## NuGlo – Collagen Generator – the beautification foundation for longevity



Provides your body with the toolset required to rejuvenate hair, skin, nails, and bones. Good for heart health, liver health and the promotion of healthy joints. Promotes collagen generation and absorption. Strengthens arterial walls and improves circulation. Protection against sun damage — a must for athletes.

## How it Works:

- **1. Silica (Bamboo Extract):** is a common ingredient found in supplements that promote skin, hair, and nail health. Silica is a compound that contains silicon, a naturally occurring element, and it is believed to have several potential benefits for these aspects of health.
  - a. **Collagen Production:** Silica supports the production of collagen, a structural protein that is essential for the health and elasticity of the skin, hair, and nails. Collagen provides strength and resilience to these tissues.
  - b. **Hair Health:** Silica is often associated with promoting hair health, as it may contribute to the growth and thickness of hair. It is believed to help strengthen hair strands, reducing breakage and promoting overall hair health.
  - c. **Skin Health:** Silica may contribute to skin health by promoting the production of collagen and elastin, which are key proteins in maintaining the skin's elasticity and structure. It may also support the skin's ability to retain moisture.
  - d. **Nail Strength:** Silica is believed to improve the strength and durability of nails, making them less prone to splitting and breaking. This can contribute to overall nail health.
  - e. **Connective Tissue Health:** Silica may play a role in maintaining the health of connective tissues throughout the body, including tendons and ligaments.
- **2. Biotin:** Biotin, also known as vitamin B7, promotes hair and nail health. It is essential for various metabolic processes, and it primarily functions as a coenzyme, assisting enzymes in carrying out important biochemical reactions. Here are some of the key functions and benefits of biotin:
  - a. **Metabolism:** Biotin is a coenzyme involved in the metabolism of carbohydrates, fats, and proteins. It helps convert these macronutrients into energy that the body can use.
  - b. **Hair, Skin, and Nails:** Biotin is often associated with promoting healthy hair, skin, and nails. It is commonly included in beauty and haircare products. While there is limited scientific evidence to support the use of biotin for hair and nail health in individuals with biotin deficiency, it is essential for overall skin health.
  - c. **Keratin Production:** Biotin is involved in the synthesis of keratin, a fibrous protein that is a key structural component of hair, skin, and nails. Adequate biotin levels are important for the maintenance of these tissues.
  - d. **Nervous System Function:** Biotin is required for normal nervous system function. It plays a role in myelin synthesis, which is essential for the proper functioning of nerves.
  - e. **Fatty Acid Synthesis:** Biotin is involved in the synthesis of fatty acids, which are essential for maintaining healthy cells and tissues. It helps convert certain fatty acids into forms that the body can use.

- f. **Glucose Regulation:** Biotin may play a role in regulating blood sugar levels by assisting in the metabolism of glucose.
- g. **Pregnancy and Development:** Biotin is crucial during pregnancy and fetal development. It is necessary for embryonic growth and the development of the baby's organs.
- h. **Skin Health:** Biotin may play a role in maintaining skin health and preventing certain skin conditions. Some individuals with biotin deficiency may experience skin issues, such as dry skin and rashes.
- **3. Black Pepper Extract:** Black pepper extract enhances the absorption of the other nutrients in the formula.
- **4. Boron:** Boron is a trace mineral that plays a role in bone health, by promoting calcium absorption and bone mineralization. It can potentially help increase bone density and reduce the risk of osteoporosis. It may also produce other key outcomes which include:
  - a. **Collagen Formation:** Boron is thought to support the formation of collagen, a protein important for the strength and integrity of skin, hair, and nails. Collagen is essential for maintaining the health of these tissues.
  - b. **Joint Health:** Boron has been suggested to have a positive impact on joint health and may be included in supplements designed to support joint function. Healthy joints are important for overall mobility.
  - c. **Wound Healing:** Boron is believed to facilitate the process of wound healing by supporting tissue repair and cell regeneration.
  - d. **Hormonal Regulation:** Boron may influence the metabolism of various hormones, including those related to bone health. It has been studied for its potential impact on hormone balance, specifically testosterone, and its effects on various body functions.
- **5.** Copper: Copper is essential for the formation of collagen, which is important for skin and connective tissue. Copper is used to promote the efficacy of the NuGlo formula in the following ways:
  - a. Copper is **an essential trace** mineral that plays several important roles in the body, and it can also have an impact on various aspects of health, including those related to hair, skin, and nails. Here are some ways in which copper may play a role in these areas:
  - b. **Melanin Production:** Copper is required for the production of melanin, the pigment responsible for the colour of your skin, hair, and eyes. Adequate copper levels are necessary for normal pigmentation.
  - c. **Collagen Formation:** Copper is involved in the synthesis of collagen, a structural protein that provides strength and elasticity to the skin. Collagen is also important for the health of hair and nails.

- d. **Antioxidant Activity:** Copper is a component of several antioxidant enzymes, including superoxide dismutase (SOD). Antioxidants help protect the skin and other tissues from oxidative damage caused by free radicals.
- e. **Wound Healing:** Copper may play a role in wound healing by assisting in the formation of connective tissue and collagen at the site of an injury.
- f. **Hair and Nail Health:** Copper contributes to the health of hair and nails by promoting their strength, flexibility, and overall integrity.
- **6. Choline:** Choline is essential for overall health and may indirectly impact skin health through its role in fat metabolism. Choline contributes to several essential functions in the body:
  - a. **Cell Membrane Structure:** Choline is a major component of phospholipids, which are crucial for the structure and integrity of cell membranes. It is a key component of the lipid bilayer that forms the outer membrane of cells.
  - Neurotransmitter Synthesis: Choline is a precursor to acetylcholine, a neurotransmitter involved in various functions, including muscle control, memory, and cognitive function. Adequate choline intake is essential for proper brain function.
  - c. **Liver Health:** Choline is involved in fat metabolism in the liver. It helps transport dietary fats and cholesterol from the liver to other parts of the body. Choline deficiency can lead to fat accumulation in the liver and may contribute to fatty liver disease.
  - d. **DNA Methylation:** Choline plays a role in DNA methylation, a process that helps regulate gene expression. It is important for the proper functioning of genes and the maintenance of overall health.
  - e. **Cell Signalling:** Choline is involved in cell signalling and communication within the body. It helps transmit signals from one cell to another, allowing for the coordination of various physiological processes.
  - f. **Choline for Pregnancy and Foetal Development:** Choline is particularly important during pregnancy. Adequate choline intake is essential for foetal brain development, and it may help reduce the risk of neural tube defects.
  - g. **Cognitive Function:** Choline is believed to support memory and cognitive function. Some research suggests that choline supplementation may have cognitive benefits, particularly in aging populations.
- **7. Glucosamine:** Glucosamine is commonly used to support joint health, which can indirectly affect overall mobility and bone health. Here are some of the roles and potential benefits of glucosamine in the NuGlo formula:
  - a. **Cartilage Formation:** Glucosamine is a precursor to the production of glycosaminoglycans (GAGs) and proteoglycans, which are essential components

- of cartilage. It helps the body create and repair cartilage, which is vital for joint mobility and function.
- b. **Joint Lubrication:** Glucosamine may contribute to joint lubrication by supporting the synthesis of synovial fluid, the natural lubricant found in joints. Adequate synovial fluid helps reduce friction and cushion the joints during movement.
- c. **Anti-Inflammatory Properties:** Some studies suggest that glucosamine has anti-inflammatory properties, which may help reduce joint inflammation and pain associated with osteoarthritis and other joint conditions.
- d. **Pain Management:** Glucosamine supplements are often taken to manage joint pain, especially in individuals with osteoarthritis. While it may not provide immediate pain relief, it is believed to have long-term benefits in reducing pain and improving joint function over time.
- e. **Cartilage Protection:** Glucosamine is thought to have a protective effect on existing cartilage, potentially slowing down the progression of joint degeneration in conditions like osteoarthritis.
- **8.** Glycine: Glycine is an amino acid that plays a role in collagen production. In the context of a formula designed to promote hair, skin, nails, and bone health, glycine may contribute in the following ways:
  - a. Collagen Formation: Glycine is one of the amino acids that make up collagen, a
    protein that provides structural support to the skin, hair, nails, and bones.
     Collagen is essential for maintaining the elasticity, strength, and integrity of these
    tissues.
  - b. **Antioxidant Properties:** Glycine can act as an antioxidant, helping to protect cells and tissues from oxidative damage caused by free radicals. This can have a positive impact on overall health and may support skin health and anti-aging.
  - c. **Detoxification:** Glycine is involved in the synthesis of glutathione, a powerful antioxidant and detoxifier. Glutathione plays a critical role in detoxifying the body and protecting cells from damage.
  - d. **Bone Health:** Glycine may support bone health by contributing to the formation and maintenance of collagen in bone tissues. Collagen helps provide structural support to bones.
  - e. **Wound Healing:** Glycine can promote wound healing by supporting tissue repair and collagen synthesis.
  - f. **Skin Health:** Glycine is essential for the production of other amino acids and molecules that are crucial for skin health. It may contribute to the hydration, softness, and overall health of the skin.
- **9. Hyaluronic Acid:** Hyaluronic acid is a naturally occurring substance found in various parts of the body, including the skin, connective tissues, and joints. It is often included in dietary supplements and skincare products due to its potential benefits for skin health and

hydration. In the context of a formula designed to promote the health of hair, skin, nails, and bones, hyaluronic acid can have several roles and potential benefits:

- a. **Skin Hydration:** Hyaluronic acid is known for its ability to attract and retain water, making it an excellent hydrating agent for the skin. It can help the skin retain moisture, improving overall skin hydration and preventing dryness and flakiness.
- b. **Collagen Production:** Hyaluronic acid may stimulate the production of collagen, a protein that provides structure and elasticity to the skin. Collagen is crucial for maintaining skin firmness and reducing the appearance of fine lines and wrinkles.
- c. **Joint Lubrication:** While not directly related to the health of hair, skin, or nails, hyaluronic acid can be beneficial for joint health by providing lubrication and cushioning to the joints. This can contribute to overall mobility and comfort.
- d. **Wound Healing:** Hyaluronic acid may play a role in wound healing by promoting tissue repair and reducing inflammation.
- e. **Anti-Aging Effects:** Some studies suggest that hyaluronic acid can have anti-aging effects by improving skin texture, reducing the appearance of wrinkles, and enhancing overall skin tone and elasticity.
- f. **Bone Health:** Although not a direct role, improved skin health and the potential benefits on joint health may indirectly support overall well-being, including bone health.

Hyaluronic acid is often used in skincare products, such as serums and creams, to help maintain skin moisture and reduce signs of aging. In dietary supplements, it is included to support overall health and well-being, including the health of skin, hair, nails, and joints.

- **10. Horse Chestnut Extract:** is known for its potential medicinal properties, particularly in supporting vascular health and circulation. Here are some of the potential benefits and roles of horse chestnut extract:
  - a. **Vascular Health:** Horse chestnut extract contains a compound called aescin, which has been studied for its potential to support vascular health. It may help strengthen blood vessels and reduce symptoms associated with conditions like chronic venous insufficiency (CVI) and varicose veins.
  - b. **Circulation:** Horse chestnut extract is believed to improve blood circulation. This may help reduce symptoms such as leg pain, swelling, and heaviness in individuals with poor circulation.
  - c. **Anti-Inflammatory Properties:** Aescin in horse chestnut extract has anti-inflammatory properties, which can be beneficial in reducing inflammation and swelling, both of which can affect skin health.
  - d. **Antioxidant Effects:** Some research suggests that horse chestnut extract has antioxidant properties, which can help protect cells from oxidative damage caused by free radicals.

- e. **Wound Healing:** In traditional herbal medicine, horse chestnut extract has been used topically to promote wound healing, which can indirectly support skin health.
- **11. Inositol:** Inositol is often considered a B-vitamin and plays a role in hair health, brain health and mood.
- **12. Lysine:** Lysine is an essential amino acid that is important for overall health, including skin health.
- **13.** Methionine: Methionine is a precursor to a compound called S-adenosyl methionine (SAMe), which is involved in a process called methylation. Methylation plays a crucial role in various biochemical reactions in the body, including the regulation of gene expression, neurotransmitter production, and the metabolism of various compounds. Methionine is also an essential amino acid and one of the building blocks of proteins. It is used by the body to create new proteins, which are essential for various physiological processes, including tissue repair, muscle growth, enzyme production, and the synthesis of structural proteins like collagen i.e. it plays a role in the production of collagen.
- **14. Proline:** Proline is an amino acid that is a crucial component of collagen. It helps protect the existing collagen in the body from degenerating and can help slow age-related degradation of the skin and connective tissue.
- **15. Milk Thistle Extract:** Milk thistle extract is used to support liver health, which can indirectly impact overall well-being.
- **16. MSM (Methylsulfonylmethane):** MSM is a sulphur compound that plays an important role in skin health and the production of collagen.
- **17. Saw Palmetto:** promotes hair growth and prevents hair loss, particularly in cases of male pattern baldness. It is believed to have anti-androgenic properties, which means it may inhibit the action of the hormone dihydrotestosterone (DHT), which is associated with hair loss.
- **18. Selenium:** is a component of several important antioxidant enzymes, such as glutathione peroxidase. These enzymes help protect cells and tissues from oxidative damage caused by free radicals. Antioxidants are important for overall health, including skin health and anti-aging. In this formulation it assists with:
  - a. **Immune Function:** Selenium is involved in the normal functioning of the immune system. It helps the body respond to infections and maintain overall immune health.
  - b. **Thyroid Function:** Selenium is necessary for the production of thyroid hormones. Proper thyroid function is essential for metabolism and overall health, although

- its impact on hair, skin, and nails is mainly related to maintaining a healthy metabolism.
- c. **Cognitive Health:** Selenium has been studied for its potential role in cognitive health. Some research suggests that adequate selenium intake may be associated with a lower risk of cognitive decline.
- d. **DNA Repair:** Selenium is involved in the repair of DNA and the prevention of DNA damage. This function is crucial for overall cellular health and maintaining the integrity of genetic material.
- e. **Cardiovascular Health:** Selenium may support cardiovascular health by helping to reduce inflammation and oxidative stress, both of which are risk factors for heart disease.
- **19. Vitamins** B1, B2, B3, B5, B6, B9, B12, D3: These B-vitamins and vitamin D3 are essential for various aspects of overall health, including skin, hair, and bone health.

The role of Vitamin D3: Vitamin D3, also known as cholecalciferol, plays several important roles in skin health and overall well-being. Here are some of the key functions and benefits of vitamin D3 for the skin:

- a. **Production of Vitamin D:** Vitamin D3 is synthesized in the skin when it is exposed to UVB (ultraviolet B) radiation from sunlight. UVB rays trigger the conversion of a precursor molecule in the skin into active vitamin D3. This synthesis is essential for maintaining optimal levels of vitamin D in the body.
- b. **Regulation of Skin Cell Growth and Repair:** Vitamin D3 is involved in the regulation of skin cell growth, differentiation, and repair. It plays a role in the turnover of skin cells and helps ensure the proper functioning of the skin's barrier.
- c. **Anti-Inflammatory Properties:** Vitamin D3 has anti-inflammatory properties that can help soothe and calm skin conditions, such as psoriasis and eczema. It may reduce redness, itching, and inflammation associated with these skin disorders.
- d. **Wound Healing:** Vitamin D3 can contribute to the wound healing process by promoting the growth and development of new skin cells at the site of an injury. It may also help reduce the risk of infection in wounds.
- e. **Supports Skin Immune Function:** Vitamin D3 is involved in the regulation of the skin's immune system. It helps the skin defend against pathogens and maintain its integrity as a protective barrier.
- f. **Skin Aging:** Some studies suggest that adequate vitamin D levels may have a positive impact on skin aging. It may help maintain skin elasticity and reduce the appearance of fine lines and wrinkles.
- g. **Protection Against UV Damage:** While vitamin D3 itself does not provide UV protection it may help protect the skin from UV-induced damage. It is believed to have antioxidant properties that can neutralize harmful free radicals generated by UV radiation.

- h. **Maintenance of Skin Moisture:** Vitamin D3 may contribute to skin hydration and help prevent dryness and flakiness.
- **20. Zinc:** Zinc is an essential mineral that plays numerous vital roles in the body, and it can significantly impact various aspects of health, including those related to hair, skin, nails, and bones. Here are some of the roles and potential benefits of zinc in these contexts:
  - a. **Collagen Production:** Zinc is involved in the synthesis of collagen, a structural protein that provides strength and integrity to the skin, hair, nails, and bones. Collagen is crucial for maintaining the health and elasticity of these tissues.
  - b. **Skin Health:** Zinc plays a role in maintaining skin health by regulating the function of sebaceous glands and reducing inflammation. It can help manage various skin conditions, such as acne, eczema, and wound healing.
  - c. **Wound Healing:** Zinc is essential for wound healing and tissue repair. It promotes cell division and the production of new tissue, aiding in the healing process.
  - d. **Hair Health:** Zinc may support hair health by helping to maintain the structure and strength of hair follicles, reducing hair loss, and promoting hair growth.
  - e. **Nail Health:** Adequate zinc levels are important for maintaining healthy nails, as it contributes to the strength and integrity of the nail structure.
  - f. **Bone Health:** While not a direct role, zinc is essential for overall bone health, as it contributes to the formation and maintenance of bone tissues.
  - g. **Immune Function:** Zinc is known to support immune function by promoting the production of immune cells and aiding in their function. A strong immune system is important for overall health.
  - h. **Antioxidant Properties:** Zinc is an antioxidant mineral that helps protect cells and tissues from oxidative damage caused by free radicals.
  - Hormone Regulation: Zinc is involved in regulating hormones, including those related to hair growth and skin health. It can play a role in the management of conditions like androgenic alopecia.

It's important to maintain an adequate intake of zinc through your diet, as it is found in various foods, including meat, seafood, dairy products, nuts, and whole grains. Zinc deficiency can have adverse effects on overall health, including skin problems, hair loss, and impaired immune function.

## Nutr8 Wellness Disclaimer:

Before using any of the Nutr8 Wellness products or any other dietary supplement, it is advisable to consult with a healthcare professional, especially if you have a pre-existing condition or are taking other medications. They can provide guidance on the most suitable approach to address your specific health needs.

## NuGlo is well complimented by:

1. Collagen Plus 8: The Nutr8 Collagen formula with added ursolic and ellagic acid for

improved bone and joint health and with hyaluronic acid for skin rejuvenation and hair growth.

Also Promotes heart health and improved blood circulation.

(Vegan versions also available with hydrolysed rice amino peptides)

Two great flavours: Original and Hints of Vanilla



- - Telomere Health
  - Klotho Protein Health
  - NAD+ Coenzymes

Promotes restorative sleep and overall stasis. The foundation for anti-aging complimenting NuGlo which serves as the beautification foundation of longevity.

