



About Paraffin Heat Therapy

Paraffin Therapy: The Latest Trend or Something More?

If you believe the mass-consumer-marketing gurus, the latest trend in “feel-good” products is the paraffin spa. Perhaps they would be surprised to learn that the use of warm paraffin began during the First World War as a medical treatment for orthopedic injuries, and was described as early as the 1930s by James A. Dickson, MD, and Walter J. Zeiter, MD, both of the Cleveland Clinic.

In fact, warm paraffin has been used for decades by physicians, physical and occupational therapists, rehabilitation and pain management specialists, and a host of other medical professionals for the heat treatment of arthritis, inflammation, strains, muscle spasms, and more. In short, paraffin is a drug-free, non-invasive method of applying heat to relieve muscle stiffness and joint pain.

The physiological benefits of heat are numerous. When heat is applied, the blood vessels expand, bringing more circulation to the affected area, increasing healing nutrients and oxygen at the cellular level and removing waste products that cause inflammation and stiffness. A temporary increase in the pain threshold, a decrease in muscle spasms, and an increase in flexibility occur, significantly benefitting the outcome of therapeutic range of motion (ROM) exercises. Topical heat also results in an increase in skin pliability. Warm paraffin may facilitate all of these heat-related benefits and is often prescribed in the post-inflammatory phase of injury and for chronic pain conditions such as arthritis.

Another benefit of warm paraffin is its effect on skin. While other forms of heat therapy — especially hydrotherapy — can dry skin out, paraffin leaves skin hydrated, soft, and pliable. Paraffin rejuvenates skin in two ways: through increased circulation and topical moisturization. As heat enhances blood flow to the small capillaries in skin, sweat from eccrine glands (which open at skin’s surface) and sebum from sebaceous glands (which open into hair follicles at skin’s surface) is increased, flushing dirt and grime from pores to give skin a healthy-looking glow. In addition, increased blood flow brings beneficial nutrients to the skin. Paired with an effective skin moisturizer, it’s no wonder that paraffin has such a dramatic effect on skin. Those who are concerned about sensitive skin can rest assured knowing that Therabath®PRO® brand food-grade paraffin is a very inert, dermatologically harmless substance that won’t clog pores.

Who Uses Paraffin Therapy?

Because it is so versatile, paraffin is used in a variety of settings by a range of healthcare, wellness, and beauty professionals. Paraffin therapy is used by physical, occupational, massage, and athletic therapists; hand therapists; reflexologists; rehabilitation, pain management, and arthritis specialists; physicians and nurses; chiropractors and podiatrists; and a host of other medical professionals for the heat treatment of arthritis pain and stiffness, inflammation, strains, muscle spasms, and more. Beauty professionals use paraffin in salons, spas, and resorts for manicures, pedicures, facials, and body treatments. Paraffin is also used in

THERABATH®PRO® PARAFFIN TREATMENT INDICATIONS

Useful in symptomatic relief of pain caused by medically diagnosed arthritis, bursitis, and chronic joint inflammation. Relaxes muscles, relieves stiffness and muscle spasms, and stimulates circulation. May be prescribed for post-fracture or post-dislocation treatment, for sprains, strains, for restriction of motion due to scar tissue, and for other conditions for which heat is indicated. Commonly used prior to therapeutic exercise and massage. May be prescribed in certain peripheral vascular diseases. Consult your physician if you have any questions.

HOW DOES IT WORK?

Paraffin wax has a very high heat capacity, meaning it is able to absorb and retain a great amount of heat. A paraffin wax bath takes advantage of paraffin's heat-retaining capacity in a simple process called heat transfer. As it melts in the warmer, the paraffin changes phase to become liquid and is able to retain heat. Then, when a hand, foot, or other area is dipped into the heated bath, the paraffin quickly changes into a solid, transferring the heat to the dipped area.

industrial settings where workers endure constant repetitive motion or intense cold, such as meat-packing.

Some occupations are taxing on hands, requiring frequent hand-washing and heavy use that severely dries skin or leaves muscles stiff and tired. Because paraffin reduces joint pain, relieves stiffness, stimulates circulation, and moisturizes skin, warm paraffin is an ideal self-care remedy for many of these conditions.

In addition to providing paraffin treatments in therapy settings, medical professionals can teach their clients and patients to use warm paraffin at home in between therapy sessions. Of course, many consumers use paraffin as simply a "feel-good" experience and for skin conditioning.

Paraffin use is contraindicated for the following conditions: Should not be used in the presence

of open cuts or wounds, inflammatory skin conditions, neoplasm (growths), peripheral vascular disease where circulation is impaired, acute inflammation, or when sensation of the extremity is reduced or absent (such as in some cases of diabetes). If there is any question about peripheral vascular disease or decreased sensation of the extremities, consult a physician or physical therapist before using. Should not be used on areas subject to hemorrhaging or in cases involving abnormal sensitivity to heat. Discontinue use if dermatitis due to paraffin sensitivity occurs. Discontinue use if wax feels too hot or cool, which could indicate health problems with the user. Do not allow children or those with severe physical disabilities to use the device.

Is Paraffin Therapy Effective?

Although the fundamental mechanism by which heat reduces pain is not fully understood, heat application appears to affect the peripheral nerve endings, increasing the pain threshold. Anecdotal evidence from hundreds of patients testifies to the efficacy of warm paraffin therapy. The effectiveness increases when used along with a physical therapy program. In a Swedish study of 52 patients with rheumatoid arthritis, those who used warm paraffin wax baths along with a hand exercise program had the greatest improvement in range of motion and grip strength.

The efficacy of heat is often compared to that of cold. Although they are often used in different situations (such as cold for acute, heat for chronic), patient comfort can play an important role in determining which is used. Logically, a person's tolerance for any therapeutic regimen — heat or cold — has a direct link to the overall result (such as increased flexibility or reduced stiffness and pain). In other words, if they are more likely to use it, they are more likely to benefit from it. In the use of moist heat versus cold therapy for chronic conditions, the overwhelming patient preference is for warm treatments.

Paraffin is sometimes compared to other forms of heat therapy. Using paraffin, clients can tolerate a surprisingly high temperature of around 130°



Medical professionals use paraffin treatments for hands, elbows, feet, and more. Wellness and beauty professionals also use paraffin for skin treatments, reflexology, and therapeutic massage.

F. — much higher than what is comfortable using hydrotherapy, which is usually at about 108–110° F. With hot packs, there is the risk of overheating (no automatic temperature regulation).

How is it Applied?

Paraffin is easiest to apply to the extremities: hands, fingers, wrists; elbows; and feet and ankles. Using a brush or fabric strips, warm paraffin can also be applied to the back, face, shoulder, knee — any body part. First cleanse the area to be treated, using a sanitizing spray if the unit is not for personal use. Apply a small amount of hydrating cream to increase the skin-softening benefit. Then (using the hand as an example), slowly dip the hand and wrist in and out of the paraffin bath several times, building up a custom-fitted “glove” of paraffin. The number of times one dips depends on the reason for use: For skin conditioning, dip three to four times; for pain relief, dip more often. (The more layers of paraffin, the longer the heat lasts.) Plastic liners and insulated covers may be used to prolong the heat, maximizing the heat benefit. When the paraffin has cooled, simply slide the paraffin off and discard. Paraffin wax will not remove hair, but an extra layer or two of paraffin is recommended for those with more hair on the treatment area. Never entirely cover the whole body in warm paraffin.

When first used, paraffin was often heated on the stove. But because it is flammable and because the paraffin should be kept at a medically-accepted, steady temperature of about 130° F., paraffin should be heated in a warmer specifically intended for paraffin. Several professional-grade paraffin units are available, and the user should compare construction, materials, features, and warranties before making a final decision.

What is Paraffin Wax?

Paraffin is a completely safe, dermatologically harmless substance that won't clog pores. While many so-called “natural” oils are in fact common allergens and may irritate skin, the oil used in paraffin is one of the safest moisturizing agents used in the cosmetic industry. Due to the large size of its molecules, paraffin stays on skin's surface and provides a barrier between the skin and the air, sealing in the hydrating cream and the circulation-increasing heat and infusing skin with its own natural moisture. Many different grades of paraffin are available on the market for various applications. Paraffin that is used on skin should be labeled “food-grade” as regulated by the FDA, meaning it is of high enough quality to be used in food processing. Paraffin should also be extra filtered for purity, and have a scientifically calculated meltpoint in order to be most effective.

Are Paraffin Treatments Sanitary?

One of the most common questions about paraffin therapy is about cleanliness. In order to determine whether paraffin treatments are sanitary, paraffin baths were tested at two separate facilities including Oregon State University. Both certified that paraffin is a “hostile environment” for bacteria and fungi, even when these organisms were intentionally added to the paraffin (such as in the OSU study). In addition, when one dips in the paraffin, an “instant barrier” is formed between the skin and paraffin in the bath. (A certificate of testing is available from WR Medical Electronics Co.) If a paraffin bath is for public use, a sanitizing spray should be used on the skin. Used paraffin should be discarded, and the paraffin bath should be cleaned regularly.

BUYER BEWARE!

Just because a manufacturer claims an ingredient comes from nature doesn't mean it has been scientifically shown to be beneficial to skin. While the terms “plant-based” and “natural extracts” sound great, many people have learned that these oils can have an irritating effect on skin. Mineral oil and paraffin, despite the myth perpetuated by cosmetic companies (who are promoting their own proprietary products), are completely natural, do not dry skin out, do not clog pores, and are some of the least problem-causing cosmetic ingredients for skin.

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