Spectacle corrections for children

Reading glasses

Many people associate reading spectacles and bifocals with the failing sight of an older adult. Some people also think that glasses are used only to make things seem clearer for people who are shortsighted or longsighted. Reading spectacles and bifocals can be worn for other reasons.
Many children and young adults benefit from wearing spectacles to help them maintain normal eye coordination, without effort, for prolonged close work. A good example of this kind of work is reading in class or studying after school. Spectacles for this purpose are called reading or study spectacles.
In most cases reading spectacles may appear to make very little difference to the clarity of the print. Their main purpose for children and young adults is to enable both eyes to aim and focus in a relaxed and comfortable manner.
Children in particular may have trouble understanding how these glasses help them, or why they have to wear them, when there is no sudden or dramatic change in the clarity of their vision. The benefits of reading spectacles are subtle; they reduce fatigue and confusion and improve concentration. The extra effort spent in merely seeing the print without glasses can be channeled into understanding the reading material.
As the name suggests, reading spectacles are for use when working on tasks close at hand. Children may need to be reminded to use them. It is important to explain patiently to children that the spectacles help them to see more easily rather than more clearly.
Wearers must also get used to taking off the spectacles, or looking over the top of them, to see clearly in the distance.

Bifocals

Bifocals are special types of lenses that contain two prescriptions: one for distance and one for reading They overcome the problem of having to take off reading spectacles to see more clearly in the distance. The reading prescription is in a segment in the lower part of the lens because we

naturally glance downward while reading. Middle-aged adults wear bifocals to assist their close-focusing system that weakens as a natural consequence of ageing. It is much less common for children to wear bifocals; the usual reason is to help to relax an overactive close focusing system.
Bifocals can be useful in treating some forms of shortsightedness. Some children who have trouble relaxing their close focusing (accommodation) may become shortsighted. Research in this area is not conclusive.
The bifocal lens allows them to relax their focusing for close objects but retain clear distance vision. Some research suggests this treatment may slow the development of shortsightedness during the years of intense study. Bifocals are also used occasionally with children and young 'adults in the case of convergence excess-a tendency to over-converge or go cross-eyed. The reading segment
of the bifocal lens allows the child to relax the focusing and convergence mechanism when looking at close objects.
Wearing properly prescribed spectacles of any description cannot weaken a child's vision. For most shortsighted children and teenagers for whom bifocals are prescribed, it is necessary for them to be worn only for a few years.
Children generally adapt to bifocals more quickly than adults do.

Prismatic glasses

Some eye co-ordination problems may be treated temporarily with a special type of lens called a prismatic lens. Prismatic lenses alter the wear's perception of where an object is and may not make the objects clearer. The edges of prismatic lenses are of different thicknesses.
The thin side of a prismatic lens is known as the apex and the thick side is known as the base. Depending on where the base of the prismatic lens is positioned in the spectacle frame, objects may appear to be smaller but closer (base-out prescription) or larger and further away (base in prescription).
These optical effects are normal and in a short time the visual system adapts to the distortions. Often the best way for a child to adapt to prismatic spectacles is to wear them while walking around or simply moving around.