

Products

[Nutritional](#)
[Personal Care](#)
[Synergy's V3](#)
[Medical Advisory Board](#)
[Quality Assurance](#)
[Ask an Expert](#)

Fourth Generation of Skin Care

Gen IV demonstrates Synergy WorldWide's unwavering commitment to developing the latest in skin-care treatments. Unlike ordinary technologies or off-the-shelf solutions, Gen IV incorporates rare enzymes and nature's own healing ability to help repair damaged skin and reverse the visible signs of aging. Backed by clinical evidence, Gen IV technology promotes vibrant, youthful skin, and revitalizes and rejuvenates your appearance.



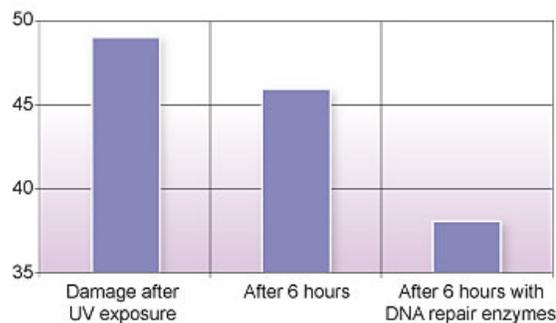
Powerful Enzymes

When your skin cells are exposed to large amounts of UV radiation, the resulting damage to cellular DNA can disrupt normal cell replication, increase the potential for skin damage and reduce the skin's ability to repair itself. Although not abundant, natural repair enzymes are present in the human body. Gen IV technology is based on, and supports this naturally occurring DNA repair process.

The key to Gen IV's revolutionary effectiveness lies in its combination of the unique T4 Endonuclease V repair enzyme and special-acting liposome. This repair enzyme helps to prevent and correct visible damage resulting from exposure to the sun's ultraviolet rays. The T4 Endonuclease V enzyme is extracted through a special biofermentation process from a certain type of microorganism. The enzymes are then encapsulated in specialized delivery liposomes that are targeted directly to the skin cells.

The T4 Endonuclease V enzymes help protect the skin from UV-induced damage, reduce the potential for sunburn, and help support the skin's immune system, thus aiding the body in self-repair. Synergy is on the cutting edge of skin care with this advanced system of DNA enzyme technology that assists the natural repair processes of the skin, helps protect against the appearance of skin damage, and helps delay the visible signs of aging.

Figure 1 shows the amount of skin damage, represented by damaged DNA, occurring immediately after sun exposure. As you can see, after six hours the body can repair some of the damage on its own. However, with the application of the DNA repair enzymes following UV exposure, a significant reduction in damage is seen after the same six hours.



Sophisticated Liposomes

The liposomes that help make Gen IV so powerful are specially engineered to localize in the upper layers of the skin, because this is where the T4 Endonuclease V enzyme provides the greatest benefit with the most activity. These liposomes are pH sensitive, ensuring that they will not release their contents until the appropriate location within the skin is reached.

The Gen IV liposome has a pH level of 6.0. Its shape is multilamellar, generally spherical and composed of three lipids: phosphatidyl ethanolamine, phosphatidyl choline and oleic acid, and cholesterol hemisuccinate. **Figure 2** shows the Gen IV liposome structure. Inside the cell, where the pH level is 4.0,

the phosphatidyl choline lipid breaks open to release the liposome's active enzyme content.

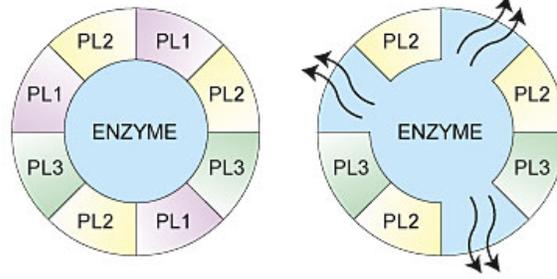
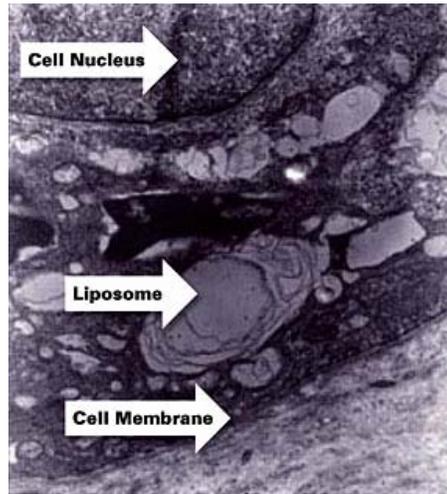


Figure 3 shows a liposome that has been delivered into a skin cell. The cell membrane is visible at the bottom of the photo. The liposome is unraveling to release the DNA repair enzymes. Once the enzymes have been released from the liposome, they will aid in repairing visible skin damage.



Synergy is committed to technological advancement and continuing research in the field of skin science. Based on solid science and backed by clinical evidence, our products containing Gen IV provide amazing anti-aging solutions that help prevent and visibly reverse the signs of aging for beautiful, youthful-looking skin.