

A Guide to Regaining Visual Independence

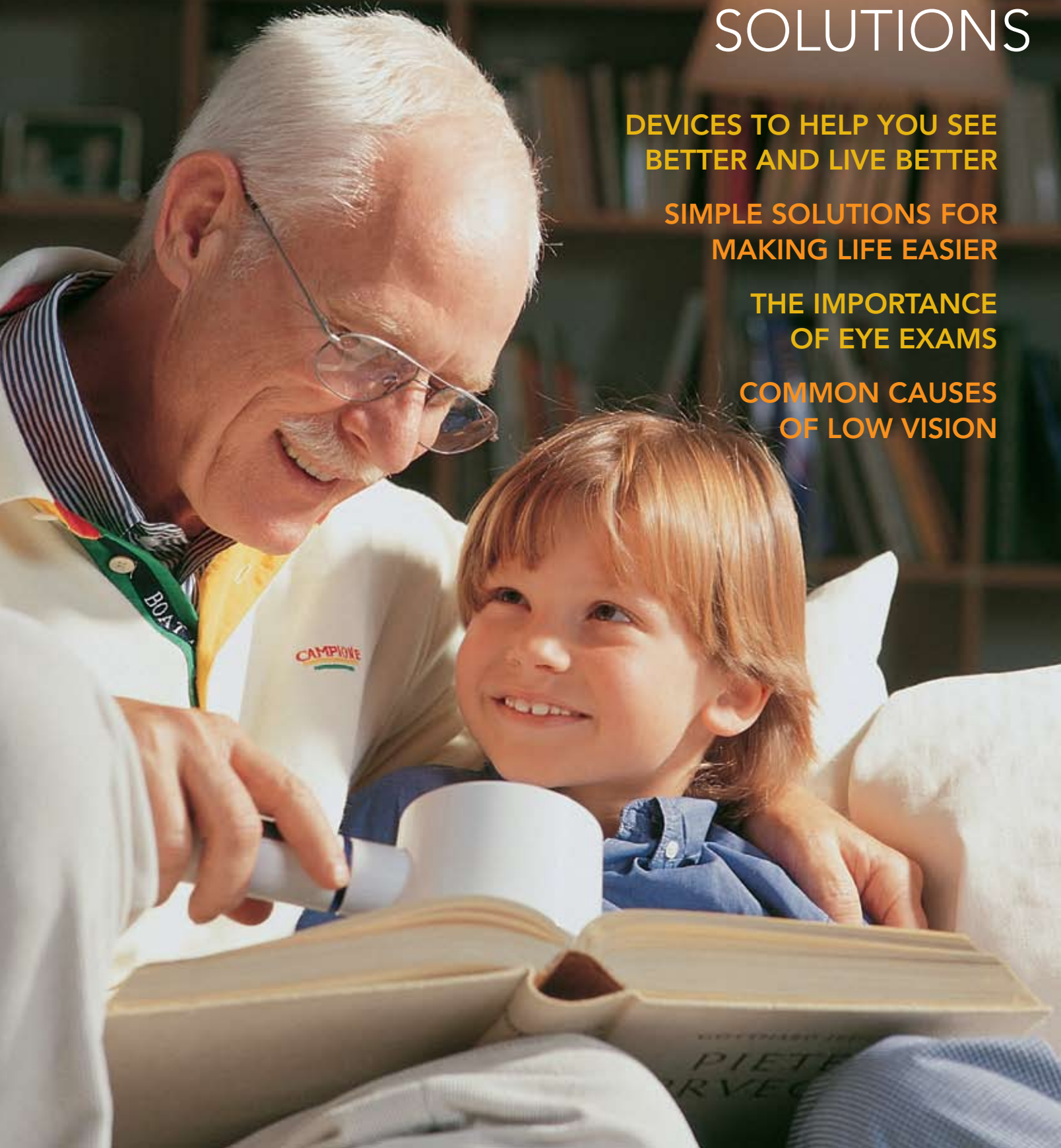
# LOW VISION SOLUTIONS

DEVICES TO HELP YOU SEE  
BETTER AND LIVE BETTER

SIMPLE SOLUTIONS FOR  
MAKING LIFE EASIER

THE IMPORTANCE  
OF EYE EXAMS

COMMON CAUSES  
OF LOW VISION



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The Vision Council works to provide better vision care for all people. We are a non-profit trade organization and our members are leaders in vision correction and vision health. For more information on low vision, please contact us at 1-866-826-0290 or info@thevisioncouncil.org.

# LOW VISION DEVICES CAN HELP YOU SEE BETTER AND LIVE BETTER!

Low vision is a visual impairment that is not correctable through surgery, pharmaceuticals, glasses or contact lenses. It can impair your ability to complete everyday tasks, follow daily routines and experience simple pleasures that many people take for granted. The good news is there are a broad range of services and devices than can offer hope for patients, families and people who care about the visually impaired.

The purpose of this magazine is to help you navigate the world of low vision. You will be provided with information about the common conditions that lead to low vision and their warning signs, as well as a complete review of the current low vision devices that can help maximize remaining vision. Finally, you will learn answers to commonly asked questions and pick up key tips that can help you start to see better and live better.



## Common Causes of Low Vision



### Age-Related Macular Degeneration (AMD/ARMD)

AMD is a leading cause of vision loss among Americans over age 60.

It accounts for nearly half of all low vision cases. It is caused when the part of the eye responsible for sharp, straight-on vision – the macula – breaks down and causes a loss of central vision.



### Glaucoma

Glaucoma has no warning signs and can lead to total blindness if left untreated. Portions of vision are lost as it progresses.



### Diabetic Retinopathy

According to the National Eye Institute, more than 30 percent of Americans diagnosed with diabetes have some form of diabetic retinopathy. It is a major cause of blindness.



### Retinitis Pigmentosa

This is a group of inherited diseases affecting the retina, and resulting in progressive vision loss.

## The Importance of Eye Exams

Often, an eye doctor will detect the early signs of AMD and other diseases that result in low vision before the patient experiences any symptoms. Some AMD treatments can slow and, in the case of what's called the "wet form," sometimes even stop its progression. This is one more reason why it's important to see your eye doctor on a regular basis. A diagnosis is just a first step. If an eye doctor ever tells you nothing more can be done, ask for a low vision exam. And remember: there may not be a cure, but there is help.

### Low Vision Exams: What to Expect

After a regular eye exam, you may be referred to a doctor that specializes in low vision for a low vision exam. In a low vision exam, the eye doctor will ask questions about your medical history. They will also try to understand any recent problems you may have had trying to read, watch television or dealing with headlight glare. Your functional vision will be evaluated by looking at a number of eye charts. The eye doctor will also talk to you about your goals for reading and performing other tasks. They may have you try many types of low vision devices before determining which ones will help meet your needs.

## Common Warning Signs of Vision Problems in Adults

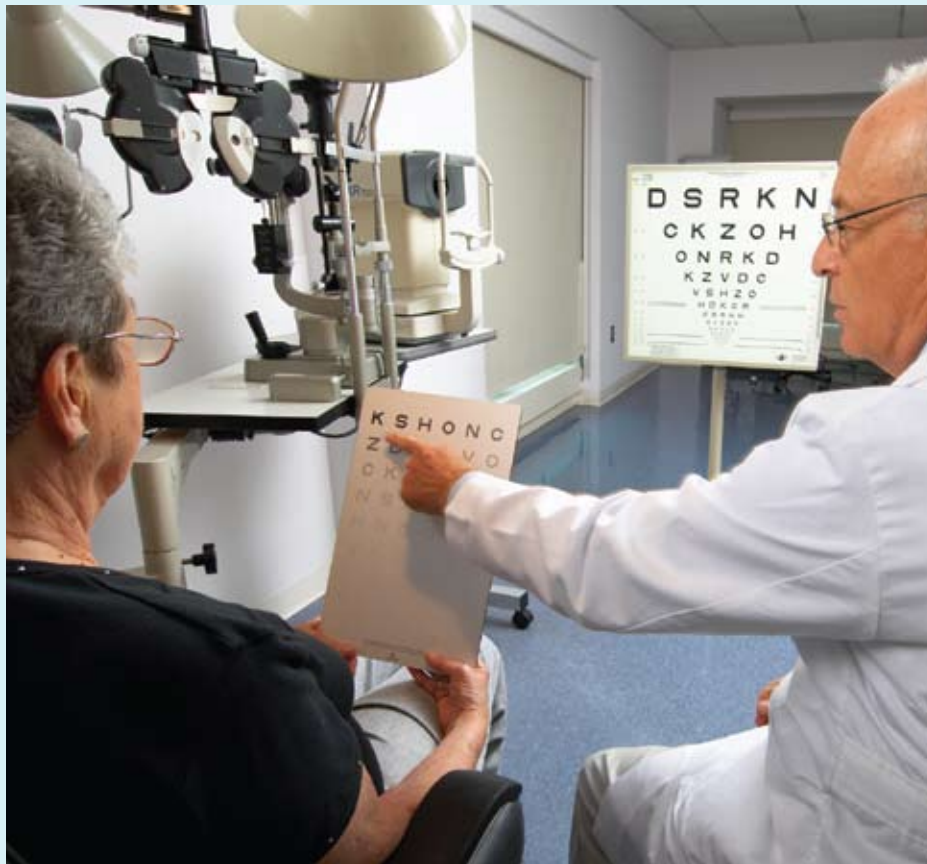


- Trouble cooking and doing up-close tasks
- Difficulty recognizing familiar faces
- Feeling that lights are too dim indoors
- Problems reading signs or crossing the street
- Areas of blurred or distorted vision

# The Benefits of Vision Rehabilitation

Though lost vision cannot be restored, a combination of vision training, rehabilitation and low vision devices can return something almost as important — independence and an increased quality of life. The key is working in tandem with a low vision specialist. Other professionals, such as social workers, instructors, technicians and therapists, can also play a part in restoring independence.

Vision rehabilitation helps patients maximize their remaining vision and develop strategies that will lead them to a more independent lifestyle. Most people use multiple low vision devices because each is designed to serve a very specific purpose. It's not unusual for someone to have five or more vision aids around the house. With proper training, some people can learn to drive while wearing their low vision devices.



# A Guide to the Most Commonly Used Low Vision Devices

## Magnifiers

### Features & Benefits:

- Portable (hand-held styles) are popular for those on-the-go
- Magnifiers on a stand (some are height adjustable) allow for reading material to be placed underneath
- Illuminated magnifiers provide additional light to viewing area
- Digital magnifiers include a camera to scan and magnify images

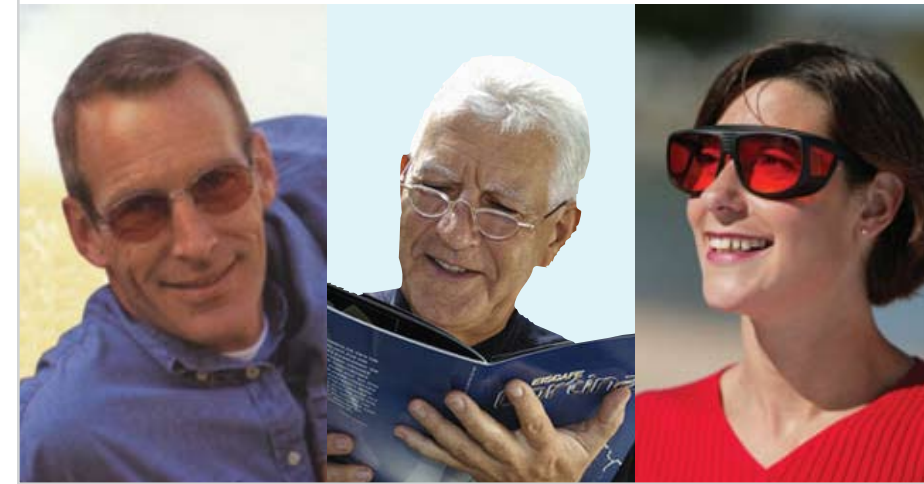


## Specialty Eyeglasses

(Includes photochromic, anti-reflective, prismatic and high-powered lenses)  
Specialty eyeglasses may be an option for some individuals with low vision.

### Features & Benefits:

- Can be designed for near, intermediate and far working distances
- New technology allows some lenses to be very thin
- Prismatic lenses often allow the wearer to see things with both eyes under high magnification
- Many styles offer glare control, which is a very common problem, including:
  - Anti-reflective lenses that eliminate reflections
  - Photochromic lenses which lighten indoors and darken outdoors
  - Sunglasses or clip-ons that block ultra-violet rays
  - Fit-over style sunglasses or glare control filters which include side shields



## CCTV (Close-Circuit TV)

(Also called video magnifiers)

### Features & Benefits:

- Consists of a display (monitor) and video camera
- Desktop and portable devices available
- Allows the user to enlarge and position an image until print is big enough to read on the display
- User can adjust contrast, brightness and color



## Telescopes

### Features & Benefits:

- Help at a variety of distances
- Can be monocular (for one eye) or binocular (for both eyes)
- Many designs feature telescopes mounted onto eyeglasses



# Learn the Lingo

Dealing with low vision is like learning a new language. Here are a few of the terms you're likely to hear:

## Adaptive Technology

Electronic magnification systems like closed-circuit TVs (CCTVs) and computers.

## Amsler Grid

A test for determining potential changes in central vision and the level of impairment due to those changes. It is often used to detect and follow AMD.

## Binocular

Using both eyes; also, a device designed for use with both eyes.

## Contrast Sensitivity

The ability to detect differences in grayness and background. There are special tests to measure the loss of contrast which are useful in prescribing optical and non-optical devices and strategies for independent function.

## Depth Perception

The ability to determine how far away an object is.

## Eccentric Viewing

Not looking directly at an object, but rather learning to focus an image onto a healthier part of the retina. This is used when central vision has been diminished.

## Functional Vision Loss

How vision loss affects the ability to function and perform activities of daily living.

## Legal Blindness

Defined in the United States as central visual acuity of 20/200 or less, which means that what a normal sighted person can see at 200 feet, a legally blind person will see at 20 feet, or visual field restriction to 20 degrees diameter or less (tunnel vision) in the better eye.

## Low Vision Services

The examination and accompanying education that lead to and determine what devices will be prescribed.

## Monocular

Using one eye; also a device intended for use with one eye.

## Orientation and Mobility

Training to help the partially-sighted get around as safely and as independently as possible.

## Peripheral Vision

Ability to see objects that are not in the direct line of vision.

## Photophobia

Discomfort and/or sensitivity to light.

## Visual Acuity

The ability to see detail (see definition of Legal Blindness).

## Visual Field

The space in which objects are visible when the eye is in a fixed position.



# Ask the Doctor

## Is low vision preventable?

While no one knows how to prevent diseases like age-related macular degeneration (AMD), research shows that exercising, not smoking and cutting exposure to ultra violet rays and blue light by wearing sunglasses outside can help reduce your risk. Also, it's been shown that a diet rich in antioxidants (vitamins C, A and E) and carotenoids (found in leafy green vegetables and carrots) may slow, and possibly help prevent, age-related vision conditions like AMD and cataracts. Be sure to check with your doctor to determine the right dosage before adding supplements to your daily regimen.

## What is a low vision specialist?

These are optometrists (OD) or ophthalmologists (MD) who have received specialized training in low vision. In addition to making a diagnosis and suggesting a course of rehabilitation, they also prescribe or recommend devices or refer out for other services. As part of a recommended program of

training and rehabilitation, the patient may also work with low vision therapists, occupational therapists and certified low vision technicians (CLVT).

## Will training or devices help restore vision?

While low vision devices won't restore vision, with the proper training they will help patients make the most of their remaining vision, which will increase independence and raise quality of life. There is no such thing as an all-purpose device. Rather, each device is designed to help the patient complete specific sets of tasks—like a magnifier for reading and a telescope for viewing distant objects.

## Does insurance cover devices and services?

Some insurance companies cover both the cost of low vision exams and low vision devices. Most Medicare programs cover low vision exams and may cover devices. Check with your health insurance provider for more information about your coverage before you seek care.

# Three Tips for Using Non-Optical Aids

Non-optical aids may be at the other end of the technology spectrum, but they can make a big difference in peoples' lives. Most are not expensive and include such items as large print or talking clocks, phones and remotes, color-coded organizers and containers, and check-writing and signature guides. There are also talking books and large-print publications.

Sometimes, simple solutions turn out to be some of the best. That's the case when it comes to everyday strategies for making life a little easier for those who have low vision. Here are a few suggestions:

## Writing

Keep broad-tipped black felt markers and bold-lined writing tablets near phones and desks. They make writing and reading notes and lists much easier.



## Colors

Use contrasting colors to draw attention. For example, cover the edge of stairs with a contrasting color of tape and replace light-colored plate switches and outlet covers with dark ones.

## Lighting

Rethink the way rooms are lit. Since lighting requirements vary by disorder, ask an eye doctor for suggestions. Quick changes include placing lamps or lights very close or almost directly onto reading material. When you add new light sources, make sure the overall room lighting is balanced with task lighting. In other words, if you raise the level of one, increase the other as well.



# Low Vision Devices: Before You Buy...

## Seek Proper Care

If your regular eye doctor's practice is not equipped with the personnel and devices to help restore your independence and meet your needs, ask for a referral to a low vision specialist or call our hotline at 1-866-826-0290.

## Set Achievable Goals

Work with a professional to set realistic goals. What's most important? Reading? Watching TV? Going to the store? Each of these activities of daily living carries a different working distance requirement, which is why device decisions are so task-specific.

## Educate Yourself

You know the difference between value and price in other areas of your life. Do the same when it comes to devices. For example, don't confuse store-bought magnifiers, whose low price matches the quality of their optics, with high-quality ones.

## Get Trained

Whether you're looking at devices with an eye doctor or a local agency, be sure they provide enough training for you to be comfortable with your new purchase.

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