



INTRODUCING OUR FREE QUARTERLY NEWSLETTER

After many years of providing consultation services to our customers, we have answered many questions about health, fitness, hair growth, sun exposure, and a wide variety of other topics. Decades of information and research needed to answer these questions has been sitting in our archives available only to those who call our office. We are proud to introduce this quarterly newsletter as a free service to all of our customers. Each quarter, we will address a few pertinent issues with current research and new insights. If you would like us to research a specific topic you think might be helpful to other customers, please contact our office.

THE IMPACT OF VASODILATION ON HAIR GROWTH

Blood and its components are very important to all of our tissues including the hair root (bulb). It carries oxygen and nutrients to the tissues and removes carbon dioxide and waste products. It also keeps the tissues near the surface of the skin warm. As people age, especially men, a predictable pattern of decreased blood flow appears on the scalp often corresponding to a decrease in hair density in the same area.

An increase in blood flow (vasodilation) can help move more nutrients and oxygen to the tissues, help elevate the temperature, and remove more waste products. This can lead to increased cellular activity especially on or near the surface of the skin. Vasodilation of the skin can also enhance absorption of materials applied to the surface of the skin.

Loesch Scalp Activator uses a special mix of agents to cause local vasodilation of the areas treated for 20-40 minutes. This may help the cells in the hair root to be more active and may help in the absorption of Minoxidil into the dermis where it can affect the hair root and surrounding tissues.

Vasodilators like Minoxidil have been shown to increase the length of time the hair root stays in the growth phase resulting in stronger, thicker hair. You can usually see an increase in hair density in about 90 days.

W. T. Loesch, Jr., Ph. D.
 President

THE THEORY BEHIND SCAR PREVENTION

Why do scars form? A scar is the result of your body's attempt to repair a serious injury such as a burn or cut. Scars do not form after just any injury. For example, if the outer layers of skin are damaged, but the underlying epithelial cells are still alive, the skin will heal outward while maintaining its structure. If the skin is damaged down through all the epithelial layers, a different kind of healing takes place.

When cells die from injury, they send out chemical signals called "mediators of inflammation." Inflammation is the repair process the body will use to heal the injury and restore the body's protective covering (the skin). These chemicals cause five main symptoms: redness, heat, swelling, pain, and disturbance of function. If bacteria have been introduced into the wound, cells called neutrophils fight the infection by ingesting bacteria. Other cells called macrophages ingest tissue debris to clear the area in preparation for repair. If the damage is severe or if the epithelial cells that are trying to grow

over the wound can not connect to each other, cells called fibroblasts will enter the wound and construct a tough matrix of fibers to help the skin cells to reconnect to each other. This is the beginning of a scar. Once this fibrous matrix is formed, it will remain even after skin cells have closed the wound.

Once a scar has formed, there is no way to remove the fibrous matrix from the scar without removing the scar itself. Since this could lead to a new scar if not done properly, that is not usually an option. The best way to prevent or reduce scar formation is first, to keep as many damaged cells as possible from dying, and second, to provide a healthy environment for the skin cells to reconnect to each other. The old practice of putting butter on a burn is very bad advice. Butter, like petroleum jelly or other greasy materials, prevents the skin cells from being able to reconnect, so fibroblasts must come in to form a scar matrix to facilitate healing. Instead, after the initial treatment is completed (ice packs, washing the wound, etc.), you should apply a non-irritating moisturizer to the wound as often as needed to prevent the wound from drying out. This moisturizer can have some light-oil ingredients, but not too much or the cells won't be able to connect to each other.

AN EXAMPLE OF HEALTHY SKIN STRUCTURE

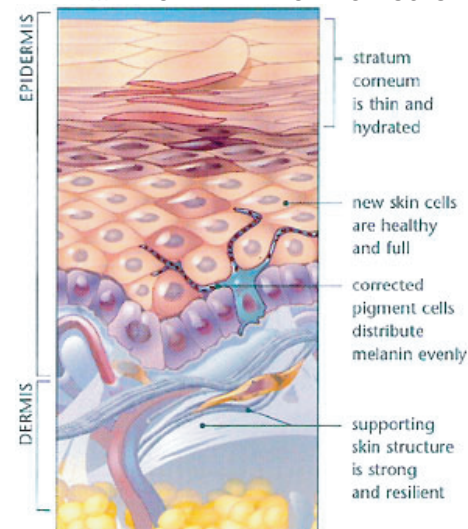


Image from Essentials of Anatomy & Physiology 5th Ed., R. Seeley, T. Stephens, and P. Tate, McGraw-Hill, New York, 2005.

By keeping as many cells alive as possible, you can minimize the body's inflammation response and minimize the pain associated with the injury as well as the number of other cells needed to complete the repair. Continue daily treatment of the wound by cleansing and moisturizing to maintain the healthiest possible environment for the skin to heal. After new skin has formed, continuing this moisturizing treatment will help the new skin remain supple and resilient.

While it may not be possible to prevent scar formation for every injury, using this technique for every appropriate injury can help to minimize scar formation making the scars that do form softer and more like the tissue they are replacing. It is certainly not necessary to spend a lot of money on expensive creams that promise to miraculously erase scars. Since most over-the-counter products can not

erase scars, most of these claims are not representative of actual results. It is important to choose a cream without any of the fancy ingredients so popular in today's market like AHAs because they can actually irritate the wound and promote scar formation. You should also not use a sunscreen on a wound because the active ingredients in most sunscreens are irritating to damaged skin. A product that deserves mention is Emunion E2 Lipid Creme available from A-Cute Derm, Inc., Houston, Texas because it contains 20% emu oil. Visit their website at www.a-cutederm.com. Emu oil seems to have a significant impact on healing time and the reduction of scar formation after injury or cosmetic surgery. We'll touch on dermatological procedures for scar removal in a future issue.

W. T. Loesch III
 Vice-President

FEATURED PRODUCT

Loesch® SCALP ACTIVATOR

We would like to announce the addition of a new product to the Loesch Hair Growth System. This remarkable innovation in hair care causes increased blood flow to the scalp which improves hair and scalp health and helps carry away waste products left over from hair production and daily exposure to the environment.

It enhances absorption and oxygenation of the scalp prior to Minoxidil or L-55-A treatment. Clients who are already using Minoxidil or L-55-A may now enhance their results by adding Scalp Activator to their treatment program.

Loesch Scalp Activator is now available by calling our office or sending in a printed order form.

CARDIOVASCULAR HEALTH: OMEGA-3 FATTY ACIDS

The FDA announced Sept 8, 2004 that it will allow foods and supplements containing eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA) omega-3 fatty acids to carry a qualified health claim that says eating the product may reduce the risk of heart disease. "The FDA has concluded that while these particular fatty acids are not essential to the diet, they may be beneficial in reducing coronary heart disease," says acting FDA commissioner Lester M. Crawford, MD. "It is our hope that this new health claim will assist consumers as they work to improve their diets by selecting the right foods to improve their health."

Food items proven to contain significant amounts of EPA and/or DHA omega-3 fatty acids will be required to display some specific labeling in order to make the new claim. "Supportive but not conclusive research shows that consumption of EPA and DHA omega-3 fatty acids may reduce the risk of coronary heart disease. One serving of [name of food] provides [x] grams of EPA and DHA omega-3 fatty acids. [See nutrition information for total fat, saturated fat and cholesterol content]."

"In our review of the science that's available for this qualified health claim, we determined that we couldn't really set a minimum amount," says Barbara Schneeman, PhD, director of the FDA's Office of Nutritional Products, Labeling and Dietary Supplements. "We felt it was more important that consumers just be informed of how much they would be consuming in a particular product."

Dietary supplements containing fish oil will not be allowed to make this new claim because they do not carry the other benefits of eating fish. When you eat fish to obtain EPA and DHA, you are effectively displacing other sources of fats such as steak or french fries. Fish is an excellent source of protein as well.

According to the AHA (American Heart Association), studies in people who have had a heart attack or heart disease show that getting from 0.5 to 1.8 grams of EPA and DHA per day either from eating fatty fish or taking supplements significantly reduces the risk of death from heart disease and other causes.

Women who are pregnant or who could become pregnant should avoid eating large amounts of fish which could contain high levels of mercury such as tilefish, shark, and swordfish.

Salmon is one of the best sources of omega-3 fatty acids with 0.68-1.83 grams per 3 oz. serving with pollock, flounder, and sole falling close behind at just under 0.5 gm per 3 oz serving.

SOURCES: FDA. Lester M. Crawford, MD, acting director, FDA. Barbara Schneeman, PhD, director of the Office of Nutritional Products, Labeling and Dietary Supplements; FDA's Center for Food Safety and Applied Nutrition. Nelda Mercer, RD, spokeswoman, American Dietetic Association. American Heart Association, WebMD.

COENZYME Q-10 AND STATIN-RELATED DEPRESSION

Ever since the statin drugs (Lipitor and Crestor) were introduced, many thousands of Americans have reaped huge benefits from lower cholesterol levels. There has been plenty of evidence that shows statins have a beneficial effect on cardiovascular health. Study results, published in a 1993 issue of the Journal of Molecular Medicine (formerly known as Clinical Investigator), showed that a group taking CoQ-10 was less likely to be hospitalized, as well as less likely to suffer complications like pulmonary edema (a collection of fluid in the lungs).

Now that some time has passed since the widespread use of statins, a new issue has emerged. We've received many reports from customers about mild depression after long term statin therapy. To combat this problem, many doctors have begun advising their patients taking statins to add Coenzyme Q-10 (CoQ-10) to their dietary supplements. If drug companies had known about this issue, they might have included CoQ-10 in the statin NDA (New Drug Application) so that patients would not have to take the supplement separately, but the cost of re-doing the clinical trials under another NDA for a combination pill containing a statin drug and CoQ-10 would certainly cost hundreds of thousands of dollars, so the drug companies aren't likely to do it.

Check out our line of dietary supplements and you'll find that CoQ-10 is just one of the products we recommend to our clients whether they are on statin therapy or not. Given the results of the study on CoQ-10 and its cardiovascular benefits, it seems a sensible thing to do whether you are experiencing depression from statin therapy or just want to improve your overall health.

W. T. Loesch III
Vice-President

DIET VS. LIFESTYLE

By definition, a diet is characterized by what you eat and how much. Many people have experienced the diet yo-yo. They starve themselves, depleting their body's energy reserves. The body responds by shutting down unnecessary functions leading to a lethargic, tired feeling. After a period of time, the body begins to burn its fat reserves resulting in weight loss, but at the same time, it burns muscle tissue reducing overall muscle mass. During the weight loss period, the body is in starvation mode just waiting for the next large meal, which is why the dieter is constantly feeling hungry and is compelled to overeat when the diet is over. This is the result of the way our not-so-distant ancestors lived. Our bodies are designed to conserve energy during famine and quickly store up energy during bountiful times. The majority of Americans no longer work the land to survive. Instead, we can walk into a building containing every kind of food you desire and walk out with as much as you can carry. We no longer burn the kind of energy we once did with work, so our bodies tend to store more as fat...a safety margin for the next famine. If the famine never comes, the fat keeps building up.

Here's the best advice I can give anyone whose body is not what it should be (overweight, obese, or just not toned): never go on another diet ever again! Here's why.

A lifestyle is determined by the set of values that you use to make choices in life, like the foods you eat and how much. If you are working in the fields tilling soil with an ox-drawn plow, then your lifestyle probably goes something like this: your upper body strength is high because you have to constantly keep the plow upright. Your core body strength is high because you have to counter the movement of the plow. Your diet probably contains lots of fatty meats and carbohydrates, deserts, and sugary drinks to keep your strength up, but your body fat would remain low because of all the vigorous work.

In our modern society, too often a lifestyle goes more like this: you might spend too much time sitting in a chair on the phone or staring at a computer, with bad posture, eating fast food, getting no exercise, and always being under stress. Why walk around the block? You have a car. Sound familiar?

Here is the secret that diet books and exercise infomercials don't want you to know. You can eat as much as you want anytime you want and never be hungry again. You can eat such a wide variety of foods that it takes months just to try everything you can eat. No, this is not some \$150/bottle magic pill that doesn't work or \$19.95 diet video with cheap plastic workout thingamabob that breaks the first time you use it. A simple, usually painless change in lifestyle can accomplish all you want for free. I'm not going to try to cover the entire diet subject with just one article. That's impossible, so look for more lifestyle tips in future newsletters.

Good news first. You have to eat a lot. You have to convince your body that it's not starving with frequent meals. When you eat, your stomach muscles stretch and as they do, nerves in the stomach sense the stretching and release a hormone that begins to dampen your appetite. You don't feel full because your stomach is really going to pop. You feel full because enough of this hormone is released to completely counteract your hunger. An overdose of this hormone can actually make you nauseous. While it is true that some people never feel full, the majority of people have a natural limit to how much they can eat in a single sitting. It's important to approach this limit, but not to blow it away. More good news. You have to cheat. Picking one day every week to eat whatever you want gives you something to look forward to and satisfies those inevitable cravings. I don't suggest

gorging on whole sticks of butter, but how much damage can 3 chocolate bars eaten one after the other do (besides make you sick) if you only do it once each week?

Now the bad news. While the old adage "you are what you eat" might not be entirely accurate, it's not far off. Chicken is a great food, high in protein and reasonably low in fat. Dip it in carbohydrates (breading) and fry it in trans-fats (shortening) and it's no longer good for you.

Here's a rule of thumb when trying to make healthier food choices. Nature has had millions of years to figure out how to produce healthy foods. In only the last 50 years, we have replaced nearly 1/2 of the average American diet with processed foods. We have a long way to go before we understand even a fraction of why nature works the way it does, so the closer to nature a food is, the better it is for you. Fresh or frozen vegetables are better than canned, battered, or fried. You can eat as much salad, mushrooms, tomatoes, and other natural toppings as you like, but when you decide on dressing, choose one that's less-processed than the others. Italian dressing made with olive oil is about as close to nature as you can get, while ranch dressing is usually made with chemical thickeners, sugars, and processed dairy products. I'm not suggesting anything as radical as Atkins or the grapefruit-only diet, just a slightly different lifestyle.

Begin by replacing one meal per day with a deliberate choice of healthy foods. Then replace another a week or so later. It would even be best if you added an extra meal each day as long as it's a healthy one. Most importantly, don't forget to schedule your cheating day in advance and stick to it. One day per week without fail, eat whatever you want.

This type of lifestyle change does not lead to rapid weight loss, so if you're trying to drop 20 pounds by next week it won't work. This type of lifestyle change gradually speeds up your metabolism and improves your overall health slowly over many months, but since you aren't hungry all the time and you can eat as much as you want, you won't always be thinking about food.

Be sure to check out future articles for more tips on healthy eating, fitness, and happy living.

W. T. Loesch III
Vice-President

SUGGEST A TOPIC FOR THE NEXT NEWSLETTER

To suggest a topic for a future issue of this newsletter, send an email to sales@loeschlab.com or send a letter to the address below. While we can't review every topic in this publication, we welcome your input and advice.

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