Illuminating Solutions

A Lighthouse Center for Education Resource

LIGHTHOUSE INTERNATIONAL

Light is essential to vision, but the kind — and amount — of light needed to see as well as possible varies. If you are visually impaired, determining the right lighting becomes even more important to maximize usable vision. And with a little knowledge, you can find the right lighting conditions for you.

On average, older people need more light than younger people. In fact, the need for more light increases approximately 10% per decade. You can experiment with different lighting levels and options to see what's most comfortable and works best for the task at hand.

Another important consideration is your individual vision condition. Different eye diseases affect the way light is perceived. More, or brighter light, is not always better! For instance, people with glaucoma often require much higher levels, while less light may work better for those with conditions such as cortical or subcapsular cataract.

A common question concerns the light source itself. What is the best kind of light — natural or artificial, incandescent or fluorescent? While there is no simple answer, here are some general rules that can help most people with either normal or impaired vision:

- Glare results when light (natural or artificial) shines directly into your eyes or reflects off a shiny surface. To avoid glare

when reading or working, position your seat away from windows so that they are behind you or to your side. If that's not possible, use blinds or shades to control the amount of light entering the room. If you are working on a computer or watching TV, make sure the screen does not face the window since light from outside can reflect onto the screen and cause glare.

- Position lamps or fixtures directly onto the task (book, newspaper, playing cards, hobby/craft, etc.). Gooseneck, adjustable arm and clip-on lamps offer good flexibility. In dimly lit restaurants, use a pocket flashlight.

- When reading or working outside, use a visor to reduce light glare.

What kind of artificial light should you use? Here again, individual comfort is important. However, there are some guidelines:

- Chromalux bulbs (60 or 100 watts) are used successfully by some people with macular degeneration and diabetic retinopathy.

- A new type of tri-phosphor, compact fluorescent bulb is available as a direct, screw-in replacement for some incandescent bulbs. They consume only one-sixth to one-tenth as much electricity, radiate very little heat and, although expensive, last about ten times as long as the conventional incandescent bulbs. In addition, these modern fluorescent bulbs are almost as bright as incandescents. They provide excellent color rendition — food looks natural, colors look normal — as well as a "comfortable" atmosphere for most people.

- If you can't completely rearrange lighting, try adding an incandescent table lamp. This may be particularly useful in rooms with fluorescent ceiling lights.

- Whatever the lighting arrangement, increase room lighting when you increase task lighting. Avoid using a very bright lamp in a dark room.

Remember, these are guidelines and not set rules. Discuss your lighting needs with your low vision specialist. You may have to experiment with various types and levels of lighting to find the combination that provides the most comfort and best performance.

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