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## COVER STORY

### Rejuvenate Your Skin While You Sleep

by Maria Rabat



"Beautiful skin is nourished skin," says Carmen Fusco, R.N., M.S., C.N.S, a research scientist and clinical nutritionist based in New York City. She is also the creator of the Dream Cream, a novel skin care formula that enhances the skin's own ability to repair itself. As we grow older, there is a decline in cell replacement, thereby compounding the problem of aged skin. A wound on a healthy teenager heals quickly, but on a fifty-year-old adult, that same wound takes more time to heal because older skin cells suffer from a decreased ability to renew and regenerate themselves.<sup>1</sup>

The Dream Cream, with years of research behind it, contains ingredients scientifically proven to heal and protect damaged skin. It's important to note that separately, each of the natural substances included in the Dream Cream packs a good deal of benefit, but when used together, they become dynamic boosters of each other. A synergy of chemical reactions intensifies antioxidant activity and heightens the overall efficacy of each ingredient.<sup>2</sup>

The antioxidants in the Dream Cream, particularly vitamins C and E, contribute to skin repair, while vitamin A works on removing old cells, a vital step in the skin renewal process. There are actually two forms of vitamin C included in the Dream

Cream, the fat soluble and non-irritating ascorbyl palmitate, which has potent free radical quenching effects, and sodium ascorbyl phosphate, which acts as a collagen production booster, strengthening collagen strands and making them more resilient. Glycolic acid works with vitamin A to remove hard, old cells, while alpha lipoic acid helps not only to deactivate free radicals, but also to strengthen and energize the healing properties of vitamins C and E, making them much more effective repair agents.<sup>3</sup>



Unique to the Dream Cream are the hormones melatonin and DHEA. These hormones do not absorb into the body, but rather are only available to the multiple layers of the skin. The importance of this is that the skin has a relatively limited blood supply that results in it being deprived of optimal amounts of orally ingested DHEA and melatonin supplements. Since melatonin is naturally secreted only at night, the application of the Dream Cream at bedtime gives the skin the hormone replacement it needs at the precise time the body is naturally recovering from the stresses of the day.

#### Enhanced delivery system

What good will all these beneficial ingredients do if they can't penetrate the skin and nourish the layers underneath? The Dream Cream incorporates a new, revolutionary liposome delivery system, called QuSome® (meaning quick liposome), to transport the product's active ingredients to the lower layers of the skin. QuSomes® deliver more active ingredient into the skin by targeting the dermis and subcutaneous skin layers for improved treatment and efficacy without any irritation. Until very recently, QuSomes® were used exclusively in medicinal drugs, but because of certain technological breakthroughs, the cost of manufacture was reduced drastically and this technology can now be used in therapeutic cosmeceuticals, such as the Dream Cream. QuSomes® are unique because they can also aid in dissolving ingredients that present difficult solubility problems, such as herbs and vitamins. Not only do they improve the textural quality of products, but they also enhance the performance of the active ingredients and the overall efficacy of the product.

#### A prestigious testimonial

Lynne Miller has to look good. As the wife of the dean and CEO of Johns Hopkins Medical School, Ms. Miller often plays host to various visiting dignitaries or is a guest herself at

#### Why skin must be protected against free radicals

Scientists have a theory that explains why our cells malfunction as we age. As we grow older, we become more vulnerable to the toxic effects of free radicals due to a depletion of naturally produced antioxidants. This is especially apparent in the skin, which is directly exposed to agents that induce free radical formation.

parties, fund raisers and other formal events. Sometimes she's in and out of makeup several times a day, changing to go from one event to the next. "I never need worry about my skin looking and feeling its best," she reports. Ms. Miller has been using the Dream Cream for close to five years, and she couldn't be happier with the results. "My daughter urged me to use it. She swore to me that it had proven results. I was reluctant at first. Please...I've tried them all!" Ms. Miller recalled during a recent phone conversation. She finally tried the moisturizer to appease her daughter. "I was amazed. My skin is super sensitive, but I had no problem with this. I couldn't believe the change it produced in my skin. It's made it incredibly supple, and has evened my skin tone." And others have taken notice, too. "People can't believe that I'm 60. My skin looks fantastic. I just can't say enough about this product. I tell everyone. Why keep it a secret? We can all reap the benefits of healthy-looking skin."

### What's good for the body is great for the skin!

Melatonin  
and DHEA  
Protect  
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Aging



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Nighttime  
Rejuvenation

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Aging causes biochemical changes in collagen and elastin, the protein fibers that give skin its youthful tone and appearance. Aged skin also appears more translucent because of the decrease in the number of pigment-containing cells called melanocytes. As the subcutaneous fat layer begins to lose its padding and connective tissue support, the skin begins to sag and look less supple, and wrinkles form. And because aged skin is thinner and more fragile, it is at increased risk of injury.<sup>4</sup> UVA damage leads to the breakdown of the skin's collagen fibers, which keeps the skin firm and sag-free.<sup>5</sup> Excessive damage, which may not show up for years, is often revealed in a leathery look of the skin, and also in the form of skin cancer and age spots.

There is plenty we can do to beat back the merciless hands of time. Maintaining a healthy lifestyle is a good first defense, along with arming yourself with scientific-based skin care products. You can make the most of the complexion you have-regardless of the advancing years-by eating sensibly and avoiding known skin aging accelerators such as tobacco smoke, UV sunlight and excess ethanol. It is critical to choose topical skin products that not only provide broad-spectrum protection against internal and environmental damage, but also help repair and renew aging skin cells. The sooner these preventative measures are taken, the better your chances are in winning the war that has been waged since the day you were born.

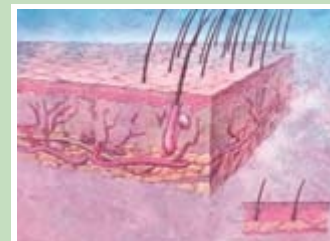
Free radicals are unstable oxygen molecules that have lost an electron during interactions with other molecules. Once an electron is lost, an atom attempts to regain its electrical balance by stealing one or more electrons from neighboring atoms. This piracy begins a chain reaction, creating more free radical molecules with damaged cellular structures. Every time a free radical molecule attempts to right itself, healthy cells are sacrificed. Free radical formation is a normal biological process, but external factors-cigarette smoking, sunlight and pollution-also play a part, and precipitate the free radical sequence.<sup>8</sup> The free-radical theory, proposed by Denham Harman, M.D., Ph.D., at the University of Nebraska in the mid-1950s, is now regarded as the basis for many of the deleterious consequences of aging.



### The anatomy and physiology of skin

An average adult's skin weighs about nine pounds, and has a surface area of around 20 square feet, making the skin the body's largest organ. As such, it has quite a few responsibilities, including eliminating carbon dioxide and other forms of waste, acting as a shield against environmental toxins, and regulating body temperature. Our skin is always at work, continually repairing and renewing itself.

Although the skin has many layers, it can be divided into three main sections. The outer, protective portion, the epidermis, contains skin cells, pigment and proteins. These skin cells are constantly being shed and replaced by the ones underneath. (A skin cell takes three to four weeks from its formation to reach the surface and be shed.) Beneath the epidermis lies the dermis, the skin's support system, containing water, blood vessels, nerves, hair follicles, sweat glands and oil, or sebaceous, glands. Both the sweat and sebaceous glands help produce the skin's acid mantle, a thin coating of oil and perspiration that protects against bacterial and fungal infections.\* In addition to providing nutrients to the epidermis, the dermis also produces collagen and elastin, the substances responsible for the skin's firmness and elasticity. The subcutaneous layer lies beneath the dermis, and it contains blood vessels and fat. The fat layer gives us contour and adds fullness to the face, keeping the skin plump and smooth. It also acts as a cushion and provides insulation. All three layers contain connective tissue with collagen fibers to give support and elastin fibers to provide flexibility and strength.



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