# Managing DIZZINESS



**Balance Problems and Fainting** 

# Feeling Dizzy, Off-Balance, or Faint

Is dizziness affecting your life? Do you have trouble keeping your balance? Do you often feel faint? These problems can make normal activities like walking hard. They can also make activities such as driving dangerous. You may worry that it's "all in your head." But there are reasons why people feel dizzy or faint. Read on to learn about these problems, and how you can manage your condition.

# What's Wrong?

The feeling may come without warning. Maybe you were driving and suddenly felt faint. Or maybe you turned over in bed and the room started spinning. After a bad episode, you might even fear you've had a stroke. Rest assured, in most cases dizziness and faintness are **not** signs of serious health problems. The source of your episodes depends on your symptoms:

- Vertigo is the feeling of spinning. It may happen if the brain receives conflicting signals from the eyes, inner ear, and body.
- Dysequilibrium is the feeling of imbalance without a sense of spinning.
   It may happen if the signal path between the body and brain is disrupted.
- Syncope is losing consciousness or fainting. It may happen if there's a problem with blood flow.

#### What Can I Do?

Even if your symptoms seem minor, don't ignore them. Call your healthcare provider. Seeking help can ease symptoms and relieve fears. You don't have to "just live with it." You can manage symptoms, increase your safety, and feel better.





This booklet is not intended as a substitute for professional medical care. Only your doctor can diagnose and treat a medical problem.

©2002, 2005 The StavWell Company, 1100 Grandy Lane, San Bruno, CA 94066-3030, www.krames.com, 800-355-3052, All rights reserved Lithographed in Canada.

#### Common Causes

Everyone knows that carnival rides can make you dizzy. But what causes dizziness and faintness when you're just standing still? Vertigo is often caused by inner car problems. Fainting, however, may be due to a heart or blood vessel problem. It can be hard to find the reason behind your symptoms. Your doctor will rule out serious health problems first.



Symptoms such as dysequilibrium can have many causes. These include diabetes, anemia, head injury, and aging, 'There's also a chance that your problem's cause will remain unknown. It can be frustrating not to have a name for what's happening to you. But take comfort in knowing that you can still get help.



#### **Table of Contents**

Working wit	h Your	Healthcare Pro	oviders	pages 4-
-------------	--------	----------------	---------	----------

Your health history is the most imporant part of diagnosis and treatment. You can help your healthcare providers by preparing your history and keeping track of symptoms.

#### Inner Ear Problems ...... pages 6-11

The inner ear sends balance signals to the brain. That's why a problem in the ear can make you feel dizzy or off-balance. Problems may include changes in inner ear structures, infection, swelling, or excess fluid.

#### Heart Problems ...... pages 12-13

The brain needs oxygen-rich blood to function. The heart pumps that blood to the brain. If there is a problem with the heart, blood flow, or blood vessels, faintness may occur.

## Increasing Safety .......pages 14-15

Episodes of dizziness or fainting can cause injury. There are easy steps you can take to prepare for episodes. Then you can increase your safety as well as the safety of others.

# **Working with Your Healthcare Providers**

Because there are many causes of dizziness and fainting, your healthcare provider will need to narrow down the list. To do this, he or she will review your health history and perform an exam. This helps indicate if you have an inner ear or heart problem, or if there is another cause. Next, you may see other nurses, doctors, or specialists to begin treatment.

#### Preparing Your History

Inner ear and heart problems have distinct symptoms. That's why your health history is so important. It can tell your healthcare provider what condition you have. To prepare your history, refer to the questions below. Have you had:

to the questions below there you had.	
☐ Constant unsteadiness or dizziness?	☐ Nausea?
☐ Frequent episodes?	☐ Double or blurry vision?
How long does each one last?	☐ Episodes of fainting or blacking out
How often do they occur?	☐ Lightheadedness after getting up
☐ Dizziness that gets worse in certain	quickly or after seeing blood?
positions? Which?	☐ A series of rapid heartbeats?
☐ The feeling that you or the world around you is spinning?	☐ Episodes after standing for a while
☐ Episodes of falling to one side?	☐ A history of ear infections?
☐ Hearing changes between episodes?	☐ A history of heart disease?
☐ Fullness, pressure, or ringing in your ears?	Any over-the-counter or prescription medications, herbs, or supplements?

# **Describing Symptoms**

Telling your doctor that you feel "dizzy" isn't truly helpful because it can mean so many things. Instead, try to describe your symptoms without using the word "dizzy." Be as precise as you can. Read the words and phrases below. Check those that best fit your experience.

When I have an episode, I feel as	if I'm:
☐ On a rocking boat	☐ Lightheaded
☐ On a merry-go-round	☐ About to black out
☐ Spinning	□ Worn out
☐ Going to be sick	☐ Giddy
☐ Off-balance	□ Woozy

# **Keeping Track**

To diagnose the problem, your healthcare provider will be looking for patterns to your episodes. Patterns can show what triggers your symptoms. To track your episodes, keep a log. Or ask a family member to keep one for you. After an episode, write down what happened, what it felt like, and how long it lasted. After you begin treatment, write down any improvement in symptoms. Be sure to bring your log to each doctor's visit.

When	What I was doing	What it felt like	How long it lasted
Monday morning	I reached for a book on the top shelf.	The room was spinning.	5 seconds

# Adding It Up

The details from your history and episode log may point to a specific problem. To learn more, your healthcare provider may listen to your heart. He or she may also check your blood pressure while you are sitting, standing, and lying down. In many cases, your hearing will also be checked. Your doctor uses this information to plan the next step in treatment. This may include:

- Watching symptoms for a few weeks.
   Many cases of dizziness go away on their own.
- Prescribing medication for symptom control.
- Recommending a specialist, who can help narrow down the possible causes of your problem.



# Inner Ear Problems

# Understanding the Balance System

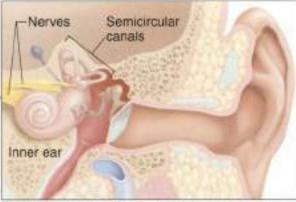
Balance is a group effort of the eyes, inner ear, joints, and muscles. They each send signals to the brain about body position and head movement. Then the brain uses this information to achieve balance. When an inner ear problem exists, the brain may receive conflicting signals. This can cause vertigo.



The brain interprets signals relayed from nerves throughout the body.



The eye sends visual data.



The inner ear sends signals related to sound and body position.

# The Inner Ear Sends Signals

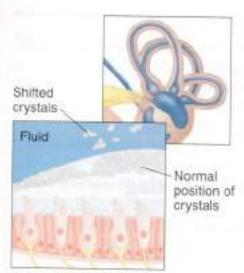
Inside the inner ear are three semicircular canals. Each canal contains tiny hairs, crystals, and fluid. These structures help the canals sense up-and-down, forward and backward, and side-to-side motion. Nerves carry the signals from the canals to the brain.

# The Brain Interprets Signals

Signals from throughout the body travel to the brain. Once the signals arrive, the brain decides what they mean. Sometimes signals conflict. Have you ever sat on a stopped train and watched a moving train go by? When that happens, your eyes signal that you're moving. But your inner ear and body signal that you're still. The brain weighs conflicting data such as this and decides what is true. The result is balance.



Joints and muscles signal body position.



# Crystals can float into the wrong part of the canal.

# Benign Positional Vertigo (BPV)

This is the most common cause of vertigo. HPV (also called BPPV) results when crystals in the canals shift into the wrong position. Episodes usually occur when the head is moved in a certain way. This can happen when turning in bed, bending, or looking up. BPV:

- Causes episodes of vertigo that last for seconds.
   These episodes can occur several times a day, depending on body position.
- · Doesn't cause hearing loss.
- Often goes away on its own, but may go away sooner with treatment.



An infection can cause nerves and canals to swell.

# Infection or Inflammation

Sometimes the semicircular canals swell and send incorrect balance signals. This problem may be caused by a viral infection. Depending on the cause, hearing can be affected (labyrinthitis) or can remain normal (neuronitis). Infection or inflammation:

- Causes episodes of vertigo that last for hours or days. The first episode is usually the worst.
- · Can cause hearing loss.
- Often goes away on its own, but may go away sooner with treatment.



Increased fluid in the canals causes swelling.

## Meniere's Disease

Although uncommon, this condition happens when there is too much fluid in the canals. This causes increased pressure and swelling, and affects balance and hearing signals. Meniere's disease:

- Causes episodes of vertigo that last for hours.
- Causes fluctuating hearing problems, usually in one ear, that worsen over time.
- · Causes buzzing or ringing in the ears (tinnitus).
- · Causes a feeling of fullness or pressure in the ear.
- May go away on its own. However, vertigo, hearing loss, tinnitus, and ear fullness can last a lifetime.

# Working with a Specialist

After your first exam, you may be referred to a specialist. An otolaryngologist is a doctor who specializes in disorders of the ear, nose, and throat (also called an ENT). A neurologist is a doctor who specializes in disorders of the brain and nervous system. Either of these doctors may help with diagnosis and treatment.

#### **Exam and History**

The ENT or neurologist will perform an exam. This is to look for clues to the cause of your dizziness. Your doctor will also go over your medical history. Be sure to bring your episode log with you to each visit.

# Hearing Testing

In most cases, you will be referred for hearing testing. This is because the nerve that sends balance signals also sends hearing signals. A problem that affects balance can also affect hearing.



The ENT will look inside your ear for redness or swelling.



The audiologist will check for hearing changes in one or both ears.

#### Other Tests

Your doctor may recommend more than one kind of test. The following tests are painless, but may cause dizziness in some cases.

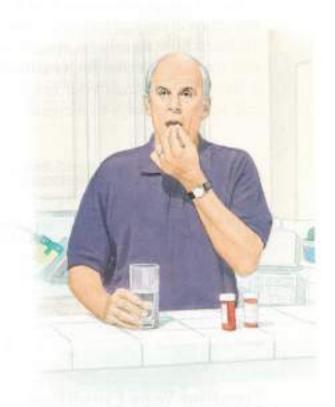
- Magnetic resonance imaging (MRI) creates images of the ear or head. A magnetic field and contrast medium are used to produce the image.
- Electronystagmography (ENG) records eye movement. Small electrodes are placed on the skin around the eyes. Then the ear is filled with warm or cold water.
- Rotation tests show the relationship between the inner ear and the eyes.
   You may be asked to wear special goggles or sit in a computerized chair.
- Posturography tests your standing balance under different conditions. You will stand on a platform that measures shifts in your body weight.

#### Medications

Although medications can't cure your problem, they can help control symptoms. Your doctor may prescribe medications for a few weeks and then taper them off. Some medications can:

- Limit conflicting balance signals. These medications are often in pill form.
- Ease nausea. Suppositories, pills, or shots may be used to reduce vomiting.
- Reduce pressure in the canals. Diaretics can be used to treat Meniere's disease. These medications help rid the body of excess fluid.
- Ease other symptoms. Other medications can help ease depression and anxiety caused by living with dizziness or fainting.

Remember, if you have side effects, contact your healthcare provider right away.



#### If You Have Meniere's Disease

Meniere's disease is a balance disorder that often causes hearing loss. For this reason, hearing tests are used for diagnosis. Although Meniere's can be a lifelong problem, diet changes can lessen symptoms. For severe cases that don't respond to other treatment, surgery is an option.

#### Diet

Meniere's disease is caused by excess fluid in the canals, Eating sodium (salt) causes the body to hold even more fluid. That's why removing all salt from your diet may help. The best way to do this is to eat only fresh food. Avoid packaged, canned, or dried foods. They all have added salt.

#### Surgery

There are surgical procedures that may lessen or stop episodes of vertigo. While surgery can reduce dizziness, it cannot cure hearing loss. In some cases, surgery worsens hearing.



Season fresh foods with herbs and spices instead of sait.

# Starting Rehabilitation

An inner ear problem can knock out part of the balance system.

But you still have your eyes, joints, and muscles working for you.

To learn how to rely on specific parts of your balance system, you may be referred for **vestibular rehabilitation therapy.**A therapist can treat your condition, teach special exercises, and show you ways to increase your safety.

# Checking Eye Movement

During your visit, the therapist will check for **nystagmus**. This is an automatic, jumpy eye movement. Nystagmus in certain positions can indicate an inner ear problem. It can even show which semicircular canal is affected. The therapist will watch your eyes while you move into different positions. In some cases, special goggles or lenses are used to record eye movement.

# **Treating Your Condition**

Before treatment, you may be asked to stop taking medications that limit conflicting balance signals. This helps your body respond to therapy. After evaluating your problem, your therapist will make your treatment plan. Treatment can include:

- Canalith repositioning, a series of guided head and body movements.
   It helps move crystals, easing BPV symptoms.
- Habituation exercises to retrain your balance system. The therapist will teach you how to do these exercises at home.
- Gaze stabilization exercises to retrain the eyes to stay in focus while the head moves. This helps ease dysequilibrium.
- Gait and balance training, which includes standing and walking on different surfaces. The therapist can teach you how to maintain balance and prevent falls.



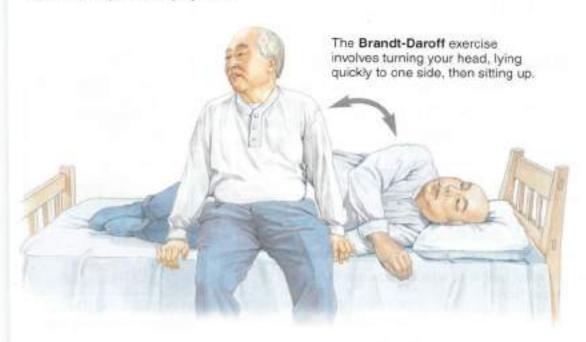
Eye movement can be recorded and displayed using special goggles.



During canalith repositioning, the therapist supports the head and gently guides movement.

# **Doing Habituation Exercises**

The therapist will teach exercises suited to your condition. Most movements are simple and can be done in a bedroom. Habituation exercises will make you dizzy at first. Just remind yourself that symptoms probably will last for only a minute. If you keep doing the exercises, they will help lessen your dizziness. Then, when you perform a similar movement in daily life, it is less likely to provoke symptoms.



# Getting Back into Action

One goal of rehabilitation is to help you resume normal activity. This includes walking, driving—even playing sports. Dizziness doesn't have to keep you from exercising. Start with activities that don't trigger episodes. When you feel more confident, ease into more challenging activities. Try these tips:

- · Always exercise with a partner.
- · Stop if you have nausea or faintness.
- Walk on a treadmill, holding on to the handles for support.
- Use a ball machine for sports like tennis until you're ready for a live game. This way you know where to expect the ball.
- Don't give up. With time, most people can return to activities and sports.

#### When Activity Is Difficult

Everyone's level of activity is different. If your symptoms are so bad that they prevent activity, ask your healthcare provider about safety devices. You may find a cane or walker useful. You may also try tracing a finger against the side of the wall to guide you while walking.

# Heart Problems

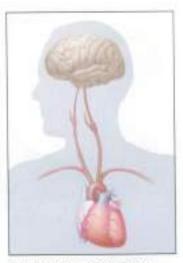
# **Understanding Syncope**

**Syncope**, or fainting, is a temporary loss of consciousness and posture. Fainting happens when the brain doesn't get enough oxygen-rich blood. It is usually not serious, but can be a sign of a heart problem. If you often feel faint, you may be referred to a **cardiologist** (heart specialist). He or she will work with you to prevent or reduce fainting.

#### The Heart Nourishes the Brain

The heart is a muscle. It pumps oxygen-rich blood to the brain. The brain needs oxygen to work properly. If it doesn't get enough oxygen, fainting can occur. This can happen if your heart rate is too slow or too fast. Fainting can be caused by:

- Strong feelings of stress, anxiety, or fear. These may lower your heart rate and blood pressure (vasovagal syncope).
- Sitting or standing too quickly, or standing too long.
   These actions cause blood to pool in the legs so it cannot reach the brain (orthostatic hypotension).
- A heart valve problem, which decreases the blood flow to the brain.



Oxygen-rich blood flows from the heart to the brain.

# Working with Your Doctor

The doctor will check your blood pressure in different positions. He or she will also listen to your heart and check your reflexes. In some cases, one or more of the following tests are done:

- Electrocardiogram (ECG or EKG) records heart rate. Electrodes are placed on the chest and shoulders.
- Event monitoring records heart rate over a span of time. A device with electrodes is worn on the body.
- Echocardiogram shows images of the beating heart on a video screen.
- Tilt table testing can show if body position affects heart rate and blood pressure. The test is done while you lie on a special moving table.



A stress ECG records heart rate while you're exercising on a treadmill.

#### **Preventing Fainting**

You can't always predict when faintness will occur. But you can prepare for episodes and learn to reduce the risk of any injury. Making certain changes and taking medications properly helps increase your safety.

#### Making Small Changes

Your healthcare provider may suggest the following:

- Don't stand for long, especially when it's hot. Shop when checkout lines are short.
- Wear specially prescribed stockings to keep blood from pooling in your legs.
- Get up slowly after you have been lying down. Sit for a moment before standing.
- · Increase the amount of salt in your diet.
- Drink water often, especially when exercising and during hot weather.

#### **Taking Medications**

You may be prescribed medication to help prevent fainting. Your doctor may also change or reduce medications that you are already taking. This is because medications for other problems may be causing faintness. For your safety:

- Tell your doctor about any medications you are currently taking. This includes any herbs or supplements.
- Tell your doctor when you start taking a new medication, especially blood pressure pills.
- Always take medication as directed.

#### When You Feel Faint

It's important to manage faintness when it happens. Don't try to "tough out" your symptoms. Listen to your body and respond. Watch for weakness, nausea, and dimmed vision. As soon as you notice symptoms, try to drink some water. Then lie down with your feet above the level of your heart. If you can't lie down, sit down with your head between your knees.



# **Increasing Safety**

The biggest problem with dizziness is that it can cause you to fall and hurt yourself. Accidents can lead to pain, broken bones, and fear of future falls. If you're driving, an episode can harm you as well as others. You can protect yourself by preparing for episodes. Simple changes can increase your safety at home and wherever you go.

#### At Home

You can make your home safer and more comfortable. Start with a walk around the rooms. Is the space you use most on the ground floor? Are hallways and stairs well lit? Are walkways clear and uncluttered?

#### Lighting

Keep all areas well lit. This helps your eyes send the right signals to the brain. It also makes you less likely to trip and fall. During an episode, you may find that bright lights make symptoms worse. If so, dim the lights or lie in a dark room until the dizziness passes. Then turn the lights back to their normal level. Remember to:

- · Keep a flashlight by the bed.
- · Place nightlights in bathrooms and hallways.
- Replace burned-out bulbs, or have someone replace them for you.

#### Fall Prevention

To reduce your risk of falling:

- Rise out of a bed or chair slowly.
- Wear low-heeled shoes that fit properly and have slip-resistant soles.
- · Remove all throw rugs.
- Use handrails on stairs. Have handrails installed or adjusted if needed.
- Install grab bars in the bathroom.
   Don't use towel racks for balance.
- Use a shower stool. Also, apply adhesive strips to the shower or tub floor.



# Away from Home

Severe episodes of dizziness may make you afraid to leave home. Take comfort in knowing that with a little time and preparation, you can get around safely.

#### Going Out

Leaving the safety of your home may be challenging. But doing so can lift your spirits and help you return to normal activities. To prepare for going out:

- · Bring a cane or walking aid if needed.
- Give yourself plenty of time in case a dizziness episode begins. This helps reduce stress.
- Be patient and accept your feelings.
   If an activity like walking through a crowded shop causes you stress, you may not be ready for it yet.

#### Driving

If you become dizzy or disoriented while driving, you could hurt yourself and others. That's why it's best to avoid driving until symptoms subside. In some cases, your license may be temporarily held until it's safe for you to drive again. For safety:

- · Ask a friend to drive for you.
- · Take public transportation.
- Walk to stores and other places when you can.

# Asking for Help

It takes strength to ask for help. Many people don't want to admit that they're overwhelmed. But keep this in mind: sharing your needs with another person helps them feel involved. Don't be afraid to ask for help running errands, cooking meals, and doing exercise. Whether it's a friend, loved one, neighbor, or stranger on the street, a little help can make a world of difference.

Ask for help if a certain movement, such as reaching for a high shelf, triggers your symptoms.



# **Regaining Your Life**

Dizziness or fainting can put your life on hold. By seeking help, you're taking the first step in getting back to normal. In many cases, symptoms will lessen over time. For now, you can take care of yourself and be prepared if symptoms return. Then you can feel more confident continuing with your life.

#### Resources

- The Vestibular Disorders Association (VEDA)
   800-837-8428
   www.vestibular.org
- American Academy of Otolaryngology www.entnet.org
- American Heart Association 800-242-8721 www.americanheart.org



#### Consultants:

Janice D. Janas, MD, Otolaryngology Alan B. Schwartz, MD, MSEE, Electrophysiology

#### With contributions by:

Rosemane Camurella, MD, MPH. Family Medicine Joyce Chadderdon, PT. Vostibular Rehabilitation Lawrence M. Eng. AuD, Audiology Brud J. Tinkelman, MD, Neurology Perc Weber, MD, Orolaryngology

