

## **SMARTSIGHT™**

### ***MAKING THE MOST OF REMAINING VISION***

Is it difficult to read newspapers and price tags, set dials, or manage glare? If so, SmartSight can help, with tips about lighting, contrast, and the tools, techniques and resources of vision rehabilitation. Losing vision does not mean giving up your activities, but it does mean applying new ways of doing them.

#### **Patterns of Vision and Vision Loss**

- ◆ **Central vision** is the detailed vision we use when we look directly at something. Macular degeneration (AMD) affects central vision. Diabetic retinopathy can affect central or peripheral vision.
- ◆ **Peripheral vision** is the less detailed vision we use to see everything around the edges. Glaucoma affects peripheral vision first. Strokes can affect one side of the peripheral vision.
- ◆ **Contrast sensitivity** is the ability to distinguish between objects of similar tones like coffee in a black cup or facial features. All eye problems can decrease contrast sensitivity.
- ◆ **Depth perception** is the ability to judge the position of objects. New vision loss in one eye can affect depth perception.
- ◆ **Visual processing:** The lens in our eye, like a camera lens, focuses the image onto the retina, like camera film. Our optic nerve carries those images to our brain, which “develops” them. Impairments in each of these affect our vision differently.

#### **The Experience of Vision Loss**

It is always a shock to learn that your vision loss is irreversible. It is important to acknowledge the anger and frustration you may feel, to get help working through these feelings, and to apply the strategies of vision rehabilitation to stay active. Doing all of these will help you avoid depression, which may appear as fatigue or lack of interest. If depression occurs, address it with treatment and counseling. A good support group can help you recognize that your value to yourself and others does not depend on your

vision and that you are worth the effort it takes to make the most of the vision you have.

## **The Phantom Visions of Charles Bonnet Syndrome (CBS)**

About 20 to 30 percent of people with vision loss see lifelike images they know are not real. This is called Charles Bonnet Syndrome and it is not a loss of mental capacity, but just part of vision loss for some.

## **Making the Most of Remaining Vision**

### ***Finding and Using Your "Next-Best Spot": Scotomas and PRLs***

When the center of your vision is obscured by a blind spot (scotoma), it is helpful to locate your "next best spot" (the Preferred Retinal Locus, PRL). To find your PRL, imagine that the object you want to see is in the center of a large clock face. Move your eyes along the clock numbers and notice when you see the center object most clearly. Use that same viewing direction for other objects.

### ***Making Things Brighter***

- ◆ *Improve lighting.* Use a gooseneck lamp directed onto your task. Carry a penlight.
- ◆ *Reduce glare.* Indoors, cover wood tables and shiny counters; wear yellow clip-on or fitover glasses. Outdoors, try dark yellow or amber glasses. Visors can be useful indoors or out.
- ◆ *Increase contrast.* Use a black ink gel or felt pen, not a ballpoint. Draw a dark line where you need to sign. Use a white cup for coffee, for example.

### ***Making Things Bigger***

- ◆ *Move closer.* Sit close to the TV, and up front at performances.
- ◆ *Enlarge.* Get large checks, large-print playing cards, bingo cards, crosswords, phone dials, TV remotes, calendars, keyboards, and books.
- ◆ *Magnify.* Magnifiers come in many powers and types, suited to different people and different tasks: hand-held for price tags and

menus, stands and video magnifiers (CCTVs or closed circuit TVs) for sentences, magnifying computer mouse.

### ***Organizing***

Designate spots for the items in your refrigerator, and for your keys and wallet. Minimize clutter. Separate black clothes from blue.

### ***Labeling***

Mark thermostats and dials with high contrast markers from a fabric store; label medications with markers or rubber bands; safety-pin the labels of similar-colored clothing.

### **Substituting: Let's Hear it for Ears!**

Get books and magazines on tape free on loan, also talking watches, clocks, calculators, glucometers, and computers. Use reading services. (See Resources.)

### **Participating**

Don't isolate yourself. Keep your social group, volunteer job, or golf game. It might require lighting, large print cards, a magnifier, a ride, or someone to watch your ball. Ask for the help you need. There is nothing independent about staying home to avoid asking for help.

### **Driving**

Pick your times and map routes carefully. Consider yellow or amber sunglasses for glare. Ask yourself: Do cars appear unexpectedly? Do drivers honk at you? Are you having fender-benders? If "yes," consider the following transportation alternatives.

### ***Transportation Alternatives: Creative Solutions***

Hire a driver, share your car, arrange for a taxi, buy gas for a friend who drives, use senior and public transit systems. Try a three-wheel bike or battery-powered scooter at walking speed. Walk if you are able. Set the pace for your peers by using these alternatives now. The future will offer even more solutions.

## **For Family and Friends**

Your loved one with vision loss needs to be empowered to do as much as possible independently. Recognize the challenge of vision loss, but don't take over their tasks. Instead, help identify the adjustments they need to make to maximize their independence.

## **Vision Rehabilitation**

A low vision evaluation and rehabilitation training can help you make the most of your vision. To locate services near you, contact VisionConnection (see Resources). Ask if services include:

- ◆ A low vision evaluation by an ophthalmologist or optometrist
- ◆ Prescription for devices. Are some devices loaned before purchase, or returnable?
- ◆ Rehabilitation training: reading, writing, shopping, cooking, lighting and glare control?
- ◆ Home assessment? Mobility? Resources and support groups?
- ◆ Are services free, billed to Medicare or other insurances? If not, what is the charge? (Note: Medicare covers most services, but not devices.)

## **Resources**

### **Books and magazines on tape loaned by mail free; tape player provided:**

- ◆ U.S. National Library Service: 800-424-8567, <http://www.loc.gov/nls>
- ◆ In Canada: Canadian National Institute for the Blind Library: 800-268-8818, <http://www.cnib.ca>

### **Books and magazines on tape, to keep, free:**

- ◆ American Printing House for the Blind: 800-223-1839, <http://www.aph.org>
- ◆ Choice Magazines (bimonthly articles, unabridged): 888-724-6423

### **Large print books and checks:**

- ◆ Books on loan by mail, free: National Association for Visually Handicapped (NAVH): 212-889-3141, <http://www.navh.org>

- ◆ Large print checks and registers (from your bank or check catalog)

**Large print materials – crosswords, bingo cards, address books, calendars:**

- ◆ National Association for Visually Handicapped (NAVH): 212-889-3141, <http://www.navh.org>
- ◆ Optelec: <http://www.shoplowvision.com>
- ◆ Eschenbach: <http://www.eschenbach.com>
- ◆ LS&S: 800-468-4789, <http://www.lssgroup.com>
- ◆ MaxiAids: 800-522-6294, <http://www.maxiaids.com>
- ◆ Independent Living Aids: 800-537-2118, <http://www.independentliving.com>
- ◆ New York Times Large Print Weekly: <http://homedelivery.nytimes.com>

**Computer enlargement – accessibility features built into your computer:**

- ◆ Magnifying mouse: Microsoft, <http://www.microsoft.com>
- ◆ Magnification software: Ai Squared, <http://www.aisquared.com>

**National organizations, for support, information, and research updates:**

- ◆ AMD Alliance International: <http://www.amdalliance.org>
- ◆ American Foundation for the Blind's "Senior Site": <http://www.afb.org/seniorsitehome.asp>
- ◆ Are You Aware?: <http://www.visionaware.org>
- ◆ Association for Macular Diseases: 212-605-3719, <http://www.macula.org>
- ◆ Macular Degeneration Partnership: 888-430-9898, <http://www.amd.org>
- ◆ MD Support: <http://www.mdsupport.org>. Also video: *Learning to Live with Low Vision*
- ◆ National Eye Health Education Program of National Institutes of Health: <http://www.nei.nih.gov>. Offers free materials (e.g., *What You Should Know About Low Vision*, also in Spanish)
- ◆ National Federation of the Blind: <http://www.nfb.org>. News by phone, 866-504-7300

## **Vision Rehabilitation Self Help Books:**

- ◆ *Making Life More Livable*, M. Duffy, NY: American Foundation for the Blind, 2001; 800-232-3044
- ◆ *Macular Degeneration: The Complete Guide to Saving and Maximizing Your Sight*, L. Mogk, MD, & M. Mogk, PhD, NY: Ballantine 2003; available in bookstores and at <http://www.amazon.com>
- ◆ *The First Year – Age-Related Macular Degeneration*, D. Roberts, NY: Marlowe 2006; available in bookstores and at <http://www.amazon.com>
- ◆ *Overcoming Macular Degeneration: A Guide to Seeing Beyond the Clouds*, S. Solomon, MD, & J. Solomon, NY: Avon 2000; available in bookstores and at <http://www.amazon.com>

## **To Locate Vision Rehabilitation Professionals and Services:**

- ◆ **Veterans:** U.S. Department of Veterans Affairs: 877-222-8387, <http://www.va.gov/blindrehab>
- ◆ **Everyone:** Contact SmartSight's partner, VisionConnection, for directory of services at <http://www.visionconnection.org>. In the "Help Near You" section, search under both "low vision services" and "vision rehabilitation," or call 800-829-0500. Also <http://www.afb.org>. Ask the questions listed under Vision Rehabilitation above, and ask them also when making an appointment for services.



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