Silicone Soft Lenses vs. Non-silicone Soft Lenses

There are a dozen choices when determining which soft lenses are the best and the best can vary among each patient. To further understand and narrow down the search, this article will explain the differences between silicone soft lenses and non-silicone soft lenses.

What is silicone and non-silicone soft lenses made of?

To start off, silicone lenses are made of two specific monomers: PHEMA (hydrophilic) and silicone (hydrophobic). These monomers are combined to form a copolymer. When a bunch of these copolymers are cross-linked together, they form the lens material.

In a similar process, non-silicone lens are made of other monomers which are combined to make polymer chains that woven together by cross-linking those polymers together to make the lens material. Unlike, silicone lenses, non-silicone lenses can be made with many types of monomers which include: methacrylic acid, isobutyl methacrylate and more.

Pros and Cons of Silicone Soft Lenses

Aside from the obvious benefits of appearance and practicalities, the main benefit of silicone lenses is its high oxygen permeability, which is crucial for maintaining the health of the cornea.

Pros and Cons of Non-silicone Soft Lenses

Many of the same benefits from using silicone soft lenses can still be applied for non-silicone lenses, such as comfort, easy adaptation and durability. However, as mentioned previously, non-silicone lenses do not allow as much oxygen to permeate to the cornea as compared to silicone lenses. On the other hand, because non-silicone lenses are less oxygen permeable, patients may feel more comfortable with non-silicone lenses because there is less sensitivity in the cornea.

What is better for you?

Almost all of the newest contact lenses are made of silicone contact lenses. The risks/benefits ratio leans towards silicone lenses though your optometrist can help you decide what lens is best for you.

