



## Review Article

# Herbal Body Wash

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### ABSTRACT

When taking a shower or bath, we use a body wash, which is a particular liquid. Keeping oneself clean is the practice of personal hygiene. All types of ailments can arise from inadequate personal hygiene maintenance. It is anticipated that multipurpose herbal wash will prove to be more cost-effective than traditional goods because the consumer may obtain the intended result. Formulated herbal wash preparations were assessed for chemical and physical characteristics, including pH, surface tension, viscosity, percent of solids contents, dirt dispersion, cleaning action, foaming ability and foam stability, antimicrobial activity, and antifungal activity. The results indicated that all of these characteristics were within acceptable bounds. Physical characteristics included color and fragrance. Coffee can protect skin against UV radiation and also it has antioxidant property. Coco Glucoside have good foaming characters and is completely biodegradable

### INTRODUCTION

The exterior layer of the human body, the skin, serves as the body's first line of protection against a variety of diseases [1]. The skin is continuously exposed to various environmental stimuli because it is the skin's interaction with the environment. This increases the risk of skin injury [2]. A common healing mechanism for severely damaged skin is the formation of scar tissue, which is frequently depigmented and discolored. Since ancient times, people have utilized plants to cure illnesses and infections in humans. [3]. Natural components are used to make organic body wash,

which hydrates, nourishes, and cleans the skin without irritating or drying it out. Gentle and efficient plant-based components are used in organic body wash. This makes it the perfect choice for people who have sensitive skin or who would like stay away from chemicals that cause irritation and artificial fragrances in their personal care products. [4]. Cleaning the body is the most typical application for body wash. It's the ideal cleanser for skin because it's lightweight and easy to rinse off. It's portable and simple to apply with a loofah or shower puff. [5]. In India, ayurvedic body washes have been used for centuries, and

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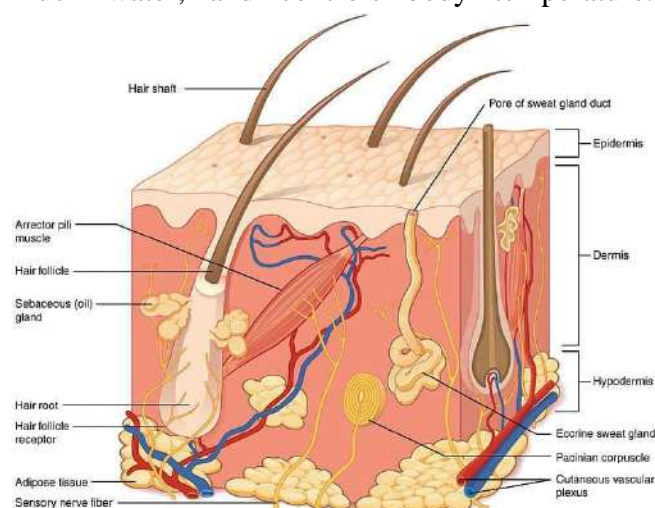
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they offer benefits beyond simple skin cleansing. Because of the nourishing and antibacterial elements in their formulation, your skin will stay clear and healthy. Regrettably, the current age seems to be drawn to body washes that are high in artificial perfumes, colors, and harsh chemicals despite their pleasant scent. India offers natural body washes that are both cleansing and moisturizing without adding any unnecessary ingredients that could irritate your skin.

### SKIN:

Making up around 15% of an adult's total body weight, the skin is the biggest organ in the body. It serves a variety of purposes, including defense against chemical, physical, and external environment, prevents the body from losing too much water, and controls body temperature.



Components of skin:

1. Epidermis
2. Dermis
3. Skin appendages
4. Subcutaneous fat

#### 1. EPIDERMIS:

There are four layers in the epidermis (basal cell, stratum spinosum, stratum granulosum, and stratum corneum, in ascending sequence of layering). beginning in the stratum corneum at the outer surface and extending to the dermal junction with the basal cell layer. It serves as a defense against the infiltration of microbes.

#### a. Basal Cell Layer

The proliferating, undifferentiated cells are called basal cells. Skin stem cells give rise to keratinocytes and are found in the basal layer of the interfollicular epidermis. For typical Daughter cells from the basal cell layer go upward and start the differentiation process to maintain skin homeostasis.

#### b. Stratum Spinosum

Keratinocytes, which differentiate from the basal cells underneath them, make up the stratum spinosum, which is situated above the basal layer. The main component of the horny stratum corneum is keratin, a fibrous protein produced by keratinocytes.

#### c. Stratum Granulosum

The epidermis contains a thin layer of these cells. Keratinocytes known as granular cells migrate from the underlying stratum spinosum. These have keratohyalin granules and protein structures that aid in keratin cross-linking and hydration.

#### d. Stratum Corneum

The vast, flat, polyhedral, plate-like cells that make up the stratum corneum are packed with keratin. The vertical layers in which they are formed vary in thickness, ranging from 15 to 25 layers on the majority of body surfaces to up to 100 layers on the palms and soles. The stratum corneum's job is to create a barrier that shields the underlying tissue from injury, dehydration, chemicals, and mechanical stress.

### 2. DERMIS:

The dermis is a tough yet flexible support layer that houses cutaneous appendages, nerves, and blood vessels. Through interacting with and controlling cell processes, it maintains structural integrity and is physiologically active.

Structural components of the dermis:

1. Collagen
2. Elastic fibers
3. Extrafibrillar matrix

The thickness of the dermis varies from 1 to 4 mm. Dermal fibroblasts create ground material, collagen fibers, and elastic fibers, which make up the majority of the dermal matrix. Seventy percent of skin's dry weight is made up of collagen. Fibrous proteins called collagen and elastic fibers combine to form the robust yet flexible skeletal matrix.

### 3. SKIN APPENDAGES:

Skin appendages are structures connected to the skin that have specific purposes, such as feeling, contractility, lubrication, and heat loss. In humans, nails, sebaceous glands, arrector Pilli, and hairs are some of the most prevalent skin appendages.

The skin appendages include:

1. Eccrine Sweat Glands
2. Apocrine Sweat Glands
3. Hair Follicle
4. Sebaceous Glands
5. Nails

### 4. SUBCUTANEOUS FAT

Between the underlying fascia and the dermis is a layer of subcutaneous fat. It acts as a buffer against blunt damage, protects the body from the cold, and provides the body with a reservoir of energy.

Subcutaneous fat:

1. Insulates
2. Absorbs trauma
3. Is a reserve energy source
4. Is biologically active

## SKIN FUNCTIONS

### 1. Protective role:

The skin serves as the body's initial line of defense. It shields our body from dangerous UV rays, infections, and chemicals.

### 2. Sensory function:

The skin serves as a sensory organ, assisting in the perception of heat, cold, touch, and discomfort, which can lead to either regurgitation or voluntary movement.

### 3. Secretory function:

Sebum smoothen skin, and sweat aids in controlling body temperature.

### 4. The role of heat regulation:

Perspiration and cutaneous blood flow contribute to the regulation of body temperature.

### 5. Excretory function:

Water, salt, fatty compounds, and urea are expelled through the secretory gland.

### 6. Synthetic function:

The skin uses sunshine to produce natural vitamin D. Melanin is a pigment produced by the skin.

### 7. Water balance:

Sweating is one way that skin controls the body's water balance.

### 8. Blood supply:

It stores between 8 to 10% of the total blood.

## HERBAL BODY WASH

Body products are defined as cosmetics or chemical formulations or preparations applied to the human body for purposes of cleaning, conditioning, protecting, beautifying, or changing appearance. Body wash is a type of liquid soap meant for personal hygiene purposes.

The purpose of body wash is to:

1. Eliminate excess oil from the skin;
2. Remove filth and dust;
3. Treat conditions such as rashes, dry skin, and itchy skin.

The advantages of body wash over bar soap are as follows:

- Body wash is a liquid, which is more hygienic than soap, as soap increases the risk of bacterial growth and potential cross-contamination between people.
- Unlike soap, body wash does not cause the skin to become as dry.

## Benefits of using Body Wash-

### 1. HYDRATING:

Moisturizers like aloe vera, shea butter, and glycerin are common in body washes and can help moisturize and prevent dry skin.

### 2. CLEANING



The purpose of body washes is to efficiently eliminate perspiration, oil, and grime from your skin, leaving it feeling clean and renewed.

### 3. FRAGRANCE:

There are many different scents of body soaps that can leave your skin smelling clean and fresh.

### 4. RESTORING:

Alpha-hydroxy acids (AHAs) and beta-hydroxy acids (BHAs), which can help remove dead skin cells and enhance skin texture, are examples of the exfoliating beads or acids included in some body washes.

### 5. CONVENIENT:

Applying body washes is simple and can be done with your hands, a sponge, or a washcloth. They are also convenient to store and carry because they are available in a range of packaging options, including squeeze tubes and pump bottles.

### 5. CALM:

Compared to bar soap, which can be drying and irritating to the skin, body washes are typically kinder to the skin. Body washes are excellent for those with sensitive skin because they are made to be less abrasive on the skin.

### COFFEE-

#### Biological Name-

Coffee arabica, coffee seed, coffee bean

#### Biological source-

It is dried ripe seed of coffee arabica linn.

#### Family-

Rubiaceae.



#### Benefits of coffee on the skin-

- Slow down the process of photoaging
- Increase the blood circulation into the skin

- Anti-cellulite activity
- Antioxidant property
- Protect skin against UV radiation
- Exfoliates and removes all dirt and impurities
- Tightens skin
- Removes tan and helps diminish dullness
- Slows down signs of ageing
- Invigorates and hydrates the skin
- Brightens skin tone

### HONEY-

#### Biological Name-

Madhu, Madh, Mel

#### Biological source-

Honey is a viscid and sweet secretion stored in the honey comb by various species of bees, such as Apis mellifera, Apis dorsata, Apis florea, Apis indica and other species of Apis, belonging to family Apidae (Order: Hymenoptera).

#### Chemical constituents-

- Moisture 14–24%
- Dextrose 23–36%
- Levulose (Fructose) 30–47%
- Sucrose 0.4–6%
- Dextrin and Gums 0–7% and
- Ash 0.1–0.8%



#### Benefits of Honey-

- Honey Hydrates and Moisturizes Skin Deeply

- Honey Reduces the Indications of Early Aging
- Honey is a mild exfoliator and an efficient pore cleaner
- Honey Lightens Hyperpigmentation and Scars
- Honey Combats Breakouts and Acne
- Honey Heals Burning Skin

### GLYCERIN-

Glycerin is beneficial to the skin because it serves as a humectant, a molecule that helps the skin retain moisture. It can improve skin hydration, alleviate dryness, and freshen the skin's surface. It is also an emollient, which means it softens the skin. This is ideal for rough or dry spots caused by eczema or psoriasis. Glycerin also has antibacterial qualities, which means it may defend the skin from harmful microbes.

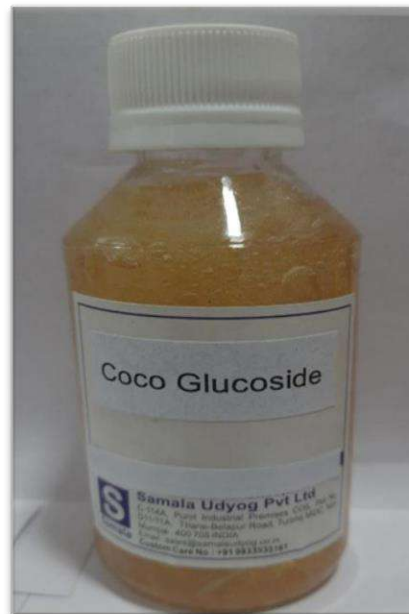
### Benefits of glycerin-

- Hydrate the outer layer of the skin
- Relieve dry skin
- Healing properties moisturizer
- Protects the skin barrier
- Exfoliates
- Anti-Aging
- Smoothens the skin
- Soothes the skin
- Improves complexion

### COCO GLUCOSIDE-

- Coco Glucoside is a non-ionic surfactant derived from coconut oil and fruit sugars, but it can also be made from potatoes or corn.
- It is an extremely delicate, foaming cleanser that is fully biodegradable.
- It has an alkaline pH (about 12) thus it is self-preserving as is, but you will most likely need

to change the final pH of products using it to get it into a range more acceptable for your skin or hair (and add a preservative).



### ROSE OIL-

- Rose oil has long been used for skin care due to its high antioxidant content.
- It is a natural citrus with astringent qualities.
- It is effective for treating stretch marks, boils, acne, and wrinkles.



### METHODOLOGY

NAME OF EXCIPIENT	USE
Coco Glucoside	Foaming agent
Coffee extract	Active ingredient
Glycerin	Smoothing agent

Honey	Hydrating agent
Rose oil	Preservative

## EVALUATION OF HERBAL BODYWASH:

### 1. Determination of clarity, color and odor –

Color and clarity were checked against a white background by naked eyes and odor was checked by smelling.

### 2. PH-

The pH of the prepared herbal bodywash was assessed by touching a pH.

### 3. Foam height –

0.5 ml sample of bodywash was dispersed in 25 ml distilled water. Then, transferred it into 100 ml measuring cylinder and the volume was made upto 50 ml with water. Twenty-five strokes were given and allowed to stand till aqueous volume. measured up to 50 ml and the foam height above the aqueous volume were measured.

### 4. Viscosity testing –

Viscosity of the formulation were tested with the help of Brookfield viscometer.

### 5. Skin irritability test –

Apply the product to a small patch of skin where a person is unlikely to accidentally wash or rub it away. Observe the redness or swelling or itching sensation on the skin.

## CONCLUSION:

The formulated soap showed considerable cleansing activity as the commercial standard and all the other parameters were good, and hence, it can be concluded that the formulated herbal bodywash must be standardized and can be used as a promising alternative to commercial chemical bodywashes.

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