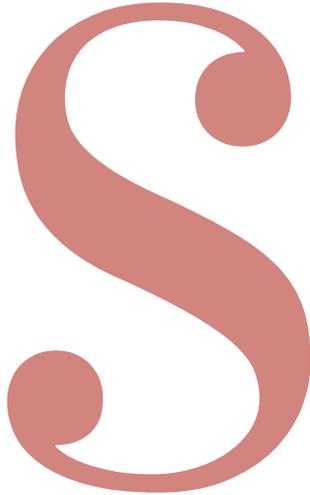


supporting skin health

Probiotics & skin supplements

by Emily Davis, licensed aesthetician





Skin health is the main focus of many aestheticians. The skin is the largest elimination organ of the body. The skin is intimately involved in the body's ability to self-heal by eliminating what the body does not want or need. Skin is not an isolated entity from the rest of the body, but rather one part of the whole synergistic organism. Skin health comes from supporting the body as a whole.

SEEING THE SCOPE

An aesthetician should always work within their scope of practice. Aestheticians are educators and should share information rather than prescribing or diagnosing, as this would be practicing medicine without a license. The words used are important – try to think of it as being an ally to the client on their journey. The professional is not there to solve their client's skin issues. Rather, they should take the expertise based on years of research to walk with the client on their journey, sharing what they know, to assist the client in making educated decisions. It may be a difficult boundary to define. Have a community of trusted professionals to refer clients to when necessary. Examples of great professionals to network with are a functional medicine doctor, a certified nutritionist, an acupuncturist, a dermatologist, a naturopathic doctor, and an herbalist.

SUPPLEMENTS

While supplements should not replace the nutrients obtained from the diet, they are an excellent complement to healthy living. It is essential when choosing which supplements to take to understand interactions and that some should not be taken together. Additionally, understanding bioavailability and absorption requires research and education. Some supplements are not bioavailable unless taken with fat, for example. Currently, it can be challenging to obtain nutrients for multiple reasons. For example, the soil quality is not what it used to be, and modern diets do not always supply individuals with the essential nutrients needed to thrive.

One of the first supplements aestheticians think of for healthy skin is a probiotic to support gut health. The health of the gut, also known as the GI tract, has been a hot topic for several years. It is one of the most important contributors to overall health, including the health of skin. In 1909, dermatologists John H. Stokes and Donald M. Pillsbury formed the gut-brain-skin theory that proposed that emotional triggers, such as stress, anxiety, and depression, negatively impact the gut, triggering systemic inflammation and contribute to acne. Their recommended remedies included probiotic cultures and omega-3 fatty acids to support the gut's lining and reduce overall inflammation.

THE MICROBIOME

To understand why supplementation of probiotics may be helpful for the skin, skin care professionals must understand the microbiome. According to researchers, around 50% of the human body is microbes. These tiny organisms make up the microbiome, a community of microorganisms including virus, fungi, bacteria, and protozoa all working

harmoniously (ideally), with the collective goal to regulate human health. The microbiome is considered an organ. It resides all over the body in an individual's tissue and fluid. There is a microbiome of the mouth, skin, mucous membranes, lungs, liver, eyes, nose, blood, uterus, cardiovascular system, central nervous system, and more. The majority of research to date has been on the microbiome of the GI tract.

A diverse microbiome is a healthy microbiome, which leads to overall mental and physical wellness. A healthy microbiome can increase gut lining permeability, reduce overall inflammation, and support healthy immunity, all of which support the skin. There is well-documented research showing that dysbiosis in the microbiome can negatively affect the skin and correlate with acne, dry skin, atopic dermatitis (eczema), psoriasis, seborrheic dermatitis, and possibly rosacea.

Other conditions that signal microbiome dysbiosis include anxiety, depression, autoimmune disease, heart disease, neurodegenerative disease, migraines, allergies, asthma, and the list goes on. Lifestyle factors that negatively affect the microbiome include poor sleep, chronic stress, processed foods, toxins such as pesticides, artificial sweeteners, air pollutants, alcohol, and smoking. The good news is that microbiome dysbiosis can be corrected.

Positive lifestyle changes can be extremely beneficial but may not be enough. Although, supplementation with probiotics and prebiotics can be useful.

PROBIOTICS

Probiotics are live strains of beneficial bacteria and yeast. Probiotics can be found in supplement form, as well as naturally in some foods. The most common bacteria strains found in probiotic supplements are bifido-



bacterium and lactobacillus. Within these strains are many different species. Experts agree that the most effective probiotic supplements are refrigerated because this helps keep the micro-organisms alive. There is now new technology that claims to have improved shelf stabilization, prolonging the life of the microbes. When shopping for a probiotic, check the expiration date. Many times, when a health food store puts a probiotic on sale, it is because it will expire soon, so it may not be helpful to stock up as they do not last forever.

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Look for probiotics that have multiple billion colony forming units (CFUs). Specific strains can help with specific conditions, so research this and have clients with a professional if working to heal an ailment. Most probiotics are taken daily, and some are recommended on an empty stomach. However, some probiotics survive better when taken with a meal, so the client must read and follow the bottle's directions.

Many agree the best results come from eating probiotic-rich foods and supplementing when necessary. Probiotic foods are fermented but must also be raw, as heat and canning will kill off many live bacteria. Raw, fermented, probiotic-rich foods can include sauerkraut, kombucha (look for brands without added sugar), kimchi, and fermented pickles.

It is also important to feed these probiotic microbes with prebiotics. Prebiotics are compounds from fiber that nourish the gut flora (symbiotic microbes). Consumed prebiotics pass through to the colon where the intes-

tinal flora ferment them. Probiotics eat prebiotics, supporting biodiversity in the microbiome.

As with probiotics, it is vital to research the prebiotic supplement company to be sure they are reputable. Although an individual can purchase prebiotic supplements, many foods are good sources of prebiotics, including garlic, leeks, apples, bananas, dandelion greens, onions, and more. Once probiotics feed on prebiotics through fermentation, the resulting byproduct microbes are called postbiotics. Many of the benefits attributed

to probiotics are actually benefits of postbiotics.

In addition to probiotics, clients may ask about other skin health supplements. A few to include are essential fatty acids, minerals, vitamin D, collagen, vitamin C, and CBD.

THE ESSENTIALS

Essential fatty acids (EFAs) are a popular topic in the field of skin nutrition. Fatty acids are the building blocks of oil, fats, and lipids. These are essential because the body does not naturally produce them independently and must be consumed through foods or supplementation. A proper balance of essential fatty acids is important for healthy cell membranes, which are the protective barrier for cells. A healthy cell membrane will result in smooth, supple, vibrant skin. Essential fatty acids have a hand in proper brain and nervous system development, blood pressure regulation, improved heart disease risk factors, and reduc-

tion of systemic inflammation among many other clinically-proven benefits. Additionally, essential fatty acids can aid with mood disorders; there is a tie to mental health and skin. They may indirectly benefit the skin in this way as well. The two types of essential fatty acids are alpha-linolenic acid (an omega 3 fatty acid) and linoleic acid (an omega-6 fatty acid.) Pay attention to the essential fatty acid ratio as the modern western diet is very high in omega 6, which can be pro-inflammatory. It is rare to have a deficiency of omega 6 fatty acids, and most people choose to supplement with and focus on the dietary increase of omega 3. Examples of omega 3 fatty acids include cod liver oil, salmon, sardines, flax seeds, chia seeds, and walnuts. Many omega 3 supplements contain some of these food sources, but be aware not to take an essential fatty acid supplement in excess. Be sure that the supplement is fresh as oils can oxidize.

Essential minerals are also important, as the body needs them but does not naturally produce them. There are two types of minerals: major minerals and trace minerals. Major minerals are needed in larger doses, while trace minerals are needed in smaller quantities. Major minerals include sodium, chloride, potassium, calcium, phosphorous, magnesium, and sulfur. Trace minerals include chromium, copper, fluoride, iron, manganese, iodine, selenium, and zinc. These are generally either a part of a multivitamin or easy to obtain in a balanced diet; however, mineral deficiencies are common. There are tests to determine if one is getting enough minerals. Zinc is exceptional because it absorbs ultraviolet radiation and is beneficial for acne, especially when paired with vitamin C. Copper is a powerful antioxidant that supports a healthy aging process by stimulating collagen. Selenium also supports protection from ultraviolet damage and has shown benefit with psoriasis.





VITAMINS

Half of all people worldwide do not get enough vitamin D, which is necessary for the body's proper functioning. Researchers believe there is a connection between this and the increased risk for cancer, diabetes, high blood pressure, and autoimmune disease. For the skin, vitamin D helps

to heal, protect, and reduce inflammation. It can be beneficial for those with eczema, psoriasis, and acne. Vitamin D is not a vitamin; it is a steroid hormone. Exposure to sunlight on the skin produces vitamin D3. It is agreed upon that in the spring and summer, just 15 minutes of sun exposure makes the amount of vitamin D needed for

the whole day. However, this more difficult in the fall and winter. Professionals generally recommend oral supplements that contain vitamins D3 and K2 together.

Dietary vitamin D3 is present in salmon, egg yolks, and sardines. Anyone considering taking a vitamin D supplement should discuss with a professional, as it is not safe for everyone to supplement with vitamin D.

COLLAGEN

Collagen supplementation is a popular and controversial topic. Researchers recently found peptides in the blood 60 minutes after consuming less than two grams of collagen peptides, increasing with increased dosage. Furthermore, when researchers traced radioactively labeled collagen peptides, they found evidence of these in the cartilage, skin, and intestinal walls. Even more exciting, another study found that oral collagen supplements increased collagen in the dermis after four weeks and increased skin hydration after eight weeks. Vitamin C is a cofactor in the production of collagen and is one of the best nutrients to assist in the natural production of collagen in the skin. Additionally, vitamin C suppresses ultraviolet damage to DNA. It is essential to research which forms of collagen are in a supplement. Hydrolyzed collagen is considered the most bioavailable, and different collagen types address different concerns.

CBD

CBD supplementation can have many benefits for the skin as well. Both topically and internally, CBD promotes homeostasis throughout the body. Homeostasis or balance within the tissue is crucial to healthy skin. CBD can be beneficial for balancing oil production – increasing if the skin is too dry or decreasing if the

skin is too oily. It helps balance skin cell proliferation, which causes skin to appear more youthful and vibrant but can also aid in psoriasis or acne cases when the turnover is excessive. CBD is highly anti-inflammatory, which can be beneficial when taken internally to address systemic inflammation contributing to skin disorders, such as acne, rosacea, eczema, and psoriasis. Reducing inflammation will additionally help the aging process.

AWARENESS

When looking for a supplement, be aware that while the FDA does regulate dietary supplements; they are not responsible for reviewing the safety of a supplement before it goes to market. Encourage clients to research brands to be sure they are reputable. Always look for transparency with a

supplement company; they should share a certificate of analysis and purity testing from a third party. Have clients check the ingredient deck, understand what fillers the supplement contains and ensure that they are safe and healthy. Lastly, skin care professionals and clients should read reviews and ask a healthcare provider if they have recommendations.

Supplements can be helpful, but replacing a healthy diet with dietary supplements is not a good idea. It is always crucial to avoid diagnosing and prescribing. Have professionals to direct clients to when necessary. Having autonomy over one's body is important. Skin care professionals are there to hold space and share information from their expertise with clients, so they can support their body's ability to heal. **d**



Emily Davis has been a licensed aesthetician since 2013 and has been educating in the aesthetics space for the last seven years. She is the owner and operator of Stratum

Aesthetics in Denver, Colorado, where she focuses on integrative skin care integrating holistic old-world treatments and plant medicine specializing in CBD with modern modalities. She is additionally an educator for Color Up. Davis joined the Color Up team in November 2018 after using the products in her skin care practice. Davis has been educating about aesthetics for over seven years. She has used the Color Up CBD products since their inception and fell in love with them immediately. Davis has a long-standing passion for health, wellness, and skin care and is so thrilled to intersect that passion with her passion for the cannabis plant.



upcoming webinar

Blended Practice: When Holistic Skin Care Goes Clinical

If the last year has taught the industry anything, it is that self-care and self-preservation have become top priority. Clinical spas have started to integrate intuitive therapies to align the needs of their clients outside of the traditional high-technical modalities and invasive procedures. Let's face it, holism is fashionable once again. Learn how to bring wellness back into the corrective treatment room in this must-see webinar. Hosted by DERMASCOPE's lead in-house aesthetician, catch it on February 15, 2021 at 11:00 A.M. CST.

dermascope.com/aia/webinars