

The Aging Process

Like growth spurts, it is natural to have aging spurts and there are times when individuals seem to age quicker. However, some aspects of aging can be slowed by taking proper care of your body. One of the most obvious signs of aging is the changes that occur in the appearance of the skin. Premature-aging is mainly caused by overexposure to the sun and harsh environmental elements. Our skin is an organ, just like the heart, liver and kidneys. It acts as a barrier and registers pain and temperature. The skin can be easily damaged by sunlight, lack of sleep, poor diet, smoking, and alcohol, which create free radicals. There are two types of aging; Intrinsic aging and Extrinsic aging.

What are the differences between the two forms of aging?

Intrinsic aging is the natural aging process beginning in our 20s. What happens in our skin, collagen production begins to slow down and elastin fibers cause our skin to be not as resilient to pressure applied. Dead skin cells shed slower and our skin begins to take on a dull, sallow appearance and fine lines begin to appear. The way skin ages are due to genes, for example, some people age at 20, versus some who age after 40.

Some signs of intrinsic aging include:

- Fine wrinkles
- Thin and transparent skin
- Loss of underlying fat, leading to hollow cheeks and sunken eyes
- Bones shrink, causing the skin to sag
- Skin dries up and begins to itch
- Inability to sweat sufficiently
- Gray hair appears
- Hair loss
- Unwanted facial hair
- Nail plates thin

Extrinsic aging causes premature aging. The most common factor for extrinsic aging is sun exposure, called Photoaging. Photoaging occurs over several years of sun damage, which most damage is caused by the age of 18. Repeated sun exposure damages the collagen and elastin fibers which cause the skin to become loose, wrinkled and even leathery quicker than normal; this process is caused by Free Radical damage. Free radicals are highly reactive molecules which cause an accumulation of changes in the skin. Free radicals occur when an oxygen molecule loses an electron. Electrons work in pairs, by missing an electron, this molecule must find a new electron. These molecules pick up electrons from other molecules, which turn these other molecules into another free radical, which sets up a chain reaction to cause substantial damage. The more damage from Photoaging, the more free radicals are present and the cycle continues until visible damage is present in the skin.