The Most Important Nutrients for Healthy Skin and where to find them!



by Erin Livers, BA, ICNT

The 3 Most Important Nutrients for Healthy Skin and where to find them!

Our Beautiful Skin

The largest organ of the human body is our skin. When it's intact, it helps our bodies retain moisture and provides a barrier of defense against environmental pathogens, as well as physical stress. Our skin literally holds us together and often reflects on the outside what's happening on the inside. If you consider that our digestive tract is often called, "the inner skin," then things that cause inflammatory reactions on the inside, may also reflect on the outside.

The sebaceous glands of the epidermis (outer layer of our skin) form sebum, which waterproofs our skin and keeps it moist. Sebum creates what is called the acid mantle of our skin and this is a protective barrier where friendly bacteria live in our skin's microbiome. The acid mantle requires that we don't wash ourselves with harsh soaps that break down this oily or fat-based layer, stripping away our microbiome and our skin's protection.

Our Skin has a Microbiome

Think of our skin as an ecosystem that allows friendly (commensal) bacteria, fungi, viruses, mites, and archaea (1, 2,) to thrive. In exchange, they protect us against opportunistic or even pathogenic organisms from infecting our skins or invading our

bodies. To read more about this fascinating topic and to discover why it's important to choose your soap, make-up and clothing carefully, read Chris Kresser's article, Skin Microbiota and Your Health.

The Gut-Skin Connection

Most of us focus on what's going on in our outer environment to keep our skin healthy. But our skin is made up of more than its outer layer or epidermis. Our skin is created from inside us starting with the dermal layer. All layers of our skin are created and nourished by the nutrients we provide it from the foods we eat. And keep in mind, if we're eating a healthy, whole-foods diet to nourish ourselves, but our digestion is compromised, we're likely not absorbing all the nutrients we're swallowing. So skin health starts with digestive health. Click here to read more about The Gut-Skin Connection. Essentially, "If you want to heal your skin, you have to heal your gut." As a nutritionist, I help my clients ensure their digestive system is working well or I will guide them through a gut repair protocol, so the nutrients they're eating are able to nourish their skin.

Nutrients for Healthy Skin

To keep inflammation low and to keep our skin functioning well, there are a number of foods and nutrients we must eat that are very important for healthy skin:

- Omega-3, Omega-6 & Omega-9 Fats
- The Fat-soluble Vitamins A, D, E & K
- Grains that do not cause Inflammation
- Water

Healthy Fats for our Skin

Foods that contain fat are absolutely necessary for our skin. The fats in our diet produce our natural oil barrier, helping to keep our skin moisturized on the outside, allow the skin to form healthy cell structures from the inside, and carry fat-

eating many of the foods high in these healthy fats, I recommend changing your diet by adding more of the foods listed below.

Omega-3 Fats

There is one Omega-3 fat that is an essential fat, meaning that our bodies can't make it, so we must get Alpha-linolenic Acid (ALA) from our diet. ALA can be converted into two additional Omega-3 fats called Eicosapentaenoic acid (EPA) and Docosahexaenoic acid (DHA), however, this conversion is often compromised or slowed by nutrient deficiencies, ingestion of other foods and common lifestyle factors, so EPA and DHA are also important to get from our diet to avoid a deficiency.

Foods that contain Omega-3 Fats

ALA is found in ground flax seed or flax oil, hulled hempseed and chia seeds, walnuts and the common weed, purslane. Flax must be ground for us to access the fatty acids in the seed as we don't have digestive enzymes to break down the seed coat like we do chia seeds. Canola and soy oil also contain ALA, but I don't recommend cooking with canola and soy should only be consumed if it's organic.

The best food source of Omega-3 fats known as EPA and DHA is cold-water fish such as, salmon, tuna, mackerel, sardines, and herring, pastured eggs and grassfed/pasture-raised animals such as beef, buffalo, lamb, poultry and wild game.

If we're not getting enough of these essential Omega-3 fats, we can also supplement with fish oil (1,000-2,000mg/day EPA & DHA or Total EFAs) or with algae oil (vegetarian).

Omega-6 Fats

There is one Omega-6 fat that is essential, meaning that our bodies can't make it, and it's called Linoleic-acid. It gets converted to Gamma-linolenic acid (GLA) and sometimes we either don't eat enough or we're not efficient at converting it, so we can become GLA deficient. If we're Omega-3 fat deficient, this also compromises our body's ability to convert LA to GLA, contributing to deficiency.

Foods that contain Omega-6 Fats

Typically, the American diet has many sources of Omega-6 fats: soy, corn, safflower and sunflower oils, peanuts, pecans and Brazil nuts. ALA is also found in smaller quantities in other nuts, seeds, grains, legumes and animal products.

Foods that contain Gamma-linolenic acid or GLA

There are no foods that contain GLA, so if we are deficient, and this fatty acid deficiency is causing skin symptoms, then we need to supplement with Evening Primrose Oil or Borage Oil (1,000mg/day). GLA has been found to help alleviate the symptoms of eczema (3). These oils can also be found in topical preparations that may help with symptom relief.

Omega-9 Fats

Omega-9 fats are not essential fats, meaning that our bodies can make them if we don't get them from our diet. However, the most common Omega-9 fat, Oleic Acid, has been found to have many health benefits for the immune system, the heart, brain and skin. Studies show Oleic acid to be immune supportive (4) and the Mediterranean Diet, which includes foods high in Omega-3 and Omega-9 fats, has been found to have significant health benefits (5).

Foods that contain Omega-9 Fats

The most common Omega-9 fat, Oleic Acid, is found in olives, olive oil, macadamia nuts, poultry and pork fat.

Fat-Soluble Vitamins for our Skin

One reason many of us become deficient in fat-soluble vitamins is that they require fat for absorption into our body. If you're eating a low-fat diet, this can contribute to deficiencies. Also, when our digestive system is compromised, especially if we've developed gut permeability, also known as 'leaky gut,' we may not be absorbing fat from our diet or our fat-soluble vitamins. This class of vitamins play many roles in ensuring the health of our skin.

Vitamin A

Vitamin A supports the production of sebum to prevent the drying of our skin and hair. It's responsible for normalizing skin cell production and oil production and assists in the promotion of collagen, elastin in the top two layers of our skin, the epidermis and dermis. Vitamin A is a key player in speeding wound healing when our skin is repairing itself.

Foods that contain Vitamin A

There are two forms of Vitamin A. One can be found in plant foods and the active form is found in animal foods. Fruits and vegetable foods that are red, orange and yellow like winter squashes, carrots, red bell peppers (orange and yellow too), peaches, papaya, cantaloupe and sweet potatoes or yams are high in pro-Vitamin A. Even leafy greens like spinach are good sources, but the yellow pigment is hidden underneath the chlorophyll, which is green. Pre-formed Vitamin A, the active form, is found in animal foods, such as meat, poultry, fish, eggs and dairy.

Vitamin D

Vitamin D, which we primarily obtain via a process in our skin when it's exposed to sunlight, supports our skin by supporting our immune system. Studies show that Vitamin D, either alone or in combination with Vitamin E, can be used in the treatment of eczema, psoriasis and dry skin (6, 7). One study (6) found that when Vitamin D & E were supplemented in combination, 1600 IU of vitamin D3 and 600 IU of vitamin E, patients improved by 64%!

Since we can't make Vitamin D on our skin during winter months in higher latitudes (away from the equator), the best approach is to have a 25 (OH) Vitamin D blood test done to see if you're deficient (<32ng/mL) and to help you supplement with Vitamin D to reach and maintain an optimal blood level (50-80ng/mL). If you're not exposing your skin to the sun 3 times per week at midday in the summer, you may need to supplement during the summer months to achieve optimal blood levels also.

Vitamin D2 is synthetic, found in fortified foods and D3 is the natural form found in foods and dietary supplements, unless marked otherwise.

Foods that contain Vitamin D

Animal foods are the primary dietary source of vitamin D3, specifically fatty fish, such as salmon, mackerel, tuna, sardines, herring, while eggs, meat, and dairy foods contain lesser amounts. Vitamin D2 is often supplemented in processed foods, such as milk, cereals, breads, margarine, and some juices.

Because more people are deficient in Vitamin D than not, it's recommended that if you can't maintain optimal levels, daily supplementation may be the best way to ensure you don't become deficient in this important nutrient. Most adults require 2,000 IU/day to maintain optimal levels, but everyone is different and I highly recommend twice yearly Vitamin D blood tests and customized supplementation to prevent a deficiency.

I recommend a combination supplement of Vitamin D3/Vitamin K2. Cod liver oil is also a helpful form of Vitamin D supplementation, because it also contains Vitamin A. There are many of these supplements available, ensure a high-quality brand.

Vitamin E

Vitamin E alleviates skin dryness by helping the skin and scalp to retain moisture. It is an anti-oxidant that neutralizes damaging 'free radicals', so it also protects our skin and hair from exposure to the elements.

Foods that contain Vitamin E

The oils found in raw nuts and seeds contain the most vitamin E in our diet. While the following foods do contain some, it's found in much smaller quantities, because these foods contain only small amounts of fat; grains, uncooked peas and green beans, leafy green vegetables and avocados.

Vitamin K

There are 3 types of Vitamin K: K1, K2 and K3. Vitamin K2 is the form we need to ensure we're getting from our diet. It helps to properly coagulate our blood and form our bones by directing the minerals we eat to be stored there. Vitamin K has less direct effects on our skin, but all fat-soluble nutrients need to be consumed, so it's mentioned here as part of this family of nutrients.

Foods that contain Vitamin K

Vitamin K is best found in natto (fermented soybeans), but it's not widely eaten in this country. Other sources are dark, leafy greens pasture-raised egg yolks, and pastured meat and dairy products, especially grass-fed butter.

Anti-Inflammatory Grains

While grains aren't a nutrient, our immune system relies on nutrients that balance our inflammatory processes. Every health condition has an inflammatory component and for skin conditions the inflammation is often caused by grains our immune system has developed an inflammatory response to. Eliminating this, often daily, inflammatory reaction by removing these grains from our diet can be a very important step toward healing our skin. Anti-inflammatory nutrients found in whole foods can also contribute greatly to the health of our skin: vegetables, fruits, anti-inflammatory grains, legumes, pastured animal products and minimally processed cooking oils and low-sugar pre-prepared foods.

For many who have skin conditions, like eczema, their condition can be a sign the person has Celiac Disease. If you've struggled with the symptoms of any chronic skin condition, especially from birth, whether you have digestive symptoms or not, I highly recommend, **before** you eliminate gluten from your diet, that you get tested for Celiac Disease. This testing can be done by your primary care doctor or a functional medicine or complimentary practitioner, but I recommend they be experienced with Celiac Disease. There are two steps to finding out if you have Celiac Disease: testing and diagnosis. Read more about this from this link for the Celiac Disease Foundation.

If your testing shows that you do not have Celiac Disease, but you notice that you have symptoms from foods like gluten, you may have non-Celiac gluten sensitivity. Other foods that may cause inflammation are diary, corn, eggs, soy and several others. If gluten, or any other food, causes you any symptoms, eliminate them 100% (after testing). If you think you're reacting to foods in your diet, but don't know which one(s), I recommend following an Elimination-Challenge Diet with the help of a practitioner to determine which foods are inflammatory for you. This is

individual, and inflammatory foods are often one of the contributors to skin disorders, like eczema, psoriasis, rosacea, acne and others.

Grains that DO contain gluten

Wheat, wheat berries, wheat germ, barley, malt, rye, spelt, kamut, and triticale. Wheat derivatives are known by these names: durum, emmer, farina, farro, graham, and semolina.

Grains (and grain substitutes) that DON'T contain gluten

rice, corn, quinoa, oats, buckwheat, sorghum, amaranth, millet, and teff.

Water

While water isn't technically a nutrient, keeping our skin hydrated by drinking half of our (healthy) body weight in ounces of water per day is important. It's a good place to start if you want to simply improve the appearance of your skin or if you want to reverse the symptoms of any skin condition.

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About Erin Livers, BA, ICNT

As an integrated clinical nutrition therapist, health educator, and intuitive chef, Erin empowers people to cultivate a mindful relationship with their body, their creativity, with nature and nourishment. She believes that nourishment is key to living a healthy life. What you eat, think and how you live are potent forms of prevention and medicine. She offers a wide range of unique and individualized care addressing nutrition concerns and a variety of health issues, in addition to offering her Revitalize Digestion Program for gut repair.



In her nutrition therapy practice, Erin helps people to lose weight and maintain it, improve digestion, relieve fatigue, sleep soundly, improve memory and concentration, balance mood and hormones, improve skin blemished by acne and eczema, improve PMS, relieve headaches, and prepare healthy meals with renewed inspiration.

She has taught health-related topics at many schools in the Boulder/Denver area. She is Board Certified in Holistic Nutrition through the National Association of Nutrition Professionals where she is a professional member. Living in progressive Boulder, Colorado allows her to tend vegetables, herbs, fruits and flowers in her organic garden before creatively cooking and eating them.

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