you must take it for three to 14 days, depending on your doctor's advise.





# All about Flatulence

Flatulence is a medical term for releasing gas from the digestive system through the anus. It is also commonly known as farting, passing wind, or having gas. It occurs when gas collects inside the digestive system.

Gas collects in two main ways. First, when you swallow air during eating or drinking, oxygen and nitrogen collect in the digestive tract. Second, as you digest food, digestive gases such as hydrogen, methane, and carbon dioxide collect. Either case can cause flatulence.

## Causes

Flatulence is very common, and it is estimated that a man will naturally pass wind between 14 and 25 times a day. A woman will pass gas between seven and 12 times per day. If you pass wind more frequently than this on a regular basis, you could be suffering from excessive flatulence, which has a number of causes.

## Swallowing Air

It is natural to swallow air throughout the day, normally during eating and drinking. Typically, only a small amount of air is swallowed. If you frequently swallow more air, you may find that you suffer from excessive flatulence.

Reasons that you may swallow more air than normal include chewing gum, smoking, sucking on objects such as pen tops, drinking carbonated drinks, and eating too quickly.

## Dietary Choices

Your dietary choices could lead to excessive flatulence. Some foods cannot be absorbed, meaning that they pass from the intestines to the colon without first being digested. The colon contains a large number of bacteria that then break down the food, releasing gases as they do so.

If your diet is high in foods such as beans, cabbage, broccoli, raisins, lentils, prunes, and apples, you may suffer from flatulence. These foods can also take a long time to digest, leading to an unpleasant smell associated with flatulence. Foods high in fructose or sorbitol, such as fruit juices, can also cause an increase in flatulence.

## Health Conditions

If your diet does not contain a large amount of carbohydrates or sugars, and you do not swallow excessive air, your excessive flatulence may be caused by a medical condition.

Potential conditions behind flatulence range from temporary conditions, such as constipation and gastroenteritis, to food intolerances, such as lactose intolerance. Digestive problems, such as irritable bowel syndrome (IBS) and celiac disease, can also lead to flatulence, although they are rarely the cause.

## Treatment

Flatulence may be treated in a number of ways, depending on the cause of the problem.

### Self-Treatment

There may be ways for you to treat excessive flatulence yourself. First, look at your diet. If it contains a large amount of difficult-to-digest carbohydrates, try to replace these with carbohydrates that are easier to digest, such as potatoes, rice, and bananas.

Keep a food diary so you can identify any triggers, and eat around six small meals a day instead of three larger ones. Additionally, avoid doing anything that may increase the amount of air that you swallow. This includes ensuring that food is chewed properly, as well as avoiding chewing gum or smoking.

Some people find that exercising helps to promote digestion and can prevent flatulence.

There are a number of over-the-counter medications that can treat flatulence, although these will only temporarily stop the problem. These include charcoal tablets that absorb gas through the digestive system as well as dietary supplements, such as alpha-galactosidase (Beano).

## Medical Care

If your flatulence is unexplained, or if you suffer from other symptoms along with flatulence such as a swollen abdomen or abdominal pain, it is important to see your doctor.

Your doctor will discuss your symptoms with you, including when the problem started, and if there are any apparent triggers.

A blood test may be requested, both to ensure that the body is not fighting an infection and to identify any possible food intolerances.

You are likely to be advised to follow the steps above, including keeping a food diary and changing your eating habits. You may also be referred to a dietician. In addition, you may be given medication for a specific condition such as IBS, if it is diagnosed, or sent for further tests to get a conclusive diagnosis.

## Outcome

There are no long-term consequences for not treating flatulence. If the flatulence is caused by a food intolerance or digestive issue, the problem may get worse, or other symptoms may develop.

In some cases, prolonged excessive flatulence can lead to other issues, such as depression and eating disorders. It is important to maintain a healthy diet and to see your doctor if the problem begins to negatively affect your life.



# Full Sleep Study

## Defining Polysomnography

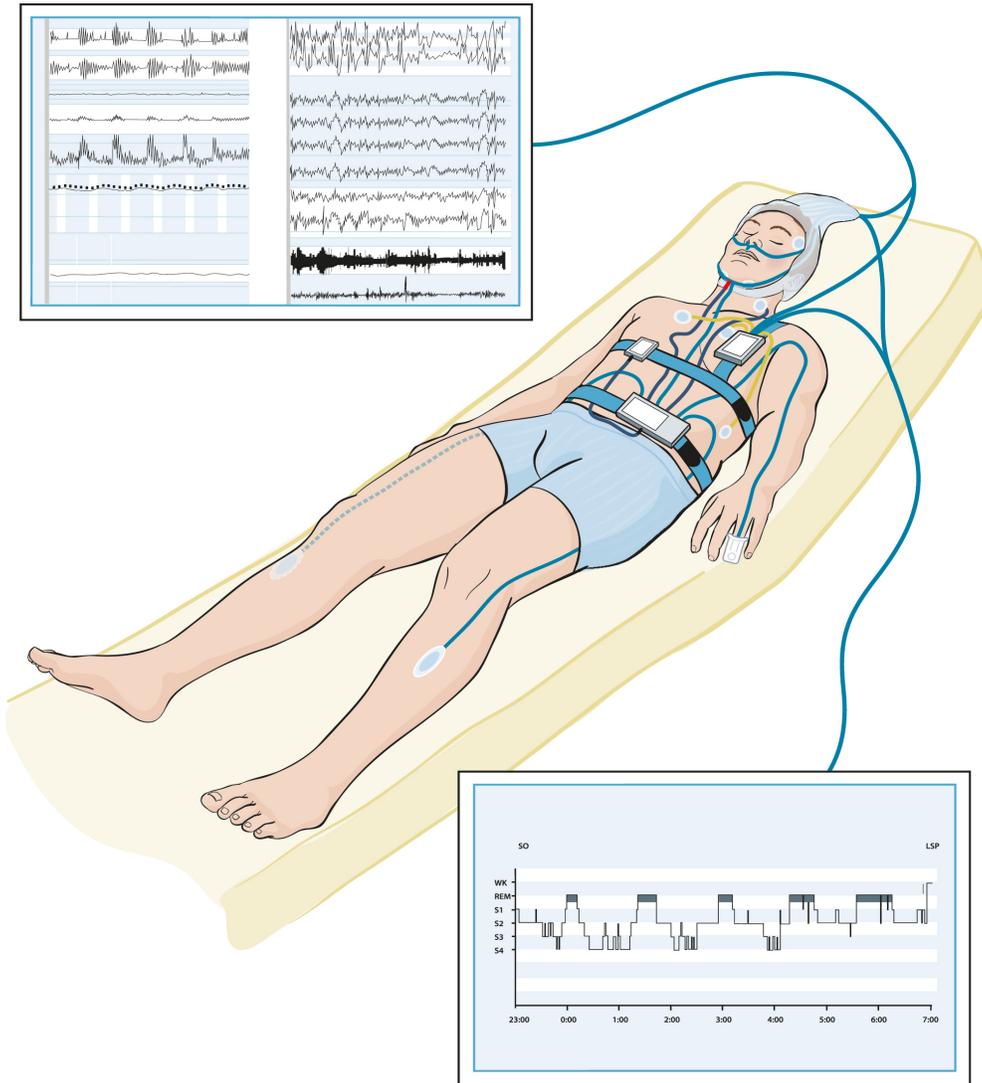
Polysomnography is a study or test done while a person is fully asleep. You will be observed while you sleep so that your doctor can record data about your sleep patterns and identify any sleep disorders. Your doctor will measure your brain waves, blood oxygen levels, heart and breathing rates, and eye movement during polysomnography to help chart your sleep cycles.

Polysomnography registers your body's shifts between the two stages of sleep: rapid eye movement (REM) sleep and non-rapid eye movement (non-REM) sleep. During REM sleep, your brain activity is high, but only your eyes and breathing muscles are active. This is the stage in which you dream. Non-REM sleep is characterized by slower brain activity. A person without a sleep disorder will switch between non-REM and REM sleep about every 90 minutes, experiencing four to six sleep cycles per night.

Observing your sleep cycles, along with your body's reactions to the changes in these cycles, can help identify disruptions in your sleep patterns.

## Diagnostic Uses

Polysomnography is used to diagnose sleep disorders. It is often used to evaluate symptoms of sleep apnea, a disorder in which your breathing



- chronic insomnia (difficulty falling asleep or remaining asleep)

The National Heart, Lung, and Blood Institute warns that if left untreated, sleep disorders can raise your risk for heart disease, high blood pressure, and stroke. Sleep disorders have also been linked to an increased risk of injuries related to falling and car accidents.

## The Procedure

A polysomnography is conducted at a specialized sleep center. Your appointment will begin in the evening, about two hours before your usual bedtime. You will sleep overnight at the sleep center, where you will stay in a private room similar to a hotel room. You will be able to bring whatever is necessary for your bedtime routine, as well as your own pajamas.

constantly stops and restarts during sleep. The symptoms of sleep apnea include:

- sleepiness during the day despite having rested
- ongoing and loud snoring
- periods of holding your breath during sleep, followed by gasps for air
- restless sleep

Polysomnography can also be used to diagnose the following sleep disorders:

- narcolepsy (extreme drowsiness and “sleep attacks” during the day)
- sleep-related seizure disorders
- periodic limb movement disorder or restless leg syndrome (uncontrolled flexing and extension of the legs while asleep)
- REM sleep behavior disorder (acting out dreams while asleep)

A polysomnography is usually administered by a technician, who will monitor you while you sleep. The technician can see and hear inside your room and you will be able to hear and talk to the technician during the night.

During the polysomnography, the technician will measure your:

- brain waves
- eye movements
- heart rate and rhythm
- blood pressure
- blood oxygen level
- breathing patterns
- body position
- limb movement
- snoring and other noises

To record this data, the technician will place small sensors, called electrodes, on your scalp, temples,

chest, and legs. The sensors have adhesive patches so they will stay on your skin while you sleep. Elastic belts around your chest and stomach will record your chest movements and breathing patterns. A small clip on your finger will monitor your blood oxygen level.

The sensors are attached to thin, flexible wires that send your data to a computer. At some sleep centers, the technician will set up equipment to make a video recording. This will allow you and your doctor to review the changes in your body position that occurred during the night.

Chances are that you won't be as comfortable at the sleep center as you would be in your own bed, so you may not fall asleep or stay asleep as easily as you would at home. However, this usually doesn't alter the data being measured. Accurate polysomnography results normally don't require a full night's sleep.

When you wake up in the morning, the technician will remove the sensors. You may leave the sleep center and participate in normal activities the same day.

## Risks

Polysomnography is painless and noninvasive, so it is relatively risk free. You may experience slight skin irritation from the adhesive that attaches the electrodes to your skin.

## Preparation

To prepare for your polysomnography, you will probably be asked to avoid drinking alcohol and eating or drinking anything that contains caffeine during the afternoon and evening of the test. Since sleep patterns and some sleep disorders can be affected by alcohol and caffeine, having these chemicals in your body could impact your results. You will also be asked to avoid taking sedatives. Remember to discuss any medications you are taking with your doctor in case you need to stop taking them before the test.

## Results

It may take up to two weeks for you to receive the results of your polysomnography. A technician will compile the data from the night of your sleep study to graph your sleep cycles. A sleep center physician will review this data, along with your medical history and sleep history in order to make a diagnosis.

If your polysomnography results are abnormal, it may indicate the following sleep-related illnesses:

- sleep apnea or other breathing disorders
- seizure disorders periodic limb movement disorder or other movement disorders
- narcolepsy or other sources of unusual daytime fatigue

To identify sleep apnea, the results of the polysomnography are reviewed for:

- frequency of apnea (instances when breathing stopped for 10 seconds or longer) frequency of hypopnea (instances when breathing was partially blocked for 10 seconds or longer)

With this data, your results can be measured using the Apnea-Hypopnea Index (AHI). An AHI score lower than five is normal. This score, along with normal brain wave and muscle movement data, usually indicates that you do not have sleep apnea.

Abnormal results are usually indicated by an AHI score of five or higher. Abnormal results are charted to show degrees of sleep apnea: mild sleep apnea: AHI score of 5 to 15 moderate sleep apnea: AHI score of 15 to 30 severe sleep apnea: AHI score higher than 30

### Follow-Up

If you are diagnosed with sleep apnea, your physician may recommend that you use a continuous positive airway pressure (CPAP) machine. This machine will provide a constant air supply to your nose and/or mouth while you sleep. A follow-up polysomnography may be recommended to determine the right CPAP setting for you.

If you are diagnosed with another sleep disorder, your doctor will discuss the treatment options with you.

# Frequent Urination

## Causes & Relief

Frequent urination describes the need to urinate more often than you usually do. There is no clear definition of frequent. However, you may have frequent urination issues if the need to urinate creates challenges in your life, or if you develop a fear of being too far from a restroom.

Urgent urination describes an overwhelming need to get to a restroom immediately. It may be accompanied by pain or discomfort in the bladder or urinary tract. You may have urgent urination issues if you sometimes can't make it to the bathroom in time or if the urge to urinate comes on very suddenly.

These two issues often occur together. This means you feel the need to urinate often, and the urge comes on suddenly.

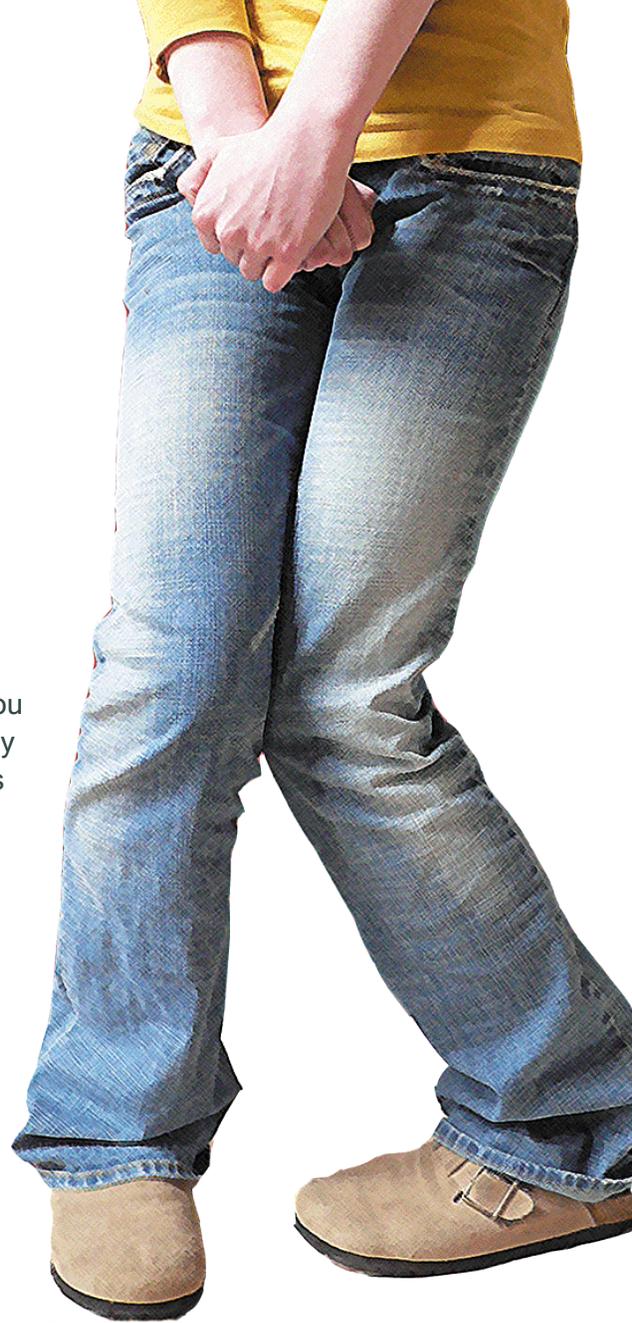
## Causes

Urinary tract infections (UTIs) are the most common cause of frequent or urgent urination. Other causes include:

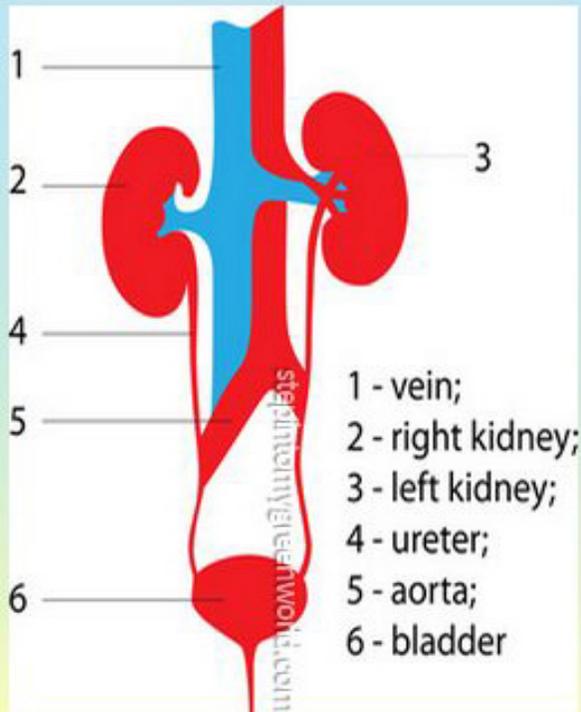
- drinking too much liquid
- caffeinated or alcoholic beverages
- diabetes
- pregnancy (especially in third trimester, when there is pressure on the bladder)
- prostate issues (enlargement or infection)
- anxiety
- diuretics
- interstitial cystitis (chronic infection in the bladder)
- overactive bladder or other urinary incontinence
- vaginal infection

Less common causes of frequent or urgent urination include:

- stroke (or other nervous system disorders)
- tumor



# FREQUENT URINATION



## CAUSES :

**Anxiety**  
**Bladder stones**  
**Bladder cancer**  
**Bladder dysfunction**  
**Diverticulitis**  
**Enlarged prostate**  
**Interstitial cystitis**  
**Overactive bladder syndrome**  
**Medications**  
**Prostate gland infection**  
**Tumor in pelvic area**

- bladder cancer
- radiation therapy to the pelvic area
- damage or injury to the urinary tract
- diverticulitis

## When to Treat

Frequent urination is a habit for some people. You could train your bladder to feel the need to empty before it is necessary if you urinate frequently. Frequent urination is a symptom that develops over time or appears suddenly for others.

Frequent or urgent urination could be normal for you if you don't have other symptoms. However, in most cases, frequent or urgent urination signals an underlying health condition. Visit your doctor when:

- your urinary problems are affecting your lifestyle
- you have blood in your urine
- your urine is unusually cloudy or smelly
- you also have a fever, chills, or fatigue
- you are vomiting
- you have pain in your abdomen or sides
- you have sudden weight loss
- you have increased appetite and/or thirst
- there is discharge from your penis or vagina

## Symptom Relief

The treatment plan for frequent or urgent urination is largely dependent on the cause. Antibiotics can help treat infections. Lifestyle changes such as monitoring liquid consumption and urine output or adjusting medications could help some people. Your doctor will develop a treatment plan to address your specific situation.



# Blackhead Removal Mechanism

Blackheads are small bumps that appear on your skin due to clogged hair follicles. These bumps are called “blackheads” because the surface looks dark or black. Blackheads are a mild type of acne that usually form on the face, but they can also appear on the back, chest, neck, arms, and shoulders. Acne affects 40 to 50 million Americans and is the most common skin disorder in the United States, according to the American Academy of Dermatology (AAD)

## Cause

Blackheads form when a clog or plug develops

in the opening of hair follicles in your skin. Each follicle contains one hair and a sebaceous gland that produces oil, called sebum, which helps keep your skin soft. Dead skin cells and oils collect in the opening to the skin follicle, producing a bump called a comedone. If the skin over the bump stays closed, the bump is called a whitehead. When the skin over the bump opens, exposure to the air causes it to look black and a blackhead forms.

Some factors can increase your chances of developing acne and blackheads, including:

- producing too much body oil

- buildup of the p. acnes bacteria (propionibacterium acnes) on the skin
- irritation of the hair follicles when dead skin cells don't shed on a regular basis
- undergoing hormonal changes that cause an increase in oil production during the teen years, during menstruation, or while taking birth control pills
- taking certain drugs, such as corticosteroids, lithium, or androgens

Some people believe what you eat or drink can affect acne. Dairy products and foods such as carbohydrates that increase blood sugar levels may play a part in triggering acne, but researchers aren't convinced that there is a strong connection.

## Symptoms

Blackheads are easy to spot on the skin because of their dark color. They are slightly raised, although they are not painful because they are not inflamed like pimples. Pimples form when bacteria invade the blockage in the hair follicle, causing redness and inflammation.

## Treatment

### Over-the-Counter Treatments

Many acne medications are available at drug and grocery stores without a prescription. These medications are available in cream, gel, and pad form and are put directly on your skin. The drugs contain ingredients such as salicylic acid, benzoyl peroxide, and resorcinol. They work by killing bacteria, drying excess oil, and forcing the skin to shed dead skin cells.

### Prescription Medications

If over-the-counter treatment doesn't improve your acne, your doctor may suggest that you use stronger prescription medications. Medications that contain vitamin A, such as tretinoin, tazarotene, and adapalene keep plugs from forming in the hair follicles and promote more rapid turnover of skin cells. These medications are applied directly to your skin. Your doctor may also prescribe another type of topical medication that contains benzoyl peroxide and

antibiotics. This type of medication may be particularly helpful if you have pimples or acne cysts in addition to blackheads.

### Manual Removal

Dermatologists, who are doctors specializing in skin care, use a special instrument called a round loop extractor to remove the plug causing the blackhead. After a small opening is made in the plug, the doctor applies pressure with the extractor to remove the clog.

### Microdermabrasion

During microdermabrasion, doctors use a special instrument that contains a rough surface to sand out the top layers of your skin. Sanding the skin removes clogs that cause blackheads.

### Chemical Peels

Chemical peels also remove clogs and get rid of dead skin cells that contribute to blackheads. During a peel, a strong chemical solution is applied to the skin. Over time, the top layers of the skin peel off, revealing smoother skin underneath. Mild peels are available over-the-counter, while stronger peels are performed by dermatologists or other skincare professionals.

### Laser and Light Therapy

Laser and light therapies use tiny beams of intense light to decrease oil production or kill bacteria. Both lasers and light beams reach below the surface of the skin to treat blackheads and acne without damaging the top layers of the skin.

## Prevention

You can prevent blackheads without spending a lot of money by trying this:

### Washing Face Regularly

Wash your face when you wake up and before you go to bed to remove oil buildup that can cause blackheads. Washing more than twice each day can irritate your skin and make your acne worse. Use a gentle cleanser that doesn't make your skin red or irritated. Some acne cleansing products have antibacterial ingredients that kill p. acnes bacteria. Don't forget to wash your hair every day, particularly if it is oily. Hair oils can contribute to clogged pores.

# Heartburn

Heartburn is a symptom that rarely has anything to do with your heart. It occurs when you feel a burning sensation in your chest that is often accompanied by a bitter taste in your throat or mouth. Symptoms of heartburn may get worse after you eat a large meal or when you are lying down. In general, the symptoms of heartburn can be treated successfully at home. However, if frequent heartburn makes it difficult to eat or swallow, your symptoms may be a sign of a more serious medical condition.

## Causes

Heartburn typically occurs when contents from the stomach back up into the esophagus. The esophagus is a tube that carries food and fluids from the mouth into the stomach. Your esophagus connects to your stomach at a juncture known as the cardiac sphincter. If the cardiac sphincter is functioning properly, it closes when food leaves the esophagus and enters the stomach.

In some people the cardiac sphincter does not function properly or it becomes weakened. This leads to contents from the stomach leaking back into the esophagus. Stomach acids can irritate the esophagus and cause symptoms of heartburn. This condition is known as reflux. Heartburn can also be caused by a hiatal hernia. This happens when part of the stomach pushes through the diaphragm and into the chest.

Symptoms of heartburn can be made worse by other health conditions or lifestyle choices including:

- smoking
- being overweight or obese
- consuming caffeine or alcohol
- eating spicy foods
- lying down immediately after eating
- taking aspirin or ibuprofen
- taking certain medications
- Seeking Help

Many people occasionally experience heartburn. However, if you experience frequent heartburn (more than twice a week) or heartburn that does not improve with treatment, you should contact your doctor, as this could be a sign of a more serious condition (NLM).

Heartburn is often associated with other gastrointestinal conditions, such as ulcers (sores in the lining of the esophagus and stomach) or gastroesophageal



reflux disease (GERD). Contact your doctor if you have heartburn and develop any of the following symptoms:

- difficulty swallowing
- pain when swallowing
- bloody stools
- shortness of breath
- pain that radiates from your back to your shoulder
- feeling dizzy or light-headed
- sweating while having chest pain

Heartburn is not associated with a heart attack. However, many people that have heartburn believe that they are having a heart attack. You may be having a heart attack if you have the following symptoms:

- severe or crushing chest pain
- difficulty breathing
- jaw or arm pain
- Diagnosis and Treatment

If you experience occasional heartburn, there are several home remedies and lifestyle changes that can help alleviate your symptoms. Lifestyle changes or modifications can help reduce your symptoms and include:

- maintaining a healthy weight
- avoiding foods that cause heartburn
- avoiding lying down after meals
- avoiding tobacco products
- avoiding consuming alcohol or caffeinated drinks

If these treatments do not improve your symptoms, you may need to see your doctor. Your doctor will review your medical history and ask you about your symptoms. Your doctor may also order several tests to find out what is causing your heartburn. Tests may include:

- X-ray of the stomach or abdomen
- Endoscopy to check for an ulcer (passing a small tube equipped with a camera down the throat and into the stomach)
- pH test to determine how much acid is in your esophagus

Depending on your diagnosis, your doctor will be able to provide you with treatment options to help reduce

or eliminate your symptoms.

Medications for the treatment of occasional heartburn include:

- antacids
- H-2 receptors to reduce stomach acid production (such as Zantac or Prevacid)
- Proton pump inhibitors that block acid production (Prilosec)

Although these medications can be helpful, they do have side effects. Antacids can cause constipation or diarrhea. Long-term use of proton pump inhibitors can increase the risk of bone fractures in people over the age of 50 (Mayo Clinic).

## Complications

Occasional heartburn is typically not a cause for concern. However, if you get this symptom frequently, you may have a serious health problem that requires treatment. If you do not get treatment for your heartburn you may develop additional health problems such as an inflammation of the esophagus (esophagitis) or Barrett's esophagus. Barrett's esophagus causes changes in the lining of the esophagus that can cause esophageal cancer.

## Prevention

If you have occasional heartburn, you can prevent it by avoiding foods or activities that may cause your symptoms. You can also take some over-the-counter medications before you eat to prevent heartburn before symptoms start. Leading a healthy lifestyle and avoiding alcohol and tobacco can also help to prevent symptoms of heartburn.



# Atrophic Vaginitis

## How to check for Postmenopausal Atrophic Vaginitis

Postmenopausal atrophic vaginitis is the thinning of the walls of the vagina, caused by decreased estrogen levels. This most commonly occurs after menopause. The condition is also called vaginal atrophy.

Menopause is the time in every woman's life (usually between ages 45 and 55) when her ovaries no longer produce eggs. She also stops having menstrual periods. A woman is postmenopausal when she has not had a period for 12 months or more.

Women with vaginal atrophy have a greater chance of chronic vaginal infections and urinary function problems. It can also make sexual intercourse painful. The condition is common. More than 40 percent of postmenopausal women have atrophic vaginitis, according to the American Association of Family Physicians. (AAFP)

## Symptoms

Nearly half of postmenopausal women develop vaginal atrophy, but only about 20 percent of women report symptoms. Symptoms can include:

- thinning of the vaginal walls
- shortening and tightening of the vaginal canal
- lack of vaginal moisture (vaginal dryness)
- vaginal burning (inflammation)

- spotting of blood after intercourse
- discomfort or pain during intercourse
- pain or burning with urination
- more frequent urinary tract infections
- urinary incontinence (involuntary leakage)

In some women, symptoms occur during perimenopause (the years leading up to menopause). In other women, symptoms may not appear until years later, if ever.

## Causes

The cause of atrophic vaginitis is a decline in estrogen. Without estrogen, vaginal tissue thins and dries out. It becomes less elastic, more fragile, and more easily injured.

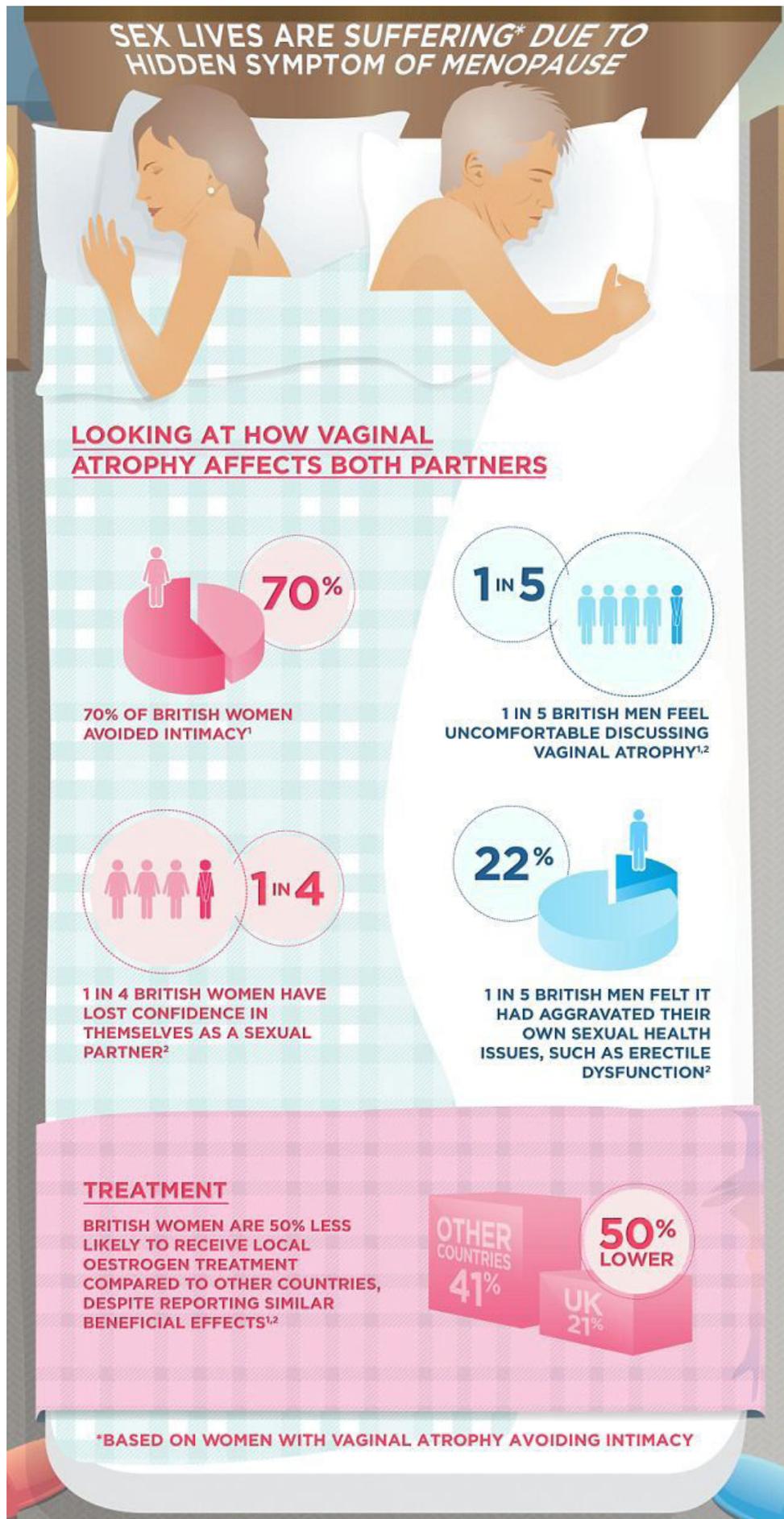
A decline in estrogen can occur at other times, including:

- during breast-feeding
- after removal of ovaries (surgical menopause)
- after chemotherapy for cancer
- after pelvic radiation therapy for cancer
- after hormonal therapy for breast cancer

Regular sexual activity helps keep vaginal tissues healthy. A healthy sex life also benefits the circulatory system and improves heart health.

## Risk Factors

Some women are more likely



than others to get atrophic vaginitis. Women who have never given birth vaginally are more prone to vaginal atrophy than women who delivered their babies vaginally.

Smoking impairs blood circulation, depriving the vagina and other tissues of oxygen. Tissue thinning occurs where blood flow is decreased or restricted. Smokers are also less responsive to estrogen therapy in pill form.

## Complications

Atrophic vaginitis increases a woman's risk of contracting vaginal infections. Atrophy causes changes in the acidic environment of the vagina. This makes it easier for bacteria, yeast, and other organisms to thrive.

It also increases the risk of urinary system atrophy (genitourinary atrophy). Symptoms associated with atrophy-related urinary tract problems include:

- more frequent urination
- more urgent urination
- burning during urination

Some women may also have incontinence and get more urinary tract infections.

## Testing and Diagnosis

See your doctor right away if sexual intercourse is painful, even with lubrication. You should also see your doctor if you experience unusual vaginal bleeding, discharge, burning, or soreness.

Your doctor will ask you questions about your health history. He or she will want to know how long ago you stopped having periods and whether you have ever had cancer. The doctor may quiz you about commercial products you use. Some perfumes, soaps, bath products, deodorants, lubricants, and spermicides can aggravate the sensitive sexual organs.

Your doctor may refer you to a gynecologist for tests, which can include:

- pelvic examination
- vaginal smear test
- vaginal acidity test
- blood test
- urine test
- Pelvic Exam

During the pelvic exam, the doctor will palpate (feel) your pelvic organs. The doctor will also examine your external genitalia for physical signs of atrophy, such as:

- pale, smooth, shiny vaginal lining
- loss of elasticity
- sparse pubic hair
- smooth, thin external genitalia
- stretching of uterine support tissue
- pelvic organ prolapse (bulges in the walls of the vagina)

## Lab Tests

The smear test is a microscopic examination of tissue that has been scraped from the vaginal walls. It looks for certain types of cells and bacteria that are more prevalent with vaginal atrophy.

To test acidity, a paper indicator strip is inserted into the vagina. Your doctor can also collect vaginal secretions for this test. You may provide samples of blood and urine for laboratory testing and analysis. These tests check several factors, including your estrogen (estradiol) levels.

## Treatment

With treatment, it is possible to improve your vaginal health and your quality of life. Treatment can focus on symptoms or the underlying cause.

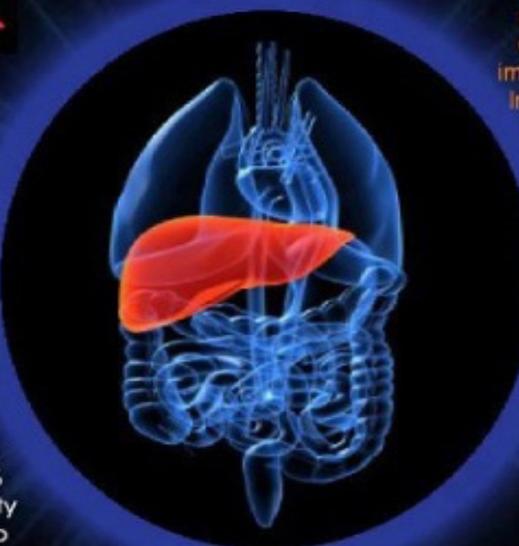
Some helpful over-the-counter products to treat dryness include moisturizers (Silk-E, Replens, or Very Private) or water-based lubricants (K-Y or Astroglide).

If symptoms are severe, your doctor may recommend estrogen replacement therapy. Estrogen improves vaginal elasticity and natural moisture. It usually works in just a few weeks. Estrogen can be taken topically (through the skin) or orally (by mouth).

# Liver Cirrhosis

a special report

## Your Amazing Liver



**WHAT YOUR LIVER DOES**

- Provides Immunity Against Infection
- Regulates Blood Clotting
- Bile production & excretion
- Excretion of bilirubin, cholesterol, hormones & drugs
- Metabolizes fats, proteins & carbohydrates
- Enzyme activation
- Stores glycogen, vitamins & minerals
- Performs over 500 different chemical functions
- Blood detoxification and purification
- Filters over a liter of blood each minute

If the weight of your liver is more than 10% fat, then you have fatty liver. As many as 10 to 25% of Americans have fatty livers!

**ORGANIC HERBS FOR LIVER SUPPORT & CLEANSING**

Milk Thistle seed, Wildcrafted Chanca Piedra, Fringetree bark, Dandelion root & leaf, Nettles root & leaf, Turmeric Root, Marshmallow root & leaf, Yellow Dock root, Barberry root bark, Blue Flag.

**SYMPTOMS OF SLUGGISH LIVER**

Headaches, Dark urine, Loss of appetite, Chronic Constipation, Diarrhea & light colored stools, Easy bruising, Anxiety & depression, Mental confusion, Hormone imbalance, Exhaustion & fatigue, Jaundice, Impaired libido, Food allergies & chemical sensitivities, Sinus & Allergy

**SUPPORT YOUR LIVER**

- Eat healthy & organic
- Smaller protein consumption
- Count carbohydrates
- Avoid antibiotics & antacids
- No alcohol & Acetaminophen
- Perform liver cleansing
- Be aware of drug side-effects
- Avoid environmental toxins

**LIVER SIZE**

Largest solid organ in your body. About 8 inches (20 cm) wide, 6.5 inches (17 cm) long & 4.5 inches (12 cm) thick. Weighs approximately 3.5 lbs.

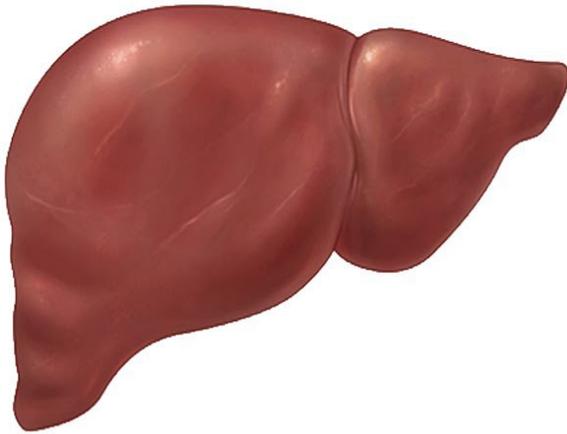


Cirrhosis is severe scarring of the liver and poor liver function seen at the end of chronic liver disease. The scarring is most often caused by long-term exposure to toxins such as alcohol or viral infections.

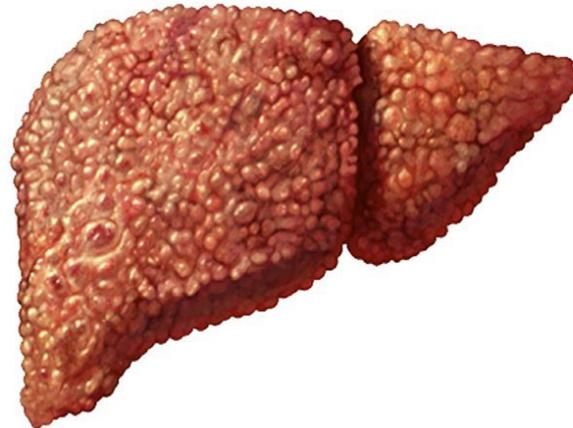
The liver, located in the upper right side of the abdomen below the ribs, has many essential body functions, such as:

- production of bile, which helps to absorb dietary fats, cholesterol, and fat soluble vitamins A, D, E, and K
- stores sugar and vitamins for later use by the body
- purifying blood (removes toxins such as alcohol and bacteria)
- creation of blood clotting proteins

Normal Liver



Liver with Cirrhosis



## Incidence

According to the National Institutes of Health (NIH) cirrhosis is the 12th leading cause of death due to disease in America. It is more likely to affect men than women.

## Development

The liver is a very hearty organ and is normally able to regenerate damaged cells. Cirrhosis develops when the factors that damage the liver (such as alcohol and chronic infections) are present over a long period of time. When this happens, the liver becomes injured and scarred. A scarred liver cannot function properly and cirrhosis results.

Cirrhosis produces changes to the liver, causing it to shrink and harden. This makes it difficult for nutrient rich blood to flow into the liver from the portal vein, a vein that carries blood from the digestive organs to the liver. When blood cannot pass into the liver, the pressure in the portal vein rises. The end result is a serious condition called portal hypertension, in which the vein develops high blood pressure.

## Causes

The most common causes of cirrhosis in the United States are long-term hepatitis C infection, and

chronic alcohol abuse. Obesity is also a cause of cirrhosis. Obesity can be a risk factor by itself, or in combination with alcoholism and hepatitis C.

The National Digestive Diseases Information Clearinghouse (NDDIC) reports that cirrhosis can develop in women who have two to three alcoholic drinks per day (includes beer and wine). For men, the amount of alcohol that puts them at risk for cirrhosis is three to four drinks daily.

Hepatitis C can be contracted through sexual intercourse, or exposure to infected blood (through intravenous drug abuse and needle sharing or transfusions). Hepatitis C is rarely transmitted by transfusion in the U.S. due to blood bank screening.

Other causes of cirrhosis are:

### Hepatitis B

The World Health Organization (WHO) reports that over two billion people are infected with hepatitis B virus world-wide. Hepatitis B can cause liver inflammation and damage that can lead to cirrhosis.

### Hepatitis D

This type of hepatitis can also cause cirrhosis. It is often seen in people who already have hepatitis B.

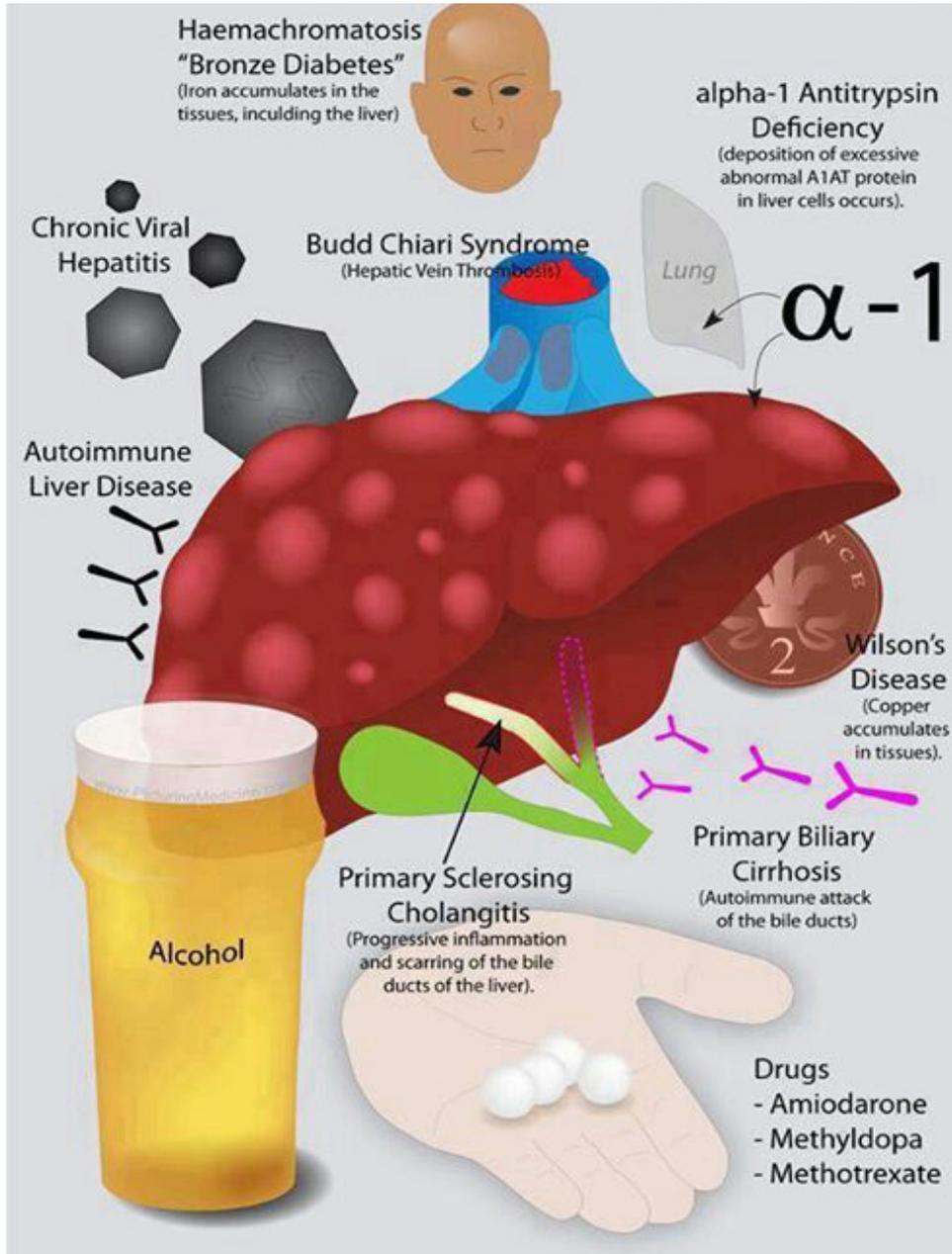
# Symptoms

The symptoms of cirrhosis occur because the liver is unable to purify the blood, break down toxins, produce clotting proteins and help with absorption of fats and fat-soluble vitamins. Often there are no symptoms until the disease has progressed. Some of the symptoms include:

- decreased appetite
- nose bleeds
- small spider-shaped arteries underneath the skin
- weight loss
- weakness

More serious symptoms include:

- confusion and difficulty thinking clearly
- yellow skin color (jaundice caused by buildup of bilirubin in the blood)
- abdominal swelling (ascites)
- swelling of the legs (edema)
- impotence
- males can start to develop breast tissue (gynecomastia)



## Inflammation Caused by Autoimmune Disease

Autoimmune hepatitis may have a genetic cause. Seventy percent of people with autoimmune hepatitis are women.

Disorders of the system that drains bile (primary biliary cirrhosis).

Disorders that affect the body's ability to handle iron and copper (hemochromatosis and Wilson's disease).

Medications, including prescription and over-the-counter drugs like acetaminophen, some antibiotics, and some antidepressants, can lead to cirrhosis.

# Diagnosis

A diagnosis of cirrhosis begins with a physical exam. A complete medical history is taken. The history may reveal long-term alcohol abuse, exposure to hepatitis C, family history of autoimmune diseases, or other risk factors.

The physical exam can show signs like:

- pale skin
- yellow eyes (jaundice)
- reddened palms
- hand tremors
- an enlarged liver or spleen
- small testicles
- excess breast tissue (in men)
- decreased alertness

Tests can reveal how damaged the liver has become.

Some of the tests used for evaluation of cirrhosis are:

- CBC (complete blood count can reveal anemia)
- coagulation blood tests (to see how quickly blood clots)
- albumin (a protein produced in the liver)
- liver function tests
- alpha fetoprotein (a liver cancer screening)
- Additional tests that can evaluate the liver are:
- upper endoscopy (to see if esophageal varices are present)
- ultrasound of the abdomen
- MRI (magnetic resonance imaging) of the abdomen
- CT scan (computed tomography of the abdomen)
- liver biopsy (the definitive test for cirrhosis)

## Complications

If your blood is unable to pass through the liver, it creates a backup through other veins such as those in the esophagus. This is called esophageal varices. These veins are not used to high pressures, and begin to bulge from the extra blood flow. Cirrhosis is a known risk factor for cancer of the liver. End stage liver disease can also lead to kidney failure.

## Treatments

Treatment for cirrhosis varies based on its cause.

- Patients must stop drinking alcohol.
- Medications (even over-the-counter ones) should not be taken without consulting your doctor. Beta-blockers or nitrates may be prescribed for portal hypertension.
- Banding procedures are used to control bleeding from esophageal varices.
- Intravenous antibiotics are used to treat peritonitis

that can occur with ascites.

- Hemodialysis can purify the blood of those in kidney failure.
- Lactulose and a low protein diet are used to treat encephalopathy.
- Liver transplantation is an option when other treatments fail.

## Prevention

### Lifestyle Changes

Becoming a non-drinker, eating a balanced diet, and getting adequate exercise can prevent or slow cirrhosis.

## Prevention Techniques

You should use latex or vinyl gloves to avoid exposure to contaminated blood and body fluids to avoid getting hepatitis. Avoiding sexual promiscuity and using of condoms can reduce the risk of getting hepatitis C. In the U.S. it is recommended that all infants and at-risk adults (such as health care providers and rescue personnel) be vaccinated against hepatitis B.



# Managing ADHD

Attention deficit hyperactivity disorder (ADHD) is a mental disorder that causes above-normal levels of hyperactive and disruptive behaviors. People with ADHD tend to have difficulty concentrating, sitting still, paying attention, staying organized, following instructions, remembering details, and/or controlling impulses. One of the unfortunate complications for people with untreated ADHD is that they often have trouble getting along with their peers, family members at home, and coworkers.

For children, ADHD is perhaps most associated with problems at school. Children with ADHD often have

difficulty succeeding in a controlled classroom setting; assignments become difficult obstacles, instead of productive learning experiences. Perhaps because of this—although it affects people of all ages—ADHD is more commonly diagnosed in children than in adults: A 2006 survey conducted by the Centers for Disease Control and Prevention (CDC) found that ADHD affects about four to six percent of American children ages five to 17 (approximately 4.5 million overall), making ADHD one of the most common childhood disorders in the United States. The survey also found that boys are twice as likely to be diagnosed as girls. The majority (50 to 70 percent) of these children will retain symptoms into adulthood, but many get better over time.

Unfortunately, ADHD can be difficult to diagnose, and many children who suffer from the condition are labeled simply as troublemakers, problem children, or, even worse, stupid or lazy. ADHD is, however, a real and serious condition, not a means of explaining away behavioral problems. Luckily, with an early diagnosis and proper treatment, children with ADHD

# ADHD

## classroom tips



tips to assist with

### homework

ADHD students often have difficulty with following instructions, being accurate, completing homework and prioritizing.



break large tasks into steps



post examples to model after



assist the child with time management



organization & management aids will be required



tips to assist with

### behaviour

ADHD students who experience impulsivity, distractibility & hyperactivity may present a behavioural challenge.



use proactive strategies



allow time for lesson breaks to move around



use discreet private cues to redirect



use preferential seating system



tips to assist with social

### interactions

ADHD students often have difficulty understanding social cues, how to behave appropriately towards their peers and in competitive situations.



model frustration control



role play social situations



provide social opportunities



give positive recognition

### more tips

Set your ADHD students up for success:



#### self-esteem

Allow your students to demonstrate their strengths in front of others.



#### transitions

Provide students with a definite purpose for activity. (We are going to the library to...)



#### ask questions ?

Assist students in preparation for starting tasks; ask 'What do you need to be able to do this?'

#### be clear

Use a multi-sensory approach with both visual and oral instructions - ask students to describe to you what their assignment is. Allow time for processing.

#### be positive

Stress effort and enjoyment for self, rather than competition with others.

can be just as successful as children who do not have the condition.

There is a wide range of behaviors that are symptomatic of ADHD. To make it easier to diagnose and treat, they have been grouped by the Diagnostic and Statistical Manual of Mental Disorders into three categories: inattentive behavior, above-normal activity level (hyperactivity), and lack of impulse control. Children who suffer from ADHD will display behaviors in one, two, or all three of these categories. Therefore, when diagnosing ADHD, the condition is divided into three subtypes:

## Predominantly Inattentive Type

This is a form of ADHD that used to be known as attention deficit disorder, or ADD. As the name suggests, children with this type of ADHD have extreme difficulty paying attention, focusing, finishing tasks, and following instructions. Experts also think that many children with an inattentive form of ADHD may be overlooked because they don't tend to disrupt the classroom. This form is most common among girls with ADHD.

## Predominantly Hyperactive-Impulsive Type

Children with this type exhibit primarily hyperactive and impulsive behavior such as fidgeting, interrupting, and an inability to wait their turns. Although inattention is less of a concern with this type of ADHD, predominantly hyperactive-impulsive patients may still have some problems focusing on tasks.

## Combined Hyperactive-Impulsive and Inattentive Type

This is the most common type of ADHD. Children with this combined form of ADHD display a significant number of symptoms connected to all three behavioral categories—an inability to pay attention, a tendency

towards impulsiveness, and above-normal levels of activity and energy.

Adults with ADHD have typically had the disorder since childhood, but it may not have been diagnosed until later in life; an evaluation usually occurs at the prompting of a peer, family member, or coworker who has observed problems at work or in relationships. Adults can be diagnosed with any of the three subtypes of ADHD discussed above. However, due to the relative maturity and experience of adults, as well as physical differences between adults and children, adult ADHD symptoms can be somewhat different than those experienced by children. For example, adults with predominantly hyperactive-impulsive ADHD are unlikely to run and jump around. Generally, ADHD has a less severe profile in adults than in children, but there is still some debate about accurately diagnosing adult ADHD. [Learn more about adult ADHD.](#)

## Treatment

While there is no known cure for attention deficit hyperactivity disorder (ADHD), there are a number of options that can help those with the condition effectively manage their symptoms. Treatments range from behavioral intervention to prescription medication. While research has found that medication alone is an effective therapy for ADHD, a large-scale study conducted by the National Institutes of Mental Health found that a combination approach to therapy—using medications and behavioral treatment together—was most useful in helping patients manage the condition.

## ADHD Medications

According to the large-scale National Survey of Children's Health taken in 2003, around 2.5 million youth four to 17 years old (56 percent of those diagnosed) were receiving medication treatment for ADHD. Medication use is highest among children with ADHD who are 9 to 12 years old. Medication is often an important and difficult reality for parents of children with ADHD. To find out which medications are safe and right for you or your child, be sure to research and discuss information with your doctor.



# Nutritional Deficiencies

The recommended daily amount (RDA) of a nutrient is determined by how much the body needs to stay healthy. Nutrients can be obtained in a variety of ways—from eating a varied diet to taking vitamin supplements.

A nutritional deficiency occurs when the body doesn't absorb the necessary amount of a nutrient. Deficiencies can lead to a variety of health problems, such as problems of digestion, skin problems, stunted or defective bone growth, and even dementia.

## Types

### Iron Deficiency

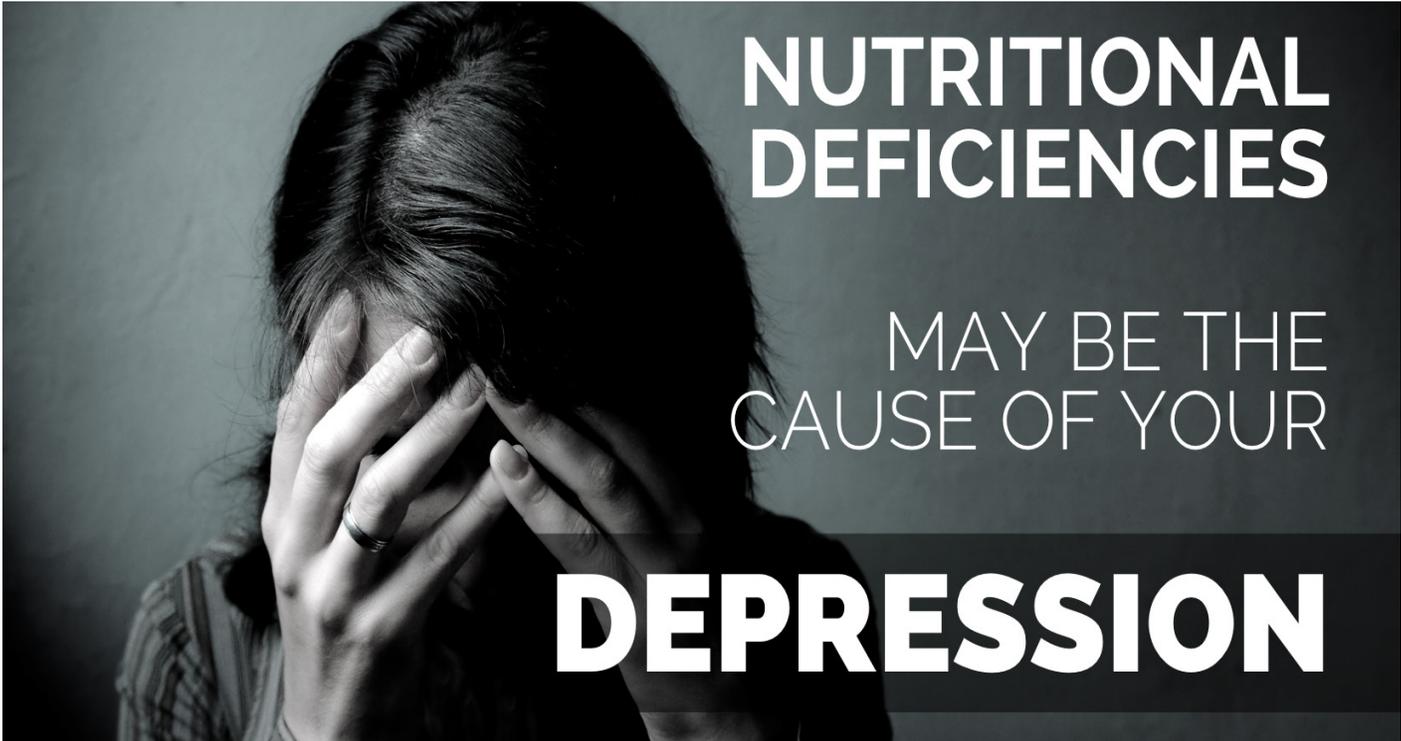
The most widespread nutritional deficiency worldwide is iron deficiency, which can result in anemia. Iron is

found in foods such as red meat, dark, leafy greens, and egg yolks. It helps your body make red blood cells. When you're iron-deficient, your body produces a reduced amount of red blood cells. The red blood cells it produces are smaller and paler than healthy blood cells.

According to the World Health Organization, over 30 percent of the world's population suffers from this condition. It is prevalent in both developing and industrialized countries (WHO). In fact, iron deficiency anemia affects so many people that it is now widely recognized as a public health epidemic.

### Vitamin A Deficiency

According to the WHO, a lack of vitamin A is the leading cause of preventable blindness in children. Pregnant women who are deficient in vitamin A have higher maternal mortality rates as well (WHO). Vitamin A is crucial for eye health and functioning, reproductive health in men and women, and also strengthening the immune system against infections. For newborn babies, the best source of vitamin A is breast milk. For everyone else, it is important to eat plenty of foods that are high in vitamin A, including green-yellow vegetables such as carrots, kale, broccoli, and sweet potatoes, or reddish-yellow fruits like apricots, papaya, and peaches.



# NUTRITIONAL DEFICIENCIES

MAY BE THE CAUSE OF YOUR

# DEPRESSION

### **Vitamin B1 (Thiamine) Deficiency**

Another common nutritional deficiency occurs with vitamin B1, also known as thiamine. Thiamine is essential for normal nerve function. Deficiency can lead to nerve and muscle damage and can affect the heart. A prolonged thiamine deficiency is also known as beriberi.

### **Vitamin B3 (Niacin) Deficiency**

A deficiency of the vitamin B3, or niacin, is often referred to as pellagra. Niacin is found in most proteins. As a result, this condition is rare in meat-eating communities. Symptoms of pellagra include diarrhea, dementia, and skin problems. In extreme cases, it can cause sudden death.

### **Vitamin B9 (Folate) Deficiency**

Vitamin B9, often referred to as folate, helps the body create red blood cells and produce DNA, and also aids in brain development and nervous system functioning. Folate is especially important for fetal development, and plays a crucial role in the formation of a developing child's brain and spinal cord. Folate deficiency can lead to severe birth defects, growth problems, or anemia. Folate is found in foods such as beans, citrus fruits, dark, leafy vegetables, and meats such as poultry, pork, and shellfish.

According to the National Institutes of Health, women

who are pregnant or who may become pregnant are encouraged to take up to 400 micrograms of folate each day to prevent serious birth defects (NIH, 2011).  
Vitamin D Deficiency

According to the Vitamin D Council, this type of deficiency is a growing global epidemic, affecting more than 50 percent of the population worldwide (VDC, 2012).

Vitamin D is essential for healthy bones and helps the body maintain the right levels of calcium in order to regulate the development of teeth and bones. A lack of this nutrient can lead to stunted or defective bone growth. Osteoporosis, caused by a lack of calcium and vitamin D, can lead to porous and fragile bones that break very easily. It can often be asymptomatic (without symptoms). The best sources of vitamin D are sun exposure and foods such as cod liver oil, salmon, or dairy products that have been fortified with vitamin D. According to the National Institutes of Health's Office of Dietary Supplements, approximately 5-30 minutes of sun exposure twice a week can provide sufficient vitamin D (NIH, 2011).

### **Calcium Deficiency**

Calcium aids in the development of strong bones and teeth, and also helps the heart, nerves, and muscles function properly. A calcium deficiency often shows

no immediate symptoms, but can lead to serious health problems over time. Calcium deficiencies are related to low bone mass, weakening of bones due to osteoporosis, convulsions, abnormal heart rhythms, or even death.

The best sources of calcium are dairy products such as milk, yogurt, and cheese; vegetables like kale and broccoli, and calcium-fortified cereals and grains.

## Causes

A poor diet that lacks essential nutrients generally causes nutritional deficiencies. The body stores nutrients. Therefore, a deficiency is usually detected after a prolonged lack of a nutrient.

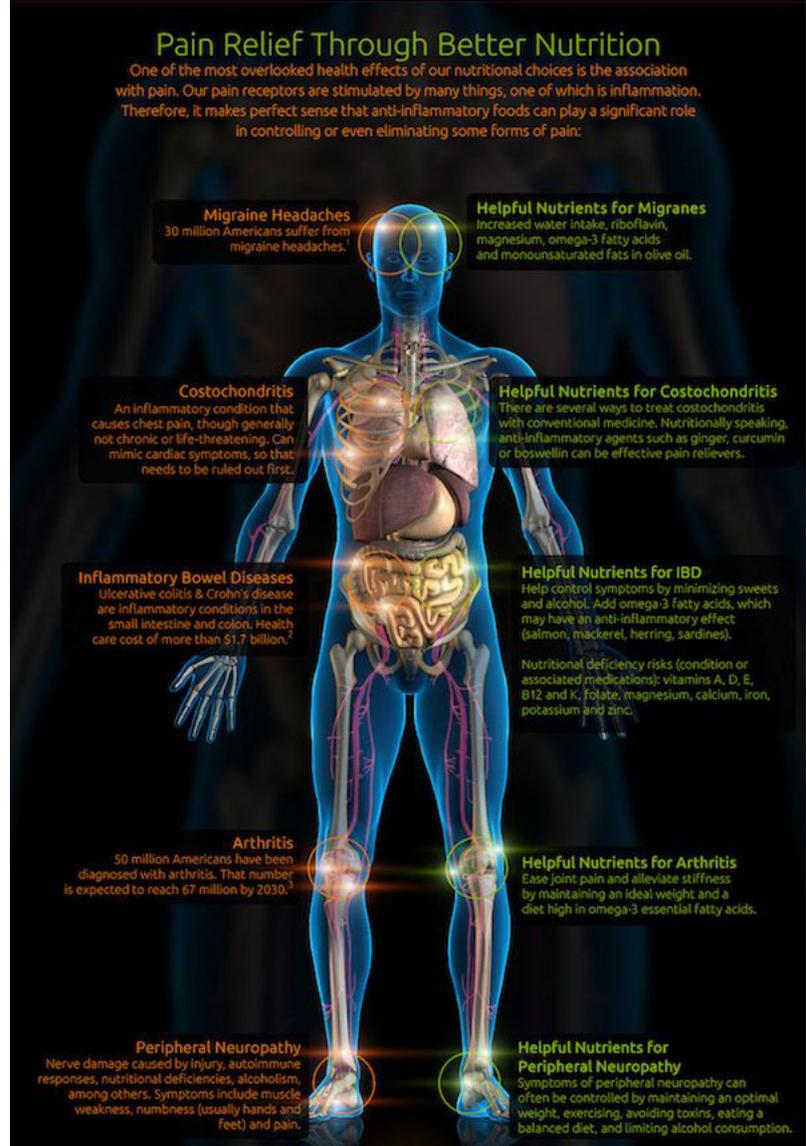
A number of diseases and conditions—including colon cancer and gastrointestinal conditions—can lead to an iron deficiency. Pregnancy can also cause a deficiency if the body diverts iron to the fetus.

## Symptoms

The symptoms of a nutritional deficiency depend on which nutrient the body lacks. However deficiencies can cause general symptoms. These include:

- Pallor (pale skin)
- fatigue
- weakness
- trouble breathing
- unusual food cravings
- hair loss
- periods of lightheadedness
- constipation
- sleepiness
- heart palpitations
- feeling faint or fainting
- depression
- tingling and numbness of the joints
- menstrual issues (such as missed periods or very heavy cycles)
- depression
- poor concentration

You may display all of these symptoms or only groups of them. Over time, most people adapt to the



symptoms. This causes the condition to go undiagnosed. Schedule a check-up with your healthcare provider if you experience prolonged periods of fatigue, weakness, and poor concentration. These symptoms could indicate the beginning of a serious deficiency.

## Diagnosis

Your doctor will discuss your diet and eating habits with you if he or she suspects a nutritional deficiency. He or she will ask what symptoms you're experiencing. Make sure to mention if you have suffered from any periods of constipation or diarrhea, or if blood has been present in your stool.

Your nutritional deficiency may also be diagnosed during routine blood tests, including a complete blood count (CBC). This is often how doctors identify anemia.



# Open Heart Surgery

Open heart surgery is any type of surgery where the chest is cut open and surgery is performed on the muscles, valves, or arteries of the heart.

According to the National Heart Lung and Blood Institute (NHLBI), coronary artery bypass grafting (CABG) is the most common type of heart surgery done on adults. During this surgery, a healthy artery or vein is grafted (attached) to a blocked coronary (heart) artery. This allows the grafted artery to “bypass” the blocked artery and bring fresh blood to the heart (NHLBI).

Open heart surgery is sometimes called traditional heart surgery. Today, many new heart procedures can be performed with only small incisions (cuts), not wide openings. Therefore, the term “open heart surgery” can sometimes be misleading.

## Reasons

Open heart surgery may be done to perform a CABG. A CABG may be necessary for patients with coronary heart disease (CHD). CHD occurs when the blood vessels that provide blood and oxygen for the heart become narrow and hard. This is often called “hardening of the arteries.” Hardening occurs when fatty material forms a plaque on the walls of the coronary arteries. This plaque narrows the arteries, making it difficult for blood to

get through. When blood can't flow properly to the heart, a heart attack may occur.

Heart surgery is also done to:

- repair or replace heart valves, which allow blood to travel through the heart
- repair damaged or abnormal areas of the heart
- put in medical devices that help the heart to beat properly
- replace a damaged heart with a donated heart (heart transplantation)

## Surgery Basics

According to the National Institutes of Health, a CABG takes between four to six hours. It is generally done following these basic steps:

The patient is given general anesthesia. This ensures the patient will be asleep and pain-free through the whole surgery. The surgeon makes an eight to 10-inch cut in the chest.

The surgeon cuts through all or part of the patient's breastbone to expose the heart. Once the heart is visible, the patient may be connected to a heart-lung bypass machine. The machine moves blood away from the heart so that the surgeon can operate. Some newer procedures do not use this machine.

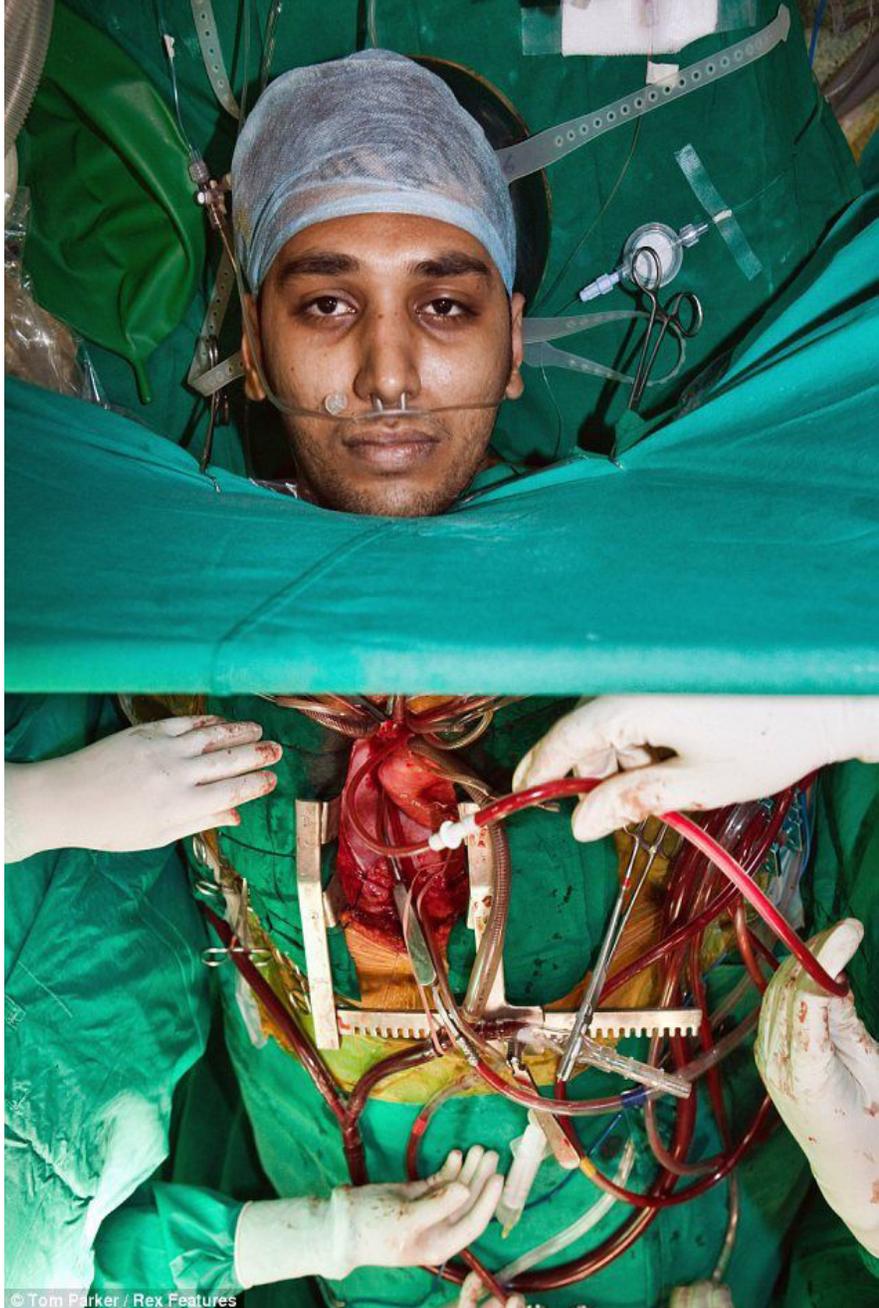
The surgeon uses a healthy vein or artery to make a new path around the blocked artery. The surgeon closes the breastbone with wire, leaving the wire inside the body. The original cut is stitched up. (NIH)

Sometimes sternal plating is done for high-risk patients, such as patients of advanced age or patients who have had multiple surgeries. This is when the breastbone is rejoined after the surgery with small titanium plates.

## Risks

Risks for a CABG include:

- chest wound infection (more common in



© Tom Parker / Rex Features

- patients with obesity or diabetes, or those who have had a CABG before)
- heart attack or stroke
- irregular heart beat
- lung or kidney failure
- chest pain and low fever
- memory loss or “fuzziness”
- blood clot
- blood loss
- breathing difficulty

According to the University of Chicago Medicine (UCM), the heart-lung bypass machine is associated with increased risks. These risks involved are stroke and memory problems (UCM).



# Psychosis Explained

Psychosis is a serious mental disorder characterized by thinking and emotions that are so impaired, that they indicate that the person experiencing them has lost contact with reality. People who are psychotic have false thoughts (delusions) and/or see or hear things that are not there (hallucinations). These are referred to as “positive” symptoms; “negative” symptoms like loss of motivation and social withdrawal can also occur. These experiences can be frightening and may cause people who are suffering from psychosis to hurt themselves or others.

It is important to see a doctor right away if you or someone you know is experiencing symptoms of psychosis.

Psychosis affects three out of every 100 people. It is most likely to be diagnosed in young adults, but psychosis can happen to anyone.

# Symptoms

Early stage psychosis:

- difficulty concentrating
- depressed mood
- sleep changes—sleeping too much or not enough
- anxiety
- suspiciousness
- withdrawal from family and friends
- ongoing unusual thoughts and beliefs
- Later stage psychosis
- delusions
- hallucinations
- disorganized speech—switching topics erratically
- depression
- anxiety
- suicidal thoughts or actions
- difficulty functioning
- Delusions and Hallucinations

# Delusions

A delusion is a false belief or impression that is firmly held even though it is contradicted by reality and what is commonly held as true. There are delusions of paranoia, grandiose delusions, and somatic delusions.

People who are experiencing a delusion of paranoia might think that they are being followed when they are not or that secret messages are being sent only to them through media. Someone with a grandiose delusion will have an exaggerated sense of his or her importance. Somatic delusions are the belief that you have a terminal illness when you are healthy.

# Hallucinations

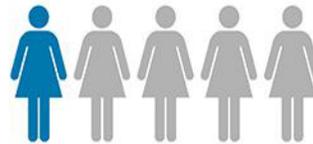
A hallucination is a sensory perception in the absence of outside stimulus. That means seeing, hearing, feeling, or smelling something that isn't present. A person who is hallucinating might see things that don't exist or hear people talking when he or she is alone.

Delusions and hallucinations seem real to the person who is experiencing them.

## Pay Attention to Your Mental Health



**Did you know?** Mental and physical health are connected. Taking care of your mental health can help you feel better physically, and taking care of your body is important for your mental health.



Each year, **1 in 5** women in the United States has a mental illness ranging from mild to serious.<sup>1</sup>

Almost **twice** as many women as men have ever been diagnosed with **anxiety**.<sup>2</sup>

Women are more than **twice** as likely as men to develop **PTSD**.<sup>3</sup>



## Tips

Take care of yourself!

- ✓ Fight stress by taking time to do something you enjoy like dancing or reading
- ✓ Reach out to friends and family for help when you need it
- ✓ Call 1-800-662-4357 for confidential treatment referral and information on mental health and substance abuse



## Schedule your well-woman visit

A well-woman visit is a time to see your health care provider to:

- ▶ Discuss family history, family planning, and personal habits, such as alcohol and tobacco use
- ▶ Schedule necessary tests, such as screenings for depression, alcohol and tobacco use, and more
- ▶ Discuss whether you should consider medication, therapy, or other treatments for mental health and substance use disorders
- ▶ Set health goals, such as being active and maintaining a healthy weight



# Causes

Each case of psychosis is different, and the exact cause is not always entirely clear. There are, however, certain illnesses that cause psychosis. There are also triggers like drug use, lack of sleep, and other environmental factors. In addition, certain situations can lead to specific types of psychosis to develop (see “Types of Psychosis” below).

- Illnesses
- Illnesses that can cause psychosis:
- brain diseases such as Parkinson’s disease, Huntington’s disease, and some chromosomal disorders
- brain tumors or cysts
- dementia (including Alzheimer’s disease)
- HIV, syphilis, and other infections that attack the brain
- some types of epilepsy
- stroke
- Environmental Causes

Psychosis can be triggered by the use of alcohol and illegal drugs, including stimulants such as methamphetamine (meth) and cocaine. Hallucinogenic drugs like LSD (acid) often cause users to see things that are not really there, but this effect is temporary. People who do not get enough sleep for long periods of time can experience symptoms of psychosis. Some prescription drugs like steroids and stimulants can cause symptoms of psychosis.

# Risk Factors

It is not currently possible to precisely identify individuals who are likely to develop a psychotic disorder. However, research has shown that genetics may play a role.

If one identical twin develops psychosis, there is a 50 percent chance the other twin will as well. Individuals with a close family member (parent or sibling) who has a psychotic disorder are more likely to develop a psychotic disorder. Children born with the genetic mutation known as 22q11 deletion syndrome are at risk for developing a psychotic disorder, especially schizophrenia.

# Types

Some kinds of psychosis are brought on by specific conditions or circumstances.

## Brief Reactive Psychosis

Extreme personal stress like the death of a family member can bring on symptoms of psychosis. Someone experiencing brief reactive psychosis will recover in a few days.

## Drug- or Alcohol-Related Psychosis

Use of alcohol and drugs can sometimes cause symptoms of psychosis. These symptoms might go away immediately when the effect of the alcohol or drug wears off, but this is not always the case. People who are addicted to alcohol and certain drugs can experience psychotic symptoms if they suddenly stop drinking or taking the drug to which they are addicted.

## Organic Psychosis

A head injury or an illness that affects the brain like Parkinson’s disease can cause symptoms of psychosis.

# Psychotic Disorders

The following types of psychoses are called psychotic disorders. They can be triggered by stress, drug or alcohol use, injury or illness, or they can appear on their own.

# Bipolar Disorder

When someone has bipolar disorder, his or her moods swing from very high to very low. When his or her mood is high and positive, he or she may have symptoms of psychosis. The individual may feel extremely good and believe he or she has special powers. When his or her mood is depressed, the individual may have psychotic symptoms that make him or her feel angry, sad, or frightened. These symptoms include thinking someone is trying to harm him or her.

# Low Back Pain

## Reasons for your Low Back Pain

Lower back pain is a common cause for visits to the doctor. According to the National Institute of Neurological Disorders and Stroke (NINDS), low back pain is the second most common neurological problem in the U.S., and Americans spend an average of \$50 billion per year treating low back pain. (NINDS, 2012)

Most low back pain is the result of an injury, such as muscle sprains or strains due to sudden movements or poor body mechanics while lifting heavy objects. But low back pain can also be caused by certain diseases, such as cancer of the spinal cord, ruptured or herniated disc, sciatica, arthritis, kidney infections, or infections of the spine. Acute back pain can last anywhere from a few days to a few weeks, while chronic back pain is pain that lasts longer than three months.

Lower back pain is more likely to occur in individuals between the ages of 30 and 50. This is partly due to the changes that occur in the body with aging. As you grow older, the fluid content between the vertebrae in the spine becomes reduced, which means discs in the spine are more easily irritated. Some muscle tone is also lost, which makes the back more prone to injury. This is why strengthening your back muscles and using good body mechanics are helpful in preventing lower back pain.



# Causes

## Strains

The muscles and ligaments in the back can be stretched or torn due to over-activity. Symptoms include pain and stiffness in the lower back, as well as muscle spasms. These symptoms tend to be relieved with rest and physical therapy.

## Disc Injury

The discs in the back are prone to injury, and this risk increases with age. The outside of the disc can be torn or may be herniated. A herniated disc (also called a slipped or ruptured disc) and occurs when the cartilage surrounding the disc pushes against the spinal cord or nerve roots. The cushion that sits between the spinal vertebrae is pushed outside its normal position. This can result in compression of the nerve root as it exits from the spinal cord and through the vertebral bones. Disc injury usually occurs suddenly after lifting something or twisting the back. Unlike a back strain, pain from a disc injury usually lasts for more than 72 hours.

## Sciatica

Sciatica can occur with a herniated disc if the disc presses on the sciatic nerve. The sciatic nerve connects the spine to the legs. As a result, sciatica can cause pain in the legs and feet. This pain is usually felt as a burning or pins-and-needles sensation.

## Spinal Stenosis

Spinal stenosis is when the spinal column narrows, putting pressure on the spinal cord and spinal nerves. Spinal stenosis is most commonly caused by degeneration of the discs between the vertebrae.

The result is compression of the nerve roots or spinal cord by bony spurs or soft tissues, such as discs. Symptoms are usually caused by the pressure on the spinal nerves and may include numbness, cramping, and weakness. These symptoms may be felt anywhere in the body. Many people with spinal stenosis notice their symptoms worsen when standing or walking.

## Abnormal Spine Curvatures

Scoliosis, kyphosis, and lordosis are all conditions that cause abnormal curvatures in the spine. These are congenital conditions and are usually diagnosed in children and teenagers. The abnormal curvature

places pressure on the muscles, tendons, ligaments, and vertebrae, causing pain and poor posture.

## Other Conditions

Along with the above conditions, there are a number of other conditions that cause lower back pain. These conditions include:

- arthritis (Lumbar osteoarthritis is a very painful condition which affects the lower back)
- fibromyalgia - long-term pain and tenderness in the joints, muscles, and tendons
- spondylitis - inflammation of the joints between the spinal bones
- spondylosis (spinal osteoarthritis) is a degenerative disorder that may cause loss of normal spinal structure and function. Although aging is the primary cause, the location and rate of degeneration is individual.
- kidney and bladder problems (severe infections of the bladder can cause low back pain)
- pregnancy (due to the increased strain on the lower back and the change in body posture)
- endometriosis - a painful condition where cells from the uterus grow in other parts of the body
- ovarian cysts - a fluid-filled growth on the inside or outside of an ovary
- uterine fibroids - non-cancerous tumors in the uterus
- cancer

# Tests

Most doctors begin by conducting a physical examination to determine where you are feeling the pain, as well as if your range of motion has been affected. Your doctor may also check your reflexes and your response to certain sensations. This is done to determine if your nerves are affected by your lower back problem. Unless you have concerning or debilitating symptoms, your doctor will probably monitor your condition for a few weeks before sending you for testing. This is because most lower back pain resolves using simple self-care treatments.

If you are experiencing certain symptoms like lack of bowel control, weakness, fever, or weight loss, or your low back pain remains after several weeks of home treatment, your doctor may wish to send you for tests. Seek medical attention immediately if you

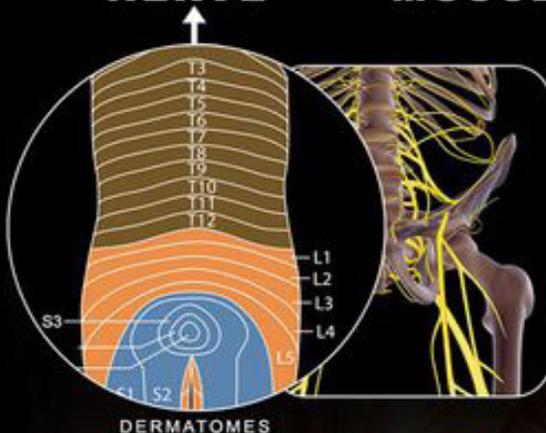
# LOWER BACK PAIN

## STRUCTURES INVOLVED

### CONNECTIVE TISSUE



### NERVE



### MUSCLE



MULTIFIDUS



LONGISSIMUS



ILOCOSTALIS



QUADRATUS LUMBORUM



GLUTEUS MEDIUS



PSOAS MAJOR

## STATISTICS

50% OF AMERICANS ADMIT TO HAVING BACK PAIN SYMPTOMS EACH YEAR.  
 80% OF THE POPULATION WILL EXPERIENCE A BACK PROBLEM AT SOME TIME IN OUR LIVES.  
 AMERICANS SPEND AT LEAST \$50 BILLION EACH YEAR ON BACK PAIN.  
 MOST CASES OF BACK PAIN ARE MECHANICAL OR NON-ORGANIC—  
 MEANING THEY ARE NOT CAUSED BY SERIOUS CONDITIONS.

## CAUSES

### OVERUSE/ INJURY

SPRAINS STRAINS INFLAMMATION



### WEAKNESS

SEDENTARY LIFESTYLE  
 CHRONICALLY STRETCHED  
 NERVE IMPINGEMENT



### DEGENERATION

OSTEOPOROSIS  
 DISK COMPRESSION



### NERVE IMPINGEMENT

### ABNORMAL BONE GROWTH

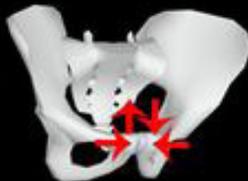
OSTEOARTHRITIS  
 SPONDYLOLISTHESIS  
 CANCER



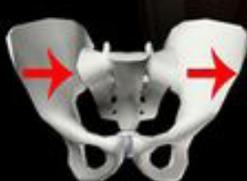
### POSTURAL MIS-ALIGNMENT



ROTATION



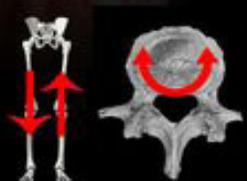
PUBIC ALIGNMENT



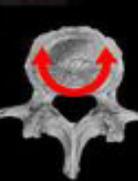
INFLARE / OUTFLARE



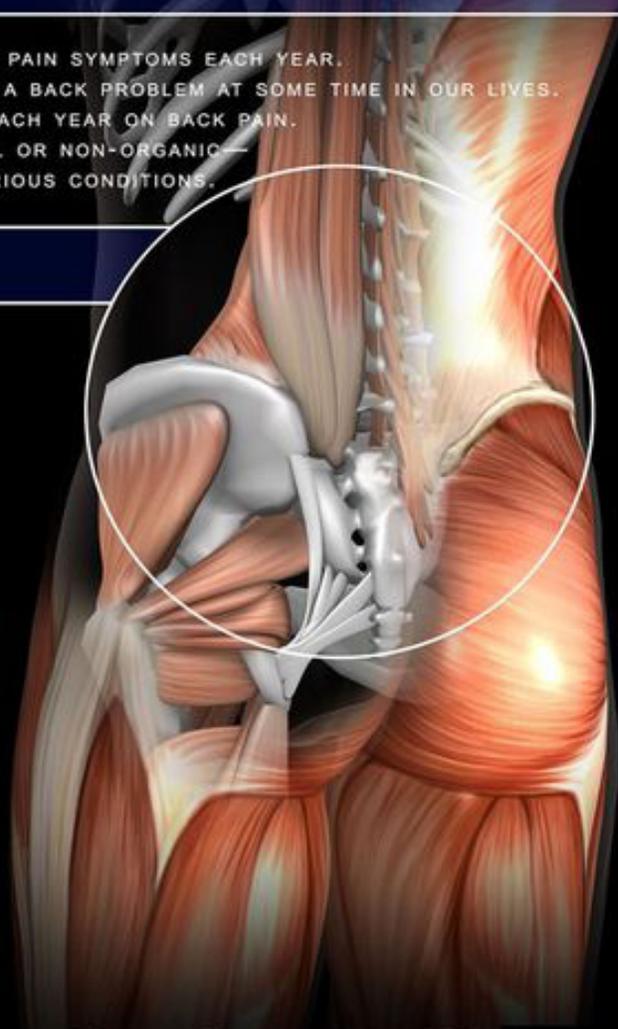
UPSILIP / DOWNSLIP



LEG LENGTH



ROTATION



are experiencing any of these symptoms in addition to lower back pain. Imaging tests include X-rays, computerized tomography (CT) scans, ultrasound, and magnetic resonance imaging (MRI), may be ordered so your doctor can check for bone problems, disc problems, or problems with the ligaments and tendons in your back.

If your doctor suspects a problem with the bones in your back, they may send you for a bone scan or bone density test. Electromyography (EMG) or nerve conduction tests can be ordered if a problem with your nerves is suspected.

## Treatment Options

### Home Care

Self-care methods are suggested for the first 72 hours after the pain began. If the pain is not getting better after 72 hours of home treatment, you should call your doctor. Self-care includes:

- rest - stop your normal physical activities for a couple days
- applying ice - generally doctors recommend using ice for the first 48 to 72 hours then switching to heat
- RICE protocol (rest, ice, compression and elevation) is recommended within the first 48 hours
- alternating ice packs with a heating pad to relax muscles
- taking over-the-counter pain medication like ibuprofen (Advil, Motrin IB) or acetaminophen (Tylenol) can relieve pain and inflammation
- sometimes lying on your back causes more discomfort; if so, trying lying on your side with your knees bent and a pillow between your legs; if you are lying on your back reasonably comfortably, it is helpful to place a pillow or rolled-up towel beneath your legs to elevate your feet to reduce the pressure on the lower back
- a warm bath can often relax stiff and knotted muscles in the back
- massage

### Medical Treatment

Because the cause of typical lower back pain is related to a number of different things, including muscle strain and weakness, pinched nerves, and

spinal cord misalignment, there is a wide variety of medical treatments such as medications, medical appliances, and physical therapy. Your doctor will determine the appropriate dosage and application of drugs and medications based on your symptoms. Medical treatment for low back pain may include:

- muscle relaxants
- non-steroidal anti-inflammatory drugs (NSAIDs)
- narcotic drugs (such as codeine) for pain relief
- steroids (to reduce inflammation)
- corticosteroid injections
- physical therapy, including massage, stretching, strengthening exercises, and back and spinal manipulation

### Surgery

For severe cases, surgery may be required. As back surgery can be invasive, surgery is usually only considered when all other options have been exhausted and your doctor knows the cause of your lower back pain. Different potential surgical procedures include:

- discectomy - to take pressure off a nerve root being pressed on by a bulging disc or bone spur, the surgeon will remove a small piece of the lamina, a bony part of the spinal canal
- foraminotomy - a surgical procedure that opens up the foramen, the bony hole in the spinal canal where the nerve root exits
- IntraDiscal Electrothermal Therapy (IDET) - involves inserting a needle through a catheter into the disc and heating it up for 20 minutes, which makes the disc wall thicker and cuts down on the inner disc's bulging and irritation of the nerve
- nucleoplasty - a wand-like device is inserted through a needle into the disc so inner disc material can be removed; the device then uses radio waves to heat the tissue and shrink it
- radiofrequency lesioning - a way to use radio waves to interrupt the way the nerves communicate with each other; a special needle is inserted into the nerves and is heated, which destroys the nerves
- spinal fusion - in order to make the spine stronger and cut down on painful motion, the discs between two or more of the vertebrae are removed and the vertebrae next to each other are fused with bone grafts and/or special metal screws



# Pubic Lice Infestation

Pubic lice, also known as crabs, are very small insects that infest your genital area. There are three types of lice that infest humans:

- *pediculus humanus capitis* (head louse)
- *pediculus humanus corporis* (body louse)
- *phthirus pubis* (pubic louse)

Pubic lice are distinct from body and head lice, and are often smaller in size. Lice feed on human blood and cause intense itching in affected areas. Pubic lice usually live on pubic hair and are spread through sexual contact. In rare cases, they can be found in eyelashes, armpit, and facial hair.

## Causes

Pubic lice are transmitted through intimate contact, usually sex. However, it's possible to catch pubic lice from using the blankets, towels, sheets, or clothing of people contaminated with pubic lice.

The adult louse lays its eggs on the hair shaft, near the skin. These eggs are called nits. Seven to 10 days later, the nit hatches into a nymph. Then it starts feeding on your blood. The lice can live without feeding on blood for a day or two.

Contrary to common belief, you're highly unlikely to catch them from a toilet seat or furniture, as pubic lice don't usually fall off their host unless they're dead. They aren't carried by animals and cannot jump from one person to another like fleas.

If a parent is badly infested, a child sleeping in the same bed might catch pubic lice. In children, the lice usually dwell in their eyelashes or eyebrows. The presence of pubic lice in a child might also indicate sexual abuse.

Pubic lice infestations are more common in people who have sexually transmitted infections (Mayo, 2010).

## Symptoms

While some people have no symptoms, it's more likely that your genitals and/or anus will start itching about five days after the initial infestation. At night, the itching becomes more intense. Other common symptoms include:

low-grade fever  
irritability  
lack of energy

pale bluish spots near bites

Excessive itching may cause wounds or infection in affected areas.

Children with lice infestations on their eyelashes are also at risk of developing conjunctivitis (pink eye).

## Diagnosis

Diagnosis is done through a visual examination of the pubic area. People are often able to diagnose themselves. If you suspect an infestation and you can't see well enough to be sure, use a magnifying glass to look for small, c r a b - s h a p e d

insects. Lice are pale gray in color, but darken after drinking your blood. If you see something moving, you probably are infested. Pubic lice eggs are another indicator of infestation. The eggs are tiny, white, and found around the roots of your pubic or other body hair. If you suspect an infestation but can't be sure, visit your doctor or health clinic for diagnosis.

## Treatment

Treatment consists of decontaminating yourself, your clothes, and your bedding. Removing pubic lice from your body usually involves topical, over-the-counter solutions, such as RID, Nix, or A-200. In stubborn cases, prescription medication might also be necessary.

Depending on the extent of your infestation, you might only need to wash your pubic hair. Read the instructions to find out exactly how long to leave a particular product on your skin.

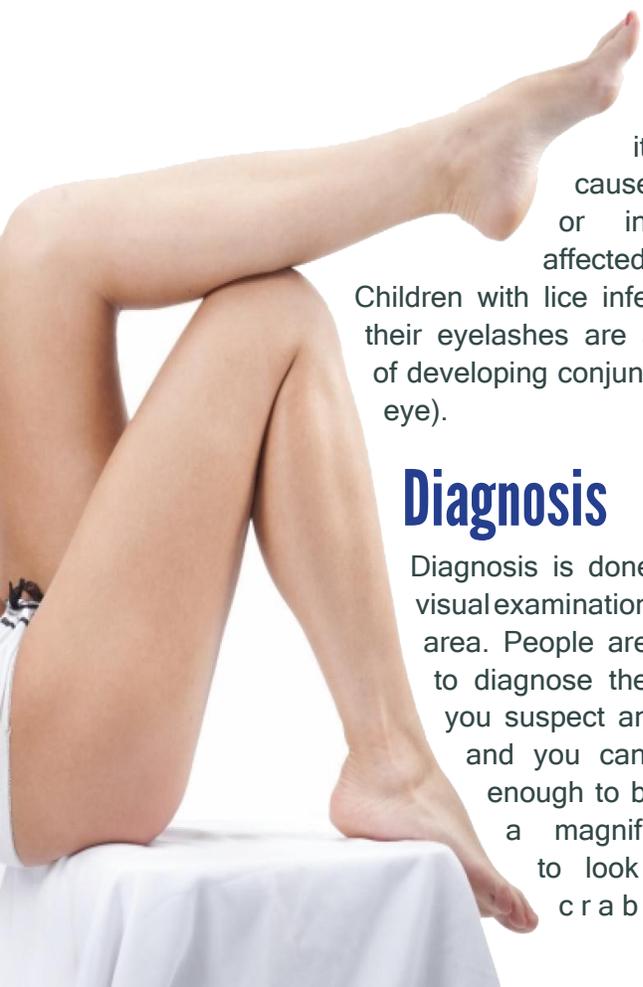
Even after successful treatment, a few stubborn eggs might cling to your hairs. Remove any leftover nits with tweezers. According to Planned Parenthood, home remedies like shaving and hot baths don't work. Lice can easily survive ordinary soap and water (Planned Parenthood).

If you are pregnant or breastfeeding, or are treating an infant for pubic lice, ask your doctor which products are safe for you to use. If several people in your household have contracted pubic lice, treat everybody at the same time. This helps prevent reinfection.

Vacuum the entire house and clean the bathroom with bleach solution. Wash all towels, bedding and clothing in hot water and machine dry using the highest setting for at least 20 minutes. If you can't wash or dry-clean something, seal it in an airtight plastic sack for 72 hours to kill any lingering lice.

If the lice survive these efforts, you might need stronger medicine, such as:

- malathion (Ovide): a topical lotion that you leave on the affected areas for eight to 12 hours
- ivermectin (Stromectol): a two-pill dose taken orally. You might need a follow-up dose 10 days later.
- lindane: the strongest and most toxic of commonly prescribed pubic lice medicines.



# Sepsis - Who's at risk?

Sepsis is a life-threatening complication of infection. It often occurs in people who are elderly or have weak immune systems.

Sepsis happens when the body suffers from an infection and the chemicals released into the blood to fight the infection cause inflammation over the entire body. Severe cases of sepsis can lead to septic shock. Septic shock occurs when the inflammation causes tiny blood clots to form, blocking oxygen from vital organs and leading to organ failure and a life-threatening drop in blood pressure.

Sepsis and septic shock affect millions of people around the world and kill more than one in four people who contract it (Dellinger, 2007).

## Symptoms

Doctors have identified three stages of sepsis: sepsis, severe sepsis, and septic shock. Sepsis often occurs while people are still in the hospital recovering from a procedure, however this is not always the case. If you experience any of the symptoms below, seek medical attention immediately. The earlier treatment with antibiotics and heavy amounts of IV fluids is started, the greater a person's chance for survival.

Symptoms of sepsis include:

- fever above 101.3 F
- heart rate higher than 90 beats a minute
- breathing rate higher than 20 breaths a minute
- possible or definite infection

For a doctor to diagnose sepsis, two of these symptoms must be present.

## Severe Sepsis

Symptoms of severe sepsis, which can mean organ dysfunction, require that only one of the following signs be present:

- patches of discolored skin
- noticeably lower amounts of urination
- mental ability changes
- low platelet (blood clotting cells) count
- problems breathing
- abnormal heart functions
- chills due to fall in body temperature
- unconsciousness
- extreme weakness
- Septic Shock

**Symptoms of septic shock include:**

1. any of the symptoms of severe sepsis are present
2. cold skin
3. very low blood pressure

## Effects

The following can occur as a result of sepsis:

- impaired blood flow to brain, ear, or kidneys
- blood clot formation in organs, arms, legs, fingers, or toes
- organ failure
- tissue death (gangrene)

## Causes

Sepsis can be caused by any type of infection—bacterial, fungal, or viral. However, the following types of infections are more likely to cause sepsis than others:

- pneumonia
- abdominal infection
- kidney infection
- bloodstream infection

According to the Mayo Clinic, sepsis is on the rise in the United States (Mayo Clinic). Possible reasons for this include:

- aging populations
- increase in drug-resistant bacteria
- large number of people with immune systems weakened because of HIV and cancer treatments

# SEPSIS IS SERIOUS!

## WHAT IS SEPSIS?

Severe inflammation in the whole body caused by infection from bacteria, virus, fungus, or parasite

May be a serious and life-threatening condition that requires urgent medical attention



## 3 STAGES

SIRS: Systemic inflammatory response syndrome

Sepsis: Infection plus 2 or more signs of inflammation.

Severe Sepsis: Sepsis causing cell death and damage to any organ resulting in gangrene or organ failure

## SPOTTING THE SIGNS OF SEPSIS

### INFLAMMATION (SIRS)



Temperature above 100.4 °F or below 96.8 °F



Heart rate over 90 beats per minute



20 or more breaths per minute

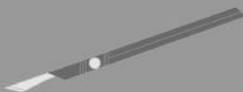
### SEPSIS



Skin and soft tissue infection



Recent history or diagnosis of infection



Recent hospitalization, surgery, or pre-existing condition



Taking antibiotics

### SEVERE SEPSIS



Difficulty breathing



Decreased urine output



Change in mental status



Decrease in blood clotting cells



Blood glucose greater than 140 mg/dl with absence of diabetes

### SEPTIC SHOCK

All of the above symptoms



Low blood pressure



Highest risk of death and complications

## SPOTTING SYMPTOMS OF INFECTION

- Fever with shaking chills
- Falling, loss of balance
- Confusion
- Painful urination or urine that is cloudy with smell
- Abdominal pain
- Nausea, vomiting, or diarrhea
- Shortness of breath, cough, or thick sputum with color
- Wounds with redness, swelling, or pus-like drainage
- Invasive tubes, catheters, or intravenous catheters
- Pre-existing chronic diseases, cancer, or chemotherapy



# Slipped Disk

## Suffering from Slipped Disk Problems?

Your spinal column is made of up 26 bones (vertebrae) that are cushioned by disks. The disks protect the bones by absorbing the shocks from daily activities like walking, lifting, and twisting.

Each disk has two parts—a soft, gelatinous inner portion and a tough outer ring. Injury or weakness can cause the inner portion of the disk to protrude through the outer ring. This is known as a slipped or herniated disk. This causes pain and discomfort. If the slipped disk compresses one of your spinal nerves, you may also experience numbness and pain along the affected nerve. In severe instances, you may require surgery to remove or repair the slipped disk.



## Symptoms

You can have a slipped disk in any part of your spine, from your neck to your lower back. The lower back is the most common area for slipped disks, according to the American Academy of Family Physicians. Your spinal column is an intricate network of nerves and blood vessels. A slipped disk can place extra pressure on the nerves and muscles around it.

Symptoms of a slipped disk include:

- pain and numbness, most commonly on one side of the body
- pain that extends to your arms and/or legs
- pain that worsens at night
- pain that worsens after standing or sitting
- pain when walking short distances
- unexplained muscle weakness
- tingling, aching, or burning sensations in the affected area

The types of pain can vary from person to person. See your physician if your pain results in numbness or tingling that affects your ability to control your muscles.

## Causes

A slipped disk occurs when the outer ring becomes weak or torn and allows the inner portion to slip out. This can happen with age. Certain motions may also cause a slipped disk. A disk can slip out of place while you are twisting or turning to lift an object. Lifting a very large, heavy object can place great strain on the lower back, resulting in a slipped disk. If you have a very physically demanding job that requires a lot of lifting, you may be at increased risk for slipped disks. Overweight individuals are also at increased risk for a slipped disk because their disks must support the additional weight. Weak muscles and a sedentary lifestyle may also contribute to development of a slipped disk.

People who are 35 to 45 years old are more likely to have a slipped disk, according to the Mayo Clinic. This is because your disks begin to lose some of their protective water content as you age. As a result, they can slip more easily out of place. They are more common in men than women.

## Effects

An untreated, severe slipped disk can lead to permanent nerve damage. In very rare cases, a slipped disk can cut off nerve impulses to the cauda equina nerves in your lower back and legs. If this occurs, you may lose bowel or bladder control.

Another long-term complication is known as saddle anesthesia. In these cases, the slipped disk compresses nerves and that causes you to lose sensation in your inner thighs, the back of your legs, and around your rectum.

While a slipped disk's symptoms may improve, they also can worsen. If you cannot perform the activities you once could, it is time to see your doctor.



# Bulging Eyes

## Treating Your Bulging Eyes

Eyes that bulge, or protrude out of their normal position, could be an indication of a serious medical condition. Proptosis and exophthalmos are the medical terms used to describe bulging eyes.

In most cases, the white part of the eye should not be visible over the iris (top of the colored part of the eye). If the white of your eyes show between the iris and your upper eyelid, this is often considered abnormal bulging. Treatment will be based on the diagnosis. However, some individuals have the hereditary trait of prominent eyes, in which the white part of the eyes is more prominent and visible. Bulging in only one eye of a child is a particularly serious sign. Seek medical attention immediately.

## Causes

The most common cause of bulging eyes is hyperthyroidism (an overactive thyroid). Your thyroid gland is located in the front of your neck. It releases several hormones that control metabolism. Hyperthyroidism is when your thyroid releases too many of these hormones over a short and concentrated or long period.

An autoimmune disorder called Graves disease is the most common cause of hyperthyroidism and of bulging eyes. Tissues around the eye become inflamed, thus creating the bulging effect. Anyone can get Graves disease, but women over the age of 20 are most at risk.

Other causes of bulging eyes include:

- hyperthyroidism caused by medications used for other conditions
- bleeding behind the eye caused by injury
- glaucoma (fluid pressure in the eye that causes optic nerve damage)
- hemangioma (an abnormal buildup of blood vessels in the internal organs or in the skin)
- histiocytosis (a group of syndromes in which there is an abnormal increase in the number of immune cells)
- leukemia (cancer of the white blood cells)
- neuroblastoma (cancer of the nerve tissue)
- orbital cellulitis (infection of tissues around the eye)
- periorbital cellulitis (infection of the eyelid or the skin around the eye)
- rhabdomyosarcoma (cancerous tumor of the muscles that are attached to bones)
- vascular disorders (disorders affecting the circulatory system)

## Diagnosis

Bulging in only one eye of a child is a particularly serious sign that requires immediate medical attention.

If you have a bulging eye or eyes, make an appointment for a thorough medical exam as soon as possible. Be prepared to provide your doctor with your complete medical history. Your doctor will also want to know the specifics of your symptoms, such as:

- When did you first notice that your eyes were bulging?
- Have they gotten worse since that time?
- Do you have any other symptoms? If so, what are they?
- Do you take any prescription or over-the-counter medications or supplements?

After a physical exam, your doctor may order additional tests. These may include:

- slit-lamp exam (uses a low-power microscope along with a high-intensity light to examine the structures at the front of the eye)
- blood tests (to check for thyroid diseases)

- imaging tests, including computed tomography (CT) or magnetic resonance imaging (MRI)

## Treatment

Any treatment for bulging eyes will depend entirely on the cause, but may include:

- eye drops
- sunglasses
- corticosteroids to ease inflammation
- surgical procedures to repair damaged arteries and veins
- surgery, chemotherapy, and radiation to treat tumors
- Treatment for thyroid disease, including Graves disease, may include:
  - beta-blockers, such as propranolol
  - antithyroid medications
  - surgery to remove the thyroid
  - radioactive iodine to destroy the thyroid, thereby stopping hormone production (this treatment can occasionally make eye problems worsen)
  - replacement hormones (if surgery or radiation was performed to destroy the thyroid)

Eye problems associated with hyperthyroidism can be worse for people who smoke, so quitting may help to lessen eye bulging.

Bulging eyes may lower self-esteem or cause self-consciousness in affected individuals, so emotional support is important as well.



# Sleep Disturbance

Sleep disorders/disturbances can cause your sleep to be disturbed. Disturbed sleep includes the inability to fall asleep, the inability to go back to sleep, and frequent waking up during the night. Sleep disorders can make you feel tired, fatigued, and irritable, making it difficult for you to concentrate during the day. Most people have experienced sleep disturbances at some point in their lives. Anyone at any age can develop a sleep disorder/disturbance. Depending on the cause and the treatment, sleep disturbances can be short-term or long-term.

## Causes

There are many conditions, diseases, and disorders that can cause sleep disturbances. There are several common causes of sleep disturbances:

- Bedwetting is a cause of sleep disturbance that usually occurs in children during potty training. It is called nocturnal enuresis. Most children learn how to control their bladders by age 6 or 7.
- Insomnia is the inability to fall or remain asleep and can last from a few nights to months or years. It can be caused by jet lag, stress and anxiety, hormones, or digestive problems, or it can be a sign of another disease or condition.
- Restless leg syndrome (RLS) is an inexplicable urge to move your legs, sometimes with a tingling sensation.

Other causes of sleep disturbance include sleep apnea, teeth grinding, allergies and colds, snoring, frequent urination, fibromyalgia, and nightmares. Sleep apnea causes breathing interruptions during your sleep, and teeth grinding (which is called bruxism) can cause you to wake up during the night.

Allergies, colds, coughing, and upper respiratory infections can make it difficult for you to breathe at night. Snoring can also disturb your sleep, and if it is loud enough, it may wake you up. Frequent urination, which is called nocturia, will cause you to wake up during the night and may disrupt your sleep.

When you have pain or fibromyalgia, you may find it difficult to sleep without interruption. People who have body-wide pain and tenderness may have fibromyalgia. The cause of fibromyalgia is not known, but doctors believe one of the causes may be linked to sleep problems. If you have bad dreams or nightmares, they may disrupt your sleep. You may also feel emotionally tired after a nightmare because nightmares leave people with negative emotional thoughts. You may even sleepwalk after having a nightmare.

## Diagnosis

If your sleep disturbances don't clear up after several days, you may want to see your doctor to find out if there is a serious underlying cause. After an exam, your doctor may recommend the following tests:

- polysomnography - a sleep study
- electroencephalogram (EEG)
- genetic blood testing in the rare case of narcolepsy (unpredictable bouts of falling asleep)

## Treatment

Treatment for sleep disturbances depends on the causes and can include any of the following:

- addressing bedwetting and potty training issues
- sleeping pills
- melatonin supplements
- allergy or cold medication
- addressing other health conditions
- medications for any underlying health issues

# SLEEP IS AWESOME!

The modern age is constantly busy. The internet is available 24/7. So is entertainment. And with mobile phones and email, we're available for work all the time. So, we've decided to get these hours from sleep instead. Hey, it's not like we're doing anything important during that time. Whatever. The thing is, sleep is awesome. The problem is that people don't know just how awesome it is, so they check Twitter and watch bad TV instead.

You're so sleep deprived you probably won't get to the bottom of this. So share this now while you're still awake! You'll get a chance to win a free Zeo sleep monitor.

**FUN FACTOID:**  
Guinness World Records no longer track longest period without sleep - it's considered too dangerous. (But sword swallowing and glass eating are ok.)



SLEEP LOSS IS KILLER

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**RISK OF CANCER**

Going to bed too late doubles the risk of breast cancer.

+200% RISK

**OBESITY**

Lose 14.3lbs per year by sleeping 1 hour more each day instead of watching TV.

-14.3 lbs PER YEAR

**RISK OF HEART DISEASE**

100% - the increased likelihood of a heart attack if you get less than 7 hours of sleep per night

+100%

**RISK OF DEATH**

If you are sleep deprived you are 20% more likely to be dead in 20 years.

+20%

WE DON'T GET ENOUGH SLEEP

FUN FACTOID: One night without sleep leaves you performing like you were legally drunk at a blood alcohol content of 0.08.



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HOURS OF SLEEP

23% of people get less than 6 hours of sleep at night. Only 7% get at least 8 hours.



**ZQ (SLEEP QUALITY) WITH AGE**

It's worse with age: ZQ decreases 18 points over our adult lives (ZQ is based on total sleep, Deep sleep, REM sleep, and time awake.)

Age	ZQ Score
20	80
30	76
40	72
50	69
60	69
70	62

**WOMEN VS MEN**

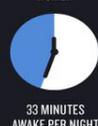
Women have it tougher: They spend 32% more time awake at night than men.

**MEN**



25 MINUTES AWAKE PER NIGHT

**WOMEN**



33 MINUTES AWAKE PER NIGHT

And men get a higher ZQ (a single measure from Zeo to describe how we sleep at night) - 2 points per night.

HOW TO FALL ASLEEP QUICKLY: "Paradoxical Intention" is a method to fall asleep more quickly. The trick: try as hard as you can to stay awake with your eyes closed laying in your bed. (It really works)



GET MORE SLEEP (TO BE NICER, SEXIER, AND JUST MORE AWESOME)

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**PROBLEM SOLVING**

A single night of sleep can more than double our ability to come up with novel solutions to difficult problems.

**SMARTER KIDS**

Longer sleep is associated with higher IQ in children.

**EMPATHY**

Sleep deprivation reduces our ability to empathize - so sleep more and be a better person!

**TOO SLEEPY FOR SEX?**

1 in 3 women report being too sleepy for sex - so GET MORE!

# Hair Loss Solutions

The American Academy of Dermatology (AAD) notes that 80 million men and women in America have hereditary hair loss (alopecia). (AAD) It can affect just the hair on your head or your whole body. Although it is more prevalent in older adults, excessive hair loss can even occur in children.

According to Kids Health and the AAD, it is natural to lose between 50 and 100 hairs a day. (Kids Health). With about 100,000 hairs on your head, that small loss is unnoticeable. The lost hair is normally replaced by new hair but not always. Hair loss can develop gradually over years or happen abruptly. Hair loss can be permanent or temporary.

It is impossible to count the amount of hair lost on a given day. You may be losing more hair than is normal if you notice:

- a large amount of hair in the drain after washing your hair
- clumps of hair in your brush
- you notice thinning patches of hair
- you experience baldness

If you notice that you are losing more hair than usual, you should discuss the problem with your doctor. He or she can determine the underlying cause of your hair loss and suggest appropriate treatment plans.

## Causes

First your doctor or dermatologist (a doctor who specializes in skin problems) will try to determine the underlying cause of your hair loss. The most common cause of hair loss is hereditary male- or female-pattern baldness. If you have a family history of baldness, you may be susceptible to this type of hair loss. It is triggered by certain sex hormones and may begin as early as puberty.

In some cases, hair loss may be related to a simple halt in the cycle of hair growth. Major illnesses, surgeries, or traumatic events can trigger hair loss. However, your hair will usually start growing back without treatment.



Hormonal changes associated with pregnancy, childbirth, discontinuing the use of birth control pills, and menopause can cause temporary hair loss.

Medical conditions that can cause hair loss include thyroid disease, alopecia areata (an autoimmune disease that attacks hair follicles), and scalp infections like ringworm. Diseases that cause scarring like lichen planus and some types of lupus can result in permanent hair loss because of the scarring.

Hair loss can also be caused by medications used to treat cancer, high blood pressure, arthritis, depression, and heart problems.

A physical or emotional shock may trigger hair loss that will be noticeable after the event. Examples of this type of shock include a death in the family, extreme weight loss, or a high fever. People with the mental illness trichotillomania (hair-pulling disorder) have a compulsion to pull out their hair—usually from their head, eyebrows, or eyelashes. Traction hair loss can be caused by hairstyles that put pressure on the follicles by pulling the hair back very tightly.

A diet lacking in protein, iron, and other nutrients can lead to thinning hair.

## Diagnosis

Persistent hair loss is often indicative of an underlying health issue. Your doctor or dermatologist can determine the cause of your hair loss based on a physical examination and your health history. In some cases, simple dietary changes can help, along with switching prescription medications.

If your dermatologist suspects an autoimmune or skin disease, he or she might take a biopsy of the skin on your scalp. This will involve carefully removing a small section of skin for laboratory testing. It is important to keep in mind that hair growth is a complex process, so it may take time to determine the exact cause of your hair loss.

## Medications

Medications will likely be the first course of treatment for hair loss. Over-the-counter medications generally

consist of topical creams and gels that are applied directly to the scalp. The most common products contain an ingredient called minoxidil (Rogaine). According to the American Academy of Dermatology, minoxidil achieves the best results when used in conjunction with other hair loss treatments. Side effects of minoxidil include scalp irritation and hair growth in adjacent areas like your forehead or face.

Prescription medications may also be used in the treatment of hair loss. The oral medication finasteride (Propecia) is prescribed for male-pattern baldness. It is taken daily to slow hair loss. Some men experience new hair growth when taking finasteride. Rare side effects of this medication include diminished sex drive and impaired sexual function. There may be a link between use of finasteride and a fast-growing type of prostate cancer.

Corticosteroids like prednisone may be prescribed for individuals with alopecia areata to reduce inflammation and suppress the immune system. Corticosteroids mimic the hormones made by your adrenal glands; when the amount of the corticosteroid is higher than would be made by your body, it reduces inflammation and suppresses the immune system. Side effects from these medications must be monitored carefully.

They include:

- glaucoma (high intraocular pressure)
- fluid retention and swelling in lower legs
- higher blood pressure
- cataracts
- high blood sugar
- increased risk for infections
- calcium loss from bones that may lead to osteoporosis
- thin skin and easy bruising
- sore throat
- hoarseness

## Procedures

Sometimes, medications aren't enough to stop hair loss. There are surgical procedures to treat baldness. Hair transplant surgery involves moving small plugs of skin, each with a few hairs, to bald parts of your scalp. This works well for people with inherited baldness since they typically lose hair on the top of the head.

Because that type of hair loss is progressive, you would need multiple surgeries over time.

In a scalp reduction, a surgeon removes part of your scalp that lacks hair. The area is closed with a piece of your scalp that has hair. Another option is a flap: your surgeon folds scalp that has hair over a bald patch. This is a type of scalp reduction.

Tissue expansion can also be used to cover bald spots. It requires two surgeries; in the first a tissue expander is placed under a part of the scalp that has hair and is next to the bald spot. After several weeks, the expander will have caused the growth of new skin cells. In the second surgery, the expander will be removed, and the new skin with hair will be placed over the bald spot.

These surgical remedies for baldness tend to be expensive and carry risks, including:

- patchy hair growth
- bleeding
- wide scars
- grafts may not take, and the surgery would need to be repeated
- infection

## Lifestyle

According to the Mayo Clinic, if you are experiencing hair loss there are things you can do to prevent further loss. (Mayo) Don't wear tight hairstyles like braids, ponytails, or buns that put too much pressure on your hair. Over time those styles permanently damage your hair follicles. Make sure your diet is nutritionally balanced and that you are getting adequate amounts of iron and protein. Try not to pull on your hair or twist/rub it.

Certain beauty regimens can actually worsen or cause hair loss. If you are currently losing hair, use a gentle baby shampoo to wash your hair. Unless you have extremely oily hair, you may consider washing your hair only every other day. Always pat the hair dry and avoid rubbing your hair.

Styling products and tools are also common culprits in hair loss. Use the following sparingly, if at all: blow dryers, heated combs, hair straighteners, coloring products, bleaching agents, perms, relaxers.

# BALDNESS 101

When it comes to baldness, people don't often think of it much beyond, "Please, oh please, let that never happen to me." Well, maybe it's time you learned a bit more about baldness: its causes, its prevalence, its treatments and how we feel about it. Hold on to your hair; you're about to learn something!

## Splitting Hairs

**35 MILLION MEN** will experience noticeable hair loss

**8.21 MILLION WOMEN** will experience noticeable hair loss

**BY AGE 35: 66% of men will experience noticeable hair loss**

**BY AGE 50: 85% of men will experience noticeable hair loss**

**BY AGE 40: 40% of women will experience noticeable hair loss**

**BY AGE 21: 1/4 MEN experience the beginning of male pattern baldness**

**100,000** AVERAGE NUMBER OF HAIR FOLLICLES ON HUMAN SCALP

**50-100** AVG NUMBER OF HAIRS LOST PER DAY BY THOSE WHO ARE NOT BALDING

## Hair Loss Disorders

<h3>Androgenetic alopecia (Hereditary thinning)</h3> <ul style="list-style-type: none"> <li>• Most common reason for hair loss</li> <li>• Occurs in both men and women</li> <li>• IN MEN: usually receding hairline</li> <li>• IN WOMEN: usually all-over thinning</li> </ul>	<h3>Alopecia areata</h3> <ul style="list-style-type: none"> <li>• Believed to be an autoimmune disease</li> <li>• Causes bald patches, often on head but also on other parts of the body</li> <li>• Those affected tend to be in good health</li> <li>• Hair typically regrows once treated</li> </ul>
<h3>Cicatricial alopecia</h3> <ul style="list-style-type: none"> <li>• Those affected tend to be in good health</li> <li>• Scar tissue forms after destruction of hair follicles, preventing regrowth</li> <li>• Treatment addresses inflammation</li> </ul>	<h3>Central centrifugal cicatricial alopecia</h3> <ul style="list-style-type: none"> <li>• Typically affects women with African ethnicity</li> <li>• Originates in center of scalp, causing a bald spot that spreads outward</li> <li>• Other symptoms include tingling, burning, pain or itching if hair loss occurs rapidly</li> </ul>

## Other Causes

Underlying medical condition (any of about 30 diseases)	Eating disorder	Stress or Surgery (severe fever/infection, flu)	Radiation or Chemo
Ringworm	Trichotillomania (compulsion to pull out hair)	Giving birth	Menopause
Stress	Weight loss	Excess of Vitamin A	Iron deficiency
Medicine (blood thinners, birth control, anti-depressants and more)	Hair products	Styling devices/accessories	Improper washing, drying, combing and handling

## Female Baldness

**19% of women are extremely concerned about hair loss**

**29% are not concerned at all**

Of those who are concerned, the most popular actions are:

<b>59%</b> Talk to the doctor	<b>57%</b> Talk to friend/family member	<b>53%</b> Change washing habits/products	<b>50%</b> Change hairstyle
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**45% OF DOCTORS RECOMMEND: JUST WAITING**

## Treatments

Hair loss treatment is a \$6 billion industry

**86%** of men taking Propecia (finasteride) see their hair loss stop

**65%** saw hair growth increase significantly

**MORE THAN 1/3 OF ALL HAIR RESTORATION SURGERIES WORLDWIDE ARE DONE IN THE U.S.**

**HAIR RESTORATION SURGERY PATIENTS BY AGE**

Under 20 - 1.4%	20-29 - 19.3%	30-39 - 30.4%	40-49 - 26.3%	50-59 - 15.4%	60+ older - 7.1%
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**1/4** men would trade 5 years of their life to prevent/reverse hair loss!

### PERSONAL POSSESSIONS men would trade for hair

STEREO	CELL PHONE	CAR	LAPTOP	TV
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**WHICH WOULD YOU RATHER HAVE: MONEY, HAIR, OR FRIENDS?**

**43.2% SAID HAIR**

# Headaches - Types & Diagnosis

Seven out of 10 people in the U.S. have at least one headache per year, according to the American College of Physicians (ACP). And it is estimated that 45 million Americans suffer from chronic headaches. Headaches are an important cause of days missed from work, costing billions of dollars in lost productivity annually.

Most headaches are not life threatening, and can be managed with medication and lifestyle changes.

The three types of headaches are: tension headaches, cluster headaches, and migraines.

## Tension Headaches

Tension headaches are the most common and they occur most frequently in women over the age of 20. A tightening of muscles in the neck and scalp causes them. Poor posture and stress are contributing factors. Tension headaches tend to be recurrent and last from several minutes to several days.



# Cluster Headaches

Cluster headaches are a type of non-throbbing vascular headache. The pain is described as severe, burning and penetrating and the headaches can last for long periods of time, known as the cluster period. The cluster period can be as long as six weeks at a time. The headaches occur every day and often more than once a day. Symptoms occur on one side of the head, behind the eye, and can be associated with tearing. It is estimated that 1 million Americans have cluster headaches. Men are most often affected.

# Migraines

Migraines are considered a neurological disease caused by the activity of nerve pathways and brain chemicals. They are a type of throbbing vascular headache that typically involves one half of the head (the word “migraine” is derived from the Greek word for “half-head”). This type of headache is often the most severe and complex.

The Migraine Research Foundation (MRF) reports that nearly one out of every four households in the United States has a migraine sufferer. They are one of the top 20 most disabling diseases in the world. Migraines have a genetic tendency: having a family member with migraines increases your risk. In adults, they occur more frequently in women (18 percent) than in men (six percent). Prior to puberty, however, migraines are more common in boys than in girls.

There are two basic types of migraine headaches: with aura and without auras. Auras are types of visual disturbances of bright spots, flashing lights, zig-zagging lines, or temporary loss of vision. These visual disturbances occur about 30 minutes before the headache and can last for 15 minutes. However, 80 percent of people with migraines do not have auras. Another kind of migraine is hemiplegic migraines. They are migraine headaches accompanied by stroke-like symptoms. Speech can be slurred, and there can be numbness and weakness of the face, arm, or leg. Hemiplegic migraines can resolve without any permanent deficits. Women with migraines who take birth control pills have an increased risk of hemiplegic migraines and strokes. Migraines have three phases: prodrome, peak headache, and postdrome. Prodrome

is the period leading up to the migraine. This is the time when auras occur. The prodrome phase may affect concentration, mood, appetite and frequent yawning may occur. Postdrome is the 24-hour period after the migraine. During this time, drowsiness can occur, and mood can vary from depression to feelings of joyfulness.

Migraines can occur before, during, or after menstrual periods. The most common food trigger for migraines is alcohol. There is uncertainty, however, as to whether chocolate is a migraine trigger. Keeping a personal food diary is a good way to track what foods may be associated with your migraines. Obesity and a sedentary lifestyle are known to increase frequency of migraines in adults and children. Maintaining optimal weight and getting proper amounts of exercise are two lifestyle changes that can help to decrease migraines.

Most headaches are not signals of a life threatening illness. You should contact your doctor immediately if headache occurs after head trauma, or is associated with drowsiness, fever, vomiting, facial numbness, slurred speech, or weakness in an arm or a leg, convulsions or confusion. Seek medical attention if you have sudden onset of a severe headache, or neck stiffness. Pressure around the eyes with a yellowish-green nasal discharge and sore throat also should be evaluated by your physician.

A headache can be a symptom of many different disease processes. The cause of a headache is determined by a complete history and physical exam. This examination should include a look at the head and neck and include a complete neurological evaluation. Medication history is important, because the sudden absence of medication and foods can cause rebound headaches. For example, heavy coffee drinkers who suddenly stop drinking coffee can experience headaches.

Tests that can evaluate headaches include:

- CBC (complete blood count to look for infection)
- sinus X-rays (if sinusitis is suspected)
- skull X-rays (if trauma is present)
- computed tomography (CT) scan or magnetic resonance imaging (MRI) of the head (in cases where stroke, trauma, or blood clots on the brain are suspected)

Treatment varies according to the cause. Most tension headaches are successfully treated with over-the-counter medications, such as aspirin, acetaminophen (Tylenol), or ibuprofen (Advil). Stress reduction, biofeedback, elimination of food triggers, exercise, and medication are common treatments for migraines and other vascular headaches.

Preventive treatment is used when headaches occur three or more times per month. Sumatriptan, a drug that acts to decrease the vascular inflammation in migraines, is commonly used for the control of migraine headaches. Other medications that can be used to prevent migraines are:

- beta blockers (propranolol, atenolol)
- verapamil (calcium channel blocker)
- methysergide maleate (helps to reduce blood vessel constriction)
- amitriptyline (antidepressant)
- valproic acid (anti-seizure medication)

## Risk Factors

A headache is any kind of pain in the head, scalp, or neck. There are many different kinds of headaches, with many different causes. Some are minor and last a few seconds or hours, while others can last days or weeks and can interfere with work or other daily activities. Some headaches may indicate immediate life-threatening problems.

Fortunately, most headaches are not a sign of a serious underlying condition and can be managed with an appropriate combination of pharmacology, environmental changes, stress management, or basic changes in diet and lifestyle.

## Types of Headache

Here are some of the most common types of headache:

### Tension Headache

Tension headaches are the most prevalent type of headache. They are characterized by dull, constant (not throbbing) pain and the sensation of tightness or pressure all around the head. They do not usually interfere with normal activities. People with tension

headaches often describe the pain as feeling like there is a “rubber band around my head.” A tension headache can last anywhere from half an hour to several days. It is caused by tension in the muscles of the scalp, neck, or face, which may be due to stress, anxiety, depression, too much exercise, or sitting or sleeping in an uncomfortable position.

### Migraine Headache

Migraine headaches are characterized by severe, throbbing or pulsating pain, often on just one side of the head, which interferes with regular activities. The exact cause of migraine is not fully understood. For a long time, the generally accepted theory was that migraine and its symptoms were caused by problems in the blood vessels of the head. Recent research, however, has shown that, while blood vessel constriction can result in pain, the cause of migraine, itself, is likely rooted in a disorder of the central nervous system.

A migraine may also be accompanied by nausea and vomiting and/or sensitivity to light or sound. Many people experience auras—unusual physical sensations like seeing colors or flashes or feeling tingling in the hands or feet—a few hours or minutes before a migraine headache begins.

### Cluster Headache

Cluster headaches are episodes of repeated severe headaches that last no more than a few hours each. Headaches usually come on during sleep and may occur one or more times every day for a period of weeks or months. Cluster-headache pain comes on very quickly and is most often felt as a sharp stabbing pain behind one eye. Patients may also experience tearing, a drooping eyelid, or reduced pupil size in one eye or congestion in one nostril. Cluster headaches are more common in young men than other age groups.

### Rebound Headaches

Also called medication-overuse headaches, rebound headaches are caused by taking headache medication too often. The body adapts to the medication, and when it wears off, headache symptoms return. Different medications have different limits on how often they may be taken.

## Sinus Headaches

Sinus headaches are pain in the face and the front of the head caused by inflammation in the sinus passages due to infection. Pain is usually worst upon waking and when leaning forward.

## Ice Cream Headaches

Ice cream headaches are caused by eating cold or frozen foods too quickly. This causes sharp pain in the forehead that goes away after a few minutes. Drinking warm liquids can quickly relieve symptoms. Ice cream headaches may also be a sign of problems with the teeth.

# Headache as a Symptom

Headaches can also be a symptom of other serious conditions, including:

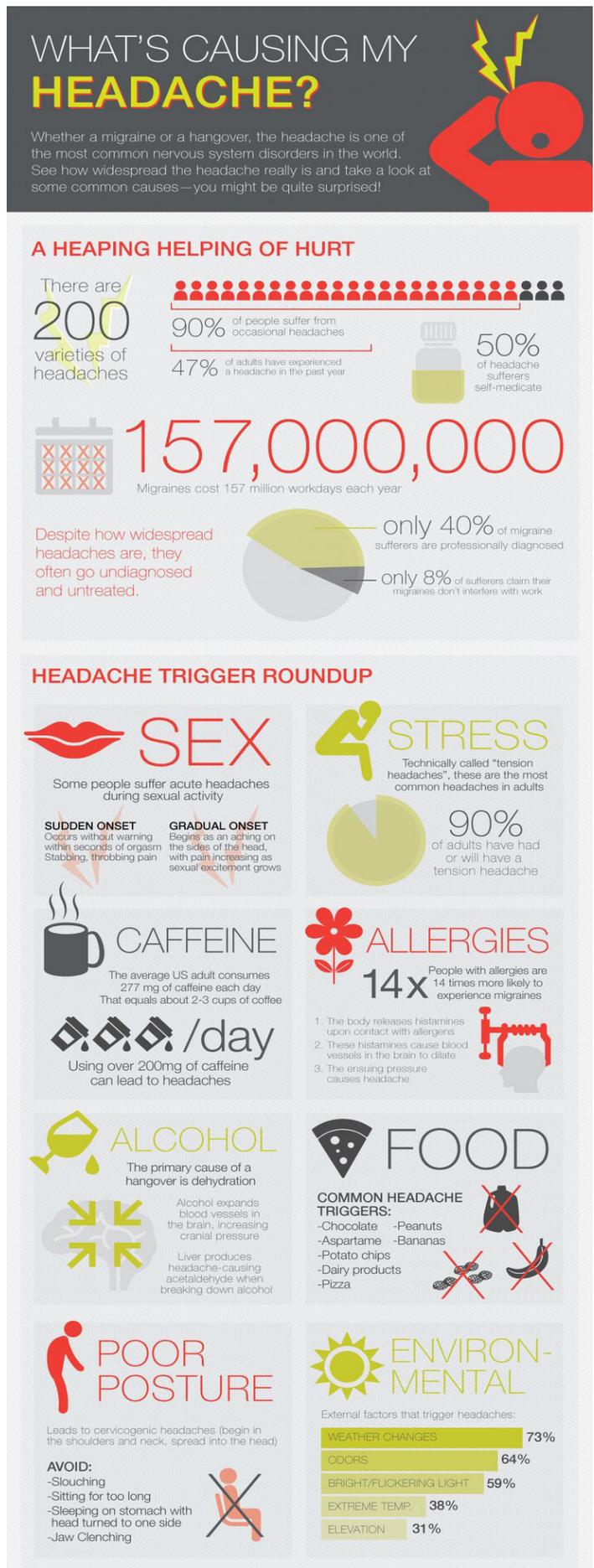
- brain tumor or aneurysm
- stroke
- concussion
- meningitis
- influenza
- encephalitis

It is uncommon for children to get headaches, so it is important to take any child's complaint of 'headache' seriously. It is important not to delay seeing your physician if you have a headache you would characterize as "the worst headache in your life" or if you have recurrent headaches. These may be a sign of a serious underlying problem. Chronic, stable headaches can be addressed when it is convenient for you to see a doctor; new onset headaches or any headache associated with vomiting, neck stiffness, slurred speech, or weakness should be addressed immediately.

# Symptoms

Migraine symptoms are caused by a complex interaction among neurotransmitter chemicals, blood vessels, and nerves in the brain. Because the brain and nervous system control all parts of the body, migraine symptoms can affect more than just the head.

Headache is the primary migraine symptom. The type of pain helps distinguish a migraine headache



from other types of headaches. Migraine pain is most often a pulsing or throbbing pain that typically occurs on only one side of the head, but can shift, and can also involve the whole head. It usually gets worse with physical exertion, such as climbing stairs. The most common site for pain is in the temple or behind the eye, but pain is sometimes felt in the back of the head, the neck, the face, the jaw, the shoulders, and upper back as well.

### **Read about other causes of headaches.**

#### Other Migraine Symptoms

Other than intense headache pain, migraine is usually accompanied by other symptoms that make working or doing everyday tasks difficult or impossible. These symptoms go away soon after headache pain ends and include:

- nausea
- vomiting
- loss of appetite
- fatigue
- dizziness
- pale or clammy skin
- blurred vision
- sensitivity to light, sound, touch, or odors
- feeling uncomfortably hot or cold
- Auras

In 15 to 20 percent of migraine sufferers, auras serve as a sort of warning sign that a migraine headache is about to occur. Aura symptoms generally last for 15 minutes to an hour. Most arise before the onset of headache symptoms, but they can also happen during or after a headache. The most common types of auras are visual. Visual auras include:

- flashing lights or dots
- wavy or jagged lines
- distorted or blurry vision
- blind spots or temporary loss of part or all of the field of vision in one or both eyes

Auras can take a variety of forms in different people. The following are other manifestations of migraine auras:

- ringing in the ears
- strange odors or tasting strange tastes
- numbness or tingling sensation
- muscle weakness
- dizziness/vertigo
- trouble speaking
- confusion

Many of these alternate aura symptoms are similar to the symptoms of stroke. If you experience any of the above symptoms and have not had the same symptoms previously before a migraine headache, you should seek medical care.

### **Read about other causes of visual aura.**

#### Anxiety and Depression

A majority of migraine sufferers do not experience auras. These people may experience anxiety, depression, and fatigue several hours before a migraine headache begins.

Find out other causes of depression and anxiety.

## **Diagnosis**

If you're seeing a doctor about headaches, here are five questions you may want to ask.

#### How much medication can I take?

If you suffer headaches frequently, medication overuse can be a big problem. If your body becomes accustomed to the medicine, you can experience rebound headaches when it wears off. In addition, some of the more powerful painkillers used for migraines and cluster headaches carry a risk of addiction. The limits on how much medication you can use vary between classes of drugs, so ask your doctor about your specific prescription.

#### What if my medication doesn't work?

Your prescribed medication should offer prompt relief of headache symptoms. If it does not, depending on the medication, you may be able to try another dose. Or your doctor may prescribe a backup medication. If your medication fails to work frequently, you may need to change to a different one.

#### Could some other disease be causing my headaches?

Primary headaches are caused by a problem directly related to the head. Secondary headaches are a symptom of another disorder. A large range of medical problems can cause headaches—everything from stroke, brain aneurysm, and meningitis to influenza, glaucoma, or an alcohol hangover. If your headache is being caused by an underlying disease, it's important to identify and treat it.

#### Are there any alternative treatments that might help?

Accupuncture, massage, and biofeedback have all

been found effective in the treatment of headache pain. Supplements of feverfew, butterbur, coenzyme Q10, riboflavin, and magnesium have also been found to reduce the severity and/or frequency of migraines. When it comes to alternative treatments, many reports of success are often anecdotal and herbal treatments can have significant side effects. Let your doctor know if you are trying alternative pharmacology for a headache; there is always a possibility it is contributing to, rather than improving, your headache symptoms.

What should make me go to the emergency room? If you suffer from frequent headaches, it can be difficult to distinguish between a “normal” headache and one that might indicate a life-threatening situation such as an aneurysm or stroke. There are subtle differences in the type and location of pain you should be aware of. Ask your doctor about symptoms that require emergency care.

## Treatment

Pain in the head region is called a headache, but there are hundreds of different kinds of headaches, depending on where the pain is located, what the pain is like, and the course of the headache. The most common kind of headaches are tension headaches. Other types of headache include sinus, menstrual, cluster, and migraine. Treatment for headache can vary, and some types of headaches respond better to certain treatments. If you experience headaches, see your doctor to make sure there is no underlying medical cause. Depending on the kind of headache you have, she may also be able to recommend one treatment over another.

## Treating Headache with Medication

Over the counter pain relievers like acetaminophen, ibuprofen, and aspirin can relieve pain associated with tension headaches. They may also lessen the severity of migraine headaches.

Prescription medications are usually recommended for migraines or cluster headaches. Triptans were the first medications targeted for migraines. These drugs include sumatriptan (Imitrex) and zolmitriptan (Zomig).

They might be used as preventive medications, or to treat symptoms. Talk with your doctor about which medications may be best for your headaches.

Drugs containing ergotamine, known as ergots, aid in muscle constriction. When blood vessels constrict, this can help reduce migraine pain. These drugs are not as widely used due to the triptans

If your doctor prescribes medication for your headaches, tell her about any other medications or supplements you are taking, to avoid any adverse interactions.

## Behavioral Treatments for Headache

Medication is not always necessary for headache relief, especially if the headaches are caused by tension. Massage, relaxation training, meditation, lying down in a dark and quiet room, and hot or cold compresses on the head and neck have all been shown to reduce headache pain.

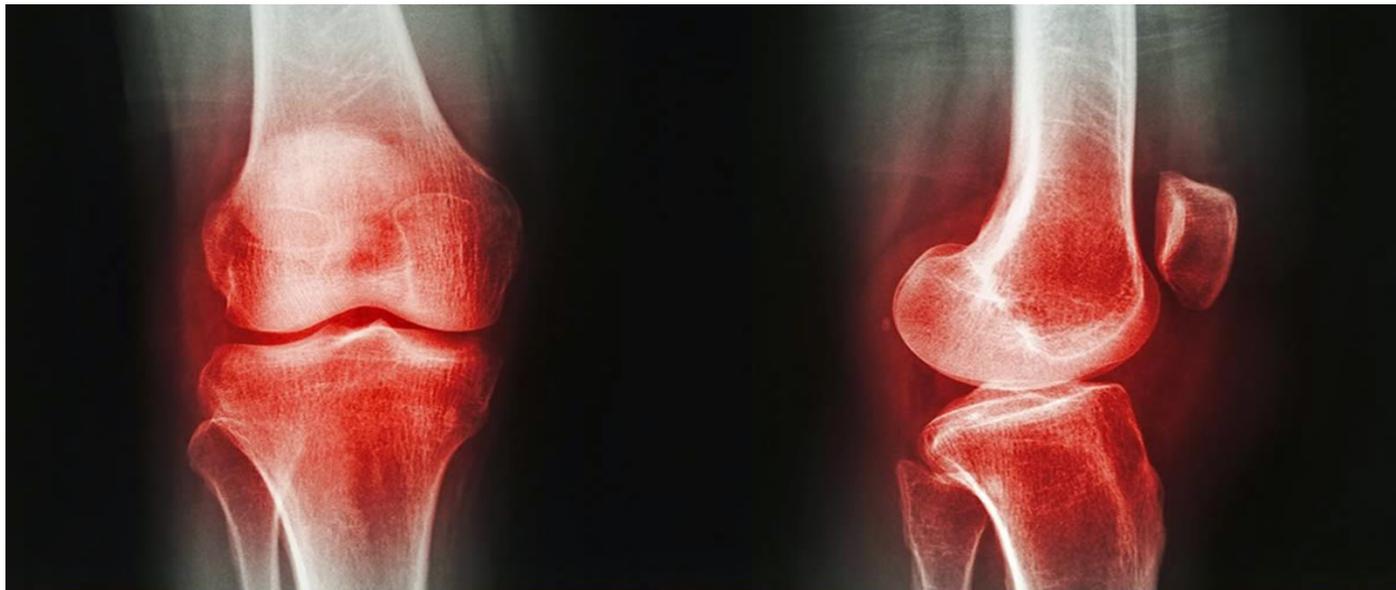
Cognitive behavioral therapy, or CBT, may be beneficial for some patients. CBT is a kind of talk therapy that enables patients to identify and deal with stressors. Stress management techniques, reframing situations and symptoms, and changing dysfunctional thought patterns are all part of CBT.

## Lifestyle Changes to Treat Headache

Changing your diet can affect your headaches. Some individuals with migraines are triggered by foods. Such trigger foods include those high in MSG, lunchmeats containing nitrates, red wine, or caffeine. If you are unsure whether any foods trigger your headaches, keep a headache diary. Note any headaches that follow ingestion of certain foods.

Make sure you are eating regularly. Skipping meals can cause low blood sugar and headaches. Stay physically active. If your headaches are caused by stress, physical activity can reduce stress.

# Joint Stiffness Causes



## Best 6 Natural Anti Inflammatory Herbs

Joints are the parts of your body where your bones meet. Joint pain refers to discomfort, aches, and soreness in any of the body's joints. Joint pain is a common complaint, and does not typically require a hospital visit. Arthritis is a frequent cause of joint pain. However, it can also be caused by other conditions or factors.

## Arthritis

There are two main forms of arthritis, both of which may cause many cases of joint pain.

### Osteoarthritis

According to the Arthritis Foundation, about 27 million individuals in the United States have this chronic condition. The knees, hips, and hands are affected most often (Arthritis Foundation, 2012). Joint pain due to osteoarthritis results from a breakdown of the cartilage that serves as a cushion and shock absorber for the joints.

The second form of arthritis is **rheumatoid arthritis**. According to the Arthritis Foundation, rheumatoid arthritis affects about 1.3 million Americans (Arthritis Foundation, 2012). It can deform and debilitate the joints over time. Rheumatoid arthritis causes pain, inflammation, and fluid buildup in the joints as the membrane that lines them is attacked by the body's immune system.

## Other Causes

Conditions other than arthritis that can cause joint pain include:

- bursitis (inflammation of the cushioning pads around joints)
- lupus
- gout
- certain infectious diseases (such as mumps, influenza, and hepatitis)
- chondromalacia of the patella (breakdown of the kneecap's cartilage)
- injury
- tendinitis (inflammation of the tendon)
- infection of the bone
- overuse
- cancer
- fibromyalgia
- osteoporosis
- sarcoidosis
- rickets
- Pain Relief at Home
- Joint Pain Caused by Arthritis

Both forms of arthritis are considered chronic conditions. Nothing can completely eliminate the joint pain associated with arthritis or keep it from returning. However, there are ways to manage the pain. It may help to:

- use topical pain relievers
- take NSAIDs (non-steroidal anti-inflammatory drugs) to reduce pain, swelling, and inflammation
- Use Cox2 medicines, they are proven to be effective.
- stay physically active and follow a fitness program focusing on moderate exercise
- stretch prior to exercising to maintain a good range of motion in your joints
- keep your body weight within a healthy range, which will lessen stress on the joints

### Joint Pain Due to Other Causes

If your pain is not caused by arthritis, you can try these general pain relief measures:

- take a nonprescription anti-inflammatory
- get a massage
- take a warm bath
- stretch frequently
- get adequate rest

## Physician Care

In some cases, your joint pain will require you to see a doctor. You should make an appointment if:

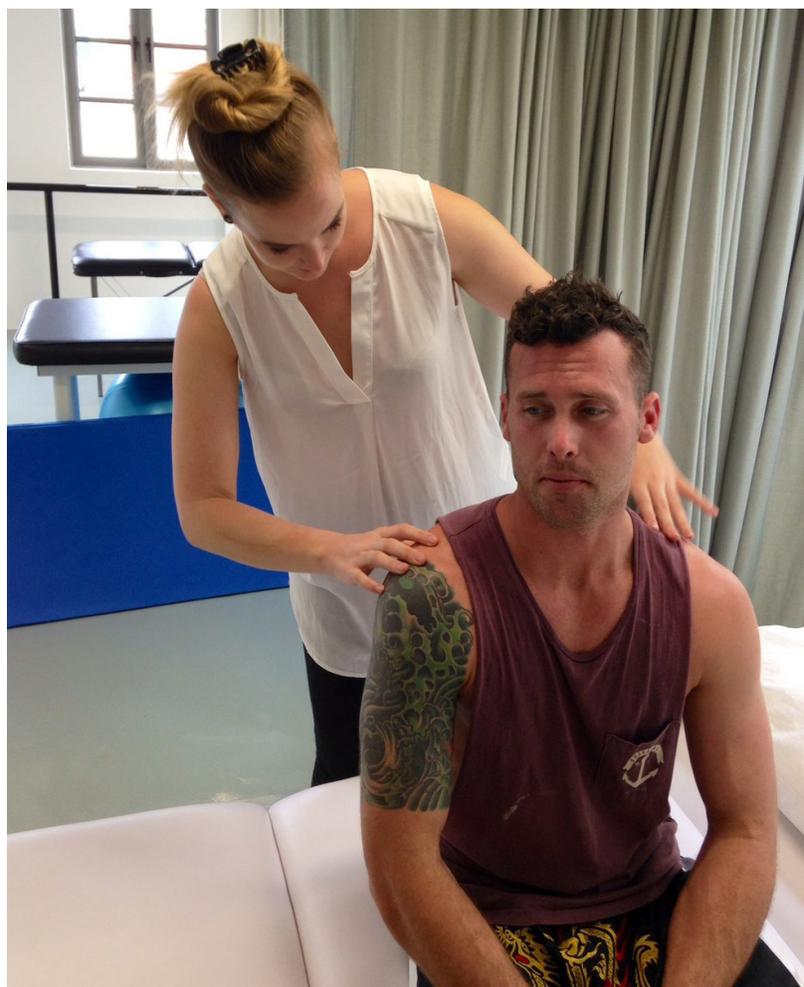
- you do not know the cause of your joint pain and are experiencing other unexplained symptoms
- the area around the joint is swollen, red, tender, or warm to the touch
- the pain persists for three days or more
- you have a fever but no other signs of the flu

Go to the emergency room if:

- the joint pain is caused by a serious injury
- the joint appears deformed
- swelling occurs suddenly
- the joint is completely immobile
- the pain is severe

Your doctor will probably perform a physical exam when you arrive at the office. He or she will also ask you a series of questions about your joint pain. This may help to narrow down the potential causes.

A joint X-ray may be needed to identify arthritis-related joint damage. If the doctor suspects there is another cause, he or she may perform a blood test to screen for certain autoimmune disorders.



# Seizures Explained

Seizures are changes in the brain's electrical activity. This can cause dramatic, noticeable symptoms or even no symptoms at all. The symptoms of a severe seizure are often widely recognized, including violent shaking and loss of control. However, mild seizures can also be a sign of a significant medical problem, so recognizing them is important. Because some seizures can lead to injury or be evidence of an underlying medical condition, it is important to seek treatment if you experience them.

## Types

Several different seizure types exist. One example is non-epileptic seizures, which result from injury. This includes a blow to the head or an illness. When the



condition is treated, the seizures go away. Partial seizures are associated with epilepsy, a condition that causes repeated seizures.

This seizure type happens on only one side of the brain. As a result, one side of the body is affected during a seizure. Other names for partial seizures include focal, Jacksonian, and temporal lobe seizures.

Generalized seizures take place on both sides of the brain. This seizure type affects both sides of the body. This includes the grand mal or tonic-clonic seizure, which is most associated with epilepsy.

Petit mal seizures are another generalized seizure example. Also known as absence seizures, these seizures have few physical symptoms but may involve a person staring off into space for several seconds. The person's attention cannot be captured during this time.

## Symptoms

You can experience both partial and generalized seizures at the same time or one can precede the other. Symptoms can last anywhere from a few seconds to 15 minutes per episode.

Some seizures occur with warning signs before the seizure takes place. These include:

- sudden feelings of fear or anxiousness
- feeling sick to your stomach
- dizziness
- changes in vision

Seizure symptoms, such as the following, take place after these symptoms and indicate a seizure in progress:

- a blackout of time, followed by confusion
- uncontrollable muscle spasms
- drooling or frothing at the mouth
- falling
- experiencing a strange taste in your mouth
- clenching teeth
- sudden, rapid eye movements
- making unusual noises, such as grunting
- losing control of bladder or bowel function
- sudden mood changes

# Causes

Seizures can stem from a number of health conditions. Anything that affects the body also may disturb the brain and lead to a seizure. Some examples include:

- alcohol withdrawal
- bites and/or stings
- brain infection, such as meningitis
- brain injury during childbirth
- brain defect present at birth
- choking
- drug abuse
- drug withdrawals
- electrolyte imbalance
- electric shock
- epilepsy
- extremely high blood pressure
- fever
- head trauma
- kidney or liver failure
- low blood glucose levels
- stroke

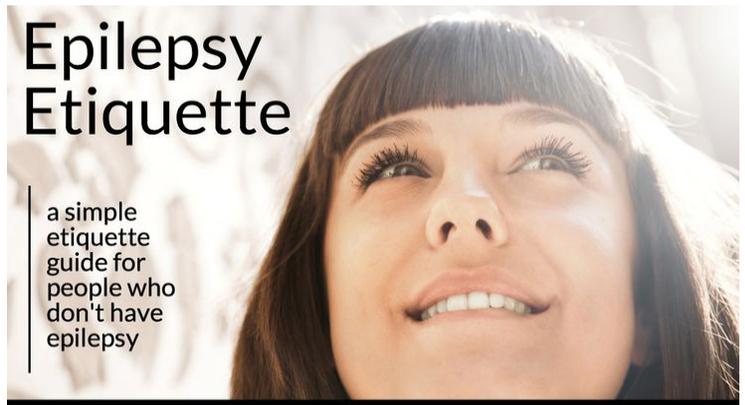
Seizures can run in families. Notify your physician if you or anyone in your family has a history of seizures. In some instances, especially with young children, there may be no known seizure cause.

# Effects

If left untreated, seizures can worsen in terms of symptoms and become progressively longer in duration.

Extremely long seizures can lead to coma or death. Seizures also can lead to injury, such as falls or trauma to the body if convulsions are involved. For this reason, it is important for those with epilepsy to wear a medical identification that helps emergency responders identify that person.

A person who experiences seizures also should notify friends and family of how to care for the person while a seizure is occurring. This includes taking steps to reduce the risk of injury like cushioning your head, loosening tight clothing, and turning you on your side if vomiting occurs.



a simple etiquette guide for people who don't have epilepsy

<p><b>Don't refer to me as an epileptic or label me.</b></p> <p>I am an individual with many interesting things about me. I also have epilepsy.</p>	<p><b>Don't assume that epilepsy is a mental condition.</b></p> <p>Epilepsy is a physical disorder that has nothing to do with mental health or illness.</p>	<p><b>Don't offer me advice on my epilepsy.</b></p> <p>I know my condition best. Unsolicited advice and tips are not helpful.</p>
<p><b>Don't presume that everyone with epilepsy has the same condition.</b></p> <p>There are many different forms of epilepsy. Seizures can differ between people.</p>	<p><b>Don't assume that living with epilepsy is easy.</b></p> <p>It's extremely hard physically and emotionally living with epilepsy.</p>	<p><b>Don't patronise me because I have epilepsy.</b></p> <p>Treat me with respect and don't talk down to me. I want to be understood without judgement or preconceived assumptions.</p>

# SEIZURES

<p><b>Do talk to me about my needs and how you can help.</b></p> <p>Feel free to discuss my epilepsy with me and find out how you can help. Listen to any instructions I have.</p>	<p><b>Don't use words like fits, spells, epis or attacks</b></p> <p>Just call them seizures. Ignorance and discrimination only make it harder so stick to the facts.</p>	<p><b>Do give me time alone after a seizure.</b></p> <p>I may be confused, disorientated and embarrassed so just leave me alone to gather myself.</p>
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# DOS

- 👍 Guide me from danger - remove harmful objects from nearby & cushion my head.
- 👍 Stay with me until I am recovered.
- 👍 Call an ambulance if the seizure lasts more than 5 minutes.
- 👍 Aid my breathing by gently placing me in the recovery position once the seizure has finished.
- 👍 Be calmly reassuring.

# DON'TS

- 👎 Restrain my movements
- 👎 Put anything in my mouth
- 👎 Move me unless I am in danger
- 👎 Attempt to bring me round
- 👎 Give me anything to eat or drink until I am recovered

# Diagnosis

Physicians can have a difficult time diagnosing seizure types. Your doctor may suggest many tests to accurately diagnose a seizure to ensure treatment recommendations that will be effective. Your doctor will consider your full medical history and the events leading up to the seizure. For example, conditions such as migraine headaches, sleep disorders, and extreme psychological stress can cause seizure-like symptoms.

Lab tests may help to further rule out other conditions that can cause seizure-like activity. These include:

- blood testing to check for electrolyte imbalances
- spinal tap to rule out infection
- toxicology screening to test for drugs, poisons, or toxins
- An electroencephalography or EEG test can help a physician diagnose a seizure. These tests measure your brain waves. Viewing brain waves during a seizure can help a physician diagnose the seizure type.
- Imaging scans such as a CT scan or MRI scan also can help by providing a clear picture of the brain, allowing your doctor to see any abnormalities like blocked blood flow or a tumor.

# Prevention

In many instances, a seizure cannot be prevented. However, maintaining a healthy lifestyle can give you the best chance at reducing your risk. This includes getting plenty of sleep, eating a healthy diet, and exercising regularly. Engaging in stress-reducing techniques may help to reduce seizures. You also should refrain from taking illegal drugs. If you are on medication for epilepsy or other medical conditions, be sure to take them as directed to prevent seizures.

# Treatment

The area around a person should be cleared during a seizure to prevent possible injury. The person should be placed on his or her side with the head cushioned. Stay with the person and contact emergency responders as soon as possible if the seizure lasts longer than two to five minutes, if the person does not awaken after the seizure, or if he or she experiences repeat seizures.

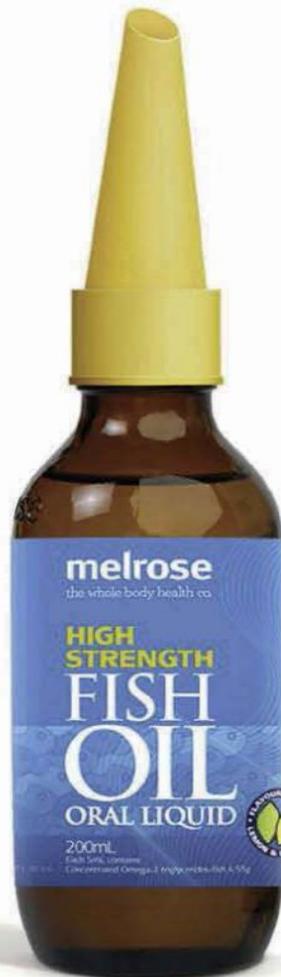
Treatments for seizures vary based upon the seizure's cause. By treating the cause of the seizures, you may be able to prevent future seizures from occurring.

If the seizures are due to epilepsy, treatments include:

- medications
- surgery to correct brain abnormalities
- nerve stimulation
- special diet, known as a ketogenic diet

With regular treatment, those with epilepsy can experience a reduction or cessation of seizure symptoms.

body  
Keep your ~~engine~~ oiled.



## And get the best out of life's journey.

It may assist blood circulation, may help increase joint mobility associated with arthritis, and may help in maintaining normal healthy cholesterol levels in healthy individuals. Melrose High Strength Fish Oil is a natural source of marine omega-3 fatty acids and has anti-inflammatory activity that may help reduce joint inflammation associated with arthritis. And it's sustainably sourced from wild fish off the coast of South America.

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Phone 1800 632 254 or [www.melrosehealth.com.au](http://www.melrosehealth.com.au)  
Use only as directed. If symptoms persist, consult your healthcare professional.

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### Hair Growth

ปรับสมดุลฮอร์โมนเพื่อเส้นผมที่แข็งแรง สำหรับผมที่อ่อนแอ บอบบาง เส้นผมที่ร่วงตามวัย



### Brain & Mood Health

ปรับสมดุลของสมอง ป้องกันความเครียด บ่อนทำลายสมอง เพิ่มอาหารสมองเพื่อความจำที่แม่นยำ ปรับฮอร์โมนสมองเพื่อป้องกันภาวะซึมเศร้า และเครียด



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### Anti-Aging Skin

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### Natural Hormone

ปรับสมดุลแห่งฮอร์โมน เพื่อคืนความอ่อนเยาว์จากภายใน Thermography ตรวจมะเร็งเต้านม โดยเทคนิคล่าสุด ไม่มีสารรังสี



### Fat Burn

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### Bone Health

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