



**PAIN RELIEF  
WITHOUT MEDICINE**

**COOL-X**



## Cool-X Cold Gel

Cool-X Cold Gel is a fast and long-acting cold treatment for muscle and joint pain. It gives soothing relief for muscular disorders and soft tissue injuries.

Cool-X Cold gel provides effective and safe cool treatment for muscle and joint pain. Treatment works similarly both in acute and chronic pain. Gel provides cooling and soothing relief for soft tissue and stress injuries, releases muscle tension and reduces inflammation.

## Cool-X Cold Gel effects with 3 steps:

- 1 **Cooling** – Controlled decreasing of the skin temperature
- 2 **Control** – Affecting pain sensory nerves by cooling the skin
- 3 **Circulation** – Muscle recovery and relaxation by increasing the blood flow

**Cool-X Cold Gel is CE marked medical device.**

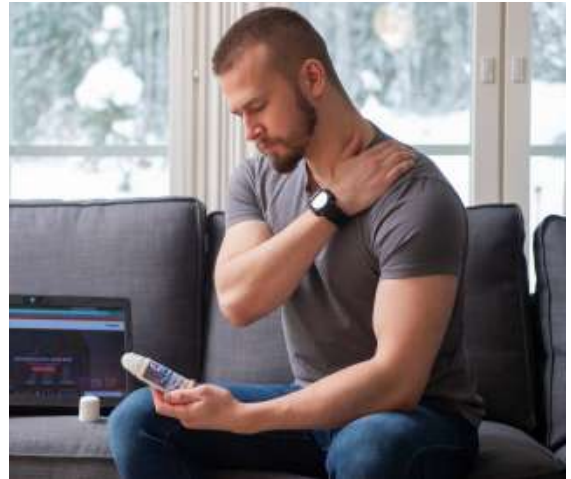
## Safe treatment

- ⦿ Pain relief without medicine
- ⦿ Effective ingredients: menthol, ethanol
- ⦿ Controlled cold therapy: decreases skin temperature by 5-7°C without risks of frostbites
- ⦿ Contraindication: broken skin
- ⦿ Suitable for the whole family



## Indications for Cool-X Cold gel:

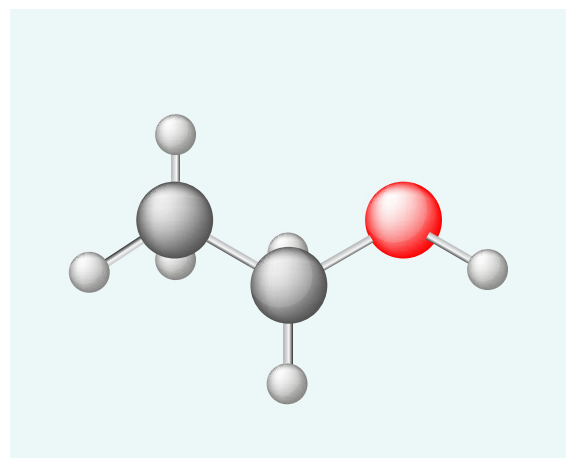
- ⦿ Relieves muscle and joint pain
- ⦿ Reduces swelling
- ⦿ Releases muscle tension
- ⦿ Decreases inflammation and stiffness
- ⦿ Improves muscle recovery from exercise.



## Active ingredients



Menthol crystals



Ethanol





# The action of cold gel

Cool-X Cold gel decreases the skin temperature by approximately 5-7°C. Optimal cooling effect is achieved without risk of frost bites. The physical cooling effect of menthol and ethanol is smoother but lasts longer than with traditional cold therapy. Cold gel first slows down blood circulation, then after 15 minutes it starts to increase. This causes muscle relaxation and supports body's self-healing system and enhances the recovery.



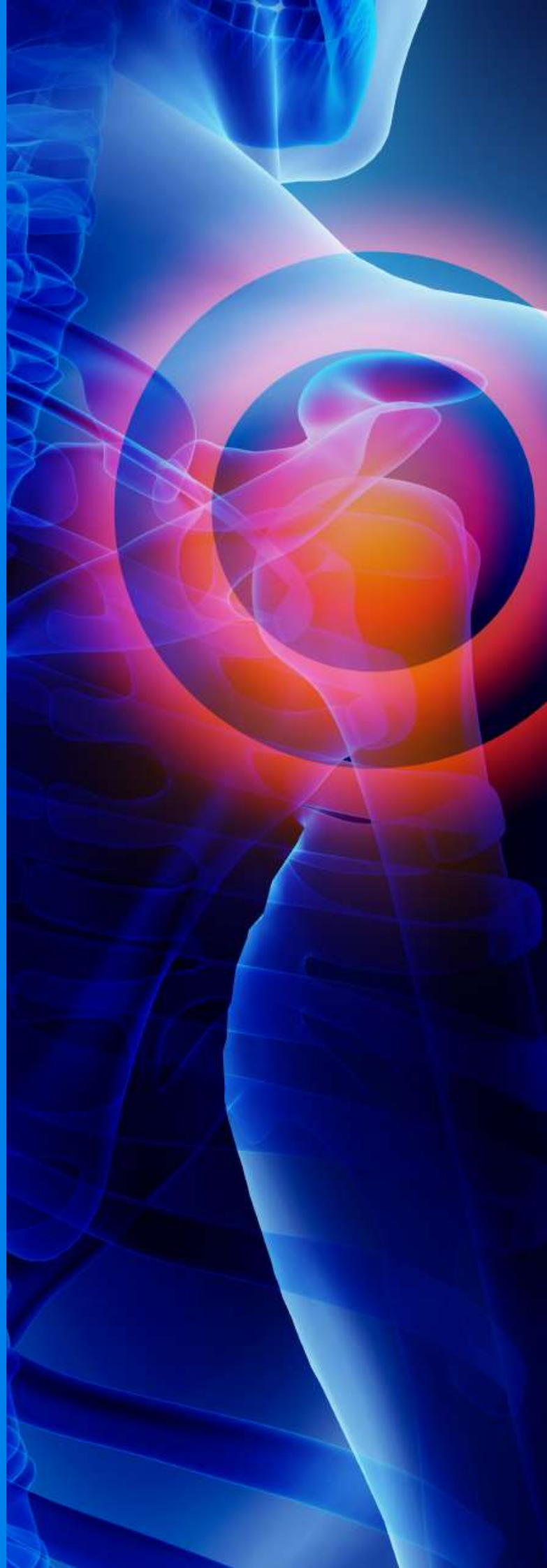
## Ingredients

### Cool-X Cold Gel, tube 150 ml

Aqua, Alcohol denat., Menthol, Eucalyptus Globulus Leaf Oil, Dimethyl Sulfone (MSM), Mentha Piperita Oil, Glycerin, Carbomer, Triethanolamine, Silica

### Cool-X Cold Gel, roll-on 75 ml

Aqua, Alcohol denat., Menthol, Eucalyptus Globulus Leaf Oil, Dimethyl Sulfone (MSM), Mentha Piperita Oil, Glycerin, Carbomer, Triethanolamine



# The fundamental basis of the pain relief

## Menthol receptor and treating pain with menthol (Turunen V)

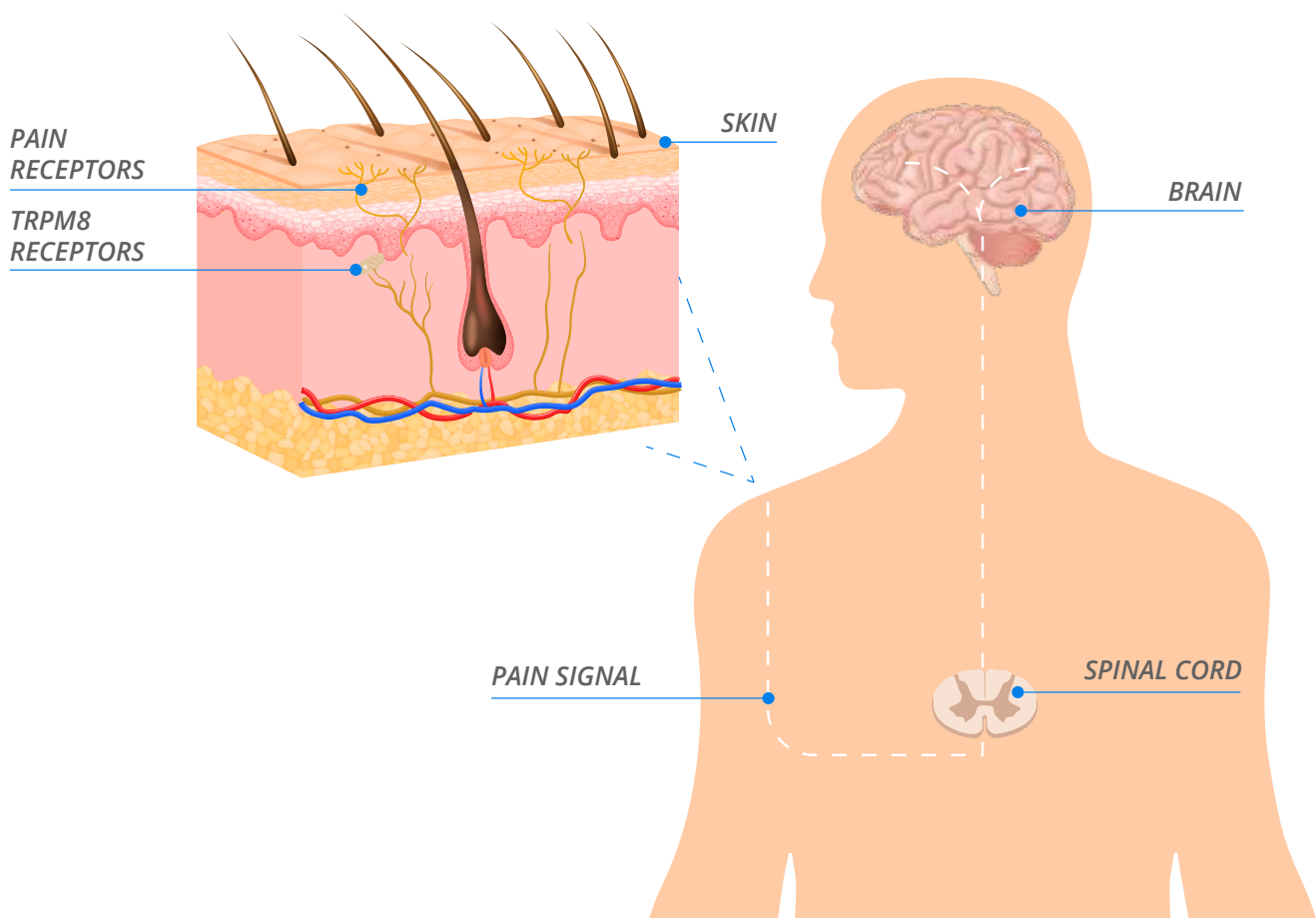
Thesis, literature review. (original text in Finnish)

University of Eastern Finland, Faculty of Health Sciences School of Medicine July 2018

*"The menthol receptor is the main receptor in humans that senses cool and cold temperatures (Bautista ym. 2007). The pain relief is based on the receptor TRPM8 (transient receptor potential melastatin) that belongs to the group of thermoreceptors which affect pain sensation and signaling. There are two abbreviations used CMR1 (cold- and mentholsensitive receptor) and TRPM8. (McKemy ym. 2002, Peier ym. 2002)*

*When the gel is applied to the area to be treated, menthol decreases the skin temperature activating the TRPM8 receptor. The cooling effect of menthol is transmitted by the TRPM8 receptor. This receptor covers 15 % of all pain sensitive receptors (McKemy ym 2002). Pain and temperature information is transmitted to the central nervous system, spinal cord and brain via small nerve fibers. For example, tissue damage activates the nociceptors to send pain signals by peripheral nerves through the spinal cord to the brain. (Laing & Dhaka 2016).*

*Cold Gel decreases the skin temperature. This activates the TRPM8 receptors to transmit the sensation of cold via the same nerve fibers as the nociceptors. After the afferent information has been processed in the spinal cord and in the brain, pain becomes more controlled and tolerable. (Pergolizzi ym. 2018)."*



# Clinical Study

## Efficacy of Cold Gel for Soft Tissue Injuries (Airaksinen O. et al)

The American Journal Of Sports Medicine, Vol. 31, No. 5

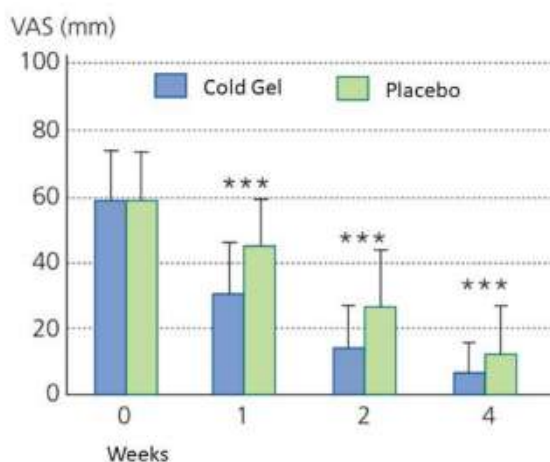
*"The clinical study Efficacy of Cold Gel for Soft Tissue Injuries (Airaksinen O. et al) has been comparing the efficacy of a novel cold gel with that of a placebo gel in patients with a soft tissue injury. The pain experienced by patients in both the placebo and cold gel groups was at the same level at the beginning of this study.*



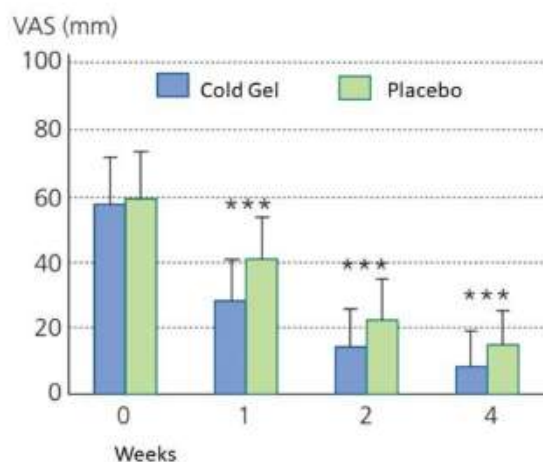
*During the trial, pain decreased markedly in both the cold gel and placebo groups as measured on a visual analog scale at each measuring time both at rest and on movement. The differences between the groups were highly significant. Disability decreased significantly more rapidly in the cold gel group. (Figures. 1 and 2).*

### Conclusions:

*This prospective randomized controlled trial showed that cold gel caused significantly faster pain relief and significantly faster rehabilitation results after minor soft tissue injuries. All primary and secondary end points favoured cold gel therapy. Our results indicated that cold gel was superior to placebo gel and provided an effective and safe treatment for pain and disability for sports related soft tissue injuries."*



**Figure 1.** Pain at rest in the active cold gel and placebo gel groups (mean  $\pm$  SD). \*\*\*, statistical significance between the groups ( $P < 0.001$ )



**Figure 2.** Pain on movement in the active cold gel and placebo gel groups (mean  $\pm$  SD). \*\*\*, statistical significance between the groups ( $P < 0.001$ )



## Usage

Apply the Cool-X cold gel onto the area to be treated every 2-4 hours. Gel absorbs fast and acts quickly.

Wash your hands carefully after use

Avoid contact with broken skin, eyes and mucous membranes

Do not use bandage on the applied area

Discontinue use if rash or irritation occurs

Seek medical attention if symptoms persist for a long time

For external use only



# Frequently asked questions

## What does cold gel do?

Cool-X Cold gel provides effective and safe treatment for muscle and joint pain. Treatment works similarly both in acute and chronic pain. Gel provides cooling and soothing relief for soft tissue and stress injuries, releases muscle tension and reduces inflammation.

## Does Cool-X Cold Gel cause allergic reactions?

Allergic reactions are not common, but every skin is different so they could happen. In case of skin irritation, apply a body lotion to skin. Your skin will normalize shortly.

## What is the odour of the cold gel?

The fresh odour comes from menthol, active ingredient of the gel.

## Can pregnant or nursing woman use Cool-X Cold Gel?

Yes, in normal situations. However, if you have doubts consult your doctor before use.

## Is there any medication in Cool-X Cold Gel?

No, there isn't. Active ingredients are menthol and ethanol.

## How often I can use cold gel?

Cool-X Cold gel does not include medicines. That's why cold gel can be used without treatment intervals or limitations.

## How fast the gel relieves pain?

Cool-X provides fast effect against the pain; however, the treatment requires usually several usages. If the reason for the pain is repetitive strain injury, cold gel provides relief for the pain but do not remove the root cause of the pain.

## Have any studies been done on the efficacy and absorption of MSM in the cream?

The clinical efficacy of the cold gel is based purely on the effect of menthol and ethanol. The product also contains joint-friendly MSM (methylsulfonylmethane). However, the clinical evidence for the absorption of MSM is poor, and therefore the clinical evaluation has been focused only to its safe use in the product.

## Can I use cold gel on damaged skin?

No, you cannot. Cold gel causes smart sensation when applied to broken or irritated skin.

## Do I need a prescription for Cool-X Cold Gel?

No, you don't. It is sold over the counter.







## Cold gel can be used widely:

*Neck and shoulder pain*

*Muscle related back pains*

*Muscle tension headache*

*Muscle tension cramps and spasms*

*Lumbago and sciatica related pain*

*Bruises*

*Children's growing pains*

*Nerve pains*

*Golfer's wrist, tennis elbow*

*Itching caused by mosquito bites*

*Muscle recovery after physical exercise*

*Work and occupation related muscular disorders*

*Arthroses, muscle inflammations, bursitis and tenosynovitis*

# Authorised Sole Representative for Asia

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## Manufacturer

**Frescon Oy** is the manufacturer of Cool-X Cold Gel. Frescon has focused on manufacturing well-being products and medical devices. Factory is located in Finland.

### Our values -



The safety of our products is of paramount importance. Our production methods ensure safe and skin-friendly products.



The quality of our products is guaranteed by our ISO 13485 certified quality system which each of our employees is committed to adhere to.



We value pure nature, e.g. by utilizing renewable energy with our own solar thermal collectors and considering the environmental impacts of all our processes. Frescon Oy does not use any animal testing in its product development.



Most of our products have been issued the Key Flag symbol. That means that the goods are manufactured in Finland.

Airaksinen O. et al: Efficacy of Cold Gel for Soft Tissue Injuries; A Prospective Randomized Double-Blinded Trial. *The American Journal of Sports Medicine*, Vol. 31, No. 5, 2003

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