

Creature Comforts™: **Nylon Stockings** **(Kneehighs & Pantyhose)**

Stretchable polyester woven stockings, for confining *Medical Maggots*™ to the wound.

Description -

Creature Comforts™ **Nylon Stockings (Kneehighs & Pantyhose)** are simple nylon stockings that have been selected and sterilized for the purpose of confining medicinal maggots to the wound area where applied, even though the anatomy may be 3-dimensionally challenging: toes, feet, ankles, legs, amputation stumps, etc. Flat fabric nets, including standard *Creature Comforts*™ may work well at confining maggots to a simple wound on a planar surface; but such a dressing can not easily be applied to 3-dimensional surfaces.

Mechanisms of Action -

Acting as a fence or “corral,” this nylon (polyester) mesh prevents fully-grown medicinal maggots from escaping the area of confinement.

[See *Medical Maggots*™ *package insert* for discussion of the maggots’ mechanisms of action]

Clinical Indications -

Creature Comforts™ **Nylon Stockings (Kneehighs & Pantyhose)** are intended to confine mature medicinal maggots on the wound bed, on the affected limb, or wherever this product is securely fastened. In essence, they are an accessory, functioning as corrals for medicinal maggots. For indications for using medicinal maggots, please refer to their labeling. *Medical Maggots*™ brand of medicinal maggots are indicated for debriding non-healing necrotic skin and soft tissue wounds, including pressure ulcers, venous stasis ulcers, neuropathic foot ulcers, and non-healing traumatic or post surgical -wounds.

Storage & Handling -

Creature Comforts™ **Nylon Stockings (Kneehighs & Pantyhose)** by **Monarch Labs** should be stored at room temperature (68-78°F). Under such conditions, and as long as the packaging remains intact, they should remain sterile and usable for up to one year after the date of production.

Warnings -

- *Creature Comforts*™ **Nylon Stockings (Kneehighs & Pantyhose)** are manufactured with a **stretchable** weave, so the fibers slide back and forth. This provides nylon stockings with an excellent fit and look, but allows the smallest larvae with a stretchable pathway to escape. When properly affixed and intact, nylon stockings will confine the mature maggots well, but when first applied some of the very young larvae (generally less than 5%) may escape through the pores. If this happens, the escaped larvae will quickly die from desiccation and starvation.
- Do not use in patients allergic to nylon or other polyesters.
- Do not use if packaging or product appears damaged.
- Remember always to familiarize yourself with all instructions and package labeling before using this or any other medical device. Call Monarch Labs immediately if you have any questions or concerns about the use or quality of this item.
- Do not apply in a manner or location that might constrict blood flow.
- Do not apply over povidone iodine or other skin irritants or products that are not intended to be covered in this way.
- This product is an accessory to *Medical Maggots*™. Be sure to read the package labeling and instructions completely for *Medical Maggots*™ or whatever brand of medicinal maggots you are using.

Instructions for Use -

Remember always to familiarize yourself with all instructions and package labeling before using this or any other medical device. Remember always to wash hands before handling patients or patient care items. Always put on gloves if you are likely to touch a wound or infected area.

Creature Comforts™ **Nylon Stockings (Kneehighs & Pantyhose)** are sterile if the packaging is intact and not expired (expiration date is generally 1 year after manufacturing date, unless otherwise noted).

Dressing Application. Gently wash out of the wound any residual medications, secretions or debris. Clean the peri-wound skin with an appropriate skin cleaner, at least as large an area as this dressing will cover. Then protect the peri-wound skin from wound drainage during treatments with a polyurethane or similar skin protectant. **Do not use povidone iodine or other potential skin irritants. Do not apply in a manner or location that might constrict blood flow.**

Creature Comforts™ **Nylon Stockings (Kneehighs & Pantyhose)** maggot confinement dressings are

used to create a cage around the maggots. They may be affixed directly to the skin with tape or adhesive; but it is less traumatic to the skin if these stockings are affixed to a strip of hydrocolloid placed proximally (+/- distally) to the wound, as described in: *Arch Dermatol* 1996;132: 254-256. Set down a 1-2 cm wide strip of hydrocolloid and paint it with a liquid adhesive before applying the maggots and a little loose gauze to the wound. After the maggots are in place (by which time the adhesive should be quite tacky), slide on the **Nylon Stockings (Kneehighs or Pantyhose)**. Line up the edge of the stocking with the strip(s) of hydrocolloid, and press it down gently over the glue. Pleat the stocking if necessary, to remove all wrinkles. Add another layer of adhesive over this portion of the stocking, so that the adhesive will flow through the pores and bond with the hydrocolloid and adhesive underneath. Then apply a fabric-based (not paper or plastic) tape over this part of the dressing to ensure that it remains secure. Framing the dressing with a transparent semi-permeable dressing (half over the glued edges of the nylon stocking, half over the peripheral intact skin) will add another optional layer of security, and is especially valuable in the patient is mobile, or if this area is likely to perspire or become soiled. Remember: transparent “semi-permeable” dressings are not permeable enough to provide air to the maggots. **Do not** cover the central mesh area with transparent membrane dressings or any other dressing besides a breathable loose absorbent gauze-like dressing because the maggots may suffocate.

If you want to use the stocking as a cylinder rather than as a blind pouch, cut off the sealed bottom (“toe” of the stocking). If you want the pouch shorter (for example, if you want to use the “panty” portion of the stocking as a pouch, and do not need the “legs”), then tie the legs into a tight knot to shorten them.

Finally, cover the dressing loosely with a breathable absorbent pad (i.e., two ply of cotton gauze). Change the top absorbent pad 4 - 8 hours and whenever it becomes soiled. If it is not wet after 8 hours, the wound and maggots may be too dry. Moisten the wound through the mesh with a little sterile irrigation fluid (water or saline). Leave the **Nylon Stockings** dressing in place for a total of approximately 48 hours.

Dressing removal. To remove the maggot confinement dressings with minimal effort, cut or peel back the maggot dressing while wiping up the maggots with a wet 4" x 4" gauze pad held in the other hand, sandwiching the maggots between the two gloved hands. Consider placing a liner or garbage bag underneath, to catch escaping larvae. Discard the maggots and dressings as you do your other potentially infectious dressing waste (i.e., discard in "red bag" securely sealed to prevent escape. Double-bag the sealed bag within another sealed bag for added security).

Duration of maggot therapy. One treatment cycle with *Medical Maggots*™, confined by *Creature Comforts*™ **Nylon Stockings**, should last 48 (maximum 72) hours. The total number of treatment cycles will depend upon the size and character of the wound, clinical response, and goals of therapy. Most ulcers are completely debrided within 1 to 5 cycles. Do not re-use these products.

Disposal -

After use, handle and discard the maggots and maggot dressings as you do your other potentially infectious dressing waste (i.e., discard in "red bag" securely sealed to prevent escape). Double-bag the sealed bag within another sealed bag for added security. See also *Disposal for Medical Maggots*™.

Overdosage -

Guerrini (1988) demonstrated that blow fly strike in sheep resulted when very large maggot burdens (> 16,000 maggots per animal) infested the sheep. In these cases, serum ammonia levels were found to be elevated (presumably due to the large protein breakdown in the wound), and the animals became encephalopathic.

How supplied -

Creature Comforts™ **Nylon Stocking** maggot confinement dressings are provided in two sizes (**Kneehighs & Pantyhose**), each individually wrapped and sterilized. Check package wrapper for size and sterility validation markings. Batch numbers include the date of production & sterilization (YY/MM/DD). If stored correctly and the packaging is intact, they should remain sterile for one year after this date.

Restrictions and Disclaimers -

No warranty is made or implied regarding the therapeutic benefit of maggot therapy for any specific patient. *Creature Comforts*™ **Nylon Stockings** maggot dressings are not appropriate for all wounds nor all locations. Call Monarch Labs if you have any questions or concerns about these products.

Inquiries and Orders -

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