

# LifeFit Collagen COLLAGEN















for healthy skin, joints and bones















# Why do we need a collagen supplement?

Collagen is a protein that helps maintain the elasticity and structure of the skin, bones, muscles, heart arteries and blood vessels.

Scientists have identified a total of 29 varieties of collagen in our body, including these 3 main types:





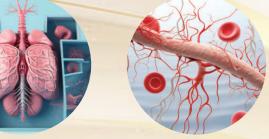


Skin, bones, ligaments, and tendons



Cartilage and joints

Internal organs (heart), blood vessels, and muscles





Wrinkles and loss of skin elasticity



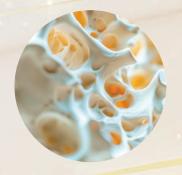
Hollow cheeks

Brittle hair and nails

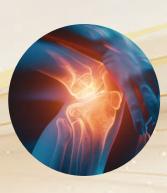
12 common collagen deficiency symptoms



Muscle loss and aching



Osteoporosis and Osteoarthritis



Joint pain







Poor circulation

High blood pressure

12 common collagen deficiency symptoms



Gastrointestinal issues



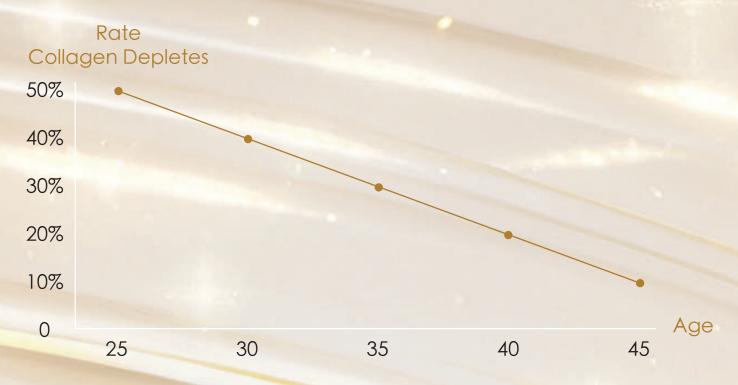


Minor organ prolapse

Slow recovery time after injury

Disclaimer: This product is not intended to diagnose, treat, cure or prevent any disease

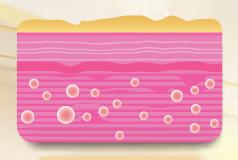
# Why do we need a collagen supplement?



Our skin is 75% collagen, but after the age of 25, collagen synthesis decreases at a rate of 1.5% per year and after the age of 40, our collagen level may have dropped more than 40%.

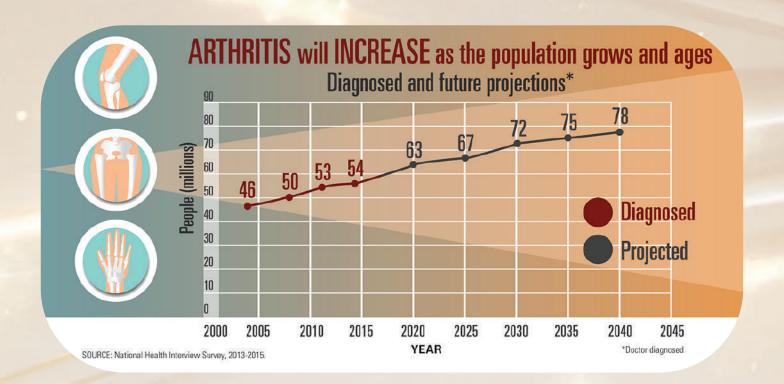
# COLLAGEN





YOUNGER SKIN

OLDER SKIN





By new estimates, 1 in 3 people ages 18 - 64 have arthritis

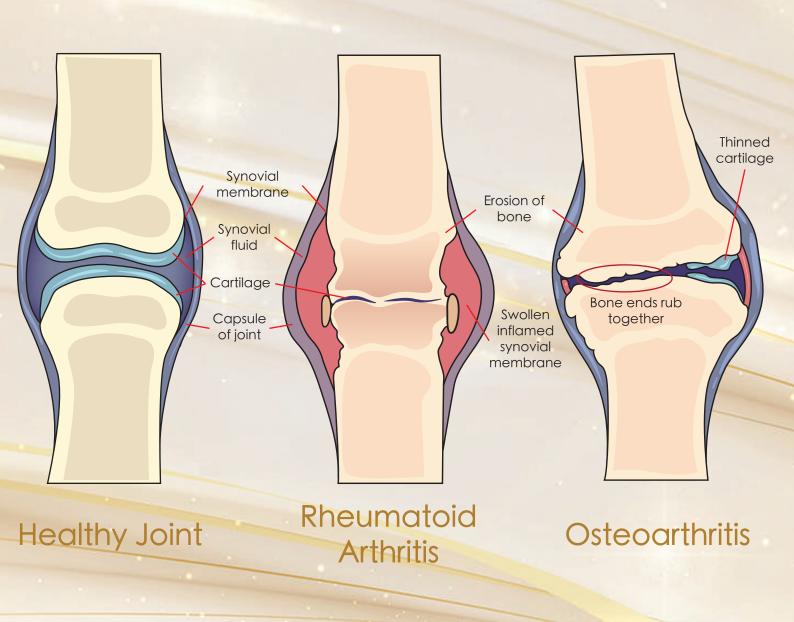


Aged 65+ experience joint pain



#### What is arthritis?

It is the swelling and tenderness of one or more of the joints cause by inflammation, wear and tear



Wear and tear of joints - causes Osteoarthritis

Autoimmune disorder - causes Rheumatoid Arthritis



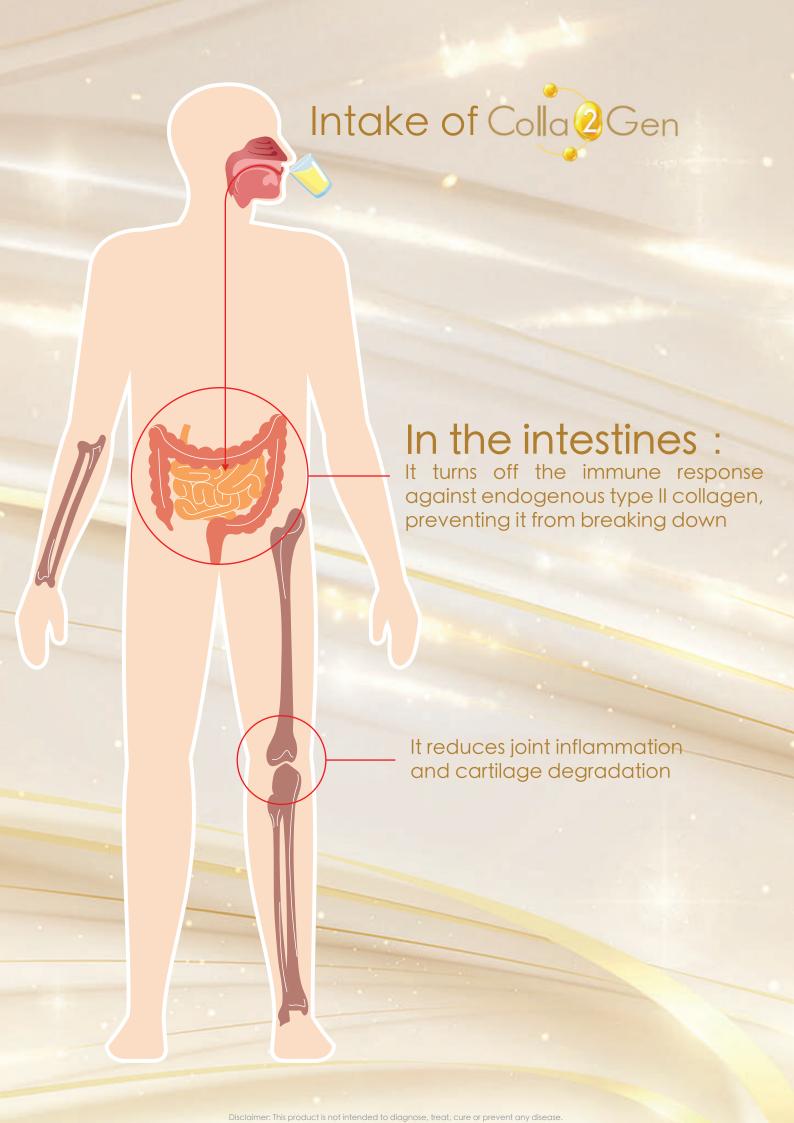
effective for joint and skin health

Only a small dose of undenatured collagen works by inducing a process known as oral tolerance that ultimately engages the immune system in the repair of its own joint cartilage and skin.

Colla2gen is a native type II collagen designed to work by oral tolerance.

When you take oral type II collagen in its native, undenatured state, it does not get absorbed by the body but instead remains intact until it reaches your *small intestine*.

Collagen Molecule Size: >3000 Daltons



#### Induce Oral Tolerance

Many studies including in vitro study, support the mechanism of



an undenatured collagen and demonstrate its efficacy in joint and skin health.



Before After

- Improve and treat arthritis symptoms
- Anti-inflammatory
- Increase the bone mineral density, elasticity and strength
- Improve bone biomechanics and benefit postmenopausal osteoporosis
- Promote the bone metabolism growth, tissue repair and reconstruction
- ✓Increase osteocalcin level

Type II collagen oral tolerance; mechanism and role in collagen-induced arthritis and rheumatoid arthritis

Kyung: Su Park <sup>1</sup>, Min Jung Park, Mi La Cho, Seung-Ki Kwok, Ji Hyeon Ju, Hyeok-Jae Ko, Sung-Hwan Park, Ho-Youn Kim

Chicken type II collagen induced immune balance of main subtype of helper T cells in mesenteric lymph node lymphocytes in rats with collagen-induced arthritis

Tong Tong <sup>5</sup>, Wei Zhao, Ying-Qi Wu, Yan Chang, Qing-Tong Wang, Ling-Ling-Zhang, Wei Wei

IL-10 overexpression differentially affects cartilage matrix gene expression in response to TNF-alpha in human articular chondrocytes in vitro

R.D. Müller <sup>1</sup>, T. John, B. Kohl, A. Oberholzer, T. Gust, A. Hostmann, M. Hellmuth, D. Laface, B. Hutchins, G. Laube, R.W. Veh, S.K. Tschoeke, W. Ertel, G. Schulze-Tanzil

Type 1 regulatory T cells specific for collagen type II as an efficient cell-based therapy in arthritis

Helène Asnagli, Delphine Martire, Nathalie Belmonte, Julie Quentin, Hervé Bastian, Mathilde Boucard-Jourdin, Papa Babacar fall, Anne-Laure Mausset-Bonnefont, Amelie Mantello-Moreau, Sandrine Rouquier, Irène Marchetti, Christian Jorgensen, Arnaud Foussat Fascale Louis-Pience

Suppression of type II collagen-induced arthritis by intragastric administration of soluble type II collagen

C Nagler-Anderson, L. A Bober, M. E. Robinson, G. W. Siskind, G. J. Thorbecke.

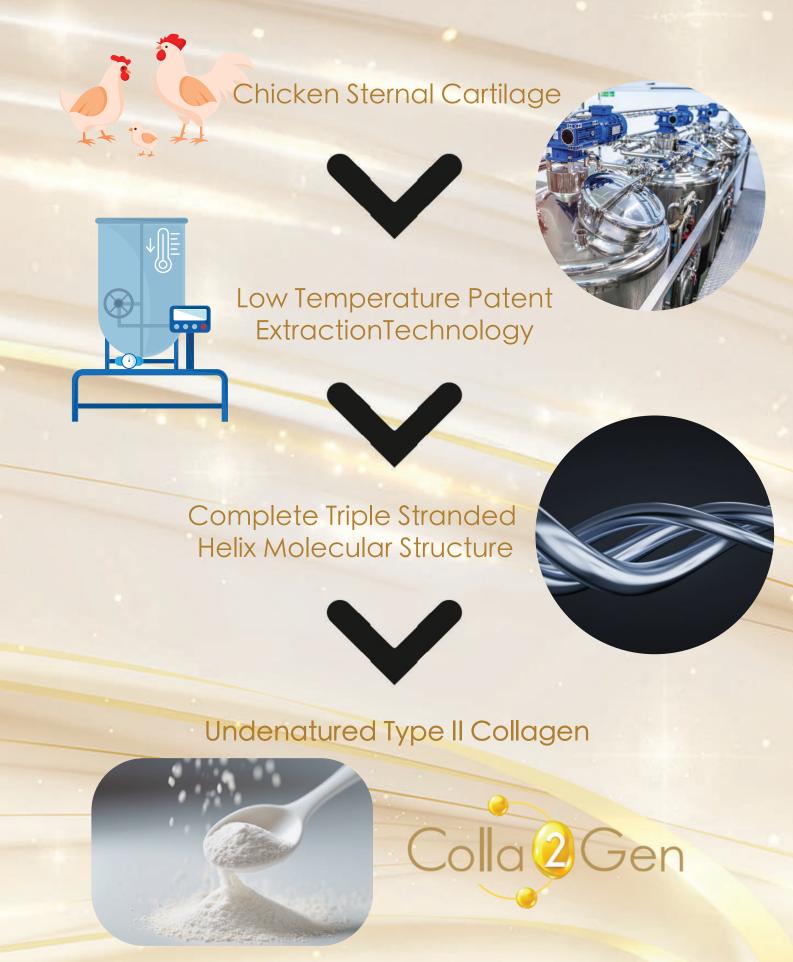
#### NMR test results recorded 3 months: Before and After





- In Vitro Study: Anti-inflammatory effect of undenatured collagen type II.
   A collaboration study conducted in Korea, 2015.
- Joint Study with Tongji Medical College of China (Chinese Journal of Public Health, April 2006)
- Tongji Medical College of China, American Journal of Translational Research, June 2018
- Tongji Medical College of China, American Journal of Translational Research, August 2018

# Collagen is a native form of collagen that is not being broken down



### Comparison

#### **Undenatured Collagen**

Hydrolyzed Collagen

100%

Chicken sternal cartilage

Source

Chicken cartilage

Low temperature extraction technology (Patented)

Manufacturing Process

Bio-enzyme hydrolysis

Native form: Triple-stranded helix structure

Molecular Structure Denatured: Peptides or amino acids

Maintenance of cartilage, tendons and ligaments

Targeted Functions

Maintenance of cartilage, tendons and ligaments

Immune-mediated process

Mechanism Of Action

Anabolic process

Low (in mg)

Effective dose

High (in g)

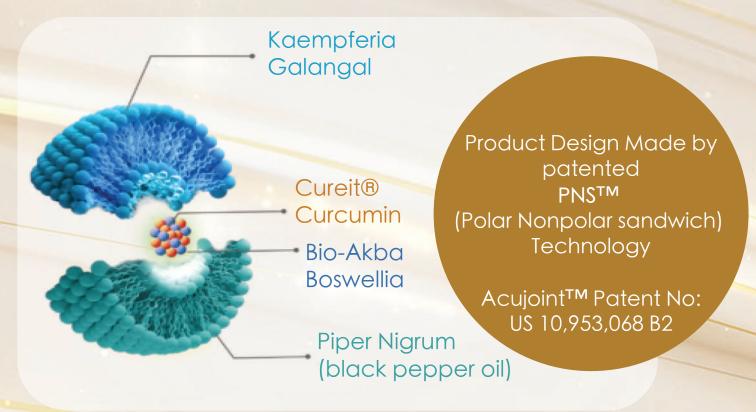


#### INNOVATIVE INGREDIENTS IN



is a complex of the botanicals curcumin, boswellia (frankincense), piper nigrum (black pepper) oil and kaempferia galangal extract, encapsulated inside a natural matrix using Polar-Nonpolar-Sandwich (PNS) Technology.

The high bioefficacy of Acujoint™ is an Innovative solution for Joint Health



#### Acujoint ™

clinically proven in human volunteers, compared with efficacy of glucosamine chondroitin standard, can:

- Inhibits the production of inflammatory cytokines in Osteoarthritis
- Rejuvenates joint cartilage
- Prevents the degradation of cartilage
- Works as an antioxidant in preventing inflammations
- Lowers the progression of arthritis and provides substantial relief to the pain
- Prevents wearing of bone tissue
- Supports musculoskeletal (Joints, Muscles, Bones) health

1. Kaempferia Galangal:

(Anti-inflammatory & Antioxidant)

The Kaempferia Galanga rhizome extracts are used for the treatment of inflammation, swelling, cytotoxic, antihypertensive, hypolipidemic effect.

#### 2. Cureit®:

Cureit® curcumin is effective in supporting immune boosting, musculoskeletal health, cell protective effect, neuroprotective effect. The bioavailability of turmeric in Acujoint formulation is 10 fold higher compared to normal curcumin by 95%.

- 3. Bio-AKBA (Boswellia Serrata Extract):

  (Anti Inflammatory & Analgesic) Boswellia acids, the main active ingredients of Boswellia serrata extracts has potent anti-inflammatory properties for controlling rheumatoid arthritis, osteoarthritis, chronic colitis, ulcerative colitis, bronchial asthma, inflammatory diseases.
- 4. Piper Nigrum Oil (Black Pepper Oil):
   Anti-inflammatory & Analgesic
   Cannabinoid receptor 2 (CB2) is a natural compound found in in black pepper exerts analgesic effects.
   People with osteoarthritis would experience a reduction in pain with this formulation.



# Collagen Peptide (Tilapia Fish)



Collagen peptides are proven for improved skin health and reduced joint pain. They prevent bone loss, increase muscle mass, support digestion and heart health. Fish collagen peptides have the best absorption and bioavailability due to their smaller particle size.



**Nutrition Research** Volume 57, September 2018, Pages 97-108



Daily oral supplementation with collagen peptides combined with vitamins and other bioactive compounds improves skin elasticity and has a beneficial effect on joint and general wellbeing

Anna Czajka ° ¹ ≅ , Ewa M. Kania ° ¹ ≅ , Licia Genovese ° ≅ , Andrea Corbo b ⊠ , Giovanni Merone <sup>c</sup> ⋈ . Cecilia Luci <sup>c</sup> ⋈ . Sara Sibilla <sup>a</sup> ⋈ ⋈ Show more > + Add to Mendeley 📽 Share 🍠 Cite

MedSci 梅斯

https://doi.org/10.1016/j.nutres.2018.06.001 a

丁旦 -

公开课

#### Skin Pharmacol Physiol: 口服胶原蛋白肽可增加皮肤角质层内天 然保湿因子的水平,从而改善皮肤含水量

& MedSci原创 皮肤屏障 胶原蛋白肽 最新指南免费下载

> Skin Pharmacology and Physiology

Research Article

Skin Pharmacol Physiol 2021;34:115-127 DOI: 10.1159/000513988

Oral Supplementation of Collagen Peptides Improves Skin Hydration by Increasing the Natural Moisturizing Factor Content in the Stratum Corneum: A Randomized, Double-Blind, Placebo-Controlled Clinical Trial

Miho Miyanaga Taro Uchiyama Akira Motoyama Nobuhiko Ochia Osamu Ueda Masashi Ogo



研究纳入99名35-50岁的健康日本妇女,随机分为3组(33人/组),每天接受1或5克CP或安慰剂,为期12周。 The study included 99 healthy Japanese women aged 35-50 years old, who were randomly divided in to 3 groups (33 people/group) and received 1 or 5 grams of CP or placebo every day for 12 weeks.



HEALTHY AGEING

JAN-XIN JIANG<sup>1</sup>, SHEN YU<sup>1</sup>, GIRREN HUANG<sup>2</sup>, XIAN-LONG ZHANG<sup>1</sup>, CHANG-QING ZHANG<sup>1</sup>, JIAN-LIE ZHOU<sup>2</sup>\*, JANNE PRAWITT<sup>6</sup>\*

Collagen Molecule Size: >3000 Daltons

Collagen peptides improve knee osteoarthritis in elderly women A 6-month randomized, double-blind, placebo-controlled study

KEYWORDS: Collagen peptides, asteoarthritis, joint pain, healthy ageing, nutraceutical



Source:

Skin Pharmacology Physiology.

2021;34(3):115-127.

doi: 10.1159/000513988. Epub 2021 Mar 26.

PMID: 33774639.



Peaches are high in fibre, vitamins, and minerals. They also contain beneficial plant compounds like antioxidants, which can help protect our body from aging and disease.

- Packed with nutrients and antioxidants
- Aid digestion
- Improve heart health
- Protect skin
- Prevent certain types of cancer
- Reduce allergy symptoms
- Boost immunity
- Prevent against certain toxins
- Reduce blood sugar levels

# Inulin (Chicory Root)

Inulin (Chicory root powder) is a type of prebiotic.

Chicory root powder may:



- Help fight inflammatory arthritis
- Boost digestive health
- Improve skin barrier function
- Aid detoxification
- Aid diabetes treatment
- Aid stay slim





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## Coenzyme Q10

Our cells use CoQ10 for growth and maintenance. Levels of CoQ10 in our body decrease as we age.



- Promotes bone cell proliferation
- Protects against osteoporosis due to ovariectomy and menopause
- Helps skin repair and regenerate
- Helps body produce collage





# 23 health benefits of CoQ10 based on science

- 1. May help treat migraine headaches
- 2. May improve brain function
- 3. May prevent Alzheimer's disease and parkinson's disease
- 4. May lower blood pressure
- 5. May improve insulin sensitivity
- 6. May prevent heart failure and other heart disorders
- 7. May improve fertility problems
- 8. Good for pregnancy
- 9. May help treat periodontal disease
- 10. May lessen the skin damage caused by sun
- 11. May prevent skin cancer
- 12. Good for lung health
- 13. May improve exercise performance
- 14. May help prevent the adverse effects of taking statin-type cholesterol drugs
- 15. May reduce fibromyalgia symptoms
- 16. Protects from oxidative stress and DNA damage
- 17. May help treat mitochondrial disorders
- 18. May decrease the inflammation in people with atherosclerosis
- 19. May decrease oxidative stress in people with huntington's disease
- 20. May slow the progression of friedreich's ataxia
- 21. May prevent premature aging
- 22. May repair DNA damage in down's syndrome
- 23. May prevent myeloma, breast cancer, prostate cancer, and lung cancer

## Multivitamins for a healthy life

Multivitamins, a combination of different vitamins and minerals present in food sources

- Increases Energy Levels
- Boosts the Immune System
- Keeps Heart Healthy
- Supports Eye Health
- Maintains Muscle Strength
- Reduces Cancer Risk
- Improves Brain Function
- Reduces Stress and Depression
- Good for Healthy Skin and Hair.

Multivitamins can boost our health by making up for nutritional gaps to fulfil our daily demands of nutrition of vitamins and minerals.

✓ Vitamin A

✓ Vitamin B1

✓ Vitamin B2

✓ Vitamin B3

✓ Vitamin B5

**D**-Biotin

✓ Vitamin B6

✓ Vitamin B12

✓ Vitamin C

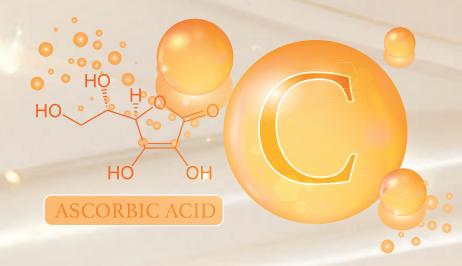
✓ Vitamin D3

✓ Vitamin E

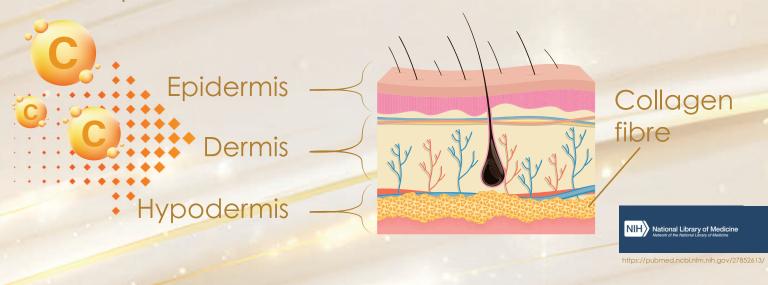
✓ Folic Acid

#### Ascorbic Acid

Ascorbic Acid or Vitamin C is essential for collagen synthesis and acts together with collagen to support



healthy tissues. Taking collagen and vitamin C together can improve skin health, hair and nails, joint health, athletic performance, and overall health and wellness.



**Erythritol** 

Erythritol is a type of carbohydrate called a sugar alcohol with zero calories. It is used to add sweetness to food, and it occurs naturally in a variety of fruits and vegetables.

OH It is only about 60-80 percent as sweet.

OH

Erythritol has no effect on either blood sugar or insulin levels, a useful ingredient for those with diabetes or people on a weight loss plan.

# Benefits of LifeFit Collagen Triple Collagen Formulation



Cartilage Health

- Stimulates cartilage growth, especially on the knees
- Relieves joint pain
- Prevents bone loss
- Repairs joints
- Give bones more structure and strength
- Boosts muscle mass
- Strengthens teeth and nails
- Maintain the elasticity and structure heart arteries and blood vessels

- Hydrates your skin and improve elasticity
- Reduces fine lines and wrinkle
- Reduces dark spot and pigmentation
- Reduces cellulite/stretch



#### **Gut Health**











## Triple Collagen Formulation for healthy skin, joints and bones







Boosting collagen production in our body can help maintain skin elasticity and youthful appearance, as well as flexible joints and healthy bones.

