

Wound Dressings Overview

	Properties	Advantages	Disadvantages	Product forms
Absorbent Dressings	<ul style="list-style-type: none"> • Either low absorbent or super absorbent pads. • Made from a variety of materials. • Super absorbent pads contain an inner absorbent core capable of absorbing moderate to high amounts of exudate. 	<ul style="list-style-type: none"> • Use as a secondary dressing to absorb exudate. 	<ul style="list-style-type: none"> • Must be removed carefully as the dressing is only low adherent and may stick to the wound. • Can cause peri wound maceration. • Usually require fixation to stay in place. 	<ul style="list-style-type: none"> • Range of pad sizes • Rolls • Adherent and non-adherent
Alginate Dressings	<ul style="list-style-type: none"> • Made from seaweed • Biodegradable. • Absorbs up to 20 times weight in wound fluid. • Used in moderate to high exuding wounds. 	<ul style="list-style-type: none"> • Provides a moist wound-healing environment. • Suitable for bleeding wounds. • Keeps nerve ending moist. • Can reduce pain. 	<ul style="list-style-type: none"> • Can only be used on exuding wounds. • Requires a secondary dressing. • Must be cut to size of wound. • Must be changed daily to second daily. 	<ul style="list-style-type: none"> • Varying sheet sizes • Ropes
Antimicrobial Dressings	<ul style="list-style-type: none"> • Delivers a sustained release of antimicrobial agents to wound bed. • Reduces likelihood of resistant bacteria developing in wound bed. • Typically gets its antimicrobial activity from silver, iodine or polyhexamethylene biguanide (PHMB). 	<ul style="list-style-type: none"> • Antimicrobial agents are progressively released into wound bed. • Absorbs exudate and bacteria. • Aids autolytic debridement. • Promotes a moist wound healing environment. 	<ul style="list-style-type: none"> • May require fixation to stay in place. • Should only be used for short periods. • May be contraindicated for people with sensitivities and/or pregnancy. 	<ul style="list-style-type: none"> • Varying delivery systems, shapes, and sizes • Sheets • Ropes • Impregnated mesh • Paste • Powders
Film Dressings	<ul style="list-style-type: none"> • Transparent, flexible, breathable adherent and non-absorbent wound dressings. • Have no intrinsic absorbency. • Made from thin sheets of polyurethane coated with layer of adhesive. 	<ul style="list-style-type: none"> • Protects wound surface and maintains a moist wound healing environment. • Provides a barrier against microbes, chemicals, friction and fluid. • Allows moisture vapour and gases to escape but is water-resistant. • Can act as blister roof and second skin. • Can be used to reduce friction over bony prominences. 	<ul style="list-style-type: none"> • Excessive exudate may pool under dressing and macerate surrounding skin. • Should not be used on fragile compromised skin because they strongly adhere to dry skin and can cause trauma to good skin when removed. 	<ul style="list-style-type: none"> • Varying sheet sizes and shapes. • New generation films are coated with silicone adhesive. • Some include a non-stick pad known as an island dressing.
Foam Dressings	<ul style="list-style-type: none"> • Hydrophilic (attracts fluid which aids in absorption). • Made from foamed polymer solutions (most commonly polyurethane) with small, open cells capable of holding fluids. 	<ul style="list-style-type: none"> • Maintains thermal temperature in wound. • Facilitates a moist wound environment. • Highly absorbent • Protects intact skin from friction. • Conforms to uneven body surfaces. 	<ul style="list-style-type: none"> • May macerate peri wound skin if it becomes saturated. • Need to ensure foam is laid the right way up. 	<ul style="list-style-type: none"> • Varying cavity filling shapes and sheets.

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Honey Dressings	<ul style="list-style-type: none"> Impregnated with 100% medical grade Manuka Honey (<i>Leptospermum</i> spp.) Use on infected or highly contaminated wounds. Antimicrobial, anti-fungal, antiviral actions, anti-inflammatory. 	<ul style="list-style-type: none"> Promotes moist wound healing. Use on malodorous wounds. Promotes autolytic debridement on slough. Can be easily cut, shaped or moulded to fit any wound type. 	<ul style="list-style-type: none"> Could lead to peri wound skin maceration because liquefies when warm. Not recommended for people with allergies to honey, bees, algae or seaweed. Monitor blood sugar levels in diabetic patients. 	<ul style="list-style-type: none"> Gel Paste Impregnated gauze
Hydrocolloids	<ul style="list-style-type: none"> A wafer type of dressing. Contains gel forming agents in an adhesive compound. Laminated onto a flexible, water-resistant outer layer that turns into a gel when exudate is absorbed. 	<ul style="list-style-type: none"> Provides a moist healing wound environment. Absorbs exudate. Protects newly healed wound or intact skin. For use in non-infected wounds with minimal exudate and dry wounds. 	<ul style="list-style-type: none"> Do not use on infected wounds. Use with caution on feet because can cause peri wound skin maceration. Not appropriate for heavily exuding wounds. 	<ul style="list-style-type: none"> Varying sheet sizes and shapes Paste
Hydrofibre & Gelling Dressings	<ul style="list-style-type: none"> Made from 100% carboxymethylcellulose. Can absorb up to 30 times in weight and provide less risk of maceration because of vertical fluid absorption properties. 	<ul style="list-style-type: none"> Promotes a moist wound healing environment. Autolytic debridement Atraumatic removal of dressing from wound bed. Aids in preventing peri wound skin breakdown. 	<ul style="list-style-type: none"> Can only be used on wounds producing a moderate to high level of exudate. Requires a secondary dressing. 	<ul style="list-style-type: none"> Varying sheet sizes Packing ribbon Can be impregnated with antimicrobial agents such as silver.
Hydrogel Dressings	<ul style="list-style-type: none"> High-water content. Contains insoluble polymers. Water content varies between 30-90%. Most contain a gel forming agent called carboxymethylcellulose. 	<ul style="list-style-type: none"> Promotes a moist wound healing environment. Rehydrates a necrotic eschar, helps in its removal without harming good cell growth. Autolytic debridement. 	<ul style="list-style-type: none"> Not to be used in a highly exuding wound. Do not use on ischemic foot wounds. 	<ul style="list-style-type: none"> Flexible sheets Gel Impregnated gauze
Hypertonic Salt Dressings	<ul style="list-style-type: none"> Cotton and /or synthetic gauze. Impregnated with hypertonic saline. Cleanses wound by wicking away necrotic tissue and purulent debris. Hypertonic properties will inhibit bacterial growth. 	<ul style="list-style-type: none"> Maintains a moist wound healing environment. Autolytic debridement of loose slough or eschar. Absorbs exudate and bacteria. Apply directly to wound, no overlap onto healthy tissue. 	<ul style="list-style-type: none"> Not to be used on bleeding or potentially bleeding wounds. Not to be used on dry wounds. Not to be used on viable tendon or bone. 	<ul style="list-style-type: none"> Sheets Packing ribbon
Impregnated Mesh Dressing	<ul style="list-style-type: none"> Made from open mesh, cotton, rayon, viscose or gauze impregnated with white or soft paraffin or medicated antiseptic. A primary dressing applied directly to the wound bed. 	<ul style="list-style-type: none"> Provides a moist environment that facilitates epithelial migration. Reduces adhesion. Allows atraumatic removal from the wound bed. 	<ul style="list-style-type: none"> Does not absorb exudate. Requires frequent changes to avoid drying out and damage to good cells when dressing is removed. Requires a secondary dressing. 	<ul style="list-style-type: none"> Varying sheet sizes
Silicone Mesh	<ul style="list-style-type: none"> An open weave product. Designed to be 'tacky' but not too moist and not too dry so it can lie on good skin. 	<ul style="list-style-type: none"> Silicone is inert and enables transfer of exudate to a secondary dressing. Can be removed from wound without trauma. Does not need to be cut to wound size. 	<ul style="list-style-type: none"> Not recommended for people with allergies to silicone products. Requires a secondary dressing. 	<ul style="list-style-type: none"> Varying sheet sizes
Silver Dressings	<ul style="list-style-type: none"> A broad spectrum antimicrobial agent. Achieves antimicrobial action by generating and releasing silver into wound. Some donate silver into wound bed while others kill bacteria absorbed into core of dressing. 	<ul style="list-style-type: none"> Active against a variety of micro-organisms including <i>Staphylococcus aureus</i>, methicillin resistant <i>Staphylococcus aureus</i> (MRSA). Protects clinically infected wounds or critically colonised wounds. Provides sustained antimicrobial activity. 	<ul style="list-style-type: none"> Must cleanse wounds with sterile water because some silvers are inactivated by normal saline. Do not use in conjunction with other topical antimicrobials. Cease after 2 weeks if no improvement. 	<ul style="list-style-type: none"> Foams Alginates Gelling cellulose fibres Films Hydrogels Sheets Packing ribbon Gel

Sources:

Wounds R Us, What the best wounds are wearing, 2019
International Wound Infection Institute, Principles of Best Practice, 2016
Champions for Skin Integrity, Wound Dressing Guide, 2013