# **Health Facts for You**

## **UWHealth**

### Presbyopia

The eye, like a camera, needs to adjust its focus for the distance of different objects. If you are watching a TV placed 12 feet away, your eyes' focus is set for 12 feet. Now, if you begin reading a newspaper held at 16 inches, your eyes' focus must adjust for the object distance of 16 inches. If your eyes remain focused for 12 feet, the newspaper held in your hand will be blurred and you won't be able to read it.

The focus system of our eyes is made up of two parts. The first is the cornea, the clear front-window of the eye. It supplies about 75% of the eye's focus power. The second is the clear lens which is found just behind the pupil. The clear lens supplies about 25% of the eye's focus power. The lens is contained within an elastic bag called the lens capsule, which contracts or expands to thicken or thin the lens to focus on the near objects. The lens is very supple, and it is easy to change its shape.

#### Presbyopia

Presbyopia occurs when an eye can no longer adjust its focus for short object distances. The lens has become less supple with age. It is one of the most common reasons why people get an eye exam and often the most common reason for getting glasses. Presbyopia is often noticed in your early to mid-forties. Most people feel that it happens all of a sudden. In fact, it happens very slowly over many years.

#### **Symptoms**

- Eyestrain
- Tired eyes
- Blurred vision while doing fine, detailed work up close.
- A need to hold objects further away in order to make them clear.

In the early stages, some may have clear vision up close but will notice blurry distance vision right after reading for a long time that may take a few minutes to clear. Some people may notice blurring of close vision first thing in the morning, which goes away after a few minutes. Others will have good close vision early in the day but will notice more blur as the day goes on.

#### Treatment

The most common treatment is to get reading glasses or multifocal lenses. The lens power of the reading glasses makes up for the lost focusing power.

You will find reading glasses work great for the close vision. But, when you look up and no longer need the extra focus power, they will blur out your distance vision. You will need to remove your glasses. This means you need to handle your glasses a lot.

Reading glasses can be made in regular eyeglass frames or in halfeyes. Half-eyes are made to be worn halfway down the nose and enable you to see in the distance by looking over the top of the glasses. Over-thecounter reading glasses can be purchased without a prescription in many drug stores. These can help if you don't need glasses for your distance vision and both eyes require the same lens power.

Multifocal glasses can get rid of the need to take the glasses on and off. The eyeglass lenses are divided into two or more parts. You simply look through the top part to see in the distance and look through the bottom part to see up close. These are useful if you need glasses for your distance vision as well as the near vision. These can come as bifocals, trifocals, or progressive add lenses (also called no-line bifocals). Your doctor or optician can help you decide which type is right for you.

#### **Contact Lenses and Presbyopia**

There is no need to quit wearing contacts. You have three options. First, wear reading glasses over the contact lenses. Second, try bifocal contact lenses. They're not for everyone but there are many designs, and one may work for you.

Third, try monovision. With this technique, a contact lens is used to set the focus for one eye for the distance while another contact lens is used to set the focus of the other eye for near. Again, this is not for everyone but seems to work about 50% of the time.

If you are nearsighted, you have one other treatment method. Simply remove your glasses for reading. The eye's focus for nearsighted is already set for up close. Therefore, you can see to read clearly without having to get other glasses. Many nearsighted people who have needed glasses for distance for years are happy to find out that they can remove their glasses for reading when others their age are having to put glasses on to read.

#### Myths

Myth: With the right eye exercise, presbyopia can be cured without the use of reading glasses. False.

Truth: Presbyopia is caused by aging of tissue in the lens and cannot be fixed by eye exercises. Myth: The use of reading glasses will speed up the loss of focus.

Truth: Aging is the only thing that causes further loss.

Myth: A lot of reading will cause presbyopia to occur at an earlier age.

Truth: Again; the only thing that causes presbyopia is the aging of tissue in the lens. Because of genetic differences, presbyopia will develop at different rates. For example, you may need bifocals at age 43 and your spouse may need them at age 41 and a friend may need them at age 45. This is due to genetics. Myth: Using over-the-counter reading glasses will harm your eyes.

Truth: Glasses will not harm your eyes. Even if the prescription is wrong, the worst that can happen is headache or eyestrain that will go away after taking off the glasses. Over-the-counter reading glasses cannot be used by each person, but if your prescription works with them, they can be an easy and cheaper option than prescription glasses.

Your health care team may have given you this information as part of your care. If so, please use it and call if you have any questions. If this information was not given to you as part of your care, please check with your doctor. This is not medical advice. This is not to be used for diagnosis or treatment of any medical condition. Because each person's health needs are different, you should talk with your doctor or others on your health care team when using this information. If you have an emergency, please call 911. Copyright © 12/2023 University of Wisconsin Hospital and Clinics Authority, All rights reserved. Produced by the Department of Nursing. HF#5038