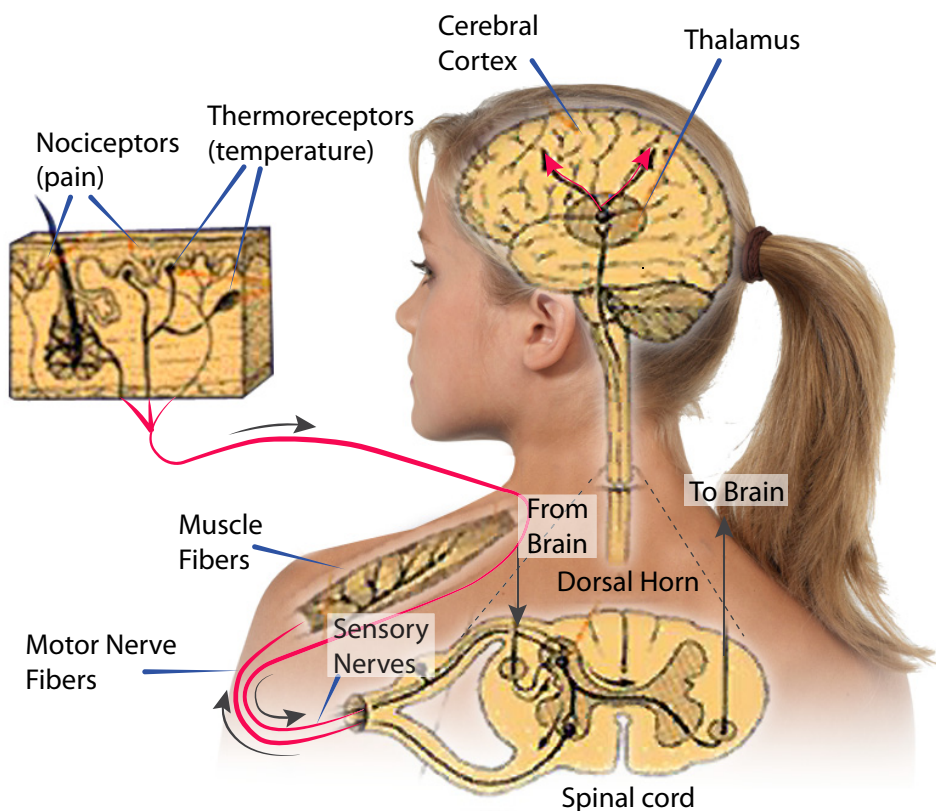


The physiological effects of cold



Pain and temperature information travels to the brain and back via spinal cord.

For example, tissue damage activates the nociceptors to send signals by the peripheral nerves through spinal cord to the brain. Cold therapy activates the thermoreceptors to transmit the sensation of cold the same route as the nociceptors send signals of pain.

After the "data process" in the brain, pain becomes more controlled.

Cold treatment provides the following effects:

- Reduces muscle spasms and spasticity and releases muscle tension
- Reduces swelling and bleeding
- Reduces the sensation of pain
- Analgesic influence due to blocking pain receptors and slowing down nerve's conducting speed
- Reduces the activity of the tissue damaging enzyme in the inflamed joint
- Prevents inflammation by reducing blood circulation on the skin and in deeper tissues

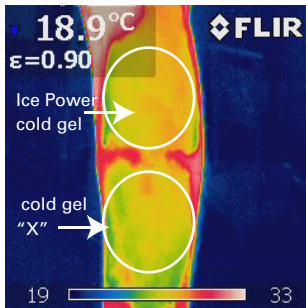
Cold stimulates person's own opioid production and decreases impulses in the nervous system – pain becomes more controlled

Comparison of pain relieving cold gels

The basic idea of cold gel treatment is to provide a safe but long lasting cooling effect. There are several pain relieving cold gels in the market with very big differences in effect.

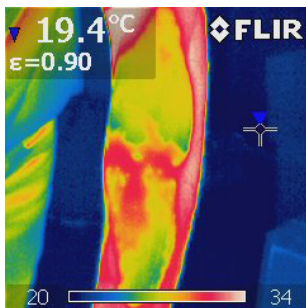
The following thermal camera pictures show a very typical difference between Ice Power Cold Gel and other cold gels – here compared with Cold Gel “X”.

2ml of Ice Power Cold Gel was spread to the upper part of the arm and exactly the same amount, 2ml of Cold Gel “X” was spread on the lower part of the arm.

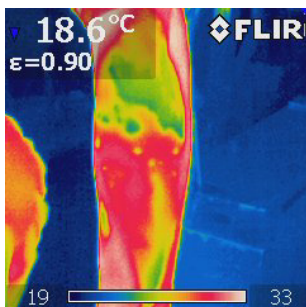


Picture 1: This picture indicates that both products provide first cooling effect, which is mostly based on Ethanol.

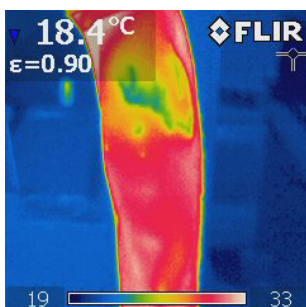
Ethanol also disinfects the skin and opens the pores for the active ingredients, but Ethanol doesn't provide long term cold effect.



Picture 2: If the cooling effect is mostly based on high percentage of Ethanol, the product provides a cooling effect in the beginning, but this effect disappears very quickly. In this picture Cold Gel “X” is already starting to lose its cooling effect.



Picture 3: The first cooling effect disappears as soon as Ethanol evaporates from the skin. Cold Gel “X” is quickly losing its effect while Ice Power Cold Gel continues the cold treatment. The difference between these two products is very clear.



Picture 4: 30 minutes after application this picture clearly reflects the fact that Ice Power is still effectively cooling the tested area while the Cold Gel “X” doesn't give any cooling effect any more.

Short term cooling effect is a very common feature among cold gels. The first cooling effect achieved with Ethanol disappears as soon as Ethanol evaporates from the skin. Ice Power Cold Gel provides long term cooling and it has proper clinical published studies and scientifically proven effect.*



Ice Power Cold Gel quickly and effectively releases muscle tension and improves recovery after physical exertion and injuries. Ice Power helps with:

- neck-, shoulder and back pain
- sprains, strains and sport injuries
- stress pain and muscle tension
- rheumatic pain
- arthrosis and arthritis
- growing pains of the children
- hemorrhage and bruises
- minor burns and sunburns

* Airaksinen et al.: Prospective Randomized Controlled Trial of the Effectiveness of Cold Gel: American Academy of Physical Medicine and Rehabilitation 9/2001; Archives of Physical Medicine and Rehabilitation 82:1326, 2001; Airaksinen et al.: Double-blinded Trial of the Efficacy of Cold Gel with soft tissue injuries ISAP, San Diego 8/2002