

# Vitagen<sup>®</sup>

## collagen

*Less Sugar*

## What is Collagen?

Collagen is the main protein of connective tissues, bones, tendons and skin that makes up about 40% of your the total body mass. It is also the main component of skin, cartilage, ligaments and tendons, and the main protein component of bone and teeth due to its tough and inextensible (with great tensile strength) properties.

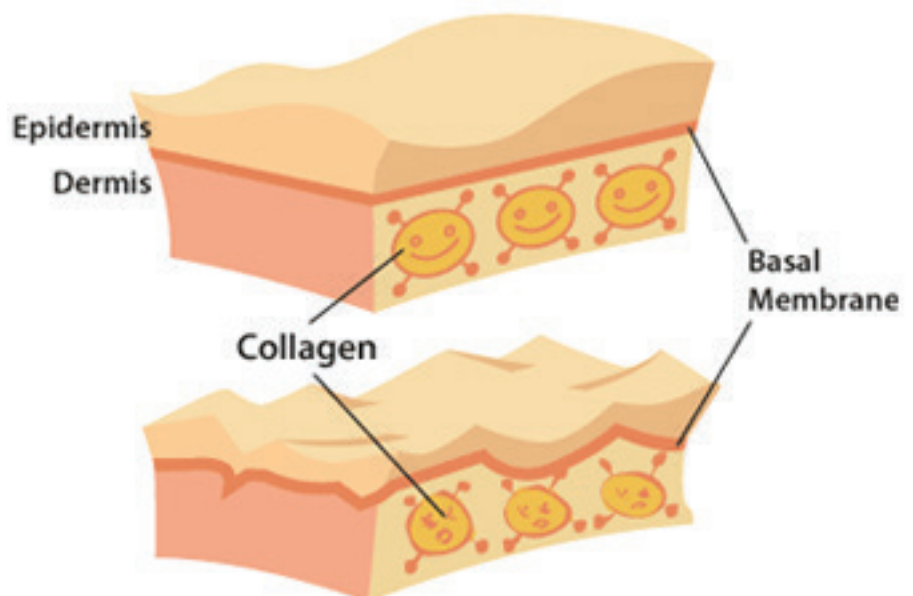
Along with soft keratin, it is responsible for skin strength and elasticity, and its degradation leads to wrinkles that accompany aging.

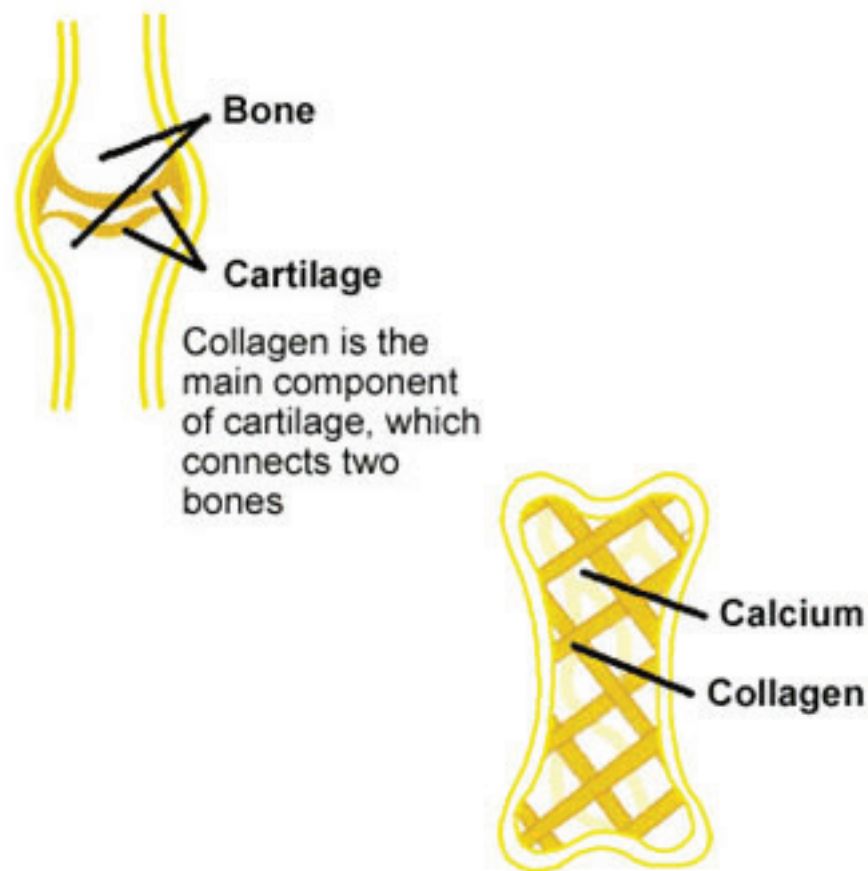


## Cosmetics Benefits

The biggest concern for skin is when skin loses its appeal with sagginess. This is a sign of a shortage of collagen in the skin's dermal layer. Collagen accounts for 70% of the dermis and helps skin to stay supple and taut. With the lack of collagen, the epidermis and the keratin layer will crumble and droop. This results in saggy skin or wrinkles.

Source: Alkemi





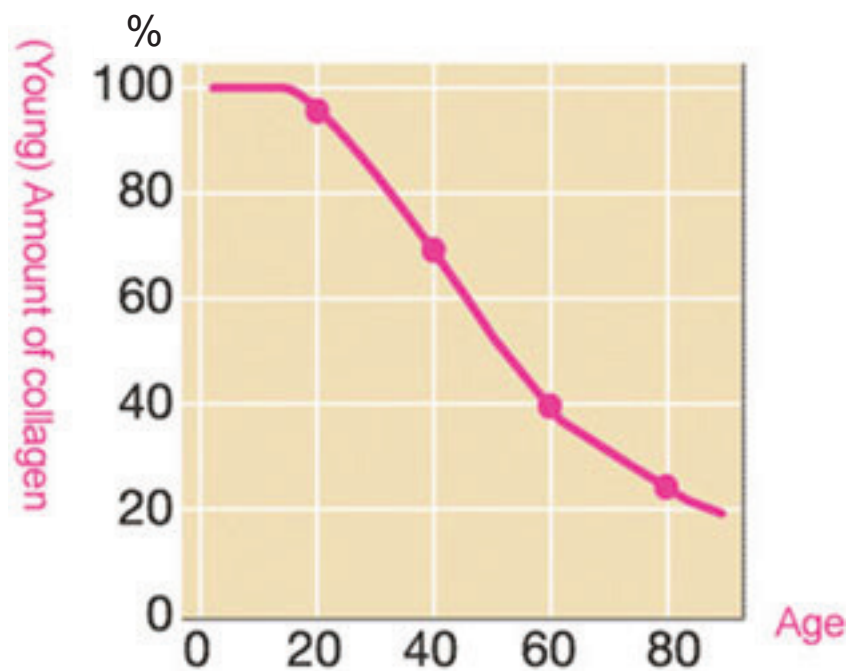
## Nutraceutical Benefits

Collagen has been clinically proven to help maintain healthy human body joint functions, supporting athletic activities and everyday movement. Often, athletes and bodybuilders place a great deal of strain on ligaments and joints, leading to injury. And as people age, the connective tissues wear out and are prone to damage. Fortunately, collagen supplements can help with re-synthesising and preserving collagen and counteract some of the wear and tear of the joints.

- **One international multicentre (US, UK and Germany) placebo-controlled human trial with 373 volunteers was recently finished by the well recognized Arthritis expert Roland W. Moskowitz (Role of collagen hydrolysate in bone and joint disease, Semin Arthritis Rheum 2000 Oct;30(2):87-99)**

Source: Alkemi Technologies Co. Ltd

# Factors Affecting Production of Collagen



Source: "Mechanism of aging and control" IBC

Age, stress, unbalanced diet, environmental toxins and sun exposure are factors which causes our skin to lose its elasticity, radiance and smoothness. At age 25, the generation of collagen starts to drop. At age 60, the level of collagen is reduced to less than half, resulting in our skin becoming thinner and less firm.



Age 40+



Age 50+



Age 60+