

WHAT IS DNA DAMAGE?

DNA is subject to thousands of daily assaults: from the outside by radiation, pollutants and thermal damage; from the inside by replication errors in the body's normal processes, and is particularly susceptible to UV damage.

The skin's own melanin and added sunscreen reflect or absorb a certain amount of light, yet enough solar radiation invariably gets through to the cell's nucleus to directly damage DNA.

While many DNA repair enzymes that spring into action when the cell is alerted to damage, in a 24-hour period, this process repairs about 50% of the DNA damage. That is not enough!

Everyone Needs DNA Repair Enzymes

Enzymes known as endonucleases assist in repairing the DNA by seeking out the damaged DNA and triggering the body's own repair enzymes to act.

Micrococcus luteus one of the most UV-resistant microbes known to science. Liposome delivery of this marine microbe recognizes cellular UV damage and accelerates the skin's repair and recovery process.

Arabidopsis thaliana, also known as OGG1, is a second endonuclease repair enzyme found in the mustard plant. It targets both the nucleus and the energy-making mitochondria of the cell. OGG1 seeks out a common type of free radical damage to DNA and helps the body's natural process by initiating the cellular repair process.

Anacystis nidulans is a light sensitive enzyme, sourced by plankton and algae, that adheres directly to the damaged DNA and channels energy it absorbs from the sunlight to separate and then restore the fused rungs. About 20 minutes of sunshine or an hour of indoor light are sufficient to activate this photolyase enzyme and help clear the DNA of UV damage.

The key to the effectiveness of these topically applied enzymes is their liposome delivery system, which transports them directly to the cells.

Liposome delivery

Most useful for being able to transfer and deliver active ingredients to the application site of topical products.

The liposome wall is very similar, physiologically, to the material of cell membranes

When a product containing liposomes is applied to the skin, the liposomes are deposited on the skin and begin to merge with the cellular membranes

In the process, the liposomes release their payload of active materials into the cells

As a consequence, not only is delivery of the actives very specific--directly into the intended cells--but the delivery takes place over a longer period of time

Liposomes are manufactured from various fatty substances that are used to encapsulate, or to create a sphere around, active materials, acting as a delivery system.

Who needs DNA skincare products?

Anyone concerned with overall skin health

Anyone overexposed to the sun, past and present

Anyone exposed to environmental pollutants

Anyone concerned with fine lines, wrinkles and UV spots

Anyone recovering from a non-invasive procedure

Everyone needs help repairing damaged DNA

Benefits:

By assisting in DNA repair, it helps the skin recover from non-invasive procedures

Because it helps the skin repair the “other” 50% of damaged DNA, it provides faster DNA recovery, which offers added protection/prevention to the UV damage suffered from sun exposure

Holds off collagen degradation in the lower layers of the skin, therefore, helping to reduce the appearance of fine lines and wrinkles

Attacks both past and present damage!