### LENSES FOR LONG-SIGHTEDNESS (HIGH HYPERMETROPES)

### Q What is long-sightedness?

A Long-sightedness affects almost a quarter of the population. It occurs when either the eye ball is too short or when the cornea is too flat compared to a normal eye. As a result, the light entering the eye does not come to a focus by the time it reaches the retina.

The symptoms of longsightedness depend on your prescription and age. In the early stages spectacles may only be required for reading. However for higher degrees of longsightedness and as you get older,



you may have to wear spectacles all the time.

## Q What spectacles should I choose?

A Long-sightedness is corrected using glasses that have a convex lens - a lens that curves outwards and is thicker in the middle. The lenses will tend to magnify the eyes somewhat.

If you are only slightly longsighted, there is no restriction on the size and shape of the spectacles and standard lenses will be adequate. If you are more long-sighted, there are a number of things that you can do to improve the appearance of your spectacles and your vision through them.



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Choose a reasonably small frame. The lenses to correct long-sightedness are always thicker in the middle than at the edges. Therefore, the larger the lenses are, the thicker and heavier they will be. Also be careful when choosing the shape of spectacles – some may be small in one direction but wide in another so the lens will still be thick in the

Choose high-index lenses. If your prescription is above a certain value, your optician may recommend high index lenses. These lenses are made from materials that bend the light more than standard glass or plastic lenses. This means that the

middle.



lenses do not have to be so curved in order to give the same power which in turn means that the lenses will be thinner and usually lighter. High index lenses are available in glass and plastic and your optician will be able to advise on the best type for your eyes.

Use aspheric lenses. In some cases your optician may recommend aspheric lenses. These lenses are specially designed to reduce the thickness of the lenses by gradually

becoming less curved towards the edge of the lens.

#### Add an anti-reflection coating.

An anti-reflection coating is a very thin layer which is applied to the front and back surface of the lenses. The coating reduces the brightness of the reflections from the lens which makes them clearer to look through and less conspicuous to look at. A coating greatly improves the appearance of higher prescription lenses and is particularly important if you have high index lenses. The coating also tends to provide some resistance to scratching.

# Q What are the alternatives to spectacles?

Α In most cases, long-sightedness can be corrected with contact lenses. These are almost completely invisible and are more convenient for sports and other activities. Long-sighted people enjoy a wider field of view with contact lenses than spectacles although it may be slightly more difficult to read tiny letters because the image at the back of the eye is bigger with spectacles than contact lenses. Your optometrist will be able to advise on your suitability for contact lenses.

It may also be possible to have your long-sightedness reduced or cured by refractive surgery. Surgical treatment for long-sightedness involves increasing the curve of the cornea in order to increase its focusing power. Nowadays, laser surgery is the most popular way of achieving this. Your optometrist will be able to advise on your suitability for this procedure.

