Connective tissue and collagen

The connective tissue is the body’s network. It consists of the extracellular matrix and of its cells. It is composed of elastic and collagen fibres, non-collagen proteins, ground substances and water. Structured like a web, the connective tissue holds and defines the cells and organs as well as bones, vessels and nerve cords.

Collagen as a main part of the connective tissue consists of very thin fibres, connected like a rope and generating a three-dimensional network in the field of nanometers. Collagen type I is the most important one with regards to quantity and is found in the dermis, the vessels, ribbons and the skeleton. Most common besides collagen type I is collagen type III which is also found in the dermis and organs. Collagen type IV is responsible for a very resistant and light tissue in the skin. A lack of collagen speeds skin aging up causes weakness in the brawn, ribbons and sinew. An increased risk of osteoporosis and a general weakness of the connective tissue can also occur.

With increasing age the metabolism slows down, the energy for cell regeneration decreases. The skin’s network of collagen and elastic is getting less as a result of decreasing collagen production. The skin is losing its tensility and elasticity, which can be reflected in fine lines and wrinkles, especially in the face and décolleté. On the one hand, this belongs to the natural process of aging and is genetically programmed, on the other hand, environmental influences do play a major role as well. Like no other organ the skin is exposed to manifold influences from inside out! Simultaneously, the skin represents significantly our appearance.

With light in specific wavelengths, the skin’s texture can be enhanced. The blood circulation and metabolism are stimulated and the skin is detoxified. Cells in the skin are stimulated to promote the collagen production in the fibroblasts. The oxygen consumption is supported in the skin, the moisture absorption and also the ability to save them in the skin will be improved. The regeneration and new formation of healthy skin is saved significantly. These processes are stimulated, supported and achieved by red light waves in the action area of 610-650 nm.

Measuring of the collagen structure

The ultrasound measurement device COLLAGENOSON® ICU can measure the skin’s thickness as well as its collagen structure. Collagen consists of very thin fibres which are connected like a robe. The fibres are connected in a three-dimensional network in the field of nanometers. The ultrasounder COLLAGENOSON® ICU displays the points of culmination (fiber bunches). The differences in density are mostly reflected through the ultrasound and returned as an echo: the bigger the difference in density, the more energy does the echo have!

Memories ...

... to the future

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Visible light (infrared)

<table>
<thead>
<tr>
<th>Wavelength (nm)</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>400</td>
<td>collagen structure measuring</td>
</tr>
<tr>
<td>610-650</td>
<td>collagen Plus® light</td>
</tr>
</tbody>
</table>
Builds collagen and elastin structure of the skin
Reduces wrinkles and fine lines, especially in the face, neck and décolleté
Improves the moisture absorption of the skin
Models the facial contours and returns volume
Vitalises and protects the skin
Prevents aging of the skin
Increases the regeneration of skin cells
Affects the mineral metabolism positively
Strengthens the connective tissue throughout the body and tones the skin

Results of the observation treatment 2008:
The effects of Collagen Plus® anti-aging light therapy have been documented and confirmed from 51 subjects (average 52 years) over a period of 4 months in the hospital Piano, Switzerland. The observation treatment has been managed and operated through Dr. Med. Fiorenzo Angehrn, co-founder and president of the swiss association of medical anti-aging.

Evaluation of the subjects questionnaire:
10 session treatment: vitalize and protect 68% revitalisation of the overall skin
20 session treatment: regenerate and model 89% significant lifting effect on the face, neck and décolleté
30 session treatment: strengthen and tighten 97% increased strength and elasticity of the whole body

Measurement of skin thickness and collagen distribution (ultrasound measurement device COLLAGENSON® ICU)
10 session treatment:
Skin Thickness 78% improvement 8% significant improvement
Collagen Distribution 80% improvement 6% significant improvement
20 session treatment:
Skin Thickness 21% improvement 79% significant improvement
Collagen Distribution 18% improvement 82% significant improvement
30 session treatment:
Skin Thickness 6% improvement 94% significant improvement
Collagen Distribution 6% improvement 94% significant improvement
Additions to the anti-aging light therapy.

10 session treatment • 34 weeks

- Vitalise and Protect

The skin is flooded and energized with light in the range of 610-650nm. The metabolism is activated, which detoxifies the skin, improves skin texture and protects from environmental influences. The skin, especially the facial area is revitalized considerably. 2-3 times a week for 10-20 minutes (continue 1-2 times per week for 10-20 minutes)

20 session treatment • 57 weeks

- Regenerates and Models

Inflamed skin and blanching heal faster. The skin looks fresher, healthier and cleaner. Customers report a better moisture content of the skin on the face, neck and décolleté, especially the face gets more volume and appears modeled. The well-being and performance is increased significantly. 2-3 times a week for 10-20 minutes (continue 1-2 times per week for 10-20 minutes)

30 session treatment • 8-10 weeks

- Strengthens and Tightens

The collagen structure in the dermis is strengthened, thereby causing an immediate tightening. The skin regains firmness and elasticity, a prerequisite against cellulite. Similarly, fine lines and wrinkles especially on the face, neck and décolleté filled, thus reducing the natural aging characteristics. 2-3 times a week for 10-20 minutes (continue 1-2 times per week for 10-20 minutes)

Hyaluron Gel

Effective moisture retention for a tighter, more delicate skin. The immediate lifting effect for the daily care. Helps to conserve moisture and smoothness of the skin. Reduces the visible signs of skin aging. Supports the maintenance of collagen and elastic components. Resistantes the cell structure and self renewal. For all skin types, ideal as a make-up base. Protects the skin against environmental influences. No animal testing, no animal ingredients. Available in 30 ml/5 ml

Trylagen and Lipomist are the decisive components of the art of sun Collagen Pen. The Roll-Pen helps the product to be applied specifically to wrinkles and expression lines.

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Timeless

Stabilises the natural balance of your skin and provides noticeably better tone and elasticity. Available in 15 ml

Premium Hyaluron Gel

Ideal formula of short and long-chain hyaluronan. Creates the perfect water balance for skin, provides outstanding protection against transepidermal moisture loss. Creates a long-lasting moisture retention moisturizing effect in skin. It is very quickly absorbed into the skin due to its excellent water binding capacity and has a noticeable smoothing and firming effect, even at a mature age. Available in 15 ml

Anti-Aging Collagen Pen

with Trylagen and Lipomist

Trylagen and Lipomist are the decisive components of the art of sun Collagen Pen. Supporting effect of this product is found by hyaluronan acid. The Roll-Pen helps the product to be applied specifically to wrinkles and expression lines. Available in 10 ml