



getting back into shape at any time

Rehab



The Rehab programs have been known for some time and used above all in the medical field. They are by now considered indispensable during post-injury rehabilitation, after a surgical operation or following a long period of forced immobilisation.

XFormer/EXE features a special section of programs able to favour and speed up complete muscle function recovery.

Their purpose is to provide the immobilised area with a minimum level of muscle tone, right up to the complete rehabilitation of the part in terms of natural strength and muscle resistance. The Rehab section programs also ensure a better flow of blood to the treated areas, thereby upgrading the metabolism and speeding up the return to normal condition.

CHARACTERISTICS OF THE REHAB PROGRAMS

Electrostimulation currently plays a lead role in the field of rehabilitation. Some research works have shown that when rehabilitation treatment is performed together with electrostimulation, it is more successful. When individual muscles or larger debilitated areas have to be stimulated following injuries or surgical operations, electrostimulation not only proves practical but also recommendable. Various scientific tests have shown that electrostimulation is essential for upgrading results obtained using traditional rehabilitation therapies. When, for instance, a limb is forced to remain immobile for more or less lengthy periods of time, muscle tone is quickly reduced, making functional recovery particularly hard and often involving not only the physical level but also conditioning the psychological sphere. It should be considered that four weeks of inactivity produces a 30-50% loss of strength. When selecting the rehabilitation program, it should also be remembered that muscle atrophy does not involve all types of fibres in the same way, but mainly affects red or I type fibres, the ones most used in daily activities due to their ability to produce time-resistant action. Suffice it to think that these are, to a large extent, responsible for posture and for offsetting the effects of the force of gravity on the body. With regard to rehabilitation, a distinction must be made between two special cases that require different procedures: the innervated muscle and the relaxed muscle. In the first case, the fibres receive the electrical impulse in a traditional way, meaning through the peripheral nervous system. In the second case on the other hand, electric stimulation must be applied so as to directly involve the muscle cells, which transmit the impulse by propagation until the entire muscle contracts. The stimulation of the relaxed muscle, however recommended, does in fact have clear limits. If on the one hand, it continues to remain the only therapy for maintaining a certain degree of muscle tone, preventing the active cells from becoming atrophic and thereby degrading the fibrous tissue, on the other we should not forget that recovery of functionality or even the partial rehabilitation of the nerve tissues cannot be achieved using this method.

Rehabilitation with XFormer/EXE

Below are some rehabilitation cases where electrostimulation is most frequently used.

- TREATMENT OF ANKLE SPRAINS
- SPRAINING OR BREAKAGE OF FRONT CROSS LIGAMENT OF THE KNEE
- TREATMENT OF CHONDROPATHY OF THE KNEECAP
- POST-OPERATION TREATMENT OF THE MENISCUS

We strongly recommend seeing a specialist or physiotherapist before carrying out rehabilitation treatment with electrostimulation.

XFormer/EXE features the following rehabilitation programs:

POST-INJURY

In the period immediately after an injury, the low-frequency currents of this program enable the muscle to maintain minimum tone and function characteristics, which would tend to be reduced due to a temporary suspension of normal activities.

MUSCLE HYPOTROPHY

The specific currents applied to a muscle forced to remain inactive or with limited activity for long periods permit gradually increasing reduced muscle tone until this returns to normal condition.

MUSCLE STRENGTHENING

Thanks to this program, it is possible to achieve a complete recovery of muscle function and to gradually restore to the fibres their ability to express strength and resistance.