

# **The Strengthening and Definition of Abdominals with Active Electrical Stimulation Using AQ8 EMS Training device.**

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## **Introduction.**

One of the most common requests by patients in our clinic, and from the whole aesthetic medicine sector in general is to achieve a strengthened and well defined abdomen. This is not just a clear sign of good health, it is also aesthetically appealing and shows quality of life and a concern for well-being. Since electrical stimulation became another alternative for developing muscle, we constantly ask ourselves if it is really useful for strengthening the abdomen and to tone the torso, which is considered to be particularly difficult to develop.

Training abdominal muscles with electrical stimulation has already become a common and fairly widespread practice. The results are undoubtedly satisfactory in the majority of cases and the benefits for the bone structure and ligaments have been sufficiently proven.

What makes abdominal training with electro stimulation a success? The answer to this question is already clear for everyone: to exercise abdominal muscles is not enough, it is necessary to eliminate the layers of fat that cover them, so the muscular development of this area is based on three factors in which electro stimulation or electro fitness has proven its effectiveness:

### **1- Reduction of the superficial fats.**

Active electro stimulation or electro fitness is based on the combination of pinpointed electrical impulses and a routine of constant physical exercise which cause a significant increase of energy consumption.

This inevitably produces a process of cell regeneration of the muscular fibers which triggers the basal metabolic rate, thanks to the increase of respiratory action of their multiple mitochondria. A decrease in the superficial layers of fat and a slender panniculus is commonly noticeable, which allows for the anticipated muscular definition.

## **2- The simultaneous exercise of all muscular groups.**

In order for all abdominal muscles to be toned and a general strengthening of the area known as the core, it is essential to concentrate on the work which is carried out on the whole body, including aerobic exercises.

In the majority of active electro stimulation or electro fitness equipment, between 9 and 10 muscular groups are activated during the training session. The vests or Bio-Jackets are equipped with 10 pairs of electrodes that work individually on the control over the flexing and stretching of the muscles, assuring the stress reduction of each muscle and an improvement in the effectiveness of physical exercise.

## **3- A correct and controlled exercise of the abdominal muscles.**

During the electro stimulation training, the intensity of the impulses is gradually intensified without the sensation of brusqueness or overstrain. The strength, intensity and duration of the impulses may be adjusted to suit each person.

The intervals between the impulses can also be adjusted in accordance with the level of training and the frequency of the exercises. Although the main action of ElectroFitness is aimed at the figure (reaffirming and toning), there are specific kinds of metabolic programs in some equipment, generally with frequencies between 5 and 7 Hz and more superficial pulses focused on a dermal action, improving the quality of tissue: the "orange peel skin" effect, stretches, flaccidity etc.

The results obviously depend on each specific case, bearing in mind factors such as age, type of metabolism and muscular fibers, physical condition etc.

Women who have given birth particularly benefit from abdominal training with electro stimulation, as the quick and effective strengthening of the muscles that form the perineum decrease the separation of the abdominal muscles.

Besides the specific training of abdominals in the gym, beauty centre, or specialized centre, it is always recommended to exercise in an active and multidisciplinary way. Aerobic exercise outdoors and oxygenation are a great help for a slim and healthy figure.

The final factor, which is very important and perhaps depends on a huge percentage of the success with regards to abdominal training with electro stimulation is, as we know - food.

The recommendations do not differ much when it comes to maintaining a healthy diet: low fat, low carbohydrates, proteins, low sugar, and many vegetables.

Electro Stimulation or electro fitness is an effective and safe tool used to exercise the muscular system in its entirety, but it must not be considered as the only way to maintain a healthy and fulfilling life. Everything is important and everything has an influence: food, outdoor exercise, and intense and continuous training.

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