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Schwarzzy

SCHWARZYZY: THE NEW DEKA SOLUTION USING
FOCUSED MAGNETIC STIMULATION FOR
MUSCLE EMPOWERING AND BODY SHAPING

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Schwarzy: The New DEKA Solution Using Focused Magnetic Stimulation for Muscle Empowering and Body Shaping



Interview with

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Aesthetic Doctor specialized in the use of non-invasive techniques

Introduction

Excess weight and localized adiposity are problems that affect a large number of people in both sexes (about 80%). The problem, however, is that -as far as noninvasive protocols are concerned, interaction with muscular mass become of primary importance. An original approach is the one proposed from Schwarzy by DEKA: a system with FMS (Focused Magnetic Stimulation) Technology dedicated to body firming with stimulation of the muscular mass. The non-invasive device acts on different body areas thanks to its paddle handpiece that you adapt



Figure 1. Schwarzy system.

to the abdomen, buttocks, arms and legs causing muscle contractions thanks to the focused magnetic energy. The rapid change of magnetic fields, generated by the device, it transmits current directly to the muscle tissue in depth, contracting it and releasing it. The results, achievable in a few sessions are: tonification, the strengthening of

muscles and the reduction of localized adiposities.

More specific: the system allows supramaximal stimulation that is higher than that which can be reached voluntarily by the patient in physical activity and is also successfully used in subjects with abdominal obesity or

overweight. The technology uses three types of different protocols: aerobic, muscle definition and muscular strengthening. The treatment is comfortable because there is none dermo-epidermal interaction with electromagnetic fields and the liquid cooling system of the handpieces guarantees high performances while avoiding warming of the treated area and painful sensations. Finally, it should be noted that Schwarzy does not use consumable materials with great economic advantages, ecological and warehouse: in fact inside the clinic there is no need of a storage for replacement material.

Dr. Incandela was among the first to use the new tool Schwarzy by Deka for body remodeling using energy generated by electromagnetic fields.

“What patients are mostly requesting for - Dr. Incandela says - is whether it is possible to lose weight and



Figure 2. Schwarzy paddle handpieces.

intervene on localized adiposity without necessarily having to either contact a surgeon or undertake long time diet therapy. Indeed, these imperfections are common to a very high percentage of individuals, without sex differences and even today, the procedures for the remodeling of the body profile are mostly based on surgical techniques. It must be said, in fact, that non-invasive body shaping therapies act effectively on fat and skin while neglecting muscle tone. Yet a third of our body is made up of muscles. Fortunately something has changed just recently."

Tell us about this energy

This is a totally new approach to body remodeling. The technology used is FMS (Focused Magnetic Stimulation).

It is a technology capable of making a muscle to move independently from the commands given by the brain; in fact, motor neurons are stimulated and thus a muscle contraction is caused. For this reason FSM is either used as a muscle trainer or in the muscle rehabilitation medicine to increase muscle strength.

The FSM also bypasses the limitation of the electrostimulation by activating the motor neurons in depth. The cutaneous receptors are affected in a limited way by this type of stimulus and it is thus possible to reach wide and deep muscle contractions, avoiding the perceptive pain sensation.

As for the musculature, what results does it allow to achieve?

It acts "at the same time" either on the trophism of muscle mass and on the reduction of fat, it induces supra-maximal muscle contractions (20.000 per session) that is not reachable through voluntary contractions and it produces a deep remodeling of the internal structure of the tissues while improving tone, definition muscle and localized fat reduction. These are working conditions that are not reproducible in the gym, neither with functional training, nor with weight exercise.

How is the action performed at the level of the muscles?

The action at muscular level consists of the increase in the volume of muscle fibers (hypertrophy) and the increase in the number of muscle fibers (hyperplasia).

Which areas can be treated?

The device acts on different body areas thanks to its handpieces that gets adapted to the abdomen, buttocks, arms and legs, it causes muscle contractions for both visible muscles and also to those ones that are difficult to reach through conventional exercises. At the abdominal level, all muscles are involved: the straight, oblique (which form the waistline) and transverse ones. The latter are the deepest abdominal muscles, essential for stability especially in the lumbar region.

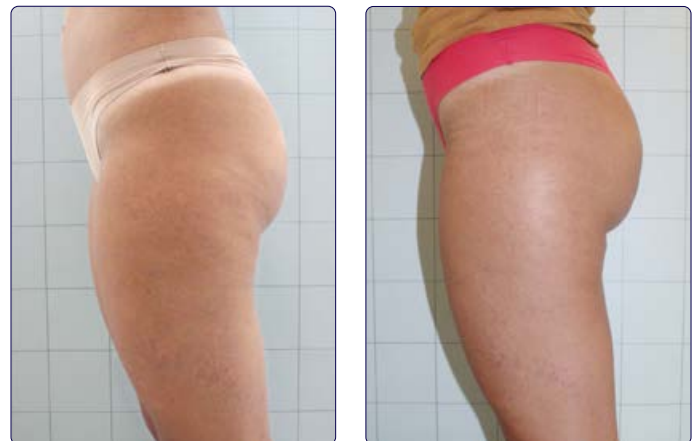


Figure 3. Before and after pictures following Schwarzy treatment. Note the buttocks push-up due to the muscle toning.

On the other hand, how does the Schwarzy's energy act on adipose tissue?

During low intensity aerobic exercise, the muscles primarily use the free fatty acids (FFAs) available in the blood. During high-intensity aerobic exercise, however, blood lipid levels begin to reduce and the body begins to rely on the lipids deposited in the adipose tissue to support activity.

Some substances (catecholamines, growth hormone and glucagon) once delivered immediately activate lipase enzymes: triglycerides catabolism begins and it transform it into molecules of either FAA and glycerol which are released into the blood and transported right to active muscle cells. A small percentage of FAA instead once produced it is retained by adipocytes to form new triglycerides in the adipose tissue in a very well-known biochemical process called re-esterification. It is exactly the intracellular accumulation of FFA into the Adipocyte cytoplasm (precisely provoked by the intense and prolonged muscular contraction activity induced by the focused magnetic field) which causes a huge stress at the level of the endoplasmic reticulum of the adipocyte and led the adipocyte to a death by apoptosis. Here, the "cleavage" of caspase starts and this causes the cell to die.

What results can be achieved?

The treated area becomes more toned. It's possible start perceiving tangible results right away after treatment, however, the best results they are observed for two to four weeks after the last session and continue to improve for several weeks after



Figure 4. Before and after pictures following a combined treatment with Schwarzzy and Onda systems. There is a reduction in fat and a more toned muscles, as well as the general improvement of texture and cellulite.

treatment. It is well known that the increase of muscle leads to an increase basal metabolic rate. Schwarzzy System offers modeling results in synergy with all non-invasive shaping therapies currently on the market, in particular with microwaves, getting a great success both among men and women.

Are there any annoying sensations?

No, as there is no dermal-epidermal interaction with electromagnetic fields. Moreover the liquid cooled paddle handpieces is a great advantage for Schwarzzy allowing for high performances and avoiding heating of the treated area. Finally, on the level deeper, the energy of the FMS is transmitted only to motoneurons, therefore, there are no negative effects on internal organs either damage to other tissues such as skin burns.

How long does a session last and how often should be repeated?

It's a pretty quick treatment, usually just 6-8 sessions to be repeated twice per week are enough to see the expected results, that is, like a normal physical training session. Treatment duration varies from 20 to 45 minutes depending on patients. The device is capable of reproducing the same metabolic effects by offering strengthening results, muscle toning and firming of the treated areas. Generally, the effect lasts 3-6 months after completion of a course of treatment.

Who would you recommend Schwarzzy to?

With its 3 pre-set programs (Aerobic, Toning and Volumising) and customizable based on muscle condition, it adapts to the needs of each type of patient. I also recommend it to my medical colleagues for the simplicity of execution, the professional satisfactions it offers as this device doesn't includes consumables for proper use.

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