

Important
information
inside
from
Lansinoh

Lansinoh HPA[®] Brand Lanolin

Simply the Purest



Why Lanolin?

When things are going well, it's easy to sell a new mother on the benefits of breastfeeding. The real challenge presents itself when things are not going so well—when, for example, incorrect latching or positioning at the breast causes sore, painful or cracked nipples.

Although faulty positioning or a poor latch is usually the main cause of pain or nipple damage, one can't overlook other possible contributing factors such as soaps, lotions, shower gels or shampoo, which can also be the cause of drying and irritation. There are also other issues – such as tongue-tie or an abrupt detachment from the breast without breaking the seal – that could be contributing to nipple soreness or nipple damage.

In these cases, solving the problem takes first priority. Pain relief trumps higher-order decision-making every time, and if mom is in pain, sometimes it doesn't matter to her how many benefits breastfeeding provides. If breastfeeding educators and mothers agree on one thing, it's that breastfeeding should be an enjoyable experience, not something that causes pain and discomfort.

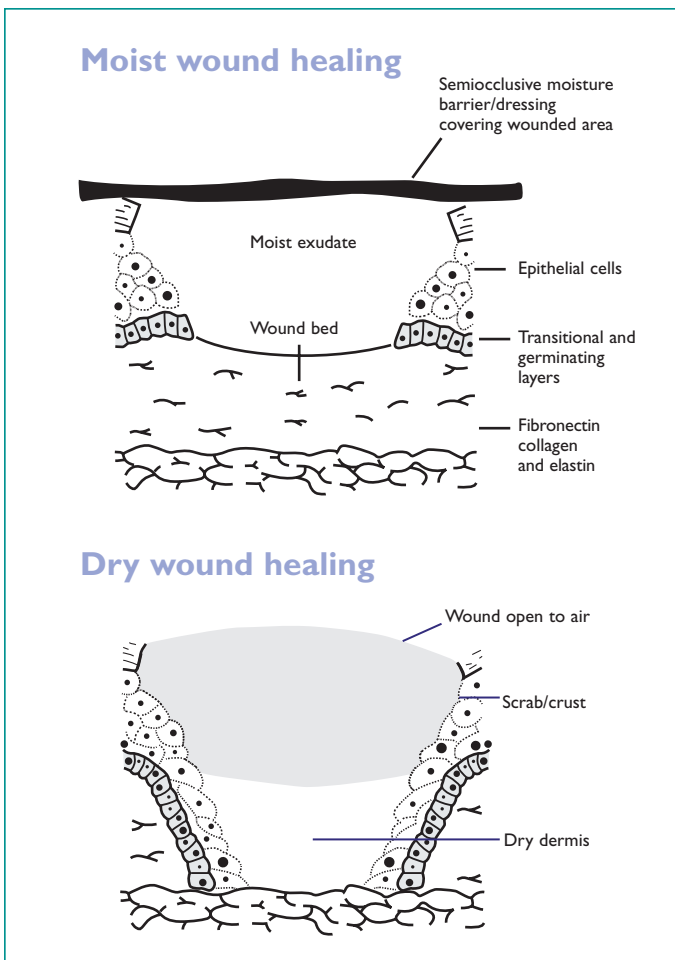
Not dry . . . but not wet either

The conventional wisdom on how to treat cracked and sore nipples has changed over the years. From the 1970s to the 1990s, the culprit was thought to be wet skin and the emphasis in treatment, understandably, was on keeping the nipples dry. Some experts even recommended the use of a hair dryer, if that's what it took to accomplish this. Unfortunately, all that the use of a hair dryer accomplished was rapid drying, which placed further tension on the skin and resulted in even more cracking.

But too much moisture is not such a good idea either. Skin needs time to heal. Think about what happens if you put a bandage on an area of the body that encounters water on a regular basis and leave it there for a few days. The skin underneath becomes white and waterlogged. That's because excess water in your skin has no way of getting out, and air has no way of getting in. Rubbing the skin even gently can cause immediate damage.

Moist wound healing

The principle of moist wound healing was first developed in 1962 and is still widely used today in the treatment of wounds of all kinds throughout the body. Moist wound healing is the preferred treatment for sore and cracked nipples, in conjunction with help that addresses the cause of the condition. Moist wound healing retains internal moisture already present in the skin. A distinction must be made between discouraging external wetness and encouraging internal moisture. Moisture cannot be added to the skin from the outside and skin must not be kept too wet.



Why Lanolin?

To create the moist healing environment, a moisture barrier is applied to injured skin and internal moisture, already within the skin, is retained. This will assist the skin in returning to its normal healthy state – supple and soft rather than dry and brittle. When dry, cracked tissue is rehydrated in this way from within, the fissure heals without the formation of a scab or crust and healing time is accelerated (Sharp, Donald A.).

An important additional benefit of moist healing is that it offers immediate pain relief, an urgent need for any mother with sore nipples. Although the mechanism is unclear, the frequent application of a moisture barrier is thought to protect the wound from external stimuli and maintain a more normal (moist) environment for exposed nerve endings within the skin (Mann-Mertz P.).

An ideal moisture barrier with which to facilitate moist wound healing is lanolin, which has been used for over 8,000 years. Directions for its use have appeared in medicinal and pharmaceutical texts for the past 2,000 years. Lanolin is produced from the sebaceous glands of sheep and protects the fleece against rain and other elements.

We obtain lanolin by extracting it from the fleece of sheep following shearing—a process that does not harm the sheep in any way. A hundred pounds of wool yields about two to four pounds of lanolin, which is a natural, renewable raw material, not a processed synthetic compound.

As an emollient, lanolin softens dry or inflexible skin by assisting rehydration. As lanolin is semi-occlusive, air and moisture can get through, though at a slower rate. In effect, the application of lanolin causes water evaporation from the skin to decrease. And, it slows down moisture loss.

Why Lansinoh HPA® Brand Lanolin?

Lanolin is not a generic material. There are many refinements of lanolin, ranging from a very crude grade used to coat machine parts to the ultra-pure medical-grade lanolin called Lansinoh HPA® Brand Lanolin.

When does “pure” really mean pure?

The United States Pharmacopeia (USP) sets standards for all prescription and over-the-counter medicines, dietary supplements, and other healthcare products manufactured and sold in the United States. What is acceptable under those standards, however, covers a lot of territory. For example, some lanolin products that claim to be pure have as much as 6 percent free lanolin alcohols (the upper limit allowed by the USP for modified lanolin) in addition to detergent residues (for which the USP sets no standard). In other words, “pure” may not always mean pure.

How important is this distinction? A lanolin that is genuinely pure need not be washed off before baby breastfeeds. How many mothers would be willing to forgo that step if they knew that the lanolin they had just used on their nipples contained detergent residues and other impurities, preservatives, and free lanolin alcohols?

Enter Lansinoh HPA® Brand Lanolin:

Mothers who know the importance of pureness in lanolin—real pureness—can feel confident when they use Lansinoh HPA® Brand Lanolin. HPA® refers to a gentle, 100% natural process by which the lanolin is refined at low temperatures without any bleaching and without the addition of any extra ingredients.

Lansinoh HPA® Brand Lanolin is a single-ingredient product—an important distinction considering the many multi-ingredient products available today as nipple treatments that claim to be as safe and efficacious as Lansinoh HPA®.

Some facts about Lansinoh HPA® Brand Lanolin:

- The safest nipple topical available—and the only one that is 100% pure HPA® Lanolin; it provides a medium that allows moist wound healing to occur.
- Single-ingredient product that contains no preservatives, no additives, no water, no chemicals, and no perfume.
- All color- and odor-forming impurities are selectively filtered out.
- Refined at low temperatures without any bleaching, unlike other lanolin nipple topicals.
- Because it contains no water, does not provide a medium in which bacteria can grow and is thereby bacteriostatic.
- Can be used with complete confidence of safety by those allergic to other brands of lanolin.
- Guaranteed to never contain more than one part per million of total combined pesticide residues (.000001).
- A current Certificate of Analysis is always available for review.

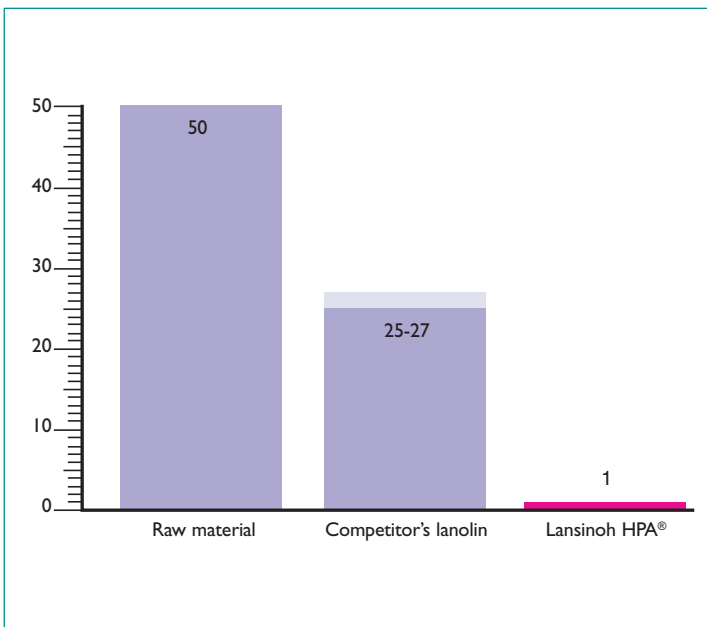
Why Lansinoh HPA® Brand Lanolin?

A difference you can see (and smell)

Lansinoh HPA® Brand Lanolin is a lighter color than other lanolins. This comes from its greater pureness and is achieved without the addition of other ingredients and without any bleaching.

Lansinoh HPA® Brand Lanolin also smells different. To be precise, it doesn't smell at all. This is because Lansinoh's unique manufacturing process naturally refreshes lanolin and does not produce Volatile Organic Compounds (VOCs), which is what normally happens when natural oils and waxes (like lanolin) are oxidized. Lansinoh verified this through the use of state-of-the-art Purge and Trap Gas Chromatogram Mass Spectrometry. What the testing found: Lansinoh HPA® Brand Lanolin is naturally oxidatively stable compared to other products, which is why it has no odor.

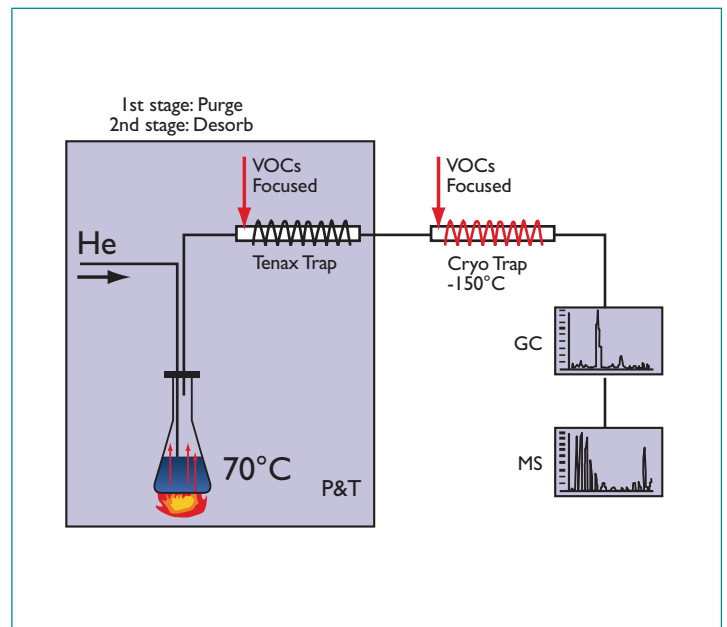
Relative Quantities of Volatile Organic Compounds (VOCs) to Base Raw Material



Taste

Taste is an important factor to consider, as baby will very likely encounter some residue of the lanolin on the nipple. Many products sold as nipple topicals have a repugnant taste and, even when mother attempts to wash them off, some of the "flavor" remains. We suggest that, before recommending any nipple topical to a mother, the breastfeeding specialist taste the product herself to verify that it is tasteless and will not deter the baby from breastfeeding because of an offensive taste.

Purge and Trap Chart



Why Lansinoh HPA® Brand Lanolin?

Getting the results you want

To achieve a moist wound healing environment for damaged nipples, it is imperative that mothers are instructed to apply a pea-sized amount to each nipple after each feeding and to keep the nipple covered with a decent coating of HPA® Lanolin. Moist wound healing will not occur if the nipple is air-dried or left uncovered by lanolin. Importantly, the application of Lansinoh HPA® Lanolin following each feed and more often if required will not only assist and speed healing the fissure but also offer pain relief.

How to Use Lansinoh HPA® Brand Lanolin

Mother should be instructed to gently pat nipples dry using a clean cloth and not to air-dry. With clean hands, the mother will squeeze a pea-sized amount of Lansinoh HPA® Brand Lanolin out of the tube and soften it between her fingertips if necessary. She will apply it carefully to the entire nipple area. If required, another small amount can be applied into the center of a disposable breast pad.

Because of its purity, Lansinoh HPA® Brand Lanolin does not need to be removed prior to breastfeeding.

Lansinoh should be stored at room temperature – the higher the temperature, the easier the product can be applied.

Allergies

It is rare, but lanolin allergy does exist. Sensitivity to lanolin is due to an allergen found in the free alcohol portion of lanolin. Lansinoh's unique purification process eliminates the risk of allergenic reactions by reducing the free alcohol proportion to below 1.5 percent in combination with detergent levels below .05 percent (Takano et al). At that level, clinicians were unable to elicit a single allergic response in lanolin-sensitive patients (Clark et al). In fact, the name "Lansinoh" is derived from lanolin, and the words and symbols combine to mean "lanolin without alcohol." "LAN" is for lanolin, the Latin word "SIN" means "without", and "OH" is the chemical symbol for "alcohol."

Evidence-Based Research and Other Articles

Documented performance

Claims relating to the therapeutic value of Lansinoh HPA® Brand Lanolin have been tested. For resources, information, and research on sore nipples and lanolin, see the listing below.

Becker G

Becker G. *Treating Sore Nipples*. BEST Services 1993.

Brent N, Rudy SJ, Redd B et al

Brent N, Rudy SJ, Redd B et al. *Sore nipples in breastfeeding women—a clinical trial of wound dressings vs conventional care*. Arch Pediatr Adolesc Med, Nov 1998, Vol. 152; 1077-1082.

Clark E et al

Clark E et al. *Lanolin of Reduced Sensitizing Potential*. Contact Dermatitis, 1981;7:80-83.

Huml S

Huml S. *Sore Nipples—a new look at an old problem through the eyes of a dermatologist*. The Practicing Midwife, Feb 1999, Vol. 2, No. 2; 28-31.

Huml S

Huml S. *Cracked Nipples in the Breastfeeding Mother*. Advance for Nurse Practitioners, April 1995.

Mann-Mertz P

Mann-Mertz P. *Intervention: Dressing Effects on Wound Healing*. New Directions in Wound Healing, ConvaTec, 1990; 93.

Sharp D A

Sharp, D.A. *Breastfeeding Abstracts*, Nov 92, Vol. 12, No. 2; 1.

Spangler A, Hildebrandt E

Spangler A, Hildebrandt E. *The Effect of Modified Lanolin on Nipple Pain/Damage During the First Ten Days of Breastfeeding*. IJCF Vol 8, No. 3; 15-19.

Takano et al

Takano et al, *Allergens of Lanolin: Parts I and II*, J. Soc. Cosmet, Chem. March/April 1983 Vol. 34; 99-125.

Tanchev S MD et al

Tanchev S, Valkova S MD*, Guerorgieva V, MD, Gesheva J, MD, Tsvetkov M, MD. *Lansinoh in the Treatment of Sore Nipples in Breast-Feeding Women*. Bulgarian Society of Obstetrics and Gynecology Journal. 2004;3(43):27-30.

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