The Secret to Youthful Skin: How Collagen, Vitamin C, Omega-3s & Polyphenols Work Together

By Robert Ferguson

Robert's note: Most people believe collagen alone is the key to youthful skin—but what if I told you there are powerful nutrients, you're missing that make collagen work even better?

In this article, you'll discover a **game-changing combination**—a **scientifically-backed approach** to **smoother**, **firmer**, **and healthier skin from the inside out**.

This article is both an educational piece and an introduction to a youthful skin solution that includes two products: **BalanceOil+** and **Collagen BOOZT**. In full disclosure, I personally sell both products; however, this does not take away from the fact that together, they provide what I refer to as the **Perfect Combo for Collagen Optimization**.

In addition to how this combination can help improve skin health and appearance, **BalanceOil+**, which is largely made up of **omega-3s and polyphenols**, provides a variety of **health-related benefits** on its own. Even without BalanceOil+, **Collagen BOOZT** alone is one of the best collagen supplements available for **enhancing skin elasticity and promoting overall skin health** from the inside out.

For years, **collagen supplements** have been hailed as the secret weapon for **younger-looking skin**, reducing wrinkles, and improving elasticity. Most people know that **vitamin C** is essential for collagen production, but **omega-3s and polyphenols** are often overlooked—despite their crucial role in protecting and optimizing collagen synthesis.

If you're investing in collagen supplements, it's time to make sure you're also getting the **right nutrients to maximize your results**. In this article, we'll break down why **collagen**, **vitamin C**, **omega-3s**, **and polyphenols work together** to give you the best skin benefits.

Collagen: The Foundation of Youthful Skin

Collagen is the most abundant **protein** in the body, responsible for keeping skin **firm**, **plump**, **and elastic**. However, after the age of 25, **collagen production naturally declines**, leading to:

- · Wrinkles and fine lines
- Loss of skin elasticity
- Dry, thinning skin
- Joint discomfort and weakened hair and nails

Taking hydrolyzed collagen peptides has been shown to stimulate fibroblasts, the skin cells responsible for making new collagen, elastin, and hyaluronic acid (1). However, collagen alone isn't enough—it needs support from other key nutrients (2).

Vitamin C: The Spark Plug for Collagen Production

Vitamin C is **critical** for collagen synthesis because:

- 1. It activates fibroblasts to produce collagen (3).
- 2. It helps **convert proline into hydroxyproline**, a key step in forming strong, flexible collagen fibers (4).
- 3. It is a **powerful antioxidant** that protects collagen from oxidative stress (5).

Without enough vitamin C, collagen production slows down, and skin can become fragile and prone to damage. This is why scurvy, a disease caused by vitamin C deficiency, leads to skin lesions and poor wound healing (6).

To maximize your collagen supplement, always **pair it with vitamin C** from whole foods like **citrus fruits, bell peppers, and strawberries** or from a quality supplement like **Collagen BOOZT**, which has the right amount of vitamin C.

Omega-3s: The Missing Link for Collagen Protection

While vitamin C helps build collagen, omega-3s help protect and optimize it. Here's how:

1. Omega-3s Reduce Inflammation That Breaks Down Collagen

Chronic inflammation is one of the **biggest threats** to healthy collagen levels. Inflammation triggers enzymes called **matrix metalloproteinases (MMPs)**, which actively **break down collagen and elastin (7)**.

Omega-3s, especially **EPA and DHA**, help by:

- Reducing MMP activity, preserving existing collagen (8).
- Calming inflammation, preventing damage from environmental stressors (9).
- Supporting wound healing and tissue repair (10).

2. Omega-3s Improve Fibroblast Function

Fibroblasts are the **powerhouses** behind collagen production, and they rely on **healthy cell membranes** to function properly. Since **omega-3s improve membrane fluidity**, they help fibroblasts:

- Absorb nutrients more efficiently (11).
- Communicate better with surrounding cells (12).
- Increase collagen production in response to signals from the body (13).

3. Omega-3s Prevent Collagen Degradation

In addition to inflammation, other factors contribute to collagen breakdown, including:

- Oxidative stress (from pollution, UV rays, and poor diet)
- Glycation (sugar molecules binding to collagen, making it stiff and brittle)
- Stress hormones like cortisol, which accelerate aging

Omega-3s **combat all these factors** by:

- Reducing oxidative stress, preventing collagen breakdown (14).
- Lowering cortisol levels, reducing stress-induced aging (15).
- Supporting hydration and skin barrier function, keeping skin plump and resilient (16).

Polyphenols: The Antioxidant Shield for Collagen

Polyphenols are **powerful plant-based antioxidants** that provide essential protection against collagen degradation. Their benefits include:

- Neutralizing free radicals, preventing oxidative damage that weakens collagen (17).
- Enhancing omega-3 absorption and stability, ensuring EPA and DHA remain bioavailable (18).
- Boosting fibroblast activity, increasing collagen production (19).
- **Supporting skin hydration and elasticity**, reducing wrinkles and improving overall skin texture (**20**).

Polyphenols work **synergistically** with omega-3s, especially in **BalanceOil+**, which combines these nutrients for **enhanced stability and bioavailability**.

Call to Action

If you would like to receive additional information on **Collagen BOOZT** and/or **BalanceOil+**, speak with the person who shared this article or email me at robert@dietfreelife.com. I welcome your thoughts and wish you the best on your journey to healthier skin!

References

- 1. Proksch E, et al. (2014). Skin Pharmacology and Physiology.
- 2. Bolke L, et al. (2019). Nutrients.
- 3. Shaw G, et al. (2007). Journal of Investigative Dermatology.
- 4. Pullar JM, et al. (2017). Nutrients.
- 5. Padayatty SJ, et al. (2003). American Journal of Clinical Nutrition.
- 6. Pilkington SM, et al. (2011). Experimental Dermatology.
- 7. Calder PC. (2012). Biochimica et Biophysica Acta.
- 8. Das UN. (2006). *Prostaglandins, Leukotrienes & Essential Fatty Acids*.
- 9. Lin JY, et al. (2009). *Photochemistry and Photobiology*.
- 10. Kim J, et al. (2018). Journal of Dermatological Science.
- 11. Rhodes LE, et al. (2013). American Journal of Clinical Nutrition.
- 12. Kawashima M, et al. (2018). Clinical, Cosmetic and Investigational Dermatology.
- 13. Meves A, et al. (2001). Journal of Investigative Dermatology.
- 14. Papakonstantinou E, et al. (2012). Dermato-Endocrinology.

- 15. Longas MO, et al. (1987). Connective Tissue Research.
- 16. Farris P. (2014). *Journal of Cosmetic Dermatology*.
- 17. Calder PC. (2017). Progress in Lipid Research.
- 18. Kawashima M, et al. (2018). Clinical, Cosmetic and Investigational Dermatology.
- 19. Ghersetich I, et al. (1994). Dermatologic Therapy.
- 20. Papakonstantinou E, et al. (2012). *Dermato-Endocrinology*.

Robert Ferguson is a California- and Florida-based single father of two daughters, nutritionist, researcher, best-selling author, speaker, podcast and television host, health advisor, NAACP Image Award Nominee, creator of the **Diet Free Life** methodology, and **Chief Nutrition Officer for iCoura Health**. He also serves on the **Presidential Task Force on Obesity** for the National Medical Association and the **Health and Product Advisory Board** for Zinzino, Inc.

You can reach Robert via email at robert@dietfreelife.com.