

How Does Cryo Work?

1 **WHOLE BODY CRYOTHERAPY COMMENCES**
We use State-of-the-Art highly efficient all-electric European chiller and wind instruments to tailor each cold therapy session to the clients needs.

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

3 **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. This causes blood to flow from the periphery towards the central core.

4 **VASODILATION REBOUND OCCURS**
After completion of the treatment, the body reheats itself through vasodilation. The vessels and capillaries expand up to four (4) 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.

5 **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.

6 **REDUCTION OF NERVE CONDUCTION VELOCITY / PAIN SIGNAL ADAPTATION**
The cold exposure drastically reduces the body's ability to communicate pain signals. After multiple sessions, the body adapts its perception to pain stimuli.

7 **MUSCLE RELAXATION TAKES PLACE**
Muscle relaxation leads to relief of muscle spasm.

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

9 **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.

10 **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 WBCT session and that multiple sessions lead to a longer-term increase in metabolism, which can lead to weight loss.

Ready to start your journey with cryotherapy? Schedule with Bangor Active Recovery Sports Medicine today!