

## I.

Therapon science is as much as about what is not in its formulations as what is in them. It's not enough to flood the skin or bloodstream with micronutrients and ingredients. It's not what is present, but *what is bio-available* and actually gets into cells, and what those ingredients do once inside the cells.

Therapon's gene expression, and antioxidant formula ingredients have been clinically shown to support:

1. Body processes responsible for healthy skin immune system function
2. Healthy skin cell gene expression
3. Body processes for healthy capillary function and blood circulation

All of ***these are critical for skin health, beauty and anti-aging benefits.***

Sun exposure to skin causes increase in skin temperature and activates \*heat shock proteins, primary drivers in skin aging by causing collagen breakdown. Theraderm formulas stimulate an antioxidant response mediated by the transcription factor Nrf2, a critically important cellular defense mechanism that serves to limit skin aging.

Theraderm's antioxidant-rich formula supports a protective natural gene expression response by skin cells and the immune system while neutralizing cell-damaging free radicals and toxic molecules at the same time.

**\* Acceleration of heat shock-induced collagen breakdown in human dermal fibroblasts with knockdown of NF-E2-related factor 2** Gunhyuk Park, BMB Rep. 2015; 48(8): 467-472  
[www.bmbreports.org](http://www.bmbreports.org), College of Pharmacy, Kyung Hee University, Seoul 02447, Korea

## II.

Lactate is an active metabolite with a role of a \*signaling factor is supported by observations that lactate stimulates connective tissue synthesis.

**\* L-lactate enhances DNA repair and modulates the resistance of cervical carcinoma cells to anticancer drugs via histone deacetylase inhibition and hydroxycarboxylic acid receptor 1 activation,** [Waldemar Wagner](#),<sup>✉</sup> [Wojciech M. Ciszewski](#),<sup>#</sup> and [Katarzyna D. Kania](#), Cell Commun Signal. 2015; 13: 36,