

# Metabolic News

The Newsletter of Metabolic Nutrition

February 2007

## The Skin You Love to Touch

By Christine N. Hardy, MA,CNE

As the largest organ of the body, skin can easily reflect the state of our overall health. Many skin disorders can manifest from a systemic disturbance or imbalance within the body. At Metabolic Nutrition, we believe that while diet and nutrition may not *cure* a skin disorder, nourishing the entire body from the inside out can only have a positive impact on our skin and general health. Interestingly, research tells us that there is a direct correlation between skin pH and blood pH.

An average square inch of skin contains 650 sweat glands, 20 blood vessels, and more than 1,000 nerve endings. Our skin weighs more than any other internal organ representing about 15% of our body weight. With its multiple layers of epithelial tissue our skin guards muscles and organs, insulates and controls evaporation, synthesizes vitamins D and B and produces hair—the filamentous outgrowth of dead skin cells. As we shed our skin every 28 days, a continuous supply of nourishment from whole foods, supplements and good skin care habits will keep us looking our best. Skin is the body’s “gatekeeper” and first line of defense, keeping out pathogens, pollution and invaders while maintaining the moisture needed for our survival. Skin filters and releases internal toxins through sweat, helps to regulate body temperature, allows us to feel sensation through dermal receptors and helps to regulate immunity.

Beauty may be only skin deep, but clear, beautiful skin has been prized since the days of Cleopatra, who reportedly went to great lengths to maintain her complexion. Nothing betrays a person’s age more than damaged skin and as skin ages it normally becomes thinner and more easily damaged. Several factors contribute to premature skin aging. The most detrimental is smoking which robs the body of nutrients, contributes toxins and deprives the body of oxygen. A lack of essential fatty acids, consumption of processed foods, refined sugar, and hydrogenated oils also contribute to toxic overload and imbalances which show up as wrinkling and loss of elasticity in the tissues of the skin.

Dry skin is a problem often more pronounced in colder winter weather as the moisture content in cooler air is less than in warmer air. Indoors, forced air heating dries the air and skin, as well as long, hot baths or showering with harsh soaps. Skin pH is normally somewhat acidic which helps to keep bacteria and pathogens in check to defeat Candida and other fungal overgrowth, but, as most soaps tend to be alkaline, with pH values ranging between 9 and 11, the acid mantle of the skin (normally a pH value of about 5) can be compromised.

*Continued on page 2*



Metabolic Nutrition  
655 Du Bois Street  
Suite F  
San Rafael, CA 94901  
Monday through Saturday  
(by appointment)  
7:30AM-4:30pm

Phone: (415) 257-3099  
**NEW** Toll Free (877) 257-3098  
**NEW** Fax: (415) 257-2226

www.bloodph.com  
christine@bloodph.com

### Inside

The Skin You LoveToTouch .continued.....	2,3
Drink Up.....	3
Metabolic Specials .....	4

## The Skin You Love To Touch.....

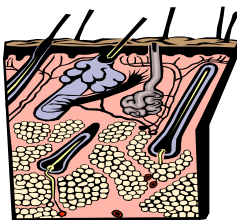
Certain skin diseases also tend to raise the pH of skin; acute eczema and atopic dermatitis can cause skin pH to shift dramatically (and become less acidic) which then leaves the skin more vulnerable to *Staphylococcus aureus* colonization. Certain systemic diseases such as diabetes, chronic renal failure and cerebrovascular disease also increase skin pH and can increase *Candida*-type skin lesions.

Acne, rosacea, psoriasis and seborrhea often improve with the use of lower or neutral pH cleansers and soaps, which are less irritating and help to soothe inflammation. Traditionally, soaps are made from animal fats and lye; "saponification" is the chemical reaction that uses up the lye and leaves hardened soap. Oils such as olive or coconut oil make softer and milder soap. (Read the label to learn what ingredients and additives you are rubbing on your face and body everyday).



Classic age spots, or "lipofuscin" are signs of free-radical deterioration of the lipids (fats) in our skin from the oxidation of polyunsaturated fats and protein. Lipofuscin pigment gradually accumulates within many cells of the body as we age and may also represent acute adrenal primary insufficiency. Our adrenal glands control melanin production and increased pigmentation on the exposed areas of the body is a specific sign of possible adrenal fatigue. Have you noticed the effect stress can have on your skin? Stress is a probable contributor to flare-ups in many skin conditions.

The omega-6 oils often found in packaged foods (such as soy, sunflower, safflower, and canola oils that have been heated to high temperatures and then become rancid) also cause an inflammatory response throughout the body. Oxidized animal fats or vegetable oil, either ingested or applied to the skin, lead to a chain reaction of free radicals and molecular damage. If you are using a soap, oil or cream that has (rancid?) animal fat or refined oil in it, you are actually causing your skin to age faster. Think of it as *topical* junk food.

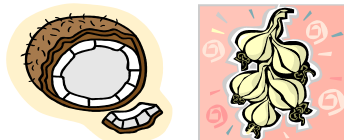


Once a free-radical reaction is started it can cause a chain reaction which ultimately damages thousands of molecules. However, when a free-radical comes into contact with an antioxidant, the chain reaction is stopped. The antioxidants in our tissues are determined, to a large extent, by the nutrients in our diet. **Lipoic Acid** is often referred to as the universal antioxidant, due to its unique ability to operate in both fat and water soluble tissues. **Vitamin C**, (in the form of ascorbic acid for Sympathetics and Slow Oxidizers and calcium ascorbate for Parasympathetics and Fast Oxidizers) is also a powerful antioxidant and also helps the body synthesize collagen.

Anti-oxidants in our skin care products are important too. Most commercial creams and lotions are predominantly water. Their moisture is quickly absorbed into dry, wrinkled skin but the effect is temporary as soon as the water evaporates or is carried away by the bloodstream. Besides water, most lotions or skin creams have an oil of some type, usually highly refined vegetable oils devoid of all natural protective antioxidants. **MSM Moisture Crème** is a happy exception containing a highly bioavailable, organic form of sulfur and rose hip oil, known for skin nourishing and collagen building qualities. MSM is required for many of the body's structural molecules, supports energy and elimination and is effective in maintaining hair, skin and nails.



**Virgin Coconut Oil** is especially useful in fighting free radicals as it is unrefined, easily absorbed into the skin and cell structure of the connective tissue. For example, a mixture of fresh crushed garlic and coconut oil can be useful in the treatment of skin and fungal infections. Coconut oil can also be used as a pre-wash hair conditioner ridding a person of dandruff better than a medicated shampoo.



## The Skin You Love To Touch.....



Inflamed skin (muscle and internal organs) will heal by forming scar tissue, a biologic process of wound repair with fibrous tissue that replaces damage caused by trauma, disease, accident and/or inflammation. As another consequence of aging, wounds heal with thicker, less pliable, weaker and more visible scars. Enzymes such as those found in fresh uncooked fruits and vegetables are used synergistically with vitamins and minerals to help the body repair damaged tissue from cuts, bruises, injuries, surgical procedures, fibrosis, and actually help to “digest” scar tissue. When it is cold outside and comfort foods are tempting, don’t forget to include fresh fruits and vegetables. According to a September 2006 study in the *Journal of the American Dietetic Association*, only 40 percent of Americans eat 5 or more (1/2 cup) servings of vegetables and fruits per day. Keep in mind that at Metabolic Nutrition we aim for a rotating assortment of fresh, organic vegetables and fruits according to your metabolic type.

**Vitalzyme and Vitalzyme X** are extra strength systemic enzyme/ nutrient supplements developed to assist the body repair damaged tissue such as post-operative injuries, cuts, bruises and scars while reducing overall inflammation. Vitalzyme is often recommended to treat psoriasis as well as allergies (notorious for causing rashes), eczema, itching and skin flare-ups.

Other supplements that contribute to a healthy complexion and radiant skin include: Zinc, Vitamin D, Neptune Krill Oil, Lecithin Granules, Fumaric Acid, Bath Salts, Vitamins B3 and B6, Vitamin A.... the list goes on. For specific suggestions tailored to your metabolic type and skin condition, please call or schedule a “tune-up” appointment at Metabolic Nutrition.

## Drink-up..... Skin care from the inside out.

Water is the most important nutrient in the living world. Individual needs for hydration vary depending on age, gender, physical activity, temperature, humidity, and physical condition. In general,



men require more water than women due to their higher lean body mass and energy expenditure. Drink water before, after and during exercise and particularly first thing in the morning to assure adequate hydration.

Water moves through the body to the skin surface in a process called “transepidermal water loss” through sweat glands. However, it is not until 1-2% of our “body water” is lost that our thirst mechanism kicks in. Don’t wait until you are de-hydrated to drink enough fluids and to be sure that you are hydrated on a cellular level, add **Liquid Ionic Trace Minerals** to carry moisture into the cell and promote electrolyte balance. Our complexion and energy levels are happiest when we sufficiently hydrated.

More about water: chemicals used to purify tap water can be skin and lung irritants. Hot steamy showering can be particularly irritating due to pH imbalanced soapy water altering the acid mantle of the skin, absorption of additives, and inhalation of vaporized chemicals including chlorine and other organic solvents. Many shower and bath water filters are available; ask to see our research.



As always,  
we offer **Same Day Shipping**

**Free Shipping**, orders over \$200

**Gift Certificates** available



### **Healing Touch and Therapeutic Massage—**

We have a number of Massage Therapists we happily recommend. Ask us for a referral in your area!!! What a great Valentine’s Day Gift for you or your Valentine.

**Tel. (415) 257-3099**

## Metabolic Supplements on SALE (through February)

**Lipoic Plus**— a powerful antioxidant blend— hundreds of times more potent than either Vitamin C or E. Remarkably able to penetrate both oil and water, Alpha Lipoic Acid works on the skin from the inside out! Also helps regulate blood sugar by transporting it to the cells to be burned for energy instead of stored as fat. 180 capsules.....reg. \$52 **now \$41.60**

**Coconut Oil— 100% Organic** .....reg. \$9 **now \$7.20**

**Extra Virgin Organic Coconut Oil** .....reg. \$17 **now \$13.60**

**Liquid Ionic Trace Minerals**— 8 oz. Insures cellular hydration and balanced oxygen stores, enhances cell communication, promotes healthy heart and brain function.....reg. \$19 **now \$15.20**

**MSM Moisture Crème**—a rich moisturizing crème with Methylsulfonylmethane and rose hip seed oil to nourish, soften and hydrate skin..... reg. \$21 **now \$16.80**

**Neptune Krill Oil**—an essential fatty acid naturally containing balanced omega 3:6:9, reported to be successfully used in the treatment of skin cancer. 300 times greater antioxidant capacity than vitamins A and E, 48 times that of fish oil, shown to lower LDL and triglyceride levels, raise HDL, increase cell hydration, lower cholesterol and helps balance blood sugar. 60 softgels.....reg. \$39.95 **now \$32**

**VitalzymeX**—Professional Therapeutic Systemic Enzyme and Nutrient Supplement to reduce inflammation, digest scar tissue, modulate the immune system, and promote circulation.

90 capsules.....reg. \$ 59 **now \$ 47.20**

180 capsules.....reg. \$ 99 **now \$ 79.20**

360 capsules.....reg. \$159 **now \$ 127.20**



Published by:  
Jason W. Kristal  
**Metabolic Nutrition**  
655 Du Bois, Suite F  
San Rafael, CA 94901  
415-257-3099

**Editor: Christine N. Hardy, MA, CNE**  
**Director of Clinical Services**

Dedicated to the memory of Dr. Harold J. Kristal