

# What Are Biomimetic Peptides?

Biomimetic Peptides mimic the function of growth factors as messengers in the skin, allowing the epidermis and dermis to communicate more efficiently. This is important, because one of the key effects of aging is reduced communication within the skin, resulting in decreased collagen production and an aggregation of degraded elastin fibers. Decreased collagen production (less supportive, firming fibers), coupled with degraded elastin (diminished skin elasticity and flexibility) combine exponentially to produce classic visible signs of aging; including thinner skin, fine and deep wrinkles, sagging and flaccidity and overall loss of skin tone.

Using cutting edge science of molecular biology, we were able to produce Biomimetic Peptides achieving an exceptionally high yield rate and superior quality. This purification technique allowed us to use the highest pure dose to make the products most effective, target specific, lack any other contamination, and have superior quality. Achieving most effective products with virtually no side effects.

This takes the concept of skin care to new levels of effectiveness and results - not just ingredients mixed into a cream but formulated in a way that imitates the biological conditions found on young healthy skin.

[Hyaluronic Acid](#) (HA), also known as hyaluronan or hyaluronate, is a carbohydrate, more specifically a [mucopolysaccharide](#) occurring naturally throughout the human body. It can be several thousands of sugars (carbohydrates) long. When not bound to other molecules, it binds to water giving it a stiff viscous quality similar to "Jello". This viscous Gel is one of the most heavily researched substances in medicine today with thousands of trials mostly in the fields of orthopedics and eye surgery. Its function in the body is, amongst other things, to bind water and to lubricate movable parts of the body, such as joints and muscles. Its consistency and tissue-friendliness allows it to be beneficial in skin-care products as an excellent moisturizer. Because HA is one of the most hydrophilic (water-loving) molecules in nature with numerous benefits for the human body it can be described as "nature's moisturizer".

## Skin

Although Hyaluronic Acid (HA) can be found naturally in most every cell in the body, it is found in the greatest concentrations in the skin tissue. Almost 50% of the bodies HA is found here. It is found in both the deep underlying dermal areas as well as the visible epidermal top layers. Young skin is smooth and elastic and contains large amounts of HA that helps keep the skin stay young and healthy. The HA provides continuous moisture to the skin by binding up to 1000 times its weight in water. With age, the ability of the skin to produce HA decreases.

