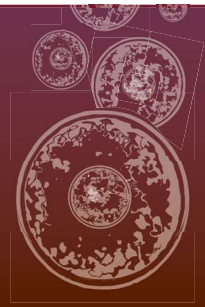




AIM BioVivify™



CANADA

AIM BioVivify is a natural health product that can improve the health of the skin, hair and nails through the power of AstaReal® astaxanthin, L-proline, glycine, L-lysine, biotin and vitamin C.

How is BioVivify Unique?

- Provides 6 mg of vegan astaxanthin per serving (2 capsules)
- Uses the most clinically studied brand of astaxanthin, AstaReal®
- Delivers a combination of amino acids important in collagen synthesis
- Combines vitamin C and astaxanthin to protect collagen fibroblast cells

Approach

The outermost layer of our skin is known as the epidermis, or more accurately, the stratum corneum. As we age, this layer can become thin and weakened from environmental factors. As the stratum corneum weakens, water loss can increase through evaporation. By protecting this layer of skin, we can help to retain more moisture to support skin hydration.

Collagen supplements cannot be vegan, as collagen can only be derived from animal sources. However, through proper supplementation we can improve the body's ability to synthesize new collagen and protect collagen from damage.

Astaxanthin

AstaReal® astaxanthin is extracted from freshwater, green microalgae (*Haematococcus pluvialis*). This microalgae is first handpicked by a technician to prepare a fresh culture of quality cells. The algae grows in photobioreactors operating indoors, where the algae is supplied with filtered air, triple-filtered water, quality nutrients and consistent light to spur growth. Once growth reaches a predetermined stage, the algae cells are subjected to high-illumination light, which converts the green chlorophyll to red astaxanthin. At the peak of astaxanthin content, the algae cells are harvested and the cellular walls are physically broken to extract the astaxanthin using a 100% solvent-free method.

AstaReal® astaxanthin is the most clinically studied brand worldwide. Currently, they have six clinical studies using servings of 2 mg to 12 mg per day, demonstrating that it increases collagen protection and synthesis,

Key Benefits and Features

- Helps to maintain healthy hair, nail, mucous membranes and/or skin
- Protects collagen from oxidative damage
- Supports collagen synthesis
- Promotes skin smoothness
- Supports skin hydration
- Enhances skin elasticity
- Reduces fine lines
- Boosts keratin production
- Reduces hair breakage and split ends
- Improves rough cuticles

supports skin hydration and smoothness, enhances skin elasticity and reduces fine lines. BioVivify provides 6 mg of AstaReal® astaxanthin in each daily serving.

In a clinical study conducted in 2016, 20 healthy women (ages 30-49) were supplemented with 3 mg of AstaReal® astaxanthin per day for 8 weeks. The subjects that consumed 3 mg of astaxanthin daily improved skin moisture by 3%, skin elasticity by 18%, and skin texture and erythema (redness) by 16% versus the control group.¹

In 2002, a published double-blind, placebo-controlled study found that AstaReal® astaxanthin improved skin hydration. Sixteen healthy women (mean age 40) with dry skin were examined in the study. Those that consumed 2 mg of AstaReal® astaxanthin for 4 weeks experienced improvement in skin hydration that was 17 times greater than the placebo group.²

Collagen

Our skin contains specialized cells called fibroblasts that synthesize collagen. Collagen half-life in our bodies is only a few months, so we are always breaking down and creating new collagen. Within each fibroblast, amino acids are



assembled by translation to create collagen alpha chains. The alpha chains are rich in the amino acids proline and glycine. In fact, every third position is glycine. These alpha chains are hydroxylated in the presence of vitamin C, which is important in providing structure to the collagen monomer. Once the chains hydroxylate, three chains can be associated together to create procollagen, which has a helical structure similar to the double helix of DNA. Once this procollagen is prepped, it can exit the fibroblast, at which point it is called a collagen monomer. These monomers can now create cross-linkages that give collagen its tensile strength using the amino acid lysine. BioVivify contains the amino acids L-lysine, glycine and L-proline.

There is an important connection between astaxanthin and vitamin C as it relates to collagen. Vitamin C is required to hydroxylate the alpha chains to improve structure and strength. In 2009, a study explored the viability of human skin fibroblast cells upon exposure to reactive oxygen species (ROS), a subset of free radicals. When the fibroblast cell is exposed to ROS, the cell itself can die. In this study, when the cell was first inoculated with AstaReal® astaxanthin, the survival rate improved. Other antioxidants, including vitamin C, did not improve survival rate. It is theorized that astaxanthin is able to access cell membranes, thereby providing better protection. If the cell was exposed to ROS, the cell died and thus it produced no collagen. Vitamin C alone could not protect the cell, so again no collagen could be produced. Only cells pre-inoculated with astaxanthin could survive ROS and allow collagen production at 80% of normal. However, when the cell was inoculated with both astaxanthin and vitamin C, the cell survived and produced 108% of normal collagen.³ BioVivify contains 90 mg of vitamin C per serving, which is 100% of the daily value.

Keratin

Biotin, also called vitamin B7, boosts keratin production. Hair consists of 90% keratin and can be damaged by free radicals. This damage can cause hair breakage, split ends, rough cuticles and color loss. Biotin can fortify the hair follicle by boosting keratin. BioVivify contains 90 mcg of biotin per serving, which is 300% of the daily value.

1. Tsukahara, H., Matsuyama, A., Abe, T., *et al.* (2016). Effects of intake of astaxanthin contained drink on skin condition. *Japanese Journal of Complementary and Alternative Medicine*, 13: 57-62.
2. Yamashita E. (2002). Cosmetic benefit of dietary supplements including astaxanthin and tocotrienol on human skin. *Food Style 21*, 6(6): 112-117
3. Tominaga K, Hongo N, Karato M, *et al.* (2009). Protective effects of astaxanthin against singlet oxygen induced damage in human dermal fibroblasts in vitro. *Food Style 21*, 13(1): 84-86

How to Use BioVivify

- Take 2 capsules daily. Best taken with food.
- Ensure to drink enough fluid before, during and after exercise.
- Consult a health care practitioner prior to use if you are pregnant or breastfeeding.
- Keep out of reach of children.
- Recommended for use with AIMega and BarleyLife for additional hair, skin and nail benefits.

FAQs

Is there anyone who should not take BioVivify?

BioVivify is formulated for adults and not recommended for children.

What is a complementary AIM product to BioVivify?

AIMega provides essential fatty acids that can also improve skin health. When taken with BioVivify, it can improve absorption of astaxanthin.



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