

Aging/Regeneration: a 302skincare Overview

Aging skin at the cellular level appears marked by collagen fragmenting, inflammatory proteins, crosslinked and fibrotic tissue, poor cell configuration and cell differentiation, decreasing energy, among other signs, all of which can be traced to DNA damage that has been ongoing. This functional damage, epigenetic in nature, is not easily, directly or permanently repairable.

The scientific literature describes a variety of substances that may provide temporary repair of DNA errors, especially retinoids which unfortunately often create their own problems in skin depletion after one year at full dose, but nothing as yet is available to fully globally restore skin to its original, youthful state, though tantalizing experiments have been successful in animal studies.

Therefore, skin aging is now a management issue that seeks to limit its look and control the factors that accelerate it. This is the 'state of the art'.

The stimulation of natural skin repair functions is the predominant approach to the reversal of the look of aging in skincare today. It is a fundamentally flawed idea that rapidly depletes the skin.

The repair function can be stimulated by heat, acids or irritants. Most procedures used in skincare 'anti-aging', including lasers and peels and exfoliating devices rely on the skin's own repair function mechanism to improve the look of the skin. The flaw in the idea is that the repair function itself has been damaged by age and the environment.

At the other end of today's spectrum of conventional skincare will be found concealers and cosmetics. These include many protein based creams.

It is impossible for any protein, peptide, collagen, growth factor, enzyme or other large molecule constituent of our skin, such as hyaluronic acid to be applied externally and thereby penetrate to the skin cells and become part of the metabolic process of the skin. It is impossible because the skin only allows molecules less than approximately 750 daltons molecular weight (MWD) to

penetrate into the epidermis or beyond. Proteins as described above are rarely less than 10,000 MWD and often 100,000 and more in size.

Large molecules tend to collect on the surface and break down into smaller parts that can create the temporary look of erasing wrinkles, like an egg white, and the barrier function also improves by retaining natural water. However, this is a cosmetic or makeup idea of temporary use and not a 'solution' to the underlying problem. It is a management 'solution' of very slight technical interest in overall skin biology but always a strong seller in the market because the user looks better 'right now'.

Sun damage initiates much of the DNA damage and protection must begin at an early age. Unfortunately, many of the products to choose from to protect can actually create as many problems in the look of aging as does ultraviolet light as various consumer groups have recently announced.

The use of sunscreens that rely on non-mineral ingredients are the worst offenders. But the use of natural mineral ingredients tends to feel sticky, even if very protective. No one wants to go around like a lifeguard's nose, covered in white zinc or titanium oxides. Recent developments in the creation of very low micron sized zinc oxide particles has helped reduce or eliminate that pasty look and sticky feel while improving protection.

302 relies on the METABOLIC model rather than the Repair model to improve the look of aged skin. We seek to create a global response that improves all aspects of skin functions, because it's not just the looks that are in need of help. When the skin is fully functional, as it was when it was young, good looks follow. It is not the other way around which is the practice of the Repair model with an artificial, plasticene, even manikin look often the outcome.

In choosing a regime or procedure you must examine the skin as you would a building in disrepair. There are many ways that you might go about the work and while you may want a new paint job right now, often it will be the walls that need shoring up first.

The problem the client herself identifies she wants solved is usually a symptom of something else, something amiss far below the surface and you must know the broad history of how it got that way. This means diet, health, family history and medications must be known and factored into the plan. For example, a client taking thyroid supplement probably has a tendency to rosacea or cuperose skin. The dosage of thyroid often is in error and it is not easy for the physician or patient to hit a moving target. This is but one example of many.

With age, the ability to remove cellular waste product degrades, so saturating the skin with substances to moisturize and stimulate and conceal and protect will lead inevitably to poor looking skin--all in interest of improving the look of the skin! Often this leads to breakouts.

The problem becomes compounded when intense procedures such as lasers and continuous exfoliation are brought to bear. The weakening of the skin in this condition is a widespread phenomenon primarily because of poor pre-treatment and post-treatment topical choices or chronic irritation from chemical insult. Your studio and home care choices should improve the waste processing capacity of the skin. We are not fans of the idea of 'detoxifying'. There is no such phenomenon. The body tends to accumulate waste products in the skin, identified as yellowish spots, known as lipofuscin in the technical literature and no amount of dieting or purging will change that. But careful administration of topicals and proper cleansing products and techniques will vastly improve the skin's processing of cellular waste.

In general, the blotchiness of age is just another indication of errors accumulating in the cells. These errors will not be controlled by sending in the antioxidant firemen either.

The 302 approach to reversing the look of aging points to the dermis and epidermis and the junction of the two. The most effective compound we have yet tested for the dermis is ascorbyl isopalmitate, also called tetrahexydecyl ascorbate or, BV-OSC. This lipid has well documented uptake and effect in the dermis. It reduces blotches and pigment problems rebuilds elasticity, increases resistance to sunlight damage and just all in all functions quite compatibly with the skin. It is a lipid form of vitamin C.

For the epidermis and epidermal/dermal junction the ingredient of choice is Avogen or avocatin 302. A truly remarkable discovery from a rainforest species of avocado, Avogen has the capacity to dramatically increase glucose which is the missing energy component in aging skin and usually induced by stressing the skins repair functions. Avogen is very well tolerated and works rapidly to restore cell integrity reduce inflammatory protein formation, eliminate fragmenting of collagen and improve the texture, feel and turgor of the skin as a consequence. Epigenetic dysfunctions caused by DNA errors also undergo rapid transformation to proper signaling, an area of intensive research interest at 302 as it pertains to inhibition of tumor growth.

The Avogen compound will be found in 302 Drops, 302 Serum, 302 Plus Serum, 302 Rosacea Drops, 302 Acne Drops, Body Treatment and 302 Clinical Products.

Alternating days between the BV-OSC compound (C-Boost at 8%, Lightening Drops at 17%) and the Avogen molecule will give the most comprehensive skin aging treatment system in home care available.

The use of ultrasound (or radio frequency) to propel these ingredients deeper into the skin, as part of a series of studio procedures, coupled with home care will provide exceptional esthetic results rivaling that of any laser procedure in esthetic improvement, with none of the safety risks.