



YOUR SKIN AND NUTRIANCE®

Since 1958, GNLD has brought you products that enhance your health and longevity. We believe that staying youthful and energetic for a lifetime is best achieved when every cell in your body is functioning efficiently. In keeping with that belief, GNLD scientists have continually pioneered breakthrough products over the years, backed by the latest research, and patterned after nature's blueprint.

GNLD applies those same far-reaching concepts to skin care with Nutriance — your age-defying solution. Nutriance is based on the GNLD philosophy that skin care is as much a part of a total wellness program as is eating a balanced diet, drinking plenty of water, getting regular exercise, and enjoying restful sleep. No matter what your age or gender, you can make skin care choices that support the lifelong health and youth of your skin. Nutriance can help protect your skin from premature aging, environmental damage and loss of youthful radiance. Nutriance, the most advanced skin care program in the world, delivers powerful immune-boosting and anti-aging botanicals all the way to the cellular level!

STRATEGIES FOR YOUTHFUL SKIN

Skin's two best friends are a continuous moisture/lipid balance and broad-spectrum UV protection. Each guards against environmental influences that can threaten the youth of your skin. That's why Nutriance provides essential moisture concentrations and nutrient potency in exceptional, synergistic products you can use at home. Nutriance effectively fulfills the two major objectives of effective skin care by:

- Continuously moisturizing cells from both the surface and from within, and helping them to retain that moisture, because moist skin inhibits development of fine, dry lines, and
- Helping protect skin against the oxidation activity created by exposure to UV rays and pollutants in air and water, because oxidative damage accelerates the aging process.

ATTEMPTS TO SEAL IN MOISTURE

For more than 50 years, skin care manufacturers have attempted to relieve dry, aging skin with products made of occlusive ingredients like mineral oil. Such products add some temporary moisture to the outside of the skin, but their primary function is to coat the surface and slow the loss of moisture from the layers below. So, while surface skin appears to feel softer and smoother for a time, the moisturizing benefit is brief.

One theory that may explain this temporary moisturizing effect is that because mineral oil functions as a solvent, repeated use dissolves natural oils as they emerge to the surface. This action may even damage the natural lipid barrier — permanently. In this situation, dry skin would feel increasingly drier over time. So the expected moisture actually results in a loss of it!

A DEEPER LOOK INTO SKIN

The structure of your skin consists of two distinct layers, the *epidermis*, or surface layer, and the *dermis*, which lies beneath it.

THE EPIDERMIS

As the external or outer surface of skin, the epidermis acts as a protective shield against bacterial infection, daily exposure to insult and injury, and chemical exposure. Composed of multiple layers of skin cells, it contains millions of tiny pores, glands, and ducts — about 6,000 per square inch.

Plump, moisture-rich cells are constantly being formed at the base of the epidermis and pushed upward by newer cells. As cells rise toward the surface, each flattens out and hardens, eventually becoming part of the dead protective surface layer called the stratum corneum or horny layer. Lifeless cells are continually shed from the surface — a natural process called exfoliation. As cells flake away or are rubbed off, they're replaced by cells from below.

THE DERMIS

The next layer down, called the dermis, supports and nourishes the epidermis. The dermis is the “home” of the protein called *collagen* and fibers called *elastin*. The dermis literally “props up” the epidermis with an intricate network of collagen and elastin “pillows.” These tiny pillows give support and elasticity to skin and protect blood vessels, nerve cells, sweat glands, and hair follicles. It could be said that elastin supplies the “snap” and collagen supplies the structure.

NATURAL OIL: SEBUM

The dermis contains sebaceous glands which manufacture a lipid substance called *sebum*. Secreted to the skin's surface through ducts located at every hair shaft, sebum reaches the outermost epidermal layer and surrounds each cell. Sebum is essential for optimum skin health and youthful appearance because it helps skin maintain a moist, smooth texture and helps reduce the risk of dehydration damage and premature wrinkling.

In dry skin, sebum production is below normal. Inefficient sebum production reduces the natural oil barrier. When that barrier is diminished, moisture constantly evaporates from the skin, leaving it dry. In oily skin, sebum production is above normal. Excess sebum produces an oily film over the surface of the skin that keeps skin from getting the oxygen it needs. This barrier can lead to obstructions and problem areas.

Several factors can adversely impact sebum production, including age, diet, over-cleansing with harsh soaps or alkaline cleansers, prescription drugs, alcohol, the environment, and overall health. Because one or more of these factors are likely to be part of your life, it's important to do everything you can to support your skin's natural sebum production, while helping to normalize it. With Nutriance, sebum levels can be brought into balance, opening the way to youthful, radiant skin.

**NATURAL MOISTURE: PERSPIRATION**

Moisture is critical to healthy skin, keeping surface cells plump, full, and firm, while helping skin retain internal moisture. Moisture also carries nutrients into the layers of skin. Moisture can come from several places, including humid environments, like steam rooms and humid weather, and directly from water. Fashion models learned ages ago that their skin looks healthier and smoother when they drink generous amounts of water. This makes sense when you consider that skin is about 20% water.

A great deal of moisture evaporates through your skin, especially in hot, arid temperatures, and in centrally-heated or air-conditioned environments. Skin's natural moisture is also absorbed by clothing. When deprived of moisture, skin becomes dry. Like parched ground during a drought, dehydrated skin can crack and completely change in texture. Skin loses its flexibility, resiliency and elasticity, and is subject to fine lines and wrinkles. What's more, repetitive movements from frequent facial expressions stretch and stress dry skin. They begin to leave lasting creases as surface elasticity breaks down.

Contrast that with plump, moist skin that is able to remain resilient and responsive. Moist skin can withstand repeated movements and stress because it remains much more flexible, resilient and elastic.

THE MOISTURE BARRIER: A HEALTHY BALANCE

When the secretions of both the sebaceous and sweat glands are in proper balance, oil and moisture blend together on the skin's surface to create the ideal oil/moisture balance. That balance promotes healthy, moist, young-acting skin and protects against dehydration.

Maintaining an ideal water-and-oil balance can be a challenge, since so many factors can affect moisture and sebum levels. Consider the astringent nature of some soaps, cleansers and toners, the way they can strip away vital moisture. Other products damage in another way: clogging pores with heavy, oil-laden cleansers and moisturizers. Nutriance Skin Care products are matched to your skin type, so they deliver exactly the nourishment your skin requires, while bringing back the youthful look and feel of your skin!

EXFOLIATION AND THE SKIN LIFE CYCLE

Throughout your life, your skin is involved in a continuous growth cycle. The surface layer is constantly shed or exfoliated, which is a process of healthy skin function.

In oily skin, outer cells tend to adhere and build up, while the surface cells of dry skin can cause a dull, scaly appearance. The natural exfoliation process slows over the years, taking twice as long at age 50 as it did at 25! Fortunately, skin responds well to additional exfoliation with scrubs that slough off dead cells on a regular basis. By encouraging a more rapid rate of renewal, skin can look and feel younger as fresh, soft new cells are constantly brought to the surface.

HOW SKIN AGES

Your skin reaches its "peak" when you're about 20 years old. That's when the sebum-moisture balance, combined with rapid cell turnover (14 to 18 days), gives your skin the best moisture barrier capabilities it will ever have! In your 30s, your skin begins to gradually lose some tone and texture, resulting in a duller, dryer appearance, and the first signs of fine, dry lines appear. Underlying these changes are slower skin renewal times and reduced ability to retain moisture.

In your 40s, your skin renewal time may have nearly doubled compared to your peak at age 20. And you can expect a skin renewal time of longer than a month when you reach your 50s. A longer renewal time means two things: 1) old skin cells remain on the surface longer, looking dry and masking natural skin color and radiance, and 2) of greater importance, the slower renewal time indicates skin is not functioning at its best.

MANY TYPES OF HEALTHY SKIN

Most people don't know how healthy and attractive their skin can be! Normal, healthy skin is neither too dry nor too oily; it's naturally soft and elastic, and is able to protect itself against the environment.

Your genetic inheritance lays the groundwork for your skin's predisposition toward dryness or oiliness, but beyond that, your skin's normal, healthy moisture-and-oil balance is the result of proper diet, adequate rest, drinking plenty of water, protection against the environment, and proper skin care. Although there are four basic skin "types," dry, normal, combination and oily, the following are the two ends of the spectrum:

DRY

Dry skin occurs when skin doesn't produce or retain enough natural moisture. Excessive dryness can be caused by changes in diet, and exposure to sun, wind and/or cold temperatures. The longer one's skin remains "thirsty," the sooner it begins to lose its youthful elasticity and resiliency, resulting in lines and wrinkles. Some skin care products may also contribute to drying effects over the long term by using occlusive (pore-clogging) ingredients that can interfere with skin's natural respiration, and inhibit its ability to secrete natural moisture.

OILY

Oily skin occurs when skin produces too much sebum. This excess oil production can, in part, be a response to environmental stress, exposure to sun and wind, or hormonal or dietary imbalances. However, oily skin may also occur as an overreaction to harshly-drying skin care products that can over-stimulate the skin's natural sebum production and possibly even erode the healthy oil/moisture barrier.

FACTORS THAT AFFECT SKIN

Several factors, including age, environment, and UV radiation can affect your skin. Since people respond in various ways to these factors, and everyone has different skin types and characteristics, the condition of your skin is uniquely different from others.



Because skin changes as the years go by, your skin care program needs to change along with it. The skin care routine you followed in your 20s may actually do more harm than good! For example, you may still be trying to fight oily skin that's no longer very oily, or your dry areas may now be much drier. When you treat your skin as a constantly changing entity, it's easier to keep it healthy and youthful. When determining your skin care plan, consider the following factors:

AGE

Your sebaceous glands usually produce less oil each decade, resulting in poorly-lubricated skin. Such skin often retains water less efficiently, causing a dry skin surface. Skin also becomes less elastic with age. As the collagen and elastin fibers break down, the underlying skin structure can weaken, causing skin to lose its firm texture. To counteract this, more frequent moisturizing or more concentrated moisturizers are needed.

ENVIRONMENT

Different seasons affect skin in different ways. Summer heat causes both oil and moisture production to increase; winter cold causes both to slow down. Moisturizing skin is often crucial, especially for dry skin.

Hot and humid – Generally, skin feels oilier in these conditions, so you may be inclined to cleanse more often, use harsher cleansers, and moisturize less. Treating your skin this way can upset the natural moisture/oil balance, stimulating even more oil production as sebaceous and sweat glands respond to heat and humidity.

Hot and dry – Skin perspires in hot and dry environments. So, while your body tries to cool itself by sweating, it doesn't necessarily produce more oil. When skin dries out faster than your natural moisture output can match, a hydrolipid imbalance is created. Extra moisturizing may be necessary. In this environment, dry skin only becomes drier.

Cold and dry – These conditions can lead to a “double whammy” — drying out your skin while inhibiting sebum production. It may be necessary to moisturize more often to keep your skin moist and protected.

ULTRAVIOLET RADIATION

Ultraviolet or UV rays, the element of sunlight that most seriously affects your skin, can cause permanent damage. The harmful rays are known as UVA and UVB. As UVA radiation reaches the skin, it permeates and passes through the epidermis to the dermis, where it can disrupt and irreversibly damage the underlying dermal collagen and elastin structure. This results in “solar aging” or “photo aging,” which contributes to premature wrinkling. UVB rays don't penetrate as deeply, but they cause sunburn and can lead to skin cancer.

Evidence of cumulative UV damage is most noticeable in beach-lovers and other sun-worshippers who've spent many hours and years in the sun. Their bronze coloring may give them a “healthy” appearance for a time, but their skin cells are actually severely damaged. Well-tanned skin can become thick, dry and leathery over the years, losing its youthful moisture and resiliency.

Recent studies show an increase in UV-exposure-related skin problems and diseases, including cancer. Reports from the American Cancer Society confirm how pervasive the problem is becoming:

1. Skin cancers are more common than cancers of any other organ, with more than one million cases of basal cell and squamous cell skin cancer expected in the late 90s.
2. Since the 70s, the incidence rate of melanoma has increased about 4% per year.
3. It is expected that more than 800,000 new cases of skin cancer will be diagnosed in the U.S. this year. An estimated total of 9,430 deaths from skin cancer are anticipated — 7,300 from malignant melanoma and 2,130 from other skin cancers.

OTHER TYPES OF RADIATION

You don't have to stand in the sun for UV radiation to reach your skin. Ambient UV radiation reaches you even when you're *indoors*. It shines through windows and skylights. It's reflected inside homes, offices and buildings. Computer screens and halogen and fluorescent lights emit low levels of UV radiation, adding to your UV exposure. Light from outdoors reaches you virtually everywhere! Not only that, many types of commercial and residential lighting fixtures emit low levels of UV radiation along with visible light. All this adds to your cumulative exposure day after day, year after year.

To prevent ambient radiation damage, a moderate-level daily sunscreen applied to your skin is essential. Several Nutriance products provide broad-spectrum daily UVA/UVB protection.

OXIDATION

Many scientists believe that to a great extent, aging is the result of cumulative damage to the body's cells caused by oxidizing agents known as free radicals. Free radicals are highly charged molecules — produced by normal metabolism, as well as outside environmental sources — which can attack, alter and destroy cells in much the same way rust destroys metal. Inside the body, this destructive chain of events is believed to be the underlying cause of diseases such as cancer and heart disease.

Oxidation can occur in both watery and fatty (lipid) portions of cells. Recent scientific evidence supports the theory that UV damage to skin cells is a result of lipid oxidation. UV light can produce free radicals in the skin, which may induce changes in the epidermal cells that precede the onset of skin cancer. Free radicals generated by UV rays may also be the cause of damage to the cross-linking of collagen and elastin fibers in the dermis, breaking down the support structure of the skin, leading to premature aging and the onset of wrinkles.

Free radicals — and subsequent oxidation damage — can also be produced by exposure to pollutants in our air and water, and may be exacerbated by dietary imbalances. To protect your skin's layers, supplement your body and skin with antioxidants, vitamins (some of which are antioxidants), and herbal formulations from Nutriance and GNLD.



HOW DIET CAN AFFECT YOUR SKIN

Science shows that the quality and balance of one's diet can be reflected in the skin. When skin is being nourished properly from within and on the surface, a number of skin problems can be avoided. Several nutrient groups have a significant effect on both the overall health and the maintenance of healthy skin:

1. **Essential lipids and sterols** support balanced sebum production and new cell development.
2. **Vitamins and minerals** support skin growth, protein synthesis and enzymatic activity, and protect against oxidation.
3. **Proteins** (amino acids) are an essential component of skin tissue, collagen and elastin.

VITAMINS AND SKIN

Deficiencies in almost any vitamin can have negative effects on your skin. The following vitamins are associated with healthy skin:

Vitamin A. Essential for normal skin development; an important regulator of epidermal cell reproduction. Involved in the synthesis of collagen.

B-vitamins. Essential for growth and maintenance of healthy skin.

Vitamin C. Functions as a water-based antioxidant inside and outside cells. Important for the formation of collagen and resistance to infection.

Vitamin E. Essential as an antioxidant, protects cell membranes from oxidation.

MINERALS AND SKIN

All essential minerals play important roles in the maintenance of the skin's metabolism and overall health. These include:

Calcium. Helps control capillary permeability.

Magnesium. Essential for the function of many enzyme systems.

Copper. An essential component in melanin formation.

Zinc. Essential for cell regeneration.

WATER AND SKIN

Pure, clean water — and lots of it! — provides the moisture healthy skin needs for optimum function. Water flushes away toxins and harmful compounds and enhances digestive elimination. Water hydrates your skin, plumping up cells with moisture. Also, water carries vital nutrients from the rest of your body to the surface layers of your skin. For the best of health, drink at least eight 8-oz glasses of water every day.

SECRETS FOR YOUTHFUL SKIN

Great skin is the result of comprehensive skin care, and reflects your total wellness. How your skin looks, feels and behaves is in large part up to you. You can nourish your skin every day by eating a balanced diet, drinking plenty of water, getting regular exercise and proper rest, and taking excellent care of your skin. As was mentioned earlier, skin's two best friends are a continuous moisture/lipid balance and broad-spectrum UV protection. Nutriance, the most advanced skin care program in the world, provides both.

GNLD'S SUPERIOR QUALITY CONTROL

From initial research to final production, Nutriance products are prime examples of GNLD's commitment to product quality, safety, purity and potency. No manufacturer goes to greater lengths to obtain premium raw materials, develop precisely-balanced formulas, and maintain the highest levels of quality control. After more than four decades, GNLD continues to set unparalleled industry standards in skin care.

A LIFETIME OF YOUNGER-LOOKING SKIN

Totally unique Nutriance is the only skin care program that delivers the GNLD Difference: supporting total wellness and youthful beauty today and tomorrow — an extraordinary difference you can see and feel in your skin from the very first day. Rediscover the healthy, resilient, glowing skin of your youth — and keep it looking younger, longer! — with Nutriance, your age-defying solution.