

# Other titles in this series:

- Alternative and Complementary Therapies
- Anti-Glare Spectacles
- Cataracts & Macular Oedema
- Computers and Software
- Daily Living Skills
- Dry Eyes
- Eccentric Viewing Techniques
- Epiretinal Membranes
- Gardening
- Getting a Diagnosis
- Hallucinations
- Intra Ocular Lenses VIP
- Juvenile Macular Dystrophies
- Large Print and Audio Publications
- Large Print Music
- Living with MD – Preparing for the Future
- Low Vision Aids
- Macular Disease and Genetics
- Macular Hole
- Macular Translocation
- Myopic Degeneration
- Nutrition and the Eye
- Psychological Impact of MD
- Registering as Visually Impaired
- Retinal Vein Occlusion
- Sports, Hobbies and Pastimes
- Stargardt Macular Dystrophy
- Travel and Holidays
- Vitrectomy





## Lighting Advice

Good lighting is very important to us all and particularly so if you have macular disease. Your home is where you should feel relaxed and comfortable. In order to make the most of your residual vision, the right light in the right place is needed, and will help you with everyday tasks such as cooking, reading, writing and generally moving about safely. This leaflet aims to help you to improve your present lighting by finding a level of lighting that is best suited to your particular needs.

Just going for the brightest light that money can buy

may not provide the best solution. Many bright light sources produce extraordinary levels of heat which can make them unusable close to. Also, increasing light levels can lead to increased problems with glare. So some thought needs to be given to finding



the best ways to utilise light effectively.

## Basic and simple things to do

Ensure your spectacles are clean, open the curtains wide, and keep the windows clean. Remove net curtains (or put up lightweight ones and wash them regularly).

## Glare

Consider using anti-glare spectacles to reduce glare. For more information on coping with glare, ask for our leaflet 'Anti-glare Spectacles'.



Glare is caused by a light source, direct or reflected, being in or near your line of sight or by being comparatively bright compared to your surroundings. It is possible to increase lighting levels whilst keeping glare to a minimum.

Try to avoid placing a light source in your direct line of sight. Ensure that light bulbs do not protrude beneath a lampshade and that a task lamp is positioned below eye level so that it does not shine directly into your eyes. If reflected light is a problem, try tilting the lamp head.

## General Lighting

Consider making a few inexpensive changes to the lighting and décor in your home to maximise the

benefits of lighting and how you use your sight.

Using colour, contrast and lighting together can help you make the most of your vision. More light means a greater degree of contrast between light and dark objects. Using things that contrast and stand out against the background make them easier to see. Think about fitting coloured light switches or surrounds, or putting coloured sticky tape around the edges of switches so that they stand out against a pale wall and make them easier to find.

It is a good idea to have bright lighting in hazardous areas like the hall, on the stairs and landing, and in the kitchen. You can get

infra-red sensors for your hall and landing so that the lights switch on and off automatically - but they are not cheap to fit.

Try to keep lighting levels as even as possible throughout the house so there is minimum change as you move from room to room; your eyes will not have to adjust as often, which also means they will get less tired. Glare is also more of a problem if there is a sharp distinction between light and dark areas in a room. Avoid placing a single, very bright, exposed bulb in the centre of the room; rather use multiple light sources spread around the room to increase light levels evenly. Try moving your table lamps and standard lamps around to create a more

even effect. (These are not particularly good for close work as the light is not directional, but they are good at increasing light levels generally.)

You can buy packs of inexpensive floor-standing up lighters which bounce light onto the ceiling and back into the room and are useful for dark corners.

Some of these are halogen, which get very hot (so not good for task lighting, which needs to be fairly close to your face, but very bright so can be used for general room lighting).

Ideally, you want your lampshades to diffuse the light without blocking it too much, and also to stop the light bulb being in your direct line of sight. Lampshades made from light coloured

material with a white lining provide more general light than those made of a dark material. An up-lighter shade (like an upside down cone) for your central light fitting will bounce light onto the ceiling and back into the room. Always be careful to fit the correct wattage of bulb as specified on your lampshade.

Wall light shades need to cover the bulb as these are lower than other light fittings and likely to cause glare if the bulb is exposed. Wall lights which direct light downwards should be avoided as these cause uneven light levels around the room. Up-lighter designs which direct light on to the ceiling and back into the room are preferable.

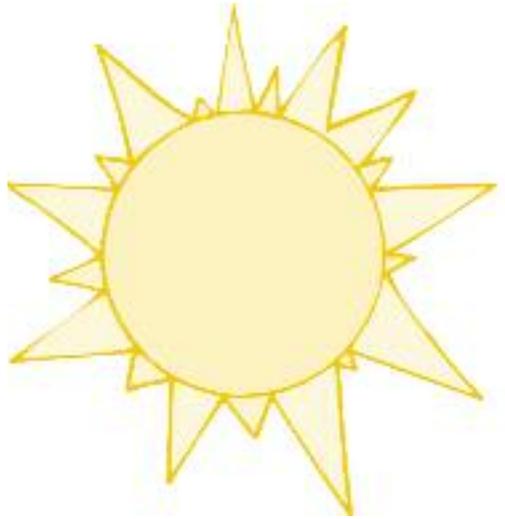
Generally multiple spotlight

designs are best avoided as each beam of light is very bright with dark areas in between. They cause a lot of glare and produce a lot of heat.

Dimmer switches can be very useful. When moving from one level of light to another it takes time for the eyes to adapt to the change; a dimmer switch can be used to gradually change the lighting level at a slower rate than an ordinary switch. In a strange place always allow a few moments for your eyes to adjust before moving forward from one lighting level to another, in case there are hazards like steps ahead.

In this country daylight is a less than predictable light source and will generally

need to be supplemented with task lighting.



However, on nice bright days, don't be tempted to face the window but sit with your back to it and let the light shine over your shoulder onto whatever it is you want to look at. Vertical or roller blinds can help control the level of light and also the angle at which it comes into a room so as to prevent it shining straight into your eyes.

## Task Lighting

As well as having good general lighting in your home, it is important to have extra lighting for specific near tasks like reading, writing, preparing food, or indeed anything that you bring close up to your eyes to do.

For close-up work, such as reading, use an adjustable task lamp that you can position 10 to 12 inches away from the object, not over your shoulder. The closer a lamp head can be positioned to a task,

without it shining into your eyes or blocking your view, the better. Ideally position the lamp head below eye level. The amount of illumination on an object increases fourfold if the distance between the lamp and the object is halved. Keep some background lighting on as well as it will help prevent eyestrain. See if different times of day suit you better for doing close work.

Lighting can improve contrast, making black on white look sharper and blacker, and for some it



can help blast through any misty areas of damage. Good lighting used in conjunction with magnifiers may mean that you can use a less powerful, and therefore larger, magnifier than you need without the light.

The key things to bear in mind when considering additional lighting for near tasks like reading, eating and continuing with hobbies are:

The task(s) you wish to perform and where you wish to sit



Minimal heat output

Adjustable positioning

Think about what you want to use the lamp for. Would a table top, floor-standing or wall-mounted flexible design best meet those needs in a safe and effective way? Can you position it so that it is below eye level, not shining into your eyes, without the unit tipping up and so that the cable will not get in your way? Is the shade designed in order to stop light escaping backwards into your eyes? If a lamp



produces a lot of heat you will find it uncomfortable to use and are at risk of burning yourself if it is touched inadvertently. (Standard lamps do not make good task lights as the light is not directional, but they are quite useful for increasing the level of background light generally in a room.)

## **Bulbs**

When choosing a bulb for a light fitting choose a pearl or frosted finish to diffuse the light rather than a clear bulb because a clear bulb will create harsh and confusing shadows.

If you are going to use the energy efficient light bulbs that local authorities are so keen on promoting, be aware that they take up to twenty minutes to reach full

brightness, which can be hazardous in areas like stairwells. If they have to be used in such areas then leave them switched on. Unfortunately the less expensive energy efficient bulbs tend to be very long and stick out from the ends of a standard lampshade. You can get a shorter length version but at present they are twice the price.

The traditional tungsten filled filament bulbs give off a lot of heat and use a lot of energy to produce relatively low levels of light.

Fluorescent tubes/bulbs give off a good bright light and stay cool to the touch. They use less energy than other types such as tungsten bulbs or halogen units. Fluorescent bulbs can be more expensive to buy but

are cheaper to run, give off much more light per wattage and last much longer than filament bulbs. If possible try before you buy! Different manufacturers give these tubes different coatings which give the emitted light different coloured hues - some may appear to give a yellowish or even pink light. Those that are called 'daylight' bulbs give off a light that resembles natural daylight and so give a truer colour rendition. Colour preference with lighting is quite personal and you need to see which you prefer, although whiter lights do enhance contrast more.

Light emitting diode (LED) task lamps are starting to appear on the market. LED lamps give off a very bright, white light. They have been

used in illuminated magnifiers and car headlights for some time. The bulbs last much longer; they use very little energy and do not get hot. (In the case of magnifiers, the whole unit needs to be replaced rather than just the bulb if the light fails.) As yet the majority of these very bright LED task lamps are very expensive. There are now a few portable ones that are inexpensive and can be used in restaurants to read menus or as a portable book light.



Indications are that the larger LED task lamps are becoming more affordable.

Halogen light fittings, which are very bright, get extremely hot so are not a good choice for task lighting which will be used close to your face; however they can be used for general room lighting. Note that when handling halogen bulbs always use a cloth as the oil from your fingers will blow the bulb. Replacement halogen bulbs are expensive to buy.

## Safety Tips

- Be careful to position cables out of the way so that they do not overhang or cause you to trip
- Do not connect several lamps into an adapter in

a wall socket. It is much safer to use a multiplug extension lead that allows you to plug a number of plugs in safely

- Make sure that lamps have the correct fuses in their plugs and that the bulb is the correct wattage for the shade
- Be careful when moving lamps that have detachable bases
- If you have any doubts about safety issues call an electrician

## Decoration of rooms

Paint with a matt finish will reduce glare. Pale walls and ceiling help reflect light back into a room but white walls in a room that is naturally very bright can

cause problems with glare. The use of colour and contrast to pick out things like window and door frames can help give perspective to a room and aid navigation. Consider painting doors a darker shade so that they stand out against paler walls. Perhaps make the doorknob white, again so it contrasts with the main colour of the door.

Good lighting can make a real difference to the way in which you use your vision and is far less costly to run than you may think.

We hope this leaflet will give you some general ideas about lighting and encourage you to think about the way you use lighting to make the most of your vision.

