

Cryostimulation for Wellness with CRYO-T 2 device

CRYO-T 2

- Triple effect stimulation, oxidation, skin tension
- Portable and convenient small device with a simple control system
- Precise application three sizes of nozzles enable more accurate application







M C METRUM CRYOFLEX



Portable and convenient

Small device with a simple



Precise application

Cryostimulation

Extremely low temperature for biological regeneration & body boost.

Biological regeneration of overloaded muscles

Cryostimulation is a short-term exposure of particular parts of the body (muscle, tendons, ligaments, trigger points) to extremely low temperature (35 - 39 °F at the skin surface). Optimal temperature for the treatment achieved by the device ranges between -103 °F and -121 °F with exposure time from 1 - 12 minutes.

Effects of carbon dioxide cryostimulation

Carbon dioxide has positive influence on the skin and underlying tissues and is well absorbed by them. Due to its biophysical characteristics carbon dioxide cause:

- Blood vessel dilating action
- Blood flow increase
- Anti-inflammatory action
- Blood fluidity improving action "smooth blood"
- Oxygen dissociation curve tight shift effect (the Bohr effect)

How cryostimulation works

Cryostimulation using CO2 is different from adjuvant techniques like ice and techniques using liquid nitrogen. CO2 under pressure in a short time provides sufficient cold (-108 °F) that is powerful (pressure), painless (dry). In a human organism, these conditions enable thermal shock to be easily obtained. Thermal shock corresponds to the response of the organism in the face of intense and powerful cold flow rapidly delivered to the body surface. The cold is transmitted to the organism via the skin, involving the epidermis, the mesoderm and the hypoderm. The effects of thermal shock are anaesthetic, analgesic, antalgesic, anti-inflammatory, vasomotor, muscle relaxant and anti-oedematous. The results are felt right after the first session.

Procedure

During the procedure patient can choose any suitable position. The operator is moving nozzle 5.9 in over the skin surface in scanning movements. Time of the procedure on one body area ranges from 1 to 5 minutes, while in patients with fat deposition or robust musculature may be extended to 10 minutes. In case of procedure on several areas, total time should not exceed 12 minutes. Cryostimulation can be performed at the same time on maximum five joints of palm, foot, and back, counted as one group of small joints. Local cryotherapy session usually consist of 10 - 15 procedures performed once or twice a day. Minimum break between sessions should take 4 - 6 hours.

Key Wellness effects

Improve your body with natural approach

Thermoregulation is activated

The process is completely tolerable, yet the body interprets the extreme cold as a threat to its wellbeing. The temperature cold-receptors in the skin send this information to the brain (hypothalamus area), which responds with an attempt to restore balance.

Vasoconstriction occurs

The first step the body takes to protect its core temperature, is to redirect blood from superficial vessels and capillaries in the skin towards deeper structures.

Vasodilatation rebound occurs

The vessels and capillaries expand up to four times their normal diameter. This causes a significant increase in blood flow to the skin and extremities, enriching cells with oxygen and enzymes to a much greater degree than under normal balanced conditions.

Hormones are released

B-endorphins are released, which act as the body's natural morphine. This has a pain relieving effect throughout the whole body and also creates a sense of euphoria.

Reduced nerve condition velocity

The cold exposure drastically reduces the body's ability to communicate pain signals. After multiple sessions, the body adapts its perception to pain stimuli.



Anti-inflamatory response

The body's white blood cells secrete small proteins (cytokines), which are used in cell signaling and ultimately affect the behaviour of other cells. These proteins can be either pro-inflammatory or anti-inflammatory. During cryostimulation, pro-inflammatory cytokines are decreased and anti-inflammatory cytokines are increased. This causes a powerful anti-inflammatory response throughout the whole body.

Reduces oxidative stress

The body's total anti-oxidative status is increased. The body achieves an improved ability to eliminate free radicals, naturalize toxins and repair cellular damage. This process can lead to a powerful anti-aging effect.

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Increased metabolism

As part of the body's metabolic reheating mechanism, additional calories are burnt, often to a degree comparable to an intense workout. Reports suggest that an additional 400 to 800 calories are burned as result of a single cryostimulation session and that multiple sessions lead to a longerterm increase in metabolism, which can lead to weight loss.









CRYO-T 2

Smart, portable device for local cryostimulation

CRYO-T 2 device is easy to carry and simple in use. It has been designed to anable users to travel to the patient destination or move around parlour in case of need. The design of CRYO-T 2 is done for maximum comfortability and light in carrying for any person. The device can be supplied from CO2 cylinder of any size and is offered with four different nozzles (three core nozzles and one hyperbaric nozzle).

Nozzles enable accurate application

Each nozzle has different gas flow distribution and stream strenght. All nozzles have electronic regulators allowing adjustment of its working parameters.

Hyperbaric nozzle

The main feature of hyperbaric nozzle is a possibility of strong flow generation which enables to obtain higher pressure on the skin surface. Such solution significantly increases cold penetration in the skin and CO2 absorption that has positive effect on the body approved by clinical researches.

Nozzle No 1.

Myofascial trigger points, recommended for children cryotherapy.

Nozzle No 2.

Joints surrounding area (arms, knees), small muscle groups.

Nozzle No 3.

Major joints, large muscle groups (e.g. shoulder girdle, rim hip)

Specification

Temperature of col stream	÷ -80 °C (-176 °F)
Stream intensiveness regulation	Nozzle adjusting ring
Nozzles connection port	1
Power source	230 V or 110 V
Cylinder capacity	10-40 l
Temperature recognition system	LED System
Standard nozzles set	3 pcs



METRUM CRYOFLEX

Manufacture

ul. Zielna 29 05-082 Blizne Łaszczyńskiego POLAND, EU **Headoffice** ul. Kolejowa 16A 05-092 Łomianki POLAND, EU

Tel: +48 22 33 13 750 +48 22 33 13 830 Fax: +48 22 33 13 766 export @metrum.com.pl www.metrum.com.pl