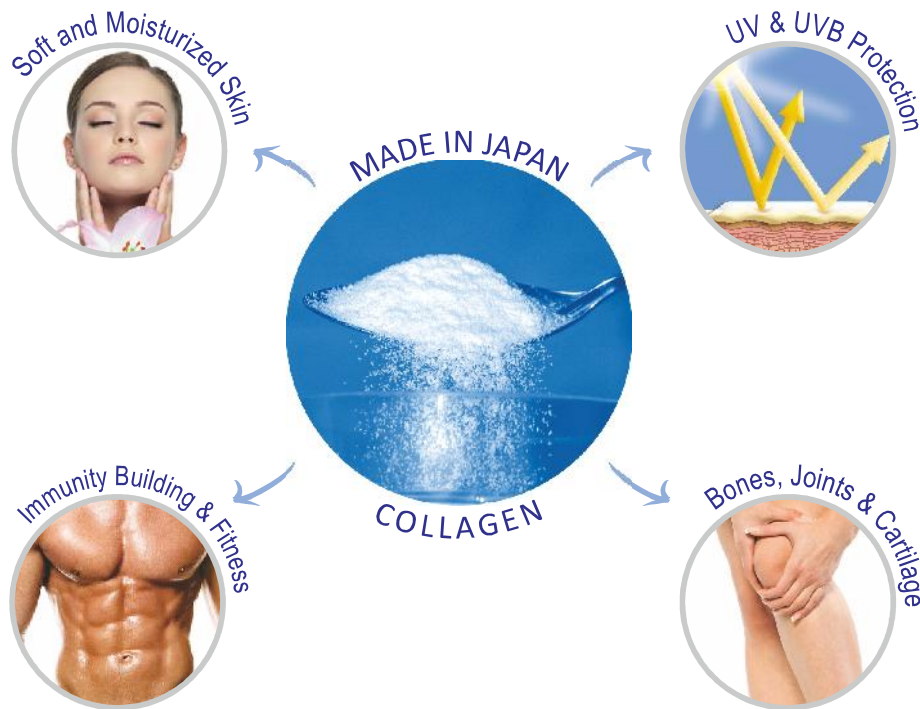


COLLAGEN

Japanese Beauty & Health Secret



Collagen provides multidimensional benefits for skin, bone and joint health by regenerating the cells needed for maintaining an active lifestyle and enhanced **immunity**, health, strength and elasticity throughout the body. Collagen peptide is a natural, high-quality, clinically tested, bio peptide. Marine Collagen is easy to digest and quickly absorbed due to its low molecular weight and high bioavailability. Classified as a food supplement, it is widely consumed in Japan by men and women of all ages especially those who look after their overall wellness, health and appearance.

No additives

No preservatives

No artificial ingredients

No fat

No GMO

No pesticides

Lactose and gluten free



SKIN HEALTH

Collagen helps to promote healthy, radiant skin by nourishing our body with the nutritional building blocks required to improve skin structure.

Skin Health is affected by age and external factors. Collagen is one of the most important structural substances in our bodies, accounting for 25 to 30% of its total protein – 75% of our skin is collagen. It is the key component for supple and radiant healthy skin.

As we age, our body loses its ability to make collagen, causing it to break down. Loss of collagen leads to a collapsing dermal layer and this contributes to wrinkles and loss of elasticity. The environment also affects our skin and UVA/UVB exposure induces skin damage and loss of collagen. Everyone can benefit from taking collagen and maintaining the integrity of the extracellular matrix is essential for a youthful skin appearance.

Collagen benefits on skin health

Collagen a bioactive ingredient that improves skin properties to achieve an optimal skin condition. Our product slows down the aging process by nourishing the body with the nutritional building blocks it needs. In particular, Marine collagen contains much larger amounts of the amino acids, glycine, proline and hydroxyproline than many other proteins. These amino acids are necessary for promoting healthy tissue growth by the cells themselves. Collagen also highly digestible and is characterized by an improved bioavailability for optimal results on the skin.

Collagen embraces the benefits of “beauty from within”. Comprehensive clinical studies have been carried out, highlighting the numerous positive effects of ingesting Collagen, including:

- **Increase in the water absorbing capacity of the stratum corneum**
- **Improvement of skin smoothness**
- **Improvement of skin suppleness and viscoelastic properties**
- **Reduction of fine lines and deep-wrinkles formation**
- **Reduction of UVB induced skin damage**

Scientifically proven :

Clinical studies reported that the ingestion of Collagen peptides increases the fibroblast density and the diameter of collagen fibrils in the dermis. Fibroblasts are the principal cells of the dermis that are responsible for generative connective tissue and allow the skin to recover from natural and photo-aging damages.



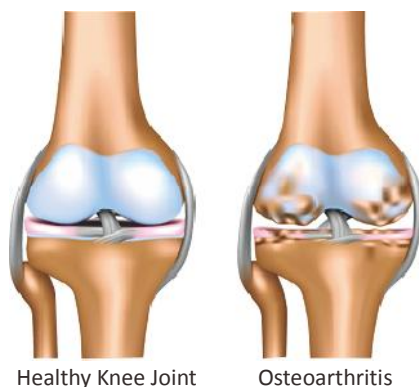
JOINTS HEALTH

Collagen promotes joint health by helping to repair joint matrix degeneration and improving long term joint comfort and mobility.

Osteoarthritis - most common joint disorder is on the rise

Joint Health is affected by age and external factors causing osteoarthritis, also known as degenerative joint disease, and is the most common joint disorder. This form of arthritis can be developed with age but external factors can also affect joints, such as mechanical stress due to intense sport activities. Osteoarthritis is linked to the breakdown of cartilage, exclusively made of chondrocytes cells.

These cells produce and maintain the cartilaginous matrix, consisting mainly of collagen. An insufficient amount of collagen results in the loss of cartilage. Without the normal amount of cartilage, the bones rub together, causing pain, inflammation and stiffness. Any movement can be extremely painful and mobility becomes limited.



Collagen benefits on Joint Health :

Collagen a bioactive ingredient that promotes joint health by helping to repair joint matrix degeneration and improving long-term joint comfort and mobility. The numerous positive effects of ingesting Collagen, including:

- Helps to repair joint matrix degeneration
- Improves joint health by strengthening cartilage and joint structure
- Enhances joint comfort and mobility to reduce joint pain
- Scientifically proven

Studies have shown that ingestion of collagen peptides directly improves joint mobility, comfort and reduces joint pain. These collagen peptides are accumulated in cartilage and help to repair joint matrix degeneration by stimulating chondrocytes cells for the biosynthesis of collagen.

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BONES, HAIR, NAIL HEALTH

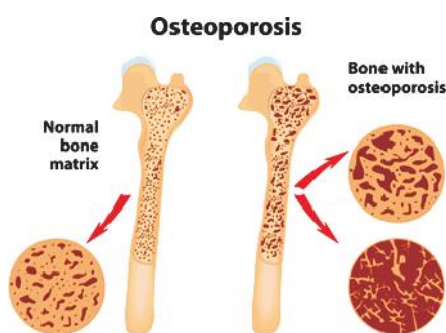
Research has shown Collagen helps to restore bone mineral density and support healthy bone metabolism. It also supports hair and nail health.

Bone Health is affected by age

As worldwide population is rapidly aging, bone health problems are consistently increasing, causing pain and discomfort. In the elderly particularly, the amount of daily intake of protein can be sub optimal and can contribute to osteoporosis, a condition where the bone mineral density is low and is associated with increasing risks of fracture.

Molecular biologists have identified collagen as the key structural protein that can help you get thicker hair and nails from the inside out.

Type I collagen represents 90% of organic bone mass. All bones consist of living and dead cells embedded in the extra-cellular matrix that makes up the skeleton. While bone is essentially brittle, it does have a significant degree of elasticity, contributed chiefly by collagen.



Collagen benefits on Bone Health

Collagen has numerous beneficial effects: collagen peptides help to maintain bone health and restore bone mineral density in order to prevent the risk of osteoporosis. Everyone can benefit from taking collagen to preserve bone health and for an improved quality of life.

Collagen provides multiple benefits to enhance bone health by:

- Restoring Bone Mineral Density
- Reducing the bone resorption and stimulating bone formation
- Increasing bone strength and reducing the risk of fracture
- Scientifically proven

In vivo animal studies conducted to investigate the effects of Collagen under a low protein diet reported that ingesting collagen daily increases considerably bone mass density. Research has shown that these peptides molecules induce the differentiation of cells into osteoblasts (cells responsible of bone formation) rather than osteoclasts (cells responsible for bone resorption).



FAQs regarding Collagen

1. What is collagen peptide made of?

Collagen is processed from animal-derived raw materials: Fish scale and skin, swine or bovine hide or bone. From a regulatory perspective, it is generally considered a food ingredient or a dietary supplement (depending on the country) and it is not an additive with an E number.

2. From where your collagen peptide derived?

Our fish collagen peptide derives from Red Snapper (deep sea fish) or Tilapia (sweet water fish) skin and/or scale depending on the grade.

3. Are there clinical studies available regarding efficacy of collagen?

Yes, clinical studies available regarding efficacy of collagen.

4. What about certificates on quality and manufacturing?

Collagen peptide is qualified under the “food” category under Japan regulations. In addition, the products are manufactured following ISO (9001:2000) standards. Some plants also manufacture pharmaceutical products, and in those cases, they have Japan GMP category (issued by the Japan Ministry of Health, Labor and Welfare). This means that we can supply collagen made under Japanese pharmaceutical industry standards. Moreover, the product MSDS is also available for countries who require this document.

5. Is collagen safe?

Yes. It is a natural supplement derived from natural ingredients, from the careful selection of raw materials through the entire manufacturing process in GMP and Japanese Ministry of Health approved facilities. Collagen has been long used all over the world in foods and medicines and clinical studies have indicated limited cases of fullness or unpleasant taste at the most, without adverse effects being noted. Most of the European makers set shelf life as 5 years from manufacturing. In our case, the usual expiry date is 3 years. We establish a shorter expiry date to guarantee the quality of the product during the entire cycle in a stricter standard than other markets.

6. What is the best application for collagen peptide?

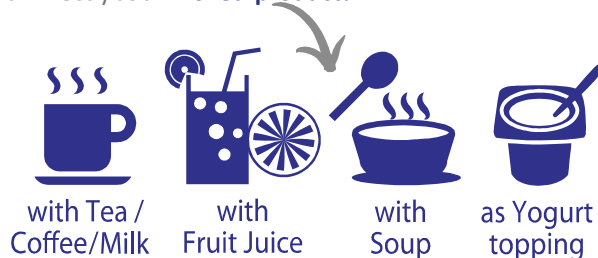
It depends upon your intended application (food, cosmetics, beverages, industrial, etc.) and then assist depending on the particular case. Collagen is a highly

versatile product!

7. Can collagen peptide be directly applied on the face or body (not through the digestive system or an injection) and be properly absorbed?

As a consumer product, the application of collagen peptide is generally understood as:

- A raw material for beauty cosmetics such as moisturizing or anti-aging creams, etc.
- Directly as a **finished-product!**



OR as an ingredient:

- To fortify food supplements, wellness foods, health drinks, tablets
- For Ingestible Beauty products, Anti-aging, Skin-care products
- Bones & knee joint formulations (Arthritis, Osteoporosis supplements)
- Muscle development, protein & diet supplements

We cannot warrant the use of collagen peptide through other means.

8. Can I take collagen if is already taking other supplements?

Our collagen is a totally natural supplement derived from fish without preservatives or conservatives. As such, there is no particular counter-indication about collagen because it should be regarded as a food supplement only. Having said the above however, we always encourage our customers to advise consumers to consult their doctors at all times and that collagen should not be understood as a replacement of any nutritious diet nor exercise routine to maintain good health and beauty.

9. What is hydrolyzed collagen?

“Collagen” is the common name of the protein sub-type and “Gelatin” is regularly used as the name of the product industrially manufactured. At its time, “Collagen Peptide” is equivalent to “hydrolyzed collagen (gelatin)”. In general, when we refer to “Collagen” in health foods, we mainly refer to collagen peptide.

FAQs regarding Collagen (Contd.)

10. Does heat (or cold) affect the efficacy of collagen?

No, the heating of the collagen peptide does not affect its efficacy. Same applies for low temperatures even to a frozen level.

11. How refined is your collagen?

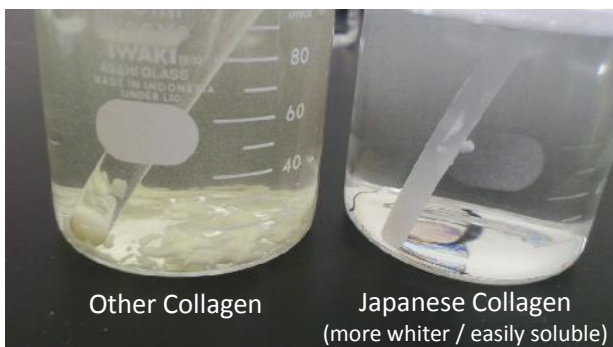
Our product is highly refined to a level of 100% purity, where no other ingredients other than protein-derived collagen are added. The product contains no additives, no conservatives, no flavoring substances, no fats, no sweeteners nor any artificial substance whatsoever. Finally, our product does not use any raw material that falls under the Genetically Modified Organisms (GMO) category.

12. Can collagen peptide be absorbed directly through mist without the collagen molecule being degraded or damaged?

Collagen peptide does not evaporate through heating. Collagen peptide does not evaporate through heating. We do not have evidence to say that collagen peptide can be absorbed in the skin by means of evaporation.

13. Why Japanese collagen may be more expensive than Korean or Chinese collagen?

Japan has the highest standards of quality and technology in the collagen market. Manufacturing practices in Japan are extremely strict and inspection, controls and confirmations are internally demanded numerous times. Our philosophy is “cost is important, but safety, quality and effectiveness are more critical”. We aim at providing the safest product and our customers can have the confidence that they are getting what they paid for: Pure collagen peptide.



14. How about European collagen?

Europe also has a tradition of collagen. However,

Japanese cosmetic/food/healthcare manufacturers demand extreme quality and therefore, the demand for Japanese collagen peptide is much higher than European Collagen in Japan. Our collagen peptide is used mostly by Japanese manufacturers due to this reason and more over about 70% of collagen market in Japan is dominated by Japanese collagen manufacturers out of which our collagen has 40% share in comparison with European collagen which has 10% due to very strict quality requirements demanded by Japanese factories including large differences in solubility.

15. How about raw materials?

Regarding raw materials, we carefully track the raw materials from factories which have HACCP certifications only, while using the same fish type in order to be able to track the raw materials in all cases. This is the Japanese standard.

16. Is there indication for cases of pregnant and breastfeeding women?

Collagen is naturally present in our body and consumed daily with our meals. Therefore, this product is usually classified as “foodstuff” or “food supplement” under most countries' laws. As collagen is essentially a “food”, there is no “medical” indication applicable to it as a principle. However, responsible manufacturers always recommend that in case of doubt, the consumer should consult the doctor, particularly in cases of people with special allergies or in cases of discomfort.

17. Do you have any testing report and data proven for skin test that is suitable for all kinds of skin even the sensitive and wound skin?

According to existing data, there is no contraindication for the use of collagen. Reason: Collagen is a food supplement. As long as a person does not have a special condition that prevents him/her from eating animal derived foods (fish, etc.), there is no general contraindication for the use of collagen. However, in cases of people with allergy, pregnancy, taking special medications, special skin diseases, etc. we recommend that the consumer should consult the doctor.

18. Is there any recommendable age to consume collagen?

Not as a principle. Collagen benefits all people equally for

FAQs regarding Collagen (Contd.)

the reasons as explained here: It is a naturally occurring element in our body that is key for maintaining firm and beautiful skin. However, it is obviously recommended for adults (not children) and it is of more use for consumers the more the age.

19. Does collagen help suppressing the effects of skin damage caused by UV?

According to latest research, collagen helps suppressing the effects of skin damage caused by the sun. This was based in a double blind placebo trial where 5gr of collagen peptide were ingested during four weeks. The test was effectuated over the skin of Japanese adult males between the ages of 20 to 59 years old.

20. Does collagen produce fat?

No.

21. I am going through an exercise routine. Will collagen help my dietary efforts?

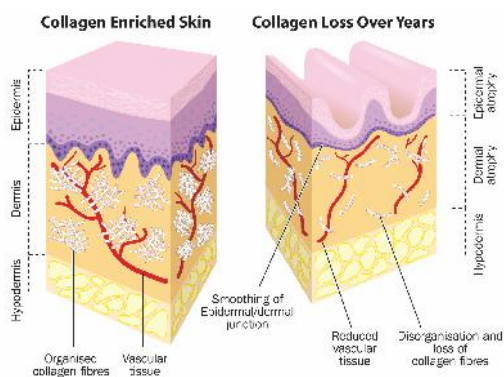
Yes, collagen as a natural protein has direct relation with muscle development: The more muscle, the higher the metabolism, and the lower the fat. Collagen supports a virtuous cycle of fat loss by supporting the development of muscle tissue.

22. What is the usual expiry date?

3 years after manufacturing is the standard.

23. What can you tell me about the absorbability level?

It is a commonly understood fact that the absorbency of protein is approximately 90%. As collagen peptide is a form of protein, it is derived that collagen protein absorbency rate is on or above 90% depending on the grade. Although scientific evidence is not completely conclusive, collagen products are regularly marketed in accordance with the above concept.



24. Is there a difference in the quality/efficacy depending on the “molecular size” of the collagen?

Although we count with a diverse molecular weight lineup (3,000-5,000 / 2,000 / 1,000 etc.), in general the average molecular size of the collagen peptide is between 3,000 to 5,000 Dalton. Reason is because we strive to keep a final product that balances efficacy with taste/odor.

a) Taste/Odor: The smaller molecular weight, the higher bitterness of the end product because reduction of molecular size requires a manufacturing process that results in the existence of higher amounts of amino acids. Amino acids result in more bitterness of the final product. Moreover, solubility is also affected in case of smaller molecular weight.

b) Efficacy: According to research made in Japan, there is no conclusive scientific evidence that indicates lower efficacy within certain range of molecular weight. In the reference section of this brochure, all the scientific studies performed in Japan were made using collagen peptide of an average Dalton of 3,000. Scientific evidence concludes that any range between 3,000 to 5,000 Dalton is suitable in terms of absorption by the human body. The end result is: Japanese collagen peptide is of a whiter color, higher efficacy, much more soluble and no smell/taste when you try it!

25. Do you have tri-peptide collagen?

Yes. This type of collagen has higher and faster absorbability. Hence, this type of collagen peptide is most recommended for consumption early in the morning, as opposed with the standard types of collagen that have better efficacy if consumed before sleep (standard absorption assures supply of collagen during long hours of fasting like when we are asleep).

In terms of molecular size, it is around 200 to 300 Dalton, which makes it very efficient. However, in terms of cost is quite higher than other types of peptide and taste-wise it is slightly bitter due the fact that the particles are much smaller than the standard types. Tri-peptide content in our collagen is 15%.



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