

## Contact Lens Types

Today's contact lenses have virtually eliminated the earlier hard lenses. Hard lenses were made from a material that didn't allow valuable oxygen to pass through to the cornea. They had to be small (to leave the cornea as uncovered as much as possible), and their size often made blinking uncomfortable and allowed the lenses to "pop out".

Today's lenses are made from materials that allow oxygen to pass freely to the eye, allowing it to "breathe" comfortably. This enables today's lenses to be bigger in diameter, greatly enhancing comfort and peripheral vision, whilst reducing the image distortion that can be caused by some spectacles.

Today's lenses are made from two general types of materials:

### **Soft Contact Lenses**

Made from oxygen permeable, water-loving plastics that actually become pliable during manufacturing. Soft contact lenses contain between 30 and 80 per-cent water, depending on the type of lens. Many people enjoy the comfort of soft lenses; they are easy to adapt to and fit both comfortably and securely. There are now soft lenses to correct many types of astigmatism and presbyopia.

### **Rigid Gas Permeable (RGP)**

Combining some of the properties of both hard and soft lenses. Made of special firmer plastics, which are permeable to oxygen, these lenses are very durable and usually have a longer life span than soft lenses. Many people find them easier to handle than soft lenses. Like soft lenses, RGP lenses fit well and offer excellent visual acuity. RGP lenses are often prescribed for people who have high degrees of astigmatism. They take a little longer than soft lenses to get used to, but regular wearers find them very comfortable.

Most contact lenses are worn on a "daily-wear" basis. They are removed in the evening and put back in the next morning. Sleeping in your contact lenses is not advisable unless it is specifically recommended by your practitioner.

New advances in contact lenses have made it possible to have a fresh pair of lenses at regular intervals at about the same cost as wearing traditional daily-wear lenses. Frequent replacement programmes have become increasingly popular and also allow the contact lens wearer to spread the cost through monthly payments.

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"Disposable" soft lenses are just what they say: after a prescribed period of time, the lenses are thrown away and replaced with a new pair.

## How Do Contact Lenses Work?

"Perfect vision" occurs when light rays converge at a point directly on the retina (on the back of eyeball). About four in ten people have "perfect" vision. For the rest, clear vision may be achieved by refocusing light rays using corrective lenses.

Contact lenses are delicately crafted, very thin optical discs about the diameter of a shirt button. They are comfortably held in place by the eye's own natural tears, which are always present between the lens and the eye.

The superior quality of today's lenses, combined with professional fitting and aftercare, ensures your lenses will be properly prescribed for ultimate fit and comfort. Your eye care practitioner has many lens options to choose from in determining which one best suits your vision needs and your lifestyle.

Most common vision conditions can be treated with contact lenses, and in the last few years, technological advances have produced many more options for treating each kind of problem. Your eye care practitioner can tell you more about the range of options available for any of these conditions:

## Short -Sightedness

(Myopia) - People with this condition can see clearly up close but not at a distance. For those who are short-sighted a number of contact lens products are now available to restore sharp, clear distance vision. Your eye care practitioner will prescribe a concave or "minus" lens which will redirect the light rays so that they are properly focused on the retina.

## Long-Sightedness

(Hyperopia)- Long-sighted individuals see better at a distance than close up and sometimes experience difficulty bringing their vision into sharp, clear focus for reading and other close-up activities. Long-sightedness can be very successfully treated with a convex or "plus" lens prescription available with a wide range of contact lens options.

## Astigmatism

This condition is characterised by an irregularly shaped cornea, causing light images to focus on two separate points in the eye. The effect is similar to the

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distorted reflection in a fun-house mirror. Until fairly recently, people with astigmatism were limited to spectacles. But today's "toric" contact lenses can be custom made and provide enhanced visual performance and comfort. Almost anyone with astigmatism can now wear contact lenses.

### **Presbyopia**

As people age, their eyes lose their ability to shift focus between far and near objects. Also called "ageing eye", this is a natural process which creates difficulty in reading small type, for example, or shifting focus between the road and a car's speedometer. For these people, their only option used to be prescription spectacles with bifocal lenses or "reading glasses". But now there's good news for those who will be affected by presbyopia as for many the condition is correctable with today's bifocal contact lenses. These lenses are individually prescribed for each person's special combination of distance and near vision, and several types of lenses are available

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