



Incontinence care



Cleans, cares,
protects and restores

Incontinence

As the population ages, incontinence will become an increasing health and social problem. Incontinence can contribute towards isolation, loneliness, depression and sleep disturbance. Furthermore, it is a frequent cause of skin damage, especially for the elderly. ^[1]



Urinary incontinence affects **8.2% of the world population.** ^[2]

Urinary incontinence

Urinary incontinence is more common than faecal incontinence. The prevalence of urinary incontinence among men and women in nursing homes is more than 70%. ^[3] Approximately 20% of acute care patients in hospitals are incontinent. ^[4]



Urinary incontinence affects **29% of community-dwelling women** aged 80 years or older. ^[3]



Urinary incontinence **among men increases steadily** between the ages of 45 years (5%) and 65 years or older (21%). ^[3]

Faecal incontinence

Faecal incontinence affects approximately 6% to 15% of women and 6% to 10% of men who live in the community, but the prevalence increases to approximately 45% among adults residing in nursing homes. ^[3]

What is incontinence-associated dermatitis (IAD)?

IAD is an inflammation of the skin caused by chronic or repeated exposure to urine or faeces. IAD is generally characterised by superficial erosion of the epidermal layer of the skin along with a wet macerated appearance. Both faecal and urinary incontinence can have a significant impact on the integrity of the skin.

Inappropriate management can cause the skin to become excoriated, leading to large areas of IAD, which can cause pain and discomfort. Furthermore, inappropriate skin management can place the patient at increased risk for secondary infection and for pressure ulcer development, which can be costly and difficult to treat. ^[5]



Skin **overhydration** can be caused by some skin **cleansing methods** and **excessive washing**. ^[6]

How does incontinence cause IAD?

With incontinence, water from urine and/or faeces is pulled into and held in the corneocytes. This overhydration causes swelling and disruption of the structure of the stratum corneum and leads to visible changes in the skin (e.g. maceration). ^[7] Excessive hydration allows the passage of irritants through the skin barrier, precipitating inflammation and leading to dermatitis. ^[8]

When skin is overhydrated, the epidermis is also more prone to injury from friction caused by contact with clothing, incontinence pads or bed linen. ^[9]

Approximately 50% of patients with urinary or faecal incontinence are affected by IAD ^[10]

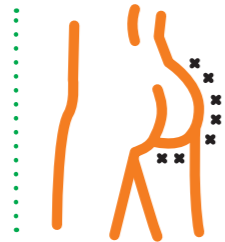
IAD and skin barrier function

Urine and faeces expose the skin to toxic enzymes and increase the normal pH of the skin. The skin becomes more alkaline and the acid mantle (skin's protective layer) is damaged. This impairs the skin's abilities to withstand bacterial invasion.

The skin becomes more alkaline because skin bacteria convert the substance urea (a product of protein metabolism found in urine) to ammonia, which is alkaline. This increase of the skin's pH allows for micro-organisms to thrive, thus increasing the risk of skin infection. [17]

Degradation, or loss of healthy skin, can lead to moisture lesions, which may result in a greatly increased risk of pressure ulcers in the presence of compression.

Patients with **faecal incontinence +/- urinary incontinence** are at **higher risk of developing IAD** than those with urinary incontinence alone. [11]



Incontinence, a risk factor for development pressure ulcers

Pressure ulcers (bedsores) are caused by deficiency of oxygen as a result of compressive and shear forces on the body, in particular where bone provides counter pressure. Sick and immobile patients are especially at risk for pressure ulcers.

Patients with incontinence-associated dermatitis can develop a pressure ulcer because excessive moisture reduces the skin's tolerance to extreme pressure!

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Patients with faecal incontinence and impaired mobility are 37.5 times more likely to develop pressure ulcers compared with continent patients [12]

Bathing 21[®] 21st century personal hygiene

Studies have shown that the incidence of IAD can be reduced with a structured skin care regimen that incorporates gentle cleansing and the use of skin protectants. [15]

The concept of Bathing 21[®] provides this regimen by setting the standards for daily bathing and personal hygiene of the 21st century. Bathing 21[®] focuses on care recipients who need assistant bathing due to a health condition by offering them 24-hour care with the use of pre-moist bathing products.



By using one washcloth/glove per body part cross-contamination is avoided. The pre-moist gloves/wipes contain a cleansing solution based on skin friendly emollients that help maintain moisture in the skin. The solution quickly evaporates from the skin's surface making towel drying unnecessary, thus avoiding further friction to the patient's skin.

The concept of Bathing 21[®] creates value for and with health care stakeholders, resulting in:

- better quality of life for care recipients;
- an improved working environment for caregivers;
- and organisational and financial benefits for health care organisations.

The advantages of Bathing 21[®]

- **Consistent care**
Standardised bathing method adjustable to individual needs.
- **Exponentially more hygienic**
Minimal risk of cross-contamination because of the use of patient-bound products.
- **Beneficial to the skin**
Bathing 21[®]-products contain a pH-skin neutral cleansing lotion that is optimally suitable for sensitive skin.
- **30-50% more quality time**
More time for personal attention.
- **Significantly more comfortable for both care recipient and caregiver**
The washing process is carried out in a single step instead of four.
- **Cost effective**
Predictable cost per body wash.

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3-in-1 incontinence care products

3-in-1 incontinence care products are intended to clean, care for, and protect the skin, by simplifying the hygiene care process and combining products in order to reduce the number of steps involved for the caregiver and the care recipient. This regimen results in time savings for the caregiver and encourages adherence from the care recipient. [9, 14, 15]

4-in-1 incontinence care products

4-in-1 incontinence care products take incontinence care one step further and are designed to clean, care for, protect and help to restore the skin.



A key to **preventing incontinent skin breakdown** is a defined skin care regimen that includes **gentle cleansing, moisturising and applying a skin protectant**. For **incontinence management**, care recipients can benefit from a fourth step: **skin restoring**. [17] For incontinence management, care recipients can benefit from a fourth step: **restoring**.

Proof

A defined (structured) skin care regimen, including the use of a soft pre-moistened washcloth impregnated with a 3% Dimethicone skin protectant, results in a significantly reduced prevalence of IAD and a trend toward less-severe lesions. Several studies support that, with respect to IAD prevention, the use of 3-in-1 perineal care washcloths is more effective than standard care including water and a pH neutral soap. [15]

3% Dimethicone

Dimethicone, or polydimethylsiloxane, a silicon-based polymer that is used in personal care as a skin protectant and a skin/hair conditioner. This silicone oil leaves a thin film on the skin which protects the skin against the damaging influences of urine and faeces. However, contrary to other film-formers, this Dimethicone film is non-occlusive allowing heat and moisture to evaporate from the skin. This skin protectant is compatible with other skin care products.

An **international consensus panel recommends** the use of 'a **disposable cloth** impregnated with both acidic no-rinse cleansers and with a protectant such as **Dimethicone**'. [18]

“Hyaluronic acid as a biologically active molecule that regulates tissue repair process on multiple levels should be considered as a safe and effective option to be used in skin repair.” [19]

Hyaluronic Acid

Hyaluronic acid (HA) is a substance found naturally in the skin that holds water and helps to keep the skin hydrated and healthy. Research has shown that HA helps wounds heal faster by regulating inflammation levels and signaling the body to build more blood vessels in the damaged area. [19, 20]



4-IN-1
CLEANS
CARES
PROTECTS
RESTORES



Swash® incontinence care

Swash® incontinence care prevents the development of IAD and keeps it from spreading in its early stages, before the condition can worsen and pressure ulcers can occur. The extended line of Swash® incontinence care products can help the skin to recover faster thanks to its innovative and enhanced Trixotric®-formula.

Swash® Perineum 3-in-1 products are moistened wash gloves or wipes infused with a skin protectant, 3% Dimethicone. This silicon-based oil leaves a thin layer on the skin, protecting it from moisture and irritation while being non-occlusive, hence allowing the skin to breath.

Swash® Perineum+ 4-in-1 products have the benefits of the 3-in-1 products plus the special Trixotric®-Formula: The Swash® **Perineum+** products put a protective but breathable layer on the skin while supporting the skin's restoration with the help of the Trixotric®-hydrogel - a combination of hyaluronic acid, hydrogel and natural bentonite clay.

trixotric®

The advantages of Swash® incontinence care products



- **3% Dimethicone**
Dimethicone leaves a protective barrier on the skin and allows the skin to breathe.
- **Trixotric®**
Formula to help restore the skin - exclusive to **Perineum+**.
- **Hypoallergenic, containing no alcohol or other harsh detergents**
The lotion is pH-skin neutral and contains nourishing ingredients such as Vitamin E and Glycerin.
- **100% fragrance-free**
Lotion with a neutral aroma.
- **Dermatologically tested**
Skin irritation test according OECD N.439:2015, Cytotoxicity according ISO 10993-5:2009 and Skin sensitisation test according hCLAT.
- **Comfortable bathing experience**
Can be used both at room temperature and when warmed up.
- **Easy assessment of the skin**
Due to the transparency of the Dimethicone barrier.
- **Easily implemented and added to the protocols for incontinence care**
Due to the simple application method of Swash® incontinence care products.
- **Environmentally friendly**
The cloth of the Swash®-products is, among other materials, made of the sustainable wood fiber, which is characterized by its purity, softness and absorption capacity.
- **Made in Holland**
High product quality is guaranteed by a fully automated production process in a cleanroom.

Arion

Arion was the first company to introduce the new bathing concept to Europe back in 1999. Since then the concept has been widely implemented and integrated into the health care sector, eliminating wash basins and has created a positive cultural shift in many health care organisations.

Thanks to its vast experience and knowledge, Arion is able to offer organisations not only the best Bathing 21®-products on the market, but also expert advice and assistance with its implementation processes from a registered nurse. Arion has the most high-tech production facility in the industry with a cleanroom environment and quality assurance laboratory, guaranteeing optimum and consistent product quality.

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