

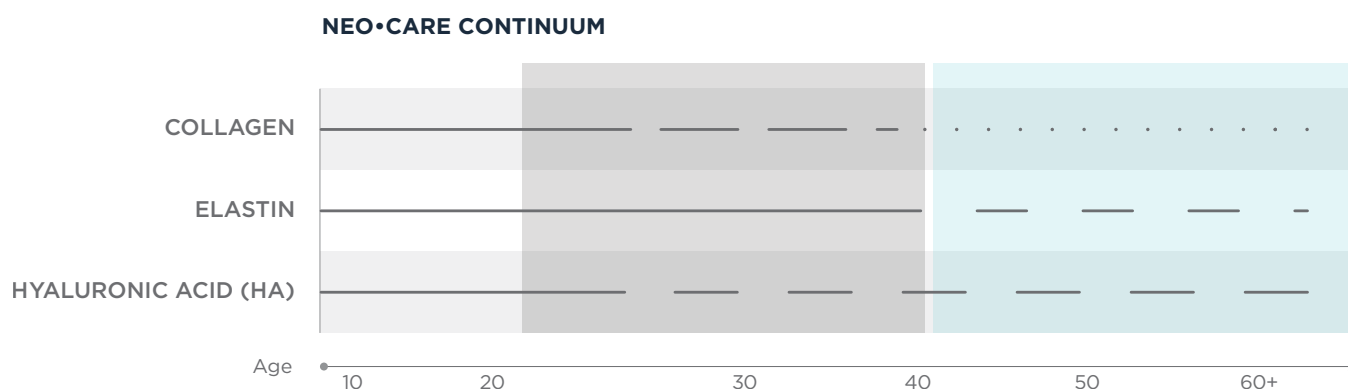
NEOCUTIS®

Results  
with Science



# NEO•CARE CONTINUUM

As you age, your skin's needs change. That's why we designed the NEO•CARE CONTINUUM, a long-term skincare regimen that helps identify the right solutions for your skin at every age. No matter where you are on the Continuum, you'll discover solutions that reveal healthy, youthful-looking skin.



Early in the aging process, helping to sustain Collagen levels in skin is important as Collagen begins to break down, leading to fine lines and wrinkles.

Later on, Elastin support is needed as its production slows down, causing the skin to sag and lose its firmness and elasticity.

Throughout the aging process, nourishment of HA (Hyaluronic Acid, a natural sugar found in the body) is necessary to aid in moisture retention.

# demonstrated benefits

## BIO•CREAM®



BEFORE



AFTER\*



BEFORE



AFTER\*

## MICRO•FIRM™



BEFORE



AFTER\*



BEFORE



AFTER\*

\* After six months, twice-daily use of BIO•CREAM®. Unretouched photos of actual study subjects. Results based on a study of 39 subjects who applied BIO•CREAM® twice daily for six months. Results may vary. Data on file; Merz North America, Inc., Raleigh, NC.

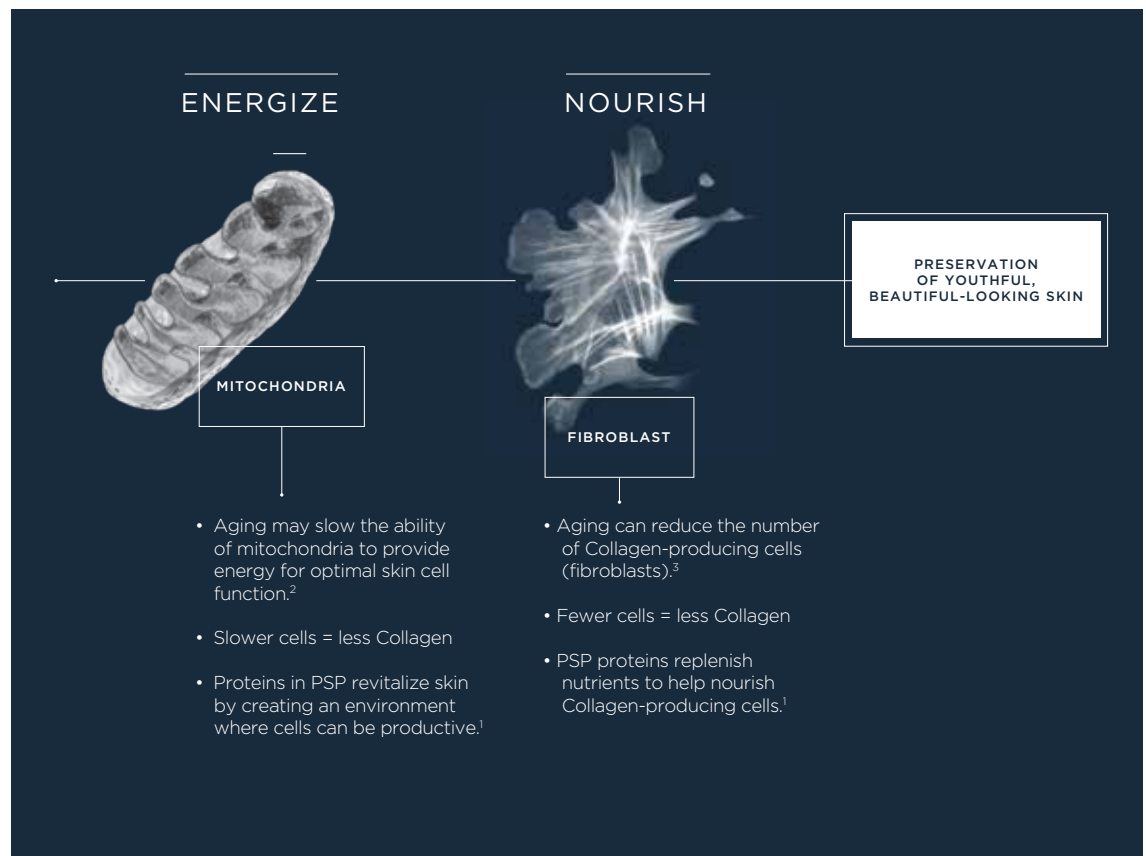
\* Unretouched photos of actual study subjects. Results based on a study of subjects who applied MICRO•FIRM™ twice daily for three months. Results may vary. Data on file; Merz North America, Inc., Raleigh, NC.

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# PSP®: unique discovery in innovation

- Driven by research in scarless wound healing, a formulation was developed containing an optimal blend of proteins (**PSP**®).
- **PSP**® (Processed Skin Proteins) a balanced blend of proteins like growth factors, interleukins and other cytokines — helps energize, nourish and preserve youthful skin.
- **PSP**® is a patented and propriety anti-aging technology exclusive to NEOCUTIS, which harnesses the power of rich, nourishing proteins from cultured fibroblasts. **PSP**® offers a solution for all skin types.
- For anti-aging and post-procedure skincare, **PSP**® supplements skin with the building blocks it needs to help maintain a youthful appearance longer.

## A Solution for All Skin Types



### References:

1. Data on file, Merz North America, Inc., Raleigh, NC. 2. Skin Aging Handbook. An Integrated Approach to Biochemistry and Product Development. Ed. Dayan N. William Andrew. Norwich, NY. 2008. 3. Langton AK, Sherratt MJ, Griffiths CE, Watson RE. A new wrinkle on old skin: the role of elastic fibres in skin ageing. *Int J Cosmet Sci.* 2010;32(5):330-339.



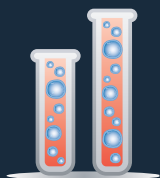
# PSP<sup>®</sup> Processed Skin Proteins

## PSP Proprietary Technology:

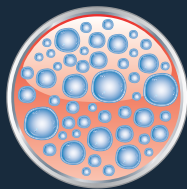
- An optimally balanced blend of Human Growth Factors, Cytokines, and Interleukins obtained from cultured fibroblasts.
- Rich in proteins, which are key to preservation of youthful skin.



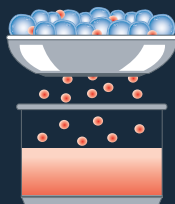
**1** Collect Original Cells  
Establish Cell Bank



**2** Cells Used  
PSP production



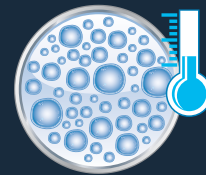
**3** Fibroblast Production



**4** Fibroblast Harvesting



**5** Fibroblasts Washed

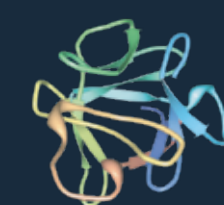


**6** Cells Freeze-Thawed  
To rupture cell lysate of membrane



**8**

PSP<sup>®</sup>, exclusive to NEOCUTIS<sup>®</sup>, is incorporated into skincare formulations



**7** PSP<sup>®</sup>  
Protein rich cell lysate is called PSP

pure cell lysate (PSP<sup>®</sup>)

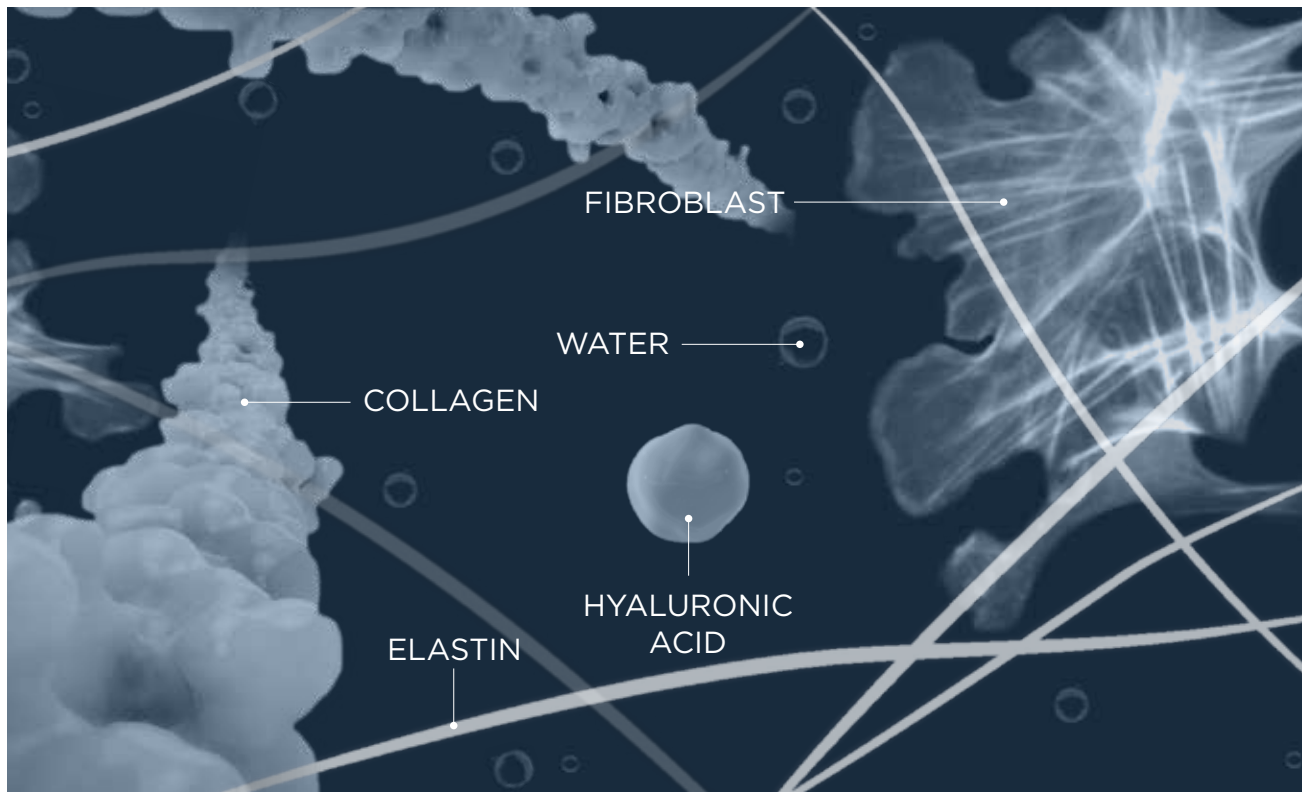
media solution (TNS)



# MPC™: born from cutting-edge research

- The visual signs of skin aging can be partially attributed to changes that occur in the extracellular matrix (ECM).<sup>1</sup>
- The ECM, present in many organs, including the skin, acts as a three-dimensional scaffold for cells and helps with many important functions, such as wound healing and cellular communication.<sup>2,3</sup>
- Recent anti-aging research has shed more light on how the ECM is intricately involved in the changes that happen to skin over time.<sup>1</sup> NEOCUTIS® is applying that understanding to thwart signs of aging at the source

## ECM



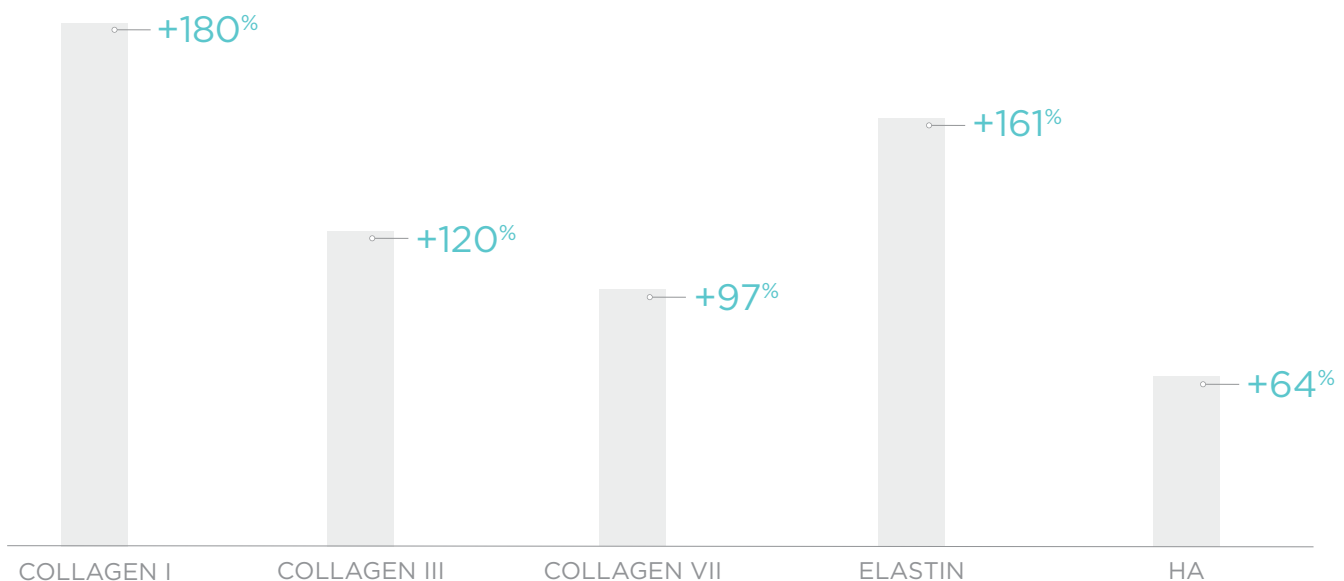
### References:

1. Quan T, Fisher GJ. Role of age-associated alterations of the dermal extracellular matrix microenvironment in human aging: a mini-review. *Gerontology*. 2015;61(5):427-434.
2. Frantz C, Stewart KM, Weaver VM. The extracellular matrix at a glance. *J Cell Sci*. 2010;123(24):4195-4200.
3. Ganceviciene R, Liakou AI, Theodoridis A, et al. Skin anti-aging strategies. *Dermato-Endocrinol*. 2012;4(3):308-319.
4. Thurstan SA, Gibbs NK, Langton AK, et al. Chemical consequences of cutaneous photoageing. *Chem Cent J*. 2012;6(1):34.
5. Baumann L. Skin ageing and its treatment. *J Pathol*. 2007;211(2):241-251.
6. Langton AK, Sheratt MJ, Griffiths CEM, et al. A new wrinkle on old skin: the role of elastic fibres in skin ageing. *Int J Cosmet Sci*. 2010;32(5):330-339.

# MPC<sup>TM</sup> Micro Protein Complex

- MPC<sup>TM</sup> is a patented blend of select Micro•Proteins, creating a breakthrough alternative to traditional cytokines and growth factors.
- The peptides in MPC<sup>TM</sup> have been shown *in vitro* to mimic matrikines, which are involved in the production of key ECM components (Collagens I, III and VII, Elastin and HA) that break down during aging.<sup>1</sup>
- MPC<sup>TM</sup> was precisely designed to include a specific, proprietary blend of these lab created peptides to help rejuvenate the appearance of aging skin.<sup>1</sup>
- MPC<sup>TM</sup> cultivates an ideal environment for the conversion of immature Elastin to mature Elastin.<sup>1</sup>

MICRO PROTEIN COMPLEX	DESCRIPTION
<b>NEO•PEPTIDE 7.5</b> Proprietary to NEOCUTIS®	Dipeptide derivative
<b>Tetrapeptide-21</b> Exclusive to NEOCUTIS® as a solid peptide salt	Tetrapeptide
<b>NEO•PEPTIDE 2.0</b> Proprietary to NEOCUTIS®	Tripeptide derivative



These results reflect the maximum effects of MPC<sup>TM</sup> obtained from *in vitro* testing.<sup>2</sup>

#### References:

- Dreher F. A novel matrikine-like micro-protein complex (MPC) technology for topical skin rejuvenation. *J Drugs Dermatol.* 2016;15(4):457-464.
- Data on file, Merz North America, Inc., Raleigh, NC.



# NEOCUTIS®

[www.neocutis.com](http://www.neocutis.com)

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