

MENIERE'S SYNDROME

The ear is a complex and delicate organ. It collects sound waves so you can hear the world around you. The ear also has a second function—it helps you keep your balance. Your ear can be divided into three parts. The outer ear and the middle ear help collect and amplify sound. The inner ear converts sound waves to messages that are sent to the brain. The inner ear also senses the movement and position of your head and body so you can maintain your balance and see clearly, even when you change positions.

A LOOK AT YOUR INNER EAR

The hearing and balance canals are made up of hard bone lined by membrane. The canals are filled with a fluid called endolymph. Sound waves cause vibrations of endolymph in the hearing canal, creating sound messages. Movement of endolymph in the balance canals creates messages about position and movement of your body. Both types of messages travel along the hearing and balance nerve to the brain. The level of endolymph in the inner ear is maintained by a fingerlike organ called the endolymphatic sac. The endolymphatic sac keeps inner ear fluid at a constant level.

WHAT GOES WRONG?

When you have Meniere's disease, too much endolymph backs up in the canals, a condition called endolymphatic hydrops. Extra fluid causes pressure build up, so the canals swell and can't work right. This leads to problems with the ear's hearing and balance systems. Pressure in the hearing canal interferes with sound signals to the brain. Signals are blocked (hearing loss), or signals get sent that make you hear ringing or buzzing (tinnitus). Pressure in the balance canals causes the balance system to malfunction and make the brain think that you're spinning in circles (vertigo).

MANAGING MENIERE'S

In addition to changes in your diet, certain other changes may help you manage Meniere's. Some of these changes are minor. Others require more dedication. They include cutting down on stress and avoiding certain substances. Special devices may also help make you more comfortable and improve your hearing. Ask your doctor whether any of these lifestyle changes are appropriate for you.

REDUCE YOUR STRESS

Stress doesn't cause Meniere's, but it may trigger Meniere's symptoms or

make them worse. Ask your doctor about stress reduction techniques. The tips below can help you get started.

1. Know what makes you feel tense and how your body responds to tension. “Listen” to your body for signs such as headaches, stomach upsets, tensed muscles, clenched teeth, or other symptoms that tell you you’re under stress.
2. Talk to your doctor about starting a regular exercise program that includes an aerobic activity (such as walking, jogging, bicycling, or swimming). Exercise is a great stress reducer.
3. Take time out from your daily errands and chores to do things you enjoy and find relaxing. Don’t look at relaxation time as “wasted time”, but as an investment in your health.
4. Ask your doctor about visualization techniques, deep-breathing exercise, stretching, yoga, and biofeedback. These are all methods that may help you reduce stress in your life.

AVOID CERTAIN SUBSTANCES

Certain substances affect how your body regulates fluid, and can make Meniere’s worse. These include:

- Caffeine, which constricts your blood vessels and reduces blood flow to your inner ear. Avoid drinks and foods (such as coffee, cola, and chocolate) that are high in caffeine.
- Alcohol, which can disturb your sense of balance. Avoid alcohol, or limit it to very small amounts.
- Smoking, which constricts blood vessels, weakens your immune system, and harms your general health. By affecting your circulation, smoking may contribute to Meniere’s symptoms. Quitting smoking is always a good idea.

EXPLORE HELPFUL DEVICES

If Meniere’s has permanently affected your hearing, a hearing aid may help you hear better. Hearing aids come in different models, and one can be chosen that suits your needs and lifestyle. In addition, certain devices can help cover up (mask) annoying and bothersome tinnitus. Try a fan or a radio tuned to music or static, or purchase a white-noise device specifically

designed to create pleasant background noise. A masking device that generates constant white noise can be worn directly in the ear. Your doctor can give you more information and recommendations about hearing aids, white-noise devices, and masking devices.

PAY ATTENTION TO YOUR BODY

People with Meniere's sometimes find that such things as bright lights, loud noises, or very low sounds bring on symptoms or make coping with an illness such as Meniere's not easy. But, with some changes, you can live a full and normal life. Learn as much as you can about how to deal with attacks and how to help yourself between attacks. Also, educate the people around you. Talk to your employer, friends, and family. The more they know about Meniere's, the easier it will be for them to understand what you're going through and to offer help when they can.

YOUR DAILY LIFE

Meniere's unpredictable and disruptive symptoms will probably mean having to make adjustments in your daily life. Keep these strategies in mind:

At work

1. If Meniere's interferes with your job, think about changes that would help. Then talk to your employer. If changes can't be made, ask whether moving to a better-suited position within the company is an option.

At home

1. If your balance is unsteady, move sharp, breakable objects out of the way. Arrange stable, sturdy objects so that you can use them for support.

In the car

1. If you have attacks that occur without warning, driving may be dangerous for you. Explore public or private transportation options. Low cost transportation is often available for those who need it.

WHAT TO DO DURING AN ATTACK

When you have a vertigo attack or feel one starting:

- Lie down on a firm surface in a darkened room.

1. Stay as still as possible.
2. Keep your eyes open. It may help to stare at a stationary object.
3. Take any medications that you have for an attack.
4. Don't get up until the spinning passes. When you do get up, do so slowly.
5. Find a comfortable place to rest or sleep for several hours while you regain your sense of balance.

EXERCISE

A healthy body can help you better cope with the challenges of Meniere's. In general, eat right and get plenty of sleep. And keep active by exercising regularly. This can help loosen and strengthen your muscles and keep your body as healthy as possible. If you need them, your doctor may also recommend vestibular (balance) exercises. These exercises may be taught in your doctor's office or by a physical therapist. They're designed to help improve your balance and coordination and lessen dizziness. The following are Cawthorne Balance Exercises, which will aid in:

1. Loosening up the muscles of the neck and shoulder to overcome the protective muscular spasm and tendency to move in one place.
2. To train movement of the eyes independent of the head.
3. To practice balancing under everyday conditions with special attention to developing the use of the eyes and muscle and joint sense.
4. To practice head movements that cause giddiness and thus gradually overcome the disability.
5. To become accustomed to moving about naturally both in daylight and in the dark.
6. Generally, to encourage the restoration of self-confidence and easy, spontaneous movement.

CAWTHORNE BALANCE EXERCISES

A. In bed

1. Eye movements; at first slow, then quick
 - a. Up and down
 - b. Side to side
 - c. Focusing on finger moving from 3 feet to 1 foot away from face.

2. Head movements; at first slow, then quick--later with eyes closed
 - a. Bending forwards and backwards
 - b. Turning from side to side

B. Sitting

3. Shoulder shrugging and circling
4. Bending over and picking up objects from the floor

C. Standing. Repeat steps 1,2 and 3 then:

5. Throwing ball from hand to hand (above eye level)
6. Throwing ball from hand to hand under knee.
7. Changing from sitting to standing and turning around in between

D. Moving About

8. Walking across room with eyes open and then closed
9. Walking up and down slope with eyes open and then closed
10. Walking up and down steps with eyes open and then closed
11. Any game involving stooping and/or stretching and aiming such as bowling and shuffleboard

The exercise in the scheme outlined above can be varied or extended according to need. The order in which the exercises are carried out should not be varied, however.

YOUR EMOTIONS

While learning to cope with chronic illness, you may find you have periods of depression, frustration, and fear. These are all normal feelings. Give yourself time to adjust. But don't give in to self-pity. You can live and cope with Meniere's. Stay active—don't let Meniere's stop you from living a full, enjoyable life. Stay close to family and friends. Tell them how you're feeling and how they can help. Also, spend time with them doing things you enjoy.

NOTES TO FAMILY AND FRIENDS

Having a loved one with a chronic illness can be challenging. Your loved one will have to make changes in his or her life. Your own life may change as well. To make transitions easier, try the tips below:

1. **Communicate.** Talk about your feelings and concerns, and encourage your loved one to do the same. The more you communicate, the fewer misunderstandings you're likely to have.
2. **Support.** Offer your loved one the emotional and physical support he or she needs. But avoid being overprotective or controlling.
3. **Learn.** Read and ask as much as you can about Meniere's disease. Understanding will help you better cope with your loved one's illness.

DIET

A common way to combat Meniere's is to eat less salt. Salt contains sodium, which makes your body hold excess fluid. Because Meniere's is due to fluid buildup in the inner ear, eating less sodium may help relieve your symptoms. Your doctor can tell you how many milligrams (mg) of sodium are okay to eat each day. A common recommendation is to limit sodium to no more than 2000mg (the amount in about one teaspoon of table salt) each day.

FURSTENBERG DIET

1. Fluids not restricted; however, excessive quantities of water discouraged.
2. Proteins unrestricted or forced; calories permitted as indicated; sodium allowance low.
3. All foods to be prepared and served without salt.

4. The following foods to be eaten daily:
 - a. eggs, meat, fish, and fowl as desired
 - b. bread as desired
 - c. cereal—one of the following: farina, oatmeal, rice, puffed wheat
 - d. potato and at least one of the following: macaroni, spaghetti, rice, corn, plums, prunes, or cranberries
 - e. any fruit and any vegetable not listed below
 - f. milk as desired
 - g. butter, cream, honey, jellies, jam, sugar, and candy (except chocolate) as desired

5. The following are foods to be avoided at all times:
 - a. salted meats and fish
 - b. salted bread, crackers and butter prepared with salt
 - c. salted carrots, spinach, endive, cow peas, clams, oysters, condensed milk, olives, raisins and caviar

6. The following foods may be taken no more than twice weekly:

Chard, kohlrabi, pumpkin, watercress, beets, cauliflower, turnips, rutabagas, radishes, celery, cantaloupe, strawberries, limes, peaches, figs, dates, muskmelon, dried currants, dried coconut, buttermilk, peanuts, horseradish, and mustard.

MEDICATIONS

If your symptoms are severe, your practitioner may also prescribe medications to help control them. If your episodes of vertigo are significant enough to effect your daily activities, you may be prescribed Meclizine or Antivert which generally helps to control these symptoms. In the event that your exacerbations are both severe and frequent, your practitioner may also consider the addition of a diuretic (a “water pill”) which may also help to curb both the number of exacerbations as well as the symptoms associated with them.