# Long-wearing contact lens

### What is contact lens?

They are thin, clear plastic discs used in the eye to improve vision

#### What are contact lenses for?

Helps correct various eye disorders, including near sightedness, far sightedness, astigmatism, and presbyopia or eyestrain to read.



#### What are the types of contact lenses that exist?

Soft contact lenses
Rigid Gas Permeable (Rgp)contact Lenses
Extended Wear Contact Lenses
Disposable (Replacement Schedule)Contact Lenses
Lens Comparison etc.

## Rigid glasses

Glass lenses were never comfortable enough to gain widespread popularity. The first lenses to do so were those made from polymethyl methacrylate (PMMA or Perspex/Plexiglas), now commonly referred to as "hard" lenses. Their main disadvantage is they do not allow oxygen to pass through to the cornea, which can cause a number of adverse, and often serious, clinical events. Starting in the late 1970s, improved rigid materials which were oxygen-permeable were developed. Contact lenses made from these materials are called rigid gas permeable lenses or 'RGPs'.

## Soft lenses

Soft lenses are more flexible than rigid lenses, and can be gently rolled or folded without lens. While rigid lenses require a period of adaptation before comfort is achieved, new soft lensdamaging the wearers typically report lens awareness rather than pain or discomfort.

Hydrogel lenses rely on their water content to transmit oxygen through the lens to the cornea. As a result, higher water content lenses allowed more oxygen to the cornea. In 1998, silicone hydrogel, or Si-hy lenses became available. These materials have both the extremely high oxygen permeability of silicone and the comfort and clinical performance of the conventional hydrogels. Because silicone allows more oxygen permeability than water, oxygen permeability of silicone hydrogels is not tied to the lenses' water content. Lenses have now been developed with so much oxygen permeability that they are approved for overnight wear (extended wear). Lenses approved for daily wear are also available in silicone hydrogel materials.