



Bag Bath

THE EVOLUTION OF THE BAG BATH

In 1994, nurse Susan M. Skewes, RN, developed a theory-based alternative method of bed bathing and this was the beginning of what we know today as BagBath®.

Since 1996 BagBath has been the most used bed bath system in Danish hospitals for washing and grooming of immobile patients or patients with special needs.

BagBath has been sold in more than 19 countries – with an impressive sale of appx. 40 mio. packs during the years.



soap

By examining soap and its effect on the skin, we can better understand why the Bag Bath has established a new standard of practice.



- In its basic form, old-fashioned soap is made by combining an alkali with a fat (often a vegetable oil) and water.
- Usually has a pH level anywhere from 7.0 to as high as 11 or 12.
- Soap is a powerful degreaser that emulsifies fats and removes lipids from the skin.
- The soap and water basin bath makes rinsing difficult, and soap often remains on the skin, elevating its pH.
- Soap can destroy sebum.
- Soap used in routine patient bathing should be liquid, non-antimicrobial, and neutral in pH, and must contain moisturizers.

soap

Nursing and medical research has found that the use of no therapeutic soap, like frequent baths, puts the elderly at risk for dry skin.

Soap is a powerful degreaser that emulsifies fats and removes lipids which bind water, from the skin.

Loss of these lipids results in skin dryness.

Most soaps alter the pH of human skin, which normally ranges in adults from 4.5 and 5.5, and the skin's mild acidity is an effective antimicrobial barrier.

Additionally, as we age, our skin suffers a marked reduction in lipid substances causing skin to become even drier, flaky, pruritic and "at risk".

It has been estimated that:

59% to 75% of the elderly have pre-existing pruritic skin conditions

(Eliopoulos, 1988; Franz & Kinney, 1986; Parnet 1985; Tinadall & Smith, 1963).

Research also suggests an association between :

dry, flaky or scaling skin and the incidence of pressure ulcers

(Guralnik, Harris, White, et al, 1988).*



Normal pH of the skin and how it is affected by soap

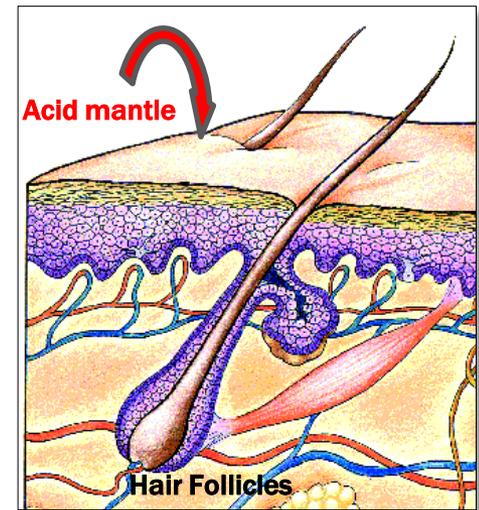
Acid Mantle

Human skin is protected by a film barrier called the acid mantle.

This protective film maintains a skin pH of 4.5 to 5.5 which is mildly acidic.

Sebum (or oil) is produced by hair follicles and is pushed to the skin's surface where it is forming the acid mantle which has bactericidal and fungicidal properties.

The daily soap and water patient bath, and when soap is not completely rinsed from the skin, the pH is elevated reducing the acid mantle's ability to fight off harmful microorganisms.



Bacteria

Soap, particularly in bar form, can become a haven or the growth of bacteria.

A bar of soap can easily be contaminated with Gram negative organisms

(Gooch, 1989).

The Alternative To Soap

Instead of using soap, skin can be just as effectively cleaned by using surfactants.



A "surfactant" is a surface-active agent that is used to reduce the surface tension of water allowing it to spread out and help cleanse an area of skin.

In addition, as a wetting agent, mild surfactants also remove contaminants from the skin without the damaging effects of soap.

Based on research by George Rodeheaver, Ph.D., Director of Plastic Surgery research at the University of Virginia School of Medicine, the surfactant F-68 was chosen to be used as the primary cleanser in the Bag Bath®.

Dr. Rodeheaver, at a symposium on advanced wound care in 1988, identified F-68 to be as tissue-friendly as normal saline.

These results, plus other study results, suggested that Pluronic F-68 (a totally bio-compatible surfactant) could be safely employed as a cleanser.

What kind of ingredients are used in the Bag Bath®?

The Bag Bath® uses a special blend of tissue-friendly, no-rinse surfactants that clean without damaging the protective acid mantle of the skin.

The solution contains vitamin E and vitamin B5.

Provitamin Dexpanthenol (B5), acts as an emollient/humectant that attracts and traps moisture in the skin, eliminating the need for extra lotions.

Dexpanthenol, promotes the skin's ability to regenerate.

It enhances the natural cell activity, so the skin heals quickly

Purified Water, - non – ionic

Surface Active Agent (F68)

Vitamin B5 (Dexpanthenol)

Vitamin E (Tocopherol)

Sodium Benzoate

Potassium Sorbate

Mild, clean

Cleanser

Humectant / cell generate

Nutrient / antioxidant

Preservative

Preservative

Purified Water, - non – ionic

The water used in Bag Bath has undergone a cleaning procedure and treated to be non-ionic.

- Free of bacteria
- Mild
- Neutral to the skin



Important !!

As the water is non-ionic, it will not remove the very important acid mantel on the skin.

Acid mantel = antimicrobial barrier.

Surface Active Agent (F68)

Instead of using soap, skin can as effectively be cleaned by using surfactants.

A surface active agent that is used to reduce the surface tension of water allows it to spread out and clean an area of the skin.

F68, a skin and wound cleanser approved by FDA.

- Removes contaminants from the skin.
- Tissue friendly as saline.
- Totally biocompatible.



Most important !!

The non-ionic cleanser prevent the development of infections

F68 cleans the skin without damaging the protective acid mantle of the skin.

Vitamin B5 (Dexpanthenol)

Dexpanthenol is used as humectant in Bag Bath, but has a lot of other benefits, that can help to understand the importance of this ingredient in Bag Bath.

Provitamins B 5 (dexpanthenol) is necessary in the processes of reconstruction of epithelium, and has regenerative and anti-inflammatory properties.

- A lot of studies show the positive effect on skin and wound conditions
- Acts like a moisturizer
- Improving stratum corneum hydration
- Reducing trans -epidermal water loss
- Activation of fibroblast proliferation
- Accelerated re-epithelialization

Most important !!

Moisturize the fragile skin

Supports all skin and wound healing processes

Used in a lot of skin care products



Vitamin E (Tocopherol)

Since the discovery that vitamin E is the major lipid soluble Antioxidant in skin. It has been used to treat almost every type of skin lesion and has been used frequently by the general population to treat burns, surgical scars, and other wounds.

Tocopherols, ascorbate polyphenols; All these compounds administered topically by cosmetics or by diet supplements (oral route), have been shown to exert an antioxidant/protective effect in skin or skin cells.

Acts as an nutrient / antioxidant

Acts as lipid soluble antioxidant

Most important !!

Vitamin E is the most important antioxidant in the body that protects cell membranes

- Topical d-alpha-tocopherol can soothe dry, rough skin



Why use bagbath

Why use **Bag Bath** instead of a
normal procedure ?



What is a normal bed bath ?

Normally bed bath are given to patients that are not able to do their own bathing due to traumatic situations, severe illness, immobile status or in such a status that precautions has to be taken.

These patients are often in such a condition, that they are in very big risk of getting infections, why the risk of cross contamination is an issue.

Gentle handling of these patients are very important as well.

- Pain during positioning.
- Pain due to traumatic situation.
- Pain due to positioning of osteosynthetic material.
- Nausea.
- Lung- and heart deseases, that not allows the patient to move.

Most important !!

- Reduced burden in manual handling by the caregiver:
- Single-contact with each body part

What is a normally used for a bed bath ?

- Roll table
- 3 Towels (body and genitals)
- Reuseable / singleuse wash towels
- Zinks (body and genitals)
- Soap
- Bed linen (spillage of water needs more bed linen)



- Takes time to find and prepare everything, and dispose after use.
- Laundry of bedlinen, towels and washing zinks.



Environmental benefits

By doing a traditional Bed Bath, you have to consider the amount of waste products that can influence the environment:



Traditional bed bath:

3 towels
Cleaning

25 litre water.
50 g soap.
20 g softner .m.
Electricity, 3 kWh/kg.
(+Transportation)

Cleaning of 2 Zinks
(Bedpan boiler)

35 litre water .
90 g soap.
10 g surfactant.
Electricity, 0,9 kWh/vask.
(low energy boiler)

Polyuretan-cloth:

70 g PU.
6 g Polyethylen.

Soap for body wash:

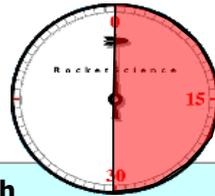
20 g.
10 litre
10 g.

Water:

Lotion:



Cost analysis



Expences for a normal BedBath	Cost
2 washing zinks filled up with water (incl. cleaning / desinfection after use)	€ 0,18
3 towels (incl. washing, logistics and depreciation)	€ 0,79
Washing cloths or PU foam cloths (incl. washing, logistics and depreciation)	€ 0,57
Soap (used in average ± 10 gram)	€ 0,08
Bodylotion (used in average ± 10 gram)	€ 0,10
Total material Cost	€ 1,72
Cost of employee (In average 30 minutes á € 25,- per hour. This is inclusive preparing and disposal, cleaning and washing the zinks)	€ 12,50
Total BedBath Cost	€ 14,22



Expences for a Bag Bath®	Kosten
One package of Bag Bath® (Average price)	€ 2,50
Heating in a microwave (average 45 seconds incl. depreciation)	€ 0,07
Storage cost warehouse (± € 250,- per ton en ± 200 gram per BagBath®)	€ 0,05
Total material Cost	€ 2,62
Cost of employee (In average 10 minutes á € 25,- per hour. This is inclusive preparing and disposal.	€ 4,33
Total Bag Bath® Cost	€ 6,95

Normal Bed Bath	14,22
Bag Bath®	€ 6,95
Possible savings by using Bag Bath®	€ 7,27

summary

- BagBath was the first “bed bathing system“ who focused on skin quality and use medical-grade ingredients, with the aim of improving the skin condition.
- BagBath has never received any complaints from professionals with regard to skin problems (allergy) of any kind.
- BagBath is dermatologically tested and has numerous articles and studies behind it.
- Easy & Time Effective
- More Cost Effective



We have **several studies** from several countries around BagBaths ability to improve skin quality and reduce bacteria, fungi , etc.

Other bed bath products contains numerous unnecessary additives , perfumes, lotion and etc.

Clinical Trial Results

- “The Effects of Bathing and Skin Care Practices on Skin Quality and Satisfaction with an Innovative Product” by Cynthia M. Sheppard, RN, MSN, and Phyllis S. Brenner, RN, PhD. Journal of Gerontological Nursing. October 2000. Pgs. 36-45.
- 22/06/2011 - Single-Blind Randomized controlled Clinical Study of Skin Irritation and sensitization potential of skin cleansing and protection product.
”ALLERGISA pesquisa dermatocósmética Ltda” (Analytical Laboratory Accredited by ANVISA) For: COMERCIAL NACIONAL DE PRODUTOS HOSPITALARES LTDA
- Study: “Test of the Alternative Body Washing System BagBath: How is the daily use of this product evaluated in an Surgical Intensive Unit at Westküstenklinikums Heide”, Hamburg, Germany. June 2006. Antje Schmidt, WKK Heide; Dr. Stefan Schröder, Manager OA and ICU.
- “Clinically controlled study by Lis Horstmann Nøddeskou, May 2010”
- “BagBath: the value of simplistic care in the community” by Fiona Collins and Sylvie Hampton. British Journal of Community Nursing, 2003, Vol. 8, No. 10. Pgs. 343-348.
- “The cost-effective use of BagBath: a new concept in patient hygiene” by Fiona Collins and Sylvie Hampton. British Journal of Nursing, 2003, Vol. 12, No. 16. Pgs. 984-989.
- “Skin Care Rituals That Do More Harm Than Good” by Susan M. Skewes, RN, ONC. The American Journal of Nursing, October 1996, Vol. 96, No. 10. Pgs. 33-35.
“Bathing: It’s a Tough Job! The rigors of assisting elderly patients in and out of tubs are a leading cause of disability for nurses” by Susan M. Skewes, RN, ONC. Journal of Gerontological Nursing. May 1997. Pgs. 45-48.