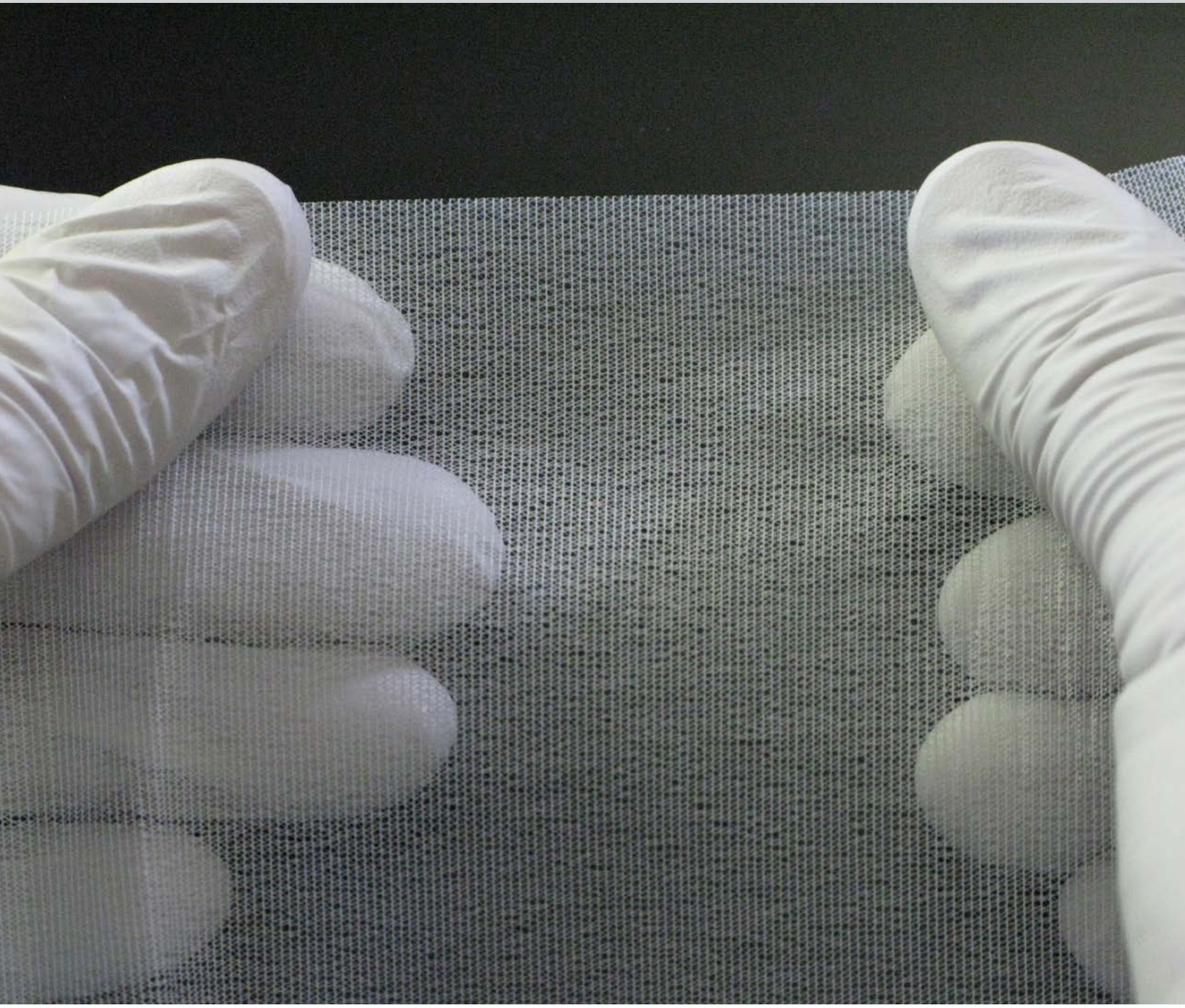
N-TERFACE®:

History, Indications and Benefits



Winfield LABORATORIES, INC.

N-TERFACE® Interpositional Surfacing Material is a soft, breathable microporous dressing. As an Interpositional Surfacing Material, N-TERFACE® is constructed of a unique, high-density polyethylene netting. N-TERFACE® has been used for decades in burn care and general wound care settings. Although it is widely recognized as a standard dressing for burn wounds, N-TERFACE® dressings are clinically beneficial for treating partial-thickness wounds of many etiologies.

History of N-TERFACE

N-TERFACE® was first cleared by the Food and Drug Administration in 1982. Since its introduction to the market, N-TERFACE® has become a popular wound contact layer dressing option for burn wounds, as well as general wound care. It has also been useful in creating dressings for multiple procedures performed by dermatologic surgeons, including dermabrasions, grafts and secondary intention healing.[1]

N-TERFACE® presents a novel approach to the problems of dressing adherence. The mechanism behind its efficacy is that it relies on the use of a dressing or wound contact material that, once applied, may, under the care of a clinician, remain in position for an extended period or until the wound has healed. The absorbent outer layer is removed easily from N-TERFACE®, which may remain on the wound as the outer absorbent dressing is replaced.

N-TERFACE® has been used in wound care for decades. Throughout this long history of use, N-TERFACE® has been shown to have many clinical benefits. It is commonly used in burn and chronic wound care and for plastic surgery, especially after chemical or laser resurfacing.[2] It is often selected as a dressing because of the ease and efficiency of dressing changes.[3]

One of the most challenging problems with wound healing by secondary intention is the potential for the desiccation and stripping of viable epithelium, which commonly occur with traditional gauze and non-woven dressings. Dry gauze or non-woven dressings are difficult and often painful to remove if they adhere to the wound bed, thus potentially damaging viable tissue.[4] As a contact layer dressing, N-TERFACE® is a non-adhering wound contact material that avoids the needless detrimental effects of dry gauze or other dry dressings on the fragile new epithelium.

There are several key advantages to this type of contact layer dressing. The dressing overcomes the disadvantages presented by dressing adherence, which include:[5]

- Pain and discomfort to the patient
- Disruption of the healing process, which may include blood loss
- Nursing time lost as a result of the slow process of removing adherent dressings

Unlike other modern dressings, N-TERFACE® does not promote, enhance or speed the healing process. However, its efficacy lies in the ability to permit painless and bloodless dressing changes without disrupting the healing process in certain types of wounds.[1] Changing N-TERFACE® dressings is often much faster, and this increases the efficiency of nursing staff while reducing the duration of patient discomfort. The achievement of this clinical goal is aided by the innovative design of N-TERFACE®.

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Design and Composition of N-TERFACE

Dressings often comprise multiple layers, each with a specialized function. The layers include contact, antibiotic or hydrating, absorbing, and contouring and securing.[6] The contact layer is in direct contact with the wound surface. This layer needs to allow wound exudate to pass through to the absorbent layers of the dressing. It must also not adhere to the wound, to prevent further damage to the wound or periwound area during dressing changes. An ideal contact layer should also be pliable, lightweight, translucent and sterile.[1]

N-TERFACE® is a unique, high-density microporous polyethylene netting that is used solely as a contact layer dressing that allows exudate and medication to pass through the dressing easily. The thin mesh composition fulfills these ideal qualities for a contact layer dressing.[1] When N-TERFACE® is used as a primary wound contact layer, it helps prevent wound shear, and its translucency provides a "window" to view the wound. Additionally, the microporous N-TERFACE® dressings allow cleansing or the application of creams and ointments directly to

the wound surface. Outer dressings may be removed from the wound contact layer without creating additional trauma to the area. This clinical benefit has been one of the primary reasons N-TERFACE® has found widespread popularity as a contact layer dressing.

N-TERFACE® can be left in place between absorbent dressing changes when clinically indicated, to help protect fragile epithelium, and the dressing does not trap heat or moisture or contain any additives.

N-TERFACE® offers the following clinical benefits:

- **Adhesive and latex-free:** N-TERFACE® contains no adhesives or latex, which means that it can be used on even the most sensitive and healing skin without irritating granulating tissue.
- **Easy to change:** N-TERFACE® dressings are much easier to change than adherent dry dressings. This ease ensures that dressing changes are quicker and less painful, thereby reducing the burden on the patient and the nursing staff.
- **Breathable and translucent**: Breathability ensures that moisture does not become trapped in the wound bed, which can cause maceration of the tissue. The porous nature of N-TERFACE® ensures that wound bed conditions are optimized for healing. The translucent dressing allows clinicians to visibly see the wound conditions. Based on the progression or regression of healing, clinicians can adjust and optimize the treatment strategies, as clinically appropriate.

- **Allows fluid movement:** N-TERFACE® dressings allow for the movement of fluid both into and out of the wound. This is crucial for several reasons. This feature allows exudate to be absorbed through the contact layer, by pulling the moisture from the wound bed. Excessive moisture can inhibit healing and lead to shearing or maceration of the delicate tissue. Additionally, creams and ointments, including topical antibiotics and antimicrobials, can be applied directly to the contact layer dressing and still reach the wound surface to address any issues with infection.
- **Non-absorbent and non-resorbable:** These features of the dressing mean that it fulfills the basic functions of dressings, such as protecting the wound tissue from direct contact with other agents or dressings applied to the wound. These dressings conform to the shape of the wound and enhance patient comfort.

These benefits, taken together, often optimize the wound healing environment by maintaining ideal wound bed conditions. They also overcome a major obstacle in wound care by allowing the outer dressings to be changed without further injuring the damaged and healing skin.

N-TERFACE® is also very easy to use. The material is placed in a single layer with edges overlapping the wound margins, and it can be easily torn in a linear direction without the use of scissors to accommodate the area of required coverage. Either surface of the dressing material may be placed on the wound or the graft site. It can be removed and reapplied during each dressing change. When clinically indicated, the dressing can also remain in place for multiple days, depending on the needs of the patient and the type of wound. The outer absorbent or wrapping layers are easily removed, and the wound can be visually inspected throughout the healing process. The wound can be cleansed, and fresh ointment or medication can be applied at any time.

N-TERFACE® is indicated for use as a primary wound contact dressing in the management of partial-thickness wounds, including the management of graft sites. It has been popular for decades for treating burn wounds, but this dressing can be beneficial for many types of wound etiologies. It can facilitate dressing changes in postoperative scenarios where dressing adherence to the wound surface leads to painful, bloody dressing changes that disrupt normal healing. It will not promote or hasten healing time, but it can be a useful tool in wound management when it is used properly in the right clinical settings and with appropriate expectations.[1]

As a proven dressing that has demonstrated a long history of success in treating wounds and minimizing patient discomfort, N-TERFACE® is an ideal option for treating certain types of chronic and acute wounds. The many benefits that N-TERFACE® can provide all work together to optimize the healing environment and achieve better clinical outcomes.

For more information, visit www.winfieldlabs.com.

References

1. Salasche SJ, Winton GB. Clinical evaluation of a nonadhering wound dressing. *J Dermatol Surg Oncol.* 1986;12(11):1220-1221.

2. Esteban-Vives R, Young MT, Ziembicki J, Corcos A, Gerlach JC. Effects of wound dressings on cultured primary keratinocytes. *Burns.* 2016;42(1):81-90. http://dx.doi.org/10.1016/j.burns.2015.06.016

3. Newman JP, Fitzgerald P, Koch RJ. Review of closed dressings after laser resurfacing. *Dermatol Surg.* 2001;26(6):562-571.

4. Weller K. Achieving compliance and consistency: avoidance of wound bed trauma utilizing a wound contact layer material in chronic and post-surgical (open) wounds. Abstract presented at the Sixth Annual Clinical Symposium on Pressure Sore and Wound Management, St. Charles, Illinois, September 12-13, 1991.

5. Sato RM. Preliminary communication: clinical evaluation of a nonadhering interpositional surfacing material. *J Burn Care Res.* 1982;3(4):240-241.

6. Winton GB, Salasche SJ. Wound dressing for dermatologic surgery. *J Am Acad Dermatol.* 1985;13:1026-1044.