

Joints form the connections between your bones and provide the body with support and facilitate movement. When joints are painful, everyday tasks may be difficult. Joint pain can be caused by injury affecting any of the ligaments, bursae, or tendons surrounding the joint. Injury can also affect the ligaments, cartilage, and bones within the joint. Pain is also a feature of joint inflammation, arthritis, such as rheumatoid arthritis and osteoarthritis. Inflammation within the joint is a common cause of shoulder pain, ankle pain, and knee pain. Joint pain is also referred to as arthralgia.

**Collagen** is the most abundant protein in the human body and builds bones, muscles, tendons and skin. As we age our bodies produce less collagen. This has an impact on how we look and function.

#### The loss of collagen is usually associated with symptoms such as:

- The skin loses elasticity, wrinkles form and wounds heal more slowly.
- Tendons and ligaments are stiffer and flexibility becomes less.
- Muscle mass decreases and the body becomes weaker.
- Cartilage wears down and joint pain and even Rheumatism or Osteoarthritis may develop.
- Intestinal linings become thinner.

Until now, the only way to supplement collagen in the body, was to use **exogenous collagen (collagen made in factories by man from animal bones, skin and other animal by products.** This is a **synthetic** collagen which is the most abundant and consists of:

- Type 1 collagen: Marine collagen from fish scales and bones, crustaceans, and other sea creatures.
- Type 2 collagen made from chicken sternum
- Type 3 collagen made from bovine peptides

### It is important to note that:

Exogenous collagen (Man- made collagen) may cause allergies and even death. Those with a fish, shellfish, or egg allergy should avoid collagen supplements as many of them are made from these ingredients. Research has shown that taking too much exogenous collagen can make your skin stretch, thicken, and harden. It can also cause damage to internal organs, such as the heart, lungs, and kidneys. Problems also include: osteogenesis imperfecta (also called brittle bone disease), caused by a problem with type I collagen. Elhers-Danlos syndrome, which leads to stretchy skin and joints, often caused by a problem with type IV collagen. Further collagen supplements are not recommended for those with a high risk of developing kidney stones. Collagen is a vital "building block" that contributes to the shape and function of the skin, heart, blood vessels and other organs. When synthesis exceeds degradation, there is a net accumulation of collagen that can eventually become fibrosis. When blood vessels become stiff due to fibrosis, the heart works harder to keep blood flowing through the vessels. This increases blood pressure. As fibrosis progresses, cells in the heart and blood vessels are

encased in a "cement-like" collagen mesh. The heart and vessels become stiffer, and their cells can no longer function properly.

High calcium levels or hypercalcemia may occur as a possible side effect of collagen supplements. Specifically, collagen supplements that come from marine sources, like shark cartilage or shellfish, can contain high levels of calcium.

Too much calcium in the body can cause:

- Constipation
- Bone pain
- Fatigue
- Nausea
- Vomiting
- Abnormal heart rhythms

The sad part is that there is no scientific evidence to suggest that taking collagen supplements actually helps repair body tissues. The body's ability to absorb Exogenous (Synthetic/man made) collagen is still debateable.

## The good news is:

We live in exciting times where advances in science are moving at a rapid pace. Science can now help the human body to produce its own collagen again! This helps us to stay healthy, young, active, vibrant and attractive. We are seeing more and more scientific proof of how a holistic, natural approach to health and wellness is the smarter way forward.

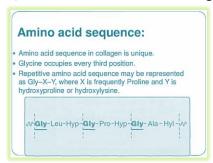
Using the latest technology and world-leading formulations, we present a unique product, made of organic, glycine-bound minerals and vitamins. This formulation is composed to assist the body to naturally synthesize collagen (Endogenous collagen). Your body creates its own collagen by combining amino acids. The process also uses vitamin C, zinc and copper.

# How can collagen naturally be produced in the body by taking an organic vitamin and mineral product?

Collagen should be naturally produced by our bodies, but production slows down at a certain stage. Amino acids are the building blocks of proteins; therefore, it is no surprise that collagen is comprised of amino acids. The primary amino acid sequence of collagen is glycine-proline-X or glycine-X-hydroxyproline. Collagen is composed of 3 chains. The chains are wound together to form a triple helix. Since glycine is the smallest of all the amino acids, it allows the chain to form a tight configuration, and it can withstand stress. In the forming of Collagen in the body, glycine is required at every third position on the collagen helix structure, because the assembly of the triple helix puts this residue at the interior (axis) of the helix, where there is no space for a larger side group than glycine's single hydrogen atom.

Because of the nutrient collapse, pollution, stress and other factors our bodies need more and more nutrient supplements and glycine and other amino acids, are needed to act as carriers for transporting minerals in the body. Glycine and other amino acids are not available anymore to produce collagen, because they become "too busy" trying to transport minerals.

This product is unique and by formulation the only one of its kind in the world! The minerals are bound to the smallest amino-acid, glycine. Therefore glycine in the body does not have to "work" to transport minerals, but is now free to build collagen!



#### Ingredients per 100ml of ReGenerate:

MSM 16000mg; Glucosamine 5600mg; Chondroitin 3200mg; **Vitamin C** 1200mg; CHD Fulvic Acid 5000mg; Biotin 4mg; **Copper 5mg**; Manganese 20mg; **Zinc 30mg**; Magnesium 50mg; Stevia; Natural flavour.

Methylsulfonylmethane (MSM) is commonly used to treat osteoarthritis, rheumatoid arthritis, tendonitis, and tenosynovitis. It is vital for supporting optimal cell structure and reversing free-radical damage to cells. MSM also supports the immune system and the body's ability to repair connective tissue. MSM can provide health benefits like:

- Treat Osteoarthritis
- Reduce Allergy Symptoms
- Speed Up Exercise Recovery
- Preserve Youthful Skin

#### Glucosamine sulphate is taken orally for

- osteoarthritis
- glaucoma
- weight loss
- joint pain caused by drugs
- a bladder condition called interstitial cystitis
- jaw pain, joint pain including knee pain, back pain
- Multiple sclerosis and HIV/AIDS.

**Chondroitin** is a building block of cartilage. It may also help

- Prevent cartilage breakdown from osteoarthritis.
- Anti-inflammatory properties and reduces joint pain and stiffness in people with osteoarthritis.

Vitamin C, also known as ascorbic acid, is necessary for

- The growth, development and repair of all body tissues.
- Formation of collagen
- Absorption of iron
- The proper functioning of the immune system
- Wound healing
- Maintenance of cartilage, bones, and teeth.

#### Carbohydrate-Derived Fulvic Acid (CHD-FA™) is proven to be:

- Anti-inflammatory
- Antiviral, antibacterial, antifungal and antioxidant
- Assists with nutritional uptake
- A natural healer that can help heal internal and external ulcers
- Helps with discharging heavy metals and pesticides from the body

#### Biotin (B7) or vitamin H helps the body

- metabolize fats and carbohydrates
- improve hair health
- maintain proper function of the nervous system
- improves brittle finger nails or toenails

#### It has also been shown to assist in the healing of

- Diabetes
- Diabetic nerve pain
- Multiple sclerosis

#### Copper is an essential nutrient and assists in

- prevention of cardiovascular disease and osteoporosis
- production of red blood cells
- regulation of heart rate and blood pressure
- absorption of iron
- prevention of prostatitis, or inflammation of the prostate
- development and maintenance of bone, connective tissue, and organs like the brain and heart
- activation of the immune system

#### Manganese is linked to lower incidences of epileptic seizures and assist in

- formation of connective tissue and to heal bones
- wound healing
- collagen production
- fat and carbohydrate metabolism
- calcium absorption
- blood sugar regulation
- normal brain and nerve function
- reduce PMS symptoms in combination with calcium
- protecting the brain against free radicals and improve brain function
- good thyroid health
- wound healing by playing a role in collagen production

#### **Zinc** supports

- wound healing and plays critical roles in
  - collagen synthesis
  - immune function and inflammatory response significantly reducing risk of age-related diseases, such as pneumonia, infection and age-related macular degeneration (AMD)
  - the prevention of acne

• the prevention of inflammation

Magnesium is a bronchodilator. It relaxes the bronchial muscles and expands the airways, allowing more air to flow in and out of the lungs. This can relieve symptoms of asthma, such as shortness of breath. Magnesium is involved in hundreds of biochemical reactions in the body and

- may boost exercise performance.
- fight depression
- has benefits against type 2 diabetes
- it can lower blood pressure
- it has anti-inflammatory benefits

Stevia is a natural sweetener linked to numerous benefits, including lower blood sugar levels