

# SEABUCKTHORN ... SYNONYMOUS WITH BEAUTIFUL SKIN

## An Internal and Topical Approach

### The Medium Is The Message

Men and women have been adorning and painting their skin for thousands of years in order to enhance their beauty and allure. Equally, body art and exotic embellishments have a long history as a very effective demonstration of tribal affiliation, status, power and intent. These practices have remained surprisingly consistent over time. Flip through any contemporary women's magazine and you can't miss the omnipresent ads for creams, colours, textures, cover-ups and scents — all designed to enhance, hide, diminish, attract and dazzle. Youth today dye, shave, pierce and paint their bodies in a paradoxical expression of determined individuality and the overriding imperative to belong.

### Our Brain On The Outside

While most of us remain preoccupied with the skin's appearance, science has another story to tell. Our largest organ, the skin is an essential component of the body's life support system. It protects, regulates, purifies and even nourishes. In fact, with its own remarkable form of photosynthesis our skin magically converts sunbeams into indispensable Vitamin D. The skin is also our interface between our very own spiritual, emotional and biochemical *internal* world and a diverse and often indeterminate *external* world. Noting the skin's capacity as a sensor of the external has prompted some to call it "*our brain on the outside*".<sup>1</sup> "*A true biologic universe, the skin incorporates all major support systems; blood, muscle and innervation as well as roles in immuno-competence, psycho-emotions, ultraviolet radiation sensing, endocrine function etc.*"<sup>2</sup>

A highly efficient, self-regulating and self-sustaining system, the skin itself, like all our organs receives its nourishment through a network of blood vessels that carry life giving oxygen and nutrients to all the cells of the body. Under normal conditions the epidermis or outer layer is kept soft and supple through water, nutrients and lipids delivered from the middle layer, the dermis. Stressors such as poor diet, environmental conditions, chemical irritants and illnesses can increase skin dryness and fragility and inhibit the body's ability to nourish and repair. Antioxidant and anti-inflammatory nutrition is critical to the restoration and optimization of the organism as a whole and specialized topical skincare treatments can replace vital nutrients and fight free radical damage through their trans-dermal activity. At the same time, topical application of creams, oils and ointments can also work from the "outside" to inhibit the loss of moisture and lipids thus supporting the "inside" process of renewal.

### Seabuckthorn – The Synergistic Giant

Synergy, from the Greek *synergos* or *working together* has been defined as "a mutually advantageous conjunction where the whole is greater than the sum of the parts"

Seabuckthorn or sea buckthorn (*hippophae rhamnoides*) has such breadth and depth of phytonutrients as to prompt the suggestion that it is the successful outcome of a very early plant breeding initiative. However it came about, seabuckthorn naturally lends itself to inner and outer skin care. At the same time, seabuckthorn is such a complex and synergistic biological system that it can be a challenge to try to explain what it is about seabuckthorn that *specifically impacts* a particular condition or disease. Human skin is a sensitive and complex organ utilizing myriad cell processes to function. A powerful antioxidant, seabuckthorn is naturally high in many compounds essential to skin health. For example, Omega 3 and Omega 6 comprise 30% of the skin's lipids.

Seabuckthorn seed oil has an amazingly high 75% of these essential omega's in a perfect one to one ratio. Palmitoleic acid (omega 7) is another naturally occurring skin lipid which is found at a rare 35% in seabuckthorn fruit oil. A full range of carotenoids, tocopherols, phytosterols, phospholipids and more make these oils a uniquely rich source of vital nutrients for the skin and body. Phospholipids contain naturally occurring essential fatty acids, which can contribute to the activation of cellular metabolism. The most important of these fatty acids is linoleic acid, present in seabuckthorn seed oil in a naturally occurring one to one ratio with omega 3.

Inflammation is increasingly recognized as an aggravating factor in many (if not all) health and skin problems and the seabuckthorn berry and leaves contain an impressive array of anti-inflammatory compounds such as ellagic acid, folic acid, ferulic acid, tannins and many essential vitamins and minerals. Both the berry and leaves are also high in the flavonoids quercetin, kaempferol and isorhamnetin — potent anti-inflammatories.

## Seabuckthorn and Your Skin

When approaching the issue of skin care, it is helpful to focus on the following qualities of seabuckthorn that directly impact skin conditions: *Anti-Inflammatory* (reducing swelling, flushing, irritation and cell damage); *Auto-Immune Moderator* (discouraging over-zealous immune system responses that attack healthy tissue); *Heart and Vascular Healer* (strengthening blood vessels, cell walls and circulation); *Anti-Microbial* (making the skin and body an unwelcome place for bacteria, microbes and parasites); *Hormone Regulator* (with topical and internal use, soothing overactive hormone production and regulating the endocrine system); and *Skin Conditioner* (nourishing and retaining young, healthy cells while softening scar tissue and tough, fibrous or abnormal ones).

## Seabuckthorn Nutrition

- Regulates hormones, as well as normalizing sebaceous secretions, blood chemistry, endocrine balance and other systems, notably the skin, that can be affected by hormone imbalances
- Seabuckthorn seed oil contains omega 3 and omega 6 in a perfect one to one ratio. The relationship of equivalence between the two omegas is critical because they self-check each other in a delicate balance to regulate thousands of metabolic functions through prostaglandin pathways. Nearly every biologic function is somehow interconnected with the delicate balance between omega 6 and omega 3. (prostaglandins are directly implicated in many inflammatory responses)
- Is a nerve and vascular conditioner, and an anti-irritant
- Is an anti-microbial (bacteria, yeast, fungus, other microbes)
- Performs many of the same functions as prescribed steroids, but without the same side-effects
- Conditions the skin in many ways; it helps by healing micro-tears in the skin, thinning out thick, coarse areas and constricting pores, as well as softening and healing scars beyond what is possible with any other non-surgical treatment
- Quercetin, a flavonoid present in seabuckthorn berries and leaves, is an antihistamine. The damaging effects of inflammation are recognised as part of the cycle of many skin conditions
- Seabuckthorn tea contains natural salicyns. The salicyns are natural anti-inflammatories and anti-keratolytics, soothing inflammation and breaking down thickened tissues
- A potent free radical scavenger, seabuckthorn's anti-aging properties may slow down cell death, resulting in less skin thickening and shedding that contributes to eruptions

## Seabuckthorn Beauty From The Inside Out

Research is starting to identify the particular nutrient requirements for soft, luminous skin. Lutein for example is not only good for the eyes but will re-hydrate the skin and protect it from sun damage. A connection between psoriasis and heart disease has recently been detected. What is this underlying connection between these two afflictions? Inflammation. The question then is: how do we reduce inflammation? An immediate Omega boost would help. Phytosterols and phospholipids improve micro-circulation which improves blood flow which is how nutrients are supplied to the skin. Improve the micro-circulation and we improve the health of our skin.

Polyphenols, Vitamin C, Vitamin E and K have also been cited as directly impacting the skin's integrity and appearance. It is no surprise that "you are what you eat", "beauty is more than skin deep" and the favourite, "beauty comes from the inside" is increasingly substantiated by solid research. So if you are convinced, as I am, that not only is the skin the medium but it is the message then Seabuckthorn — Synonymous with Beautiful Skin is a full length feature film.

Susan McLoughlin is the President of Seabuckthorn International Inc. Peachland, BC Canada.

In partnership with her late husband, Ms. McLoughlin pioneered the seabuckthorn industry in Canada. Educated at UBC, she is currently engaged in the manufacture and marketing of nutraceuticals and cosmeceuticals from seabuckthorn. Ms. McLoughlin can be reached at [smcl@shaw.ca](mailto:smcl@shaw.ca) or 250 767 6100.

You can read more about seabuckthorn by visiting the Seabuckthorn International Inc. website at: [www.seabuckthorn.com](http://www.seabuckthorn.com)

---

1.A. Slominski, Neuroendocrine system of the skin, *Dermatology*, 2005, 211, DOI: 10.1159/000087012.

2.Tobin, Desmond J , Biochemistry of human skin—our brain on the outside, *Chemical Society Reviews*, 2005, DOI: 10.1039/b505793k

Lanoville, Natalie A, Seabuckthorn and Acne – SII, 2006

Lutein skin health study elicits excited response at conference, *Nutra Ingredients Europe* , Jess Halliday 13/09/2006

Skin Physiology, Irritants, Dry Skin and Moisturizers, Christina Marino, MD, MPH Report Number 56-2-2001a August 2001 (Revised June 2006), Washington State Department of Labor and Industries Safety and Health Assessment and Research for Prevention Program

Nourish your skin from the outside in: what's the best way to keep wrinkles at bay? Vitamins A, B, C, E, and K, Karyn Repinski, COPYRIGHT 2004 Weider Publications

Psoriasis: a possible risk factor for development of coronary artery calcification.Ludwig RJ, Herzog C, Rostock A, Ochsendorf FR, Zollner TM, Thaci D, Kaufmann R, Vogl TJ, Boehncke WH.,Department of Dermatology and Department of Radiology, Johann Wolfgang Goethe-University, Theodor-Stern-Kai 7, D-60590 Frankfurt am Main, Germany. 2006

Anti-Aging Cosmeceuticals: what Works and What Doesn't? Marie Spano, MS, RD, *Nutraceuticals World*, 15/09/2006

Female consumers drive nutricosmetics market, Louise Prance, *Cosmetics design-europe*, 20/11/2006

Li, Thomas S. C. and Beveridge, Thomas H. J. *Sea Buckthorn (Hippophae Rhamnoides L.): Production and Utilization*. Ottawa: NRC Research Press. 2003

Risto, Erkkola and Baoru, Yang, Sea buckthorn oils: Towards healthy mucous membranes. *AGROFood industry hi-tech* May/June 2003

Quirin, K.W. and D. Gerard (1993). Sea-buckthorn pulp and kernel oils: valuable lipids for skin care. Unpublished Report, Flavex Natuuextrakte Co. 8 p.