

HOW TO LOOK

# 10 YEARS YOUNGER

WITH YOUNG SKIN, DREAM BODY AND FULL HAIR



THANKS TO MODERN

**BEAUTY**

**TECHNOLOGY**

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## Preamble

The first humans who roamed the steppes in early times had only one problem with getting older: It seldom worked. The reason was either a predator, a hard winter, or a sickness. The opportunities and entitlements are completely different today; the life expectancy and especially the life quality has increased drastically. Nowadays life can be really fun again after the kids are flown out.

Due to healthier lifestyle nowadays people feel younger than they actually are. Help yourself to recognize your perceived age in the mirror.

But what is it that makes a face look so attractive? A face is attractive if the owner looks healthy and young.

The human brain has been trained since the stone age to notice the opposite in less than 1 sec. Characteristic features of a young and healthy face are defined cheekbone and full cheeks. No nasolabial folds and wrinkles, the jawline is smooth and evenly defined. The skin is also smooth and even, without any spots.

Quite in contrast to it, an older face can be recognized immediately by its deeper cheekbones, sunken cheeks, pronounced nasolabial wrinkles and it is not evenly defined the jawline and wrinkled, „blotchy“ skin.

It is no wonder, that the majority of the people want that its youth, beauty, and efficiency can be easily recognized from the outside. It's not for nothing that external beauty is like an admission ticket. Inner beauty and a good character are like a residence permit.

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## Introduction

At the Oscars, Grammys and Echo awards - they glitter and sparkle, each trying to outshine the other: the wrinkle-free faces of stars. Many people are wondering: How do actors and singers manage to look so young even in old age? One thing is clear: it does not rely purely on the inheritance of successful genes.

Kleopatra, Marilyn Monroe or Karlie Kloss – every age has its own ideals of beauty. What many people do not know: Beauty treatments are not just a trend of our time. For example thread - lifting was already used in antiquity.

In the last ten years minimally-invasive methods of treatment with botulinum toxin, hyaluronic filler and threads have developed a number of modern treatments that have the added benefit of causing few or no side effects and have provided natural and effective results on the face.

And the development continues: nowadays there are some excellent devices on the market for home usage, which help you to look more attractive and younger in a simple and safe way.





## Classic treatment by doctors

### 2.1 Operational procedures

#### 2.1.1 Facelift

The facelift is an operation. The procedure is performed under general anesthesia. The skin, the underlying fat tissue, muscles, and connective tissue will be tightened and strengthened. In the past even a layperson could recognize the main features of a Facelift. Technologies nowadays have improved. A Facelift does not guarantee that the skin does not age. After several years a further Facelift is mostly necessary.

A facelift can be repeated, however the effort should not be forgotten. You're out of action for at least two weeks, because after a facelift your face often hurts. Bruising and asymmetry can also becloud your pleasure.

#### 2.1.2 Bodylift

Even sagging body parts, like upper arms, abdomen, upper thigh, or buttocks can be tightened in an operative way. Also this procedure is performed under general anesthesia normally. The excess skin and underlying fatty tissue will be surgically removed and all incisions will be sutured. The healing period takes about 2-4 weeks. Side effects like pain and hematomas can happen. Unfortunately, in most cases annoying scars may possibly remain.

#### 2.1.3 Liposuction

The healing period takes at least 2-4 weeks. Liposuction is performed under general or local anesthesia and the fat will be



removed by use of microcannulas. The procedure is according to the connective tissue part of the fatty tissue more or less easy. Liposuction by use of cannulas must be often supported with laser, strong water jet or ultrasound.

Side effects like pain, hematomas can happen, your skin may appear bumpy, wavy or withered.

## 2.1.4 Hair transplantation

All men and women will be affected by hair loss at some stage in their lives, it happens to everyone over the course of their lifetime. Women develop a diffuse hair loss over the years, which slowly thins the hair on the entire head. Men develop a receding hairline, in the course of time the hair thins out also on top of the head. The hair in the tonsure area, i. e. the temples, lateral and back of the head area, is normally always retained in men.

At first, you don't notice the hair loss. Gradually the hair thins out and the scalp becomes visible. At the latest then the desire arises to have more hair again.

One option is hair transplantation.

Nowadays, hair transplantation is carried out almost exclusively according to the FUE method. Follicular Unit Extraction (FUE) refers to the extraction, storage, and insertion of follicular units (FU). The units are natural groupings of one to four (in rare cases five) hairs. These follicular units are of great importance for hair transplantation because hair does not grow individually but in natural bundles. In an FUE transplant, these hair groups (usually from a small group of about 1-5 naturally related roots) are removed from the hair crown area with a hollow needle and inserted into the corresponding areas.

Extraction needles are used for the procedure, which can remove grafts in a size of 0.5 mm to 1 mm. Before transplanting, a health check of the group is carried out. The transplants are stored in a nutrient solution until implantation.

Afterward, the hair will be replanted in the desired area.

Tiny holes are created for each hair and the prepared hair root

or hair root group is inserted individually. Since small minimum distances must be left between the hairs used and the transplantation of each individual hair is very time-consuming, the hair transplantation must be carried out in several sessions in order to achieve the desired result.

The disadvantage of the FUE method is the increased time required for individual removal. The workload for such a treatment is very intensive. The treatment lasts 6 to 12 hours, depending on the number of transplanted hairs also more. In some cases, two or more sessions at intervals of a few days are also required.

Complications such as heavy bleeding are very rare if the procedure is performed correctly.

Most commonly, severe swelling occurs from the 2-4th postoperative day, which reaches into the midface and can lead to impressive eyelid edema.



## 2.2 Modern minimally invasive techniques

### 2.2.1 Botulinum toxin

Botulinum toxin is an active ingredient that blocks the transmission of nerve impulse to muscle for a certain time. If it is injected into a muscle, it specifically blocks the nerve impulses there. As a result, the corresponding muscle can no longer be tensed as usual. Other nerve functions - such as feeling or touching through the skin - are not affected. Botulinum toxin can be used to smooth different types of wrinkles.

Most botulinum toxin treatments are performed in the upper third of the face: frown lines, forehead wrinkles and smile lines on the outer corner of the eye. The active ingredient is injected under the skin with a fine needle. The botulinum toxin then ensures that the muscles in the treated zone can no longer tense and the skin smoothes. For example, you can then no longer pull your eyes together in such a way that the so-called frown line forms. The forehead wrinkles and crow's feet can also be reduced in this way.

In the course of the day, slight redness may occur around the puncture site, but this will disappear by itself. After three to seven days, the final result is visible. It lasts up to six months. Then the treatment can be repeated.

Immediately after the treatment, small bruises, redness, and slight swelling may occur around the puncture site. Asymmetries are possible with improper treatment, but they can be compensated. The success of the treatment is visible after about seven days. Muscle activity is much lower or even disappears. Even with strong facial expressions („angry face“), it cannot reappear. The sweat formation decreases considerably.



The wrinkles are also reduced by the lack of muscle activity. If the treatment is repeated over a longer period of time, the notched wrinkle valleys, in which the skin has thinned under the long-term pressure of facial expressions, also regenerate.

As a result, the natural facial expression is influenced in the long run, the face appears expressionless due to the reduced facial expression (freeze effect).



## 2.2.2 Hyaluron/filler

The era of fillers for wrinkle treatment began about 100 years ago. At that time, doctors preferred to use own fat to compensate volume deficits in the face. Later, in the 50s to 80s, many practitioners used liquid silicone or paraffin. However, the results were not permanent, side effects such as infections, deformities, and granulomatous reactions were not uncommon. About 20 years ago, there was a rethink: doctors rely on fillers that the body breaks down over time.

Starting with collagen, hyaluron is now considered the gold standard among fillers. The results are natural, the side effects are low. With the Hyaluron treatment, a Hyaluron gel with a very fine needle is injected under the skin in the area of wrinkles or for the 3D volume build-up („Liquid Lift“). The wrinkle is raised and adjusted to the level of the surrounding skin. The previously disturbing depression, which is the reason for wrinkles or visible scars, is thus immediately eliminated or improved.



Hyaluron is one of the most important components of connective tissue. It occurs in all connective or supporting tissues of the body (e. g. fibrous tissue of the skin, bones, various cartilages). In the body, hyaluron lies in itself cross-linked like a cushion between the framework of collagen fibers, stores moisture and is an essential factor for the elastically smooth appearance of the skin structure. Hyaluron also acts as an activator of the fibroblasts, which are special cells that produce the body's own elastin and collagen that keep our skin smooth and supple.

From the age of 30, the amount of hyaluronic acid in the skin decreases continuously. The skin loses suppleness, smoothness, and volume. This is a normal process of skin aging, which can partly be accelerated by environmental factors. Hyaluron treatment offers the possibility to counteract this process.

Hyaluron is a natural polysaccharide that occurs in the organism, e. g. in the basic substance of connective tissue, in the skin and synovial fluid. With increasing age, the natural hyaluronic acid content of the skin decreases. This can result in loss of moisture and elasticity.

The hyaluron used for the treatment is obtained fermentatively from special cultures. It's a colorless, clear gel. Chemically, physically and biologically, the human hyaluron and the synthetically produced hyaluron are identical. Since allergic reactions are not to be expected, no skin test is necessary before the treatment.

By injecting hyaluron the lack of volume can be compensated and the sunken skin tissue (wrinkles, scars) can be raised. Also with the year's sunken face parts like e. g. the cheek and the cheekbone region can be lifted. This gives the face a more youthful, dynamic and above all more attractive expression.



After the first treatment, sometimes further treatment is necessary to achieve the desired level of correction. The result usually improves in the course of further treatments.

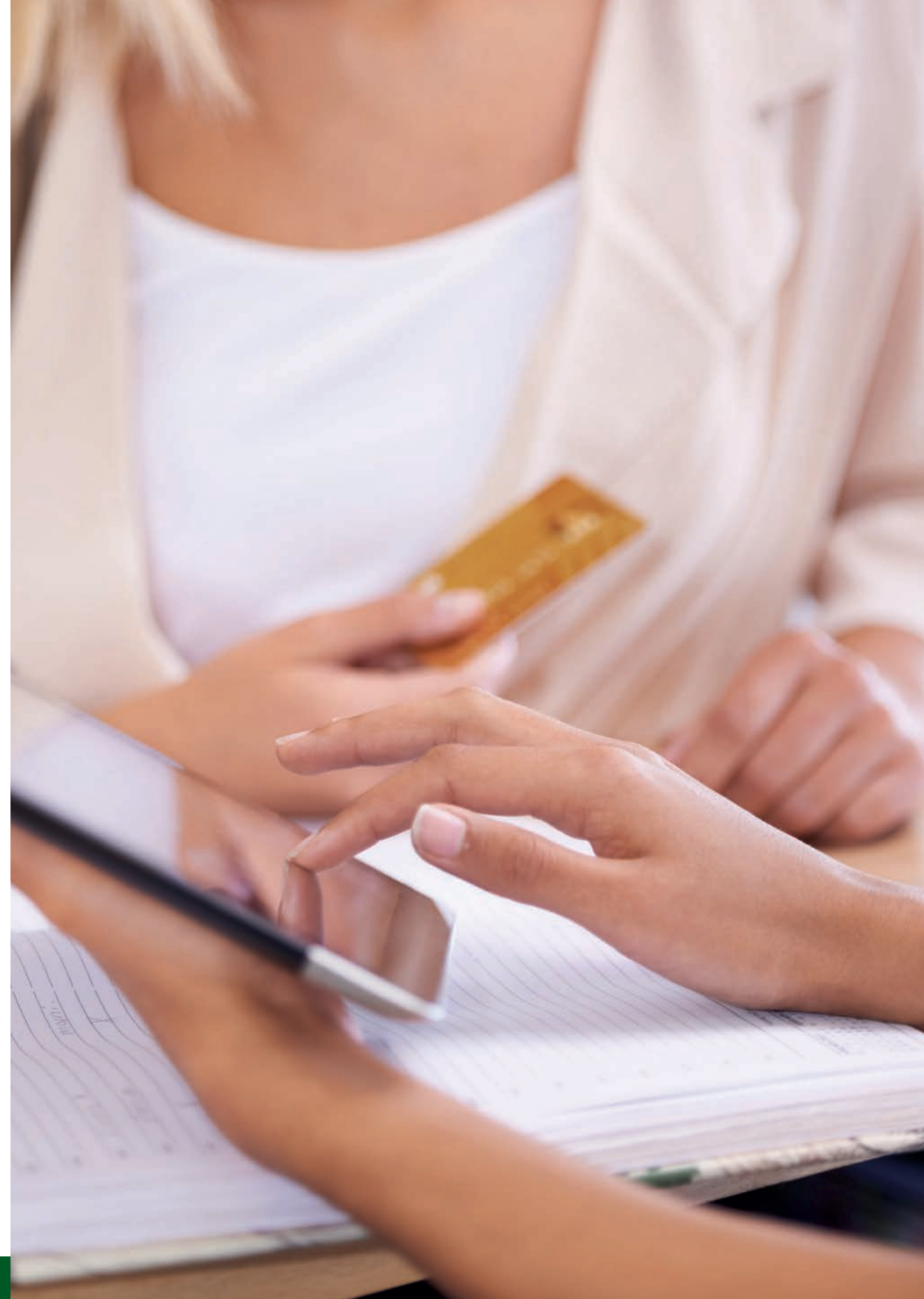
As with any other injection into the skin, skin irritation, skin infection or slight swelling may occur in very rare cases. The most common side effect is bruising at the injection site. All these undesirable phenomena disappear within a few days.

However, according to the current state of science, all side effects are temporary. Long-term side effects are not known in the treatment with hyaluron.

In rare cases, the position of the material may change. This happens, for example, if you exert permanent pressure on the lined area, e. g. while sleeping.

The material decomposes within a few months. This can be seen as a disadvantage. On the other site, degradable hyaluron hardly poses a risk of nodular formation. The face also changes over the years. The advantage is that each new treatment can improve the current condition of the face. The repeated treatment with Hyaluron adapts to the advancing age.

The cost of treatment with hyaluron does not only depend on the amount, but also on the quality of the hyaluron. In Europe, the costs are from approx. 250 € per 1ml ampoule including fee (=honorarium). A complete facial rejuvenation can quickly cost thousands of euros and more and must be repeated regularly.



### 2.2.3 Mesotherapy for hair loss

Mesotherapy is a method of treatment from complementary medicine that contains elements of neural therapy, acupuncture, and gently pharmaceutical therapy. The organ most affected by mesotherapy is the skin. In mesotherapy, a mixture of medicines in small dosages is injected by means of surface injections (mostly by multiple microinjections) with an injection pistol into the scalp and underneath the skin. Due to this special injection technology, only minimal quantities of medications are needed, and this eliminates the major part of normal side effects of the traditional pharmaceutical medicines. Mesotherapy acts locally.

The mesotherapy has its origin in France and there has been nurtured and developed for over 50 years and taught in universities. The principle of mesotherapy is injecting medicine miscellanies in the skin as close as possible of the whereabouts of disease. This is achieved by areal Intra- and subcutaneous injections of medicine miscellanies in small dosages. The most important therapeutic principle of the mesotherapy is little - seldom -at the right spot“. The method was developed 1952 by Michel Pistor, France.

The latest scientific findings led to the development of ingredient complexes, which help slow and stop the most types of hair loss and even promote new hair growth and hair thickness.

In the mesotherapy, this complex composition of active substances can get through the first skin layer and get introduced directly into the hair follicle and create there new, natural and strong, thick hair. (see chapter 8.2).

The therapeutical success can be maintained by quarterly follow-up sessions. To achieve a long term effect, it is necessary to repeat the treatment several times.

### 2.2.4 Creams

The variety of creams, cleansers and other cosmetics is huge, almost unmanageable. The cosmetic industry seems to have the right solution for every problem. And every product promises true wonders: at least 10 years younger-looking skin through the formula XYZ, scientifically proven and dermatologically tested, etc. For considerable sums of money of course. At the latest in the cosmetics department, in front of the exuberant shelves of a department store full of colorful packs, comes the moment of truth: But woe to those who do not know what the own skin needs.

In the innumerable expensive little pots, tubes and jars there is a recurring range of basic preparation. These basics are simple and clear, the cosmetic products differ mostly in price, fragrance, and design. But preparations with sufficient care can be counted on the fingers of one hand. The preparations that you really need for adequate care can be counted almost on the fingers of one hand.



### 2.2.4.1 Why creams do not really work?

The horny layer of the epidermis maintains direct contact with the outside world. This outer part of the skin, which faces the environment, is on average one-twentieth of a millimeter thin but adapts to the strain. On the face it is up to one-fiftieth of a millimeter tender, on the soles of the feet on the other hand it grows up to one-millimeter thickness and more. The skin is exposed to particularly high stress with even stronger horny skin: cornea and calluses.

The epidermis consists of two layers: the germ layer and the horny layer above. New skin cells grow continuously in the germ layer: they form the prickly cell layer. These regrowing cells slowly push their predecessors outwards - and are soon pushed outwards by the following cells themselves. On their way to the outside, they incorporate protein into their cell walls in order to become properly robust. Finally, they die and form the protective horny layer on the skin surface.

The skin protects the body from a wide variety of invaders such as unwanted bacteria, viruses, and fungi. The trick of the skin is that it produces a layer on its surface that reacts like a weak acid. Strictly speaking, the skin does not produce this protective layer itself but applies it to friendly bacteria. These benign microorganisms are allowed to live on the skin and get a little sweat, sebum and shed skin cells. The little things feed on it and digest this mixture of thanks to the protective acid - the protective acid mantle.

The protective acid mantle and the close proximity of the horny cells protect the skin from bacteria or other foreign substances penetrating into the skin. In addition, the skin is waterproof and greaseproof.

That is why the skin is not particularly impressed by protein and

other additives in cosmetic products. Foreign proteins applied to the skin cannot penetrate into the skin - luckily; otherwise, bacteria and other small enemies could also penetrate unchecked.

At best, some skin creams manage to keep the skin slightly moist and thus a little less wrinkled for a short time by leaving hyaluronic acid, collagen or similar substances on the skin surface.

The horny layer is supplied with some water, which makes wrinkles and fine lines appear more smooth. This kind of light lifting effect lasts just for a couple of hours.

Even expensive „anti-aging“ creams, which in principle contain the right active ingredients, can not penetrate into the deeper skin layers and do not have any long-term rejuvenating effect. This fact has been established through scientific tests.

