

## What is moist wound healing?

In the case of nipple soreness or cracking, as with other types of skin fissures, the recommended treatment is to increase the moisture content of the skin and reduce further drying. Wounds in moist environments typically heal faster and with reduced scab and scar formation than those in dry environments. Moist wound healing allows the skin to regain the proper moisture content from within. Rapid healing is facilitated without a hard crust or scab forming.

LANSINOH® provides a covering that allows the moist wound healing to occur. LANSINOH® is bacteriostatic, it does not provide a medium for bacteria to grow because it contains no water. Applying an emollient such as LANSINOH®, soothes the dry cracked area and 'coats' the free nerve ending of the exposed area, thus providing relief from pain.

In the 1970-1990s, the thinking was that if the skin was wet and there were signs of skin breakdown, it was important to keep the skin dry. There were recommendations to keep the nipple dry, using a hair dryer if needed. This approach would lead to rapid drying which could cause further cracking.

Surface moisture on the nipple, such as residual milk, can be gently patted off with a tissue. Then the application of LANSINOH® allows the skin's own internal moisture to aid the healing of the crack.

Moist wound healing using various hydrogel wound dressings has been studied. These dressings are designed for chronic leg ulcers and similar wounds where the dressing stays in place for a period of time, unlike with breastfeeding where it is removed frequently. One study (Brent et al, 1998) found the hydrogel dressing was less effective at reducing pain than using LANSINOH®. The dressing group had a higher level of infections which resulted in the study ending early to avoid further harm.

### *What is an emollient?*

An emollient is an agent which when applied to dry or inflexible skin, will effect a softening of that tissue by inducing rehydration. Lanolin causes the natural water in the skin to increase by slowing down, though not completely inhibiting moisture loss from the skin. Lanolin does not *add* moisture to the skin, it *retains* the skin's own natural moisture.

### *What does semi-occlusive mean?*

Semi-occlusive means some air and moisture can go through the layer of lanolin on the skin, though it goes through slowly. Skin needs air to heal. For example, if you put an occlusive (non-porous) wound dressing or piece of cellotape around your finger and leave it for a few days, you will see that the skin underneath becomes white and waterlogged because the excess water cannot get out and air cannot get in. Slight rubbing easily damages this skin. If you put a porous dressing (or LANSINOH®) on your finger, the skin stays much healthier.



***For further information for health workers on treating sore nipples see:***

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

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

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

Huml, S. *Moist Wound Healing – Current Concepts in Treatment*, National Conference, June 1993 Assoc of Women's Health, Obstetrics and Neonatal Nurses

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

