## While You Are Sleeping

by Dr. Diana L. Howard

Our skin is a dynamic organ that changes not only with the seasons and environment but also exhibits fluctuations in physiology from day to night; we call these distinct shifts in biological activity, circadian rhythms. We know that our skin excretes less sebum, loses more water, is warmer, has a more acidic pH, and repairs itself more at night than during the day. Basically, while you are sleeping your skin gets a reprieve from the trauma of the day and the body's repair processes get a chance to catchup. The question we asked in R&D was, How do we utilize the skin's natural circadian rhythms to our advantage in treating aging skin?

We know that wrinkles/ fine lines and dehydration are the biggest concerns for most people as their skin ages. Years of exposure to UV rays contributes to photoaging which includes degradation of our structural collagen along with a decline in hyaluronic acid resulting in wrinkles, fine lines and sagging skin. Dehydration is compounded by the fact that our lipid barrier layer diminishes with age and isnt replenished as quickly.

Ideally, in order to restore the integrity and health of the skin, we have to address all of these issues. We need to use water attracting humectants, skin softening emollients, lipid barrier reinforcements and collagen stimulating peptides. And in order to optimize treatment of the skin, we need to capitalize on the skin's natural circadian rhythms and infuse the skin with a super concentrated dose of nourishing and conditioning agents.

Dermalogica's Overnight Repair Serum is a technologically advanced treatment serum that deeply

nourishes skin overnight and gives lackluster skin a fresh, dewy appearance. It is a nourishing treatment serum that works as you sleep to help repair skin tissue. Our essential-oil-based peptide enriched serum stimulates collagen to help firm skin and fight signs of aging while stimulating production of the skin's most powerful moisture magnet, hyaluronic acid. Antioxidant rich Argan oil and Brown seaweed help fight free radicals (ROS) and control enzymes (MMPs) that degrade skin as a result of daytime UV exposure while restoring the protective barrier lipid layer. Vitamin C enriched Rosehip seed oil contributes to this protective barrier while a natural Rose retinoid helps reduce the appearance of aging skin.

Dermalogica® Overnight Repair Serum provides cell nourishment and protection while you sleep. It not only helps scavenge free radicals that assault the skin leading to premature aging, it helps reinforce protective barrier lipids while controlling MMPs and fortifying much needed collagen in the deeper layers of the skin.

## Why a serum?

Serums are super concentrated formulas based on either water or oil. They are often referred to as concentrates and contain a higher dosage of biologically active substances than their moisturizer (cream) counterparts. This means quicker more effective penetration of actives to address skin care issues.