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Elessy Abraham Nazareth College of Pharmacy, Othera P.O, Thiruvalla, India Hair is an accoutrement, hair is jewelry, it's an accessory- Realize "The killing effects of shampoo"

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#### Abstract

Shampooing is the most common form of hair treatment. Shampoos have primarily been products aimed at cleansing the hair and scalp. The diversity of qualities demanded from a good shampoo by today's consumer go far beyond this general function. A cosmetic benefit is expected, and the shampoo formulation has to be tailored to all the possible variations associated with hair quality, age (baby shampoo), care habit (frequency of shampooing) and specific problems relating to the superficial condition of the scalp (dandruff, seborrhea). Regular shampoo can wreak havoc on not only our hair but also our bodies. Because it contains harmful and synthetic chemicals that are absorbed through the skins pores we are putting ourselves at risk by directly applying carcinogenic chemicals into the scalp. By doing this on a regular basis we are basically inviting these dangerous ingredients in to damage our system and potentially putting ourselves at risk of cancer and disease. Ingredients typically contained in regular shampoos have been proven to reduce the size of hair follicles, irritate and disrupt oil glands, dry out the scalp, which ultimately can result in hair loss. The herbal drugs are good for hair because they moisturize, clean, adds shine, and it also gives volume and texture to the hair.

Keywords: Shampoo, diseases, ingredients, herbal drugs

#### Introduction

Shampoos are cleaning formulations used for a wide range of applications, including personal care, pet use, and carpets. Most are manufactured in roughly the same manner. They are composed primarily of chemicals called surfactants that have the special ability to surround oily materials on surfaces and allow them to be rinsed away by water. Most commonly, shampoos are used for personal care, especially for washing the hair.

A shampoo is technically designed to clean the scalp of sebum and prevent the development of folliculate and seborrhea dermatitis. Shampoos are intended to rid the hair of sebum, sweat components, desquamated stratum cornea, styling products, and environmental dirt. The idea of beautifying the hair is really a secondary concern that is primarily addressed by Beautifying the hair is really quite a complex task. The average woman possesses four to eight square meters of hair surface area to clean. Bar soap was used to clean the hair until the mid 1930s, when liquid coconut oils became available, which allowed the formulation of a liquid soap that lathered and rinsed better than a bar soap. At present, bar soaps are not recommended for hair cleansing because they leave behind a soap scum when mixed with hard water that is difficult to rinse from the hair and scalp. This may be one of the aggravating factors for seborrhea dermatitis in some older men who use a bar soap to clean the scalp. Thus, there really is a need for well-formulated shampoos that both clean and beautify the hair a conditioner.

#### History

In India, a variety of herbs and their extracts were used as shampoos since ancient times. A very effective early shampoo was made by boiling Sapindus with dried Indian gooseberry (amla) and a few other herbs, using the strained extract. Sapindus, also known as soapberries or soapnut, is called *Ksuna* and its fruit pulp contains saponins which is a natural surfactant and the extract of soapberries may creates lather may called *phenaka* and it leaves the hair soft, shiny and manageable.

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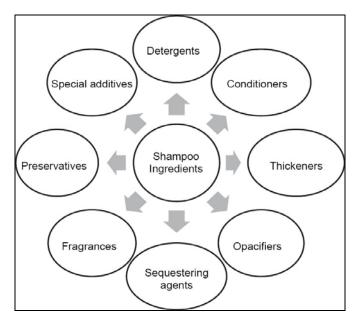
Other products used for hair cleansing were shikakai (Acacia concinna), soapnuts (Sapindus), hibiscus flowers, ritha (Sapindus mukorossi) and arappu (Albizzia amara).Guru Nanak, the founding prophet and the first Guru of Sikhism, made references to soapberry tree and soap in 16th century. Cleansing with hair and body massage (champu) during daily strip wash was an indulgence of early colonial traders in India. When they returned to Europe, they introduced the newly learnt habits; including hair treatment they called shampoo.

Shampoo originally meant head massage in several North Indian languages. Both the word and the concept were introduced to Britain from colonial India. The word *shampoo* in English is derived from Hindi *chāmpo* and were used for the head massage, usually with some form of hair oil. The term and service was introduced in Britain by a Bengali entrepreneur Sake Dean Mohamed in 1814, when Dean, together with his Irish wife, opened a shampooing bath known as 'Mohamed's Indian Vapor Baths' in Brighton, England. His baths were like Turkish baths where clients

received an Indian treatment of champi (shampooing) or therapeutic massage. His service was appreciated; he received the high accolade of being appointed 'Shampooing Surgeon' to both George IV and William IV.In the 1900s, the meaning of the word shifted from the sense of massage to that of applying soap to the hair. Earlier, regular soap had been used for washing hair. However, the dull film soap left on the hair made it uncomfortable, irritating, and unhealthy looking.

During the early stages of shampoo, English hair stylists boiled shaved soap in water and added herbs to give the hair shine and fragrance. Kasey Hebert was the first known maker of shampoo, and the origin is currently attributed to him. Originally, soap and shampoo were very similar products; both containing surfactants, a type of detergent. Modern shampoo as it is known today was first introduced in the 1930s with *Drene*, the first synthetic (non-soap) shampoo. In India, the traditional hair massage is still common.

#### **Ingredients of Chemical Shampoo**



*	Detergents ;	Functions to remove environment dirt, styling products, sebum, and skin scales from the hair and scalp
*	Foaming agent;	This agent allows the shampoo to form suds, as consumers equate cleansing with foaming even though the
		two are unrelated
*	Conditioners ;	Leave the hair soft and smooth after sebum removal by the detergent
*	Thickeners ;	Thicken the shampoo, as consumers feel that a thick shampoo works better than a thin shampoo
*	Opacifiers ;	Added to make a shampoo opaque as opposed to translucent for aesthetic purposes, unrelated to cleansing
*	Sequestering agents;	Functions to prevent soap scum from forming on the hair and scalp in the presence of hard water; The basic
		difference between a liquid shampoo and a bar cleanser
*	Fragrance ;	Added to give the shampoo a consumer-acceptable smell
*	Preservatives ;	Prevent microbial and fungal contamination of the shampoo before and after opening
*	Specialty additives;	Treatment ingredients or marketing aids added to impart other benefits to the shampoo, besides hair and
		scalp cleansing

#### Diseases Associated With Chemical Shampoo

**1. Cancer:** Shampoo contains Diethanolamine (DEA), a wetting agent, and nitrite, a preservative used in shampoos. These two chemicals react forming Nitrosamines – a cancer causing compound. Also, parabens, a preservative used in shampoos, can cause breast cancer as well.

**2. Kidney and Liver Problem:** Diethanolamine (DEA) or Triethanolamine (TEA) can cause potential damage to your liver and kidneys, if used frequently.

**3. Hair and Scalp Problem:** The dangerous ingredient in shampoo, SLS, causes damage to hair follicles and cause hair loss. SLS, foaming agent in shampoo has protein denaturing properties causes' inflammation and skin irritation with many other scalp problems.

**4. Eye Problem:** The toxic ingredients such as SLS or SLES can cause cataract in adults if it overuse. More shockingly, everyday shampooing in kids can hamper the proper development of their eyes. Another chemical, Formaldehyde used in shampoos cause burning sensation.

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**5. Asthma:** Some ingredients in shampoo such as DMDM hydantoin, diazolidinyl urea, imidazolidinyl urea, quaternium-15 and bronopol contains a chemical called formaldehyde, a sensitiser. Asthma, chest pain and shortness of breath are some major harmful effects.

**6. Skin Problem:** Daily shampooing decreases the natural production of oils of the skin, thus causing various skin irritations. Frequent exposure to shampoo can cause rashes, skin inflammation, itching, redness and eczema because of the various harsh chemicals present.

**7. Immune System:** The toxic ingredients packed in shampoo can pose a threat to the entire immune system, if used repeatedly. Mainly, the ingredients like SLS and SLES found in 95% of shampoos causes a major risk to immune system rather acting as a good hair ingredient.

## **The Herbal Drugs**

Natural herbal rinses are gentle and nourishing for the scalp. They rely upon botanicals, to promote healthy hair and scalp, rather than the synthetic ingredients and chemicals that can damage hair and cause build-up.

Herbal infusions have been used for centuries to naturally soften hair, increase manageability, and restore luster, body and bounce.

Herbal hair rinses can provide a deep cleansing, lighten, darken or enrich your natural hair color, soothe irritation, prevent dandruff or stimulate the scalp to increase growth.

## 1. Aloe Vera

Enzymes in aloe vera dissolve dead skin cells and excess sebum which can clog hair follicles. Aloe contains salicylic acid, an anti-inflammatory and mild anti-biotic. Aloe gel is also an excellent moisturizer with a molecular structure similar to keratin, the prominent protein that makes up skin and hair. For this reason, aloe vera is one of the best carriers for other herbal remedies that promote hair growth.



#### 2. Amla

Amla, the Indian Gooseberry contains several anti-oxidants including vitamin C which is necessary for collagen production. Elevated collagen levels accelerate production and increase strength of new hair growth.



#### 3. Basil

Basil is rich in magnesium, an often overlooked mineral that is essential for hundreds of chemical processes within the human body. When applied to hair and scalp as herbal rinse basil acts as an anti-inflammatory, strengthens hair against breakage, and improves circulation in the hair follicles which helps to stimulate growth.



## 4. Bhringraj

Also commonly known as maka, *Eclipta alba* or bhringrajis an ancient Ayurvetic herb considered to be one of the most helpful natural means for encouraging hair growth.



## 5. Burdock Root

The root of the Burdock plant has many traditional medicinal uses including as an anti-inflammatory and scalp treatment. Rich in fatty-acids, burdock root oil can be used by itself or combined with other herbs such as rosemary to promote scalp health and encourage stronger hair growth.



## 6. Calendula

The flowers of *Calendula officinalis*, also known as marigolds are rich in minerals and anti-oxidants. Calendula oil applied to the scalp promotes growth of stronger hair by increasing collagen production and circulation in hair follicles. Use calendula alone or in combination with another moisturizing



#### 7. Shikakai

Acacia concinna, a shrub native to the warm plains of Asia has been used for thousands of years as an herbal hair cleanser. Dried shikakai fruit may be ground into powder or steeped in warm water to make a healing cleanser. Rinse hair or massage shikakai paste into hair and scalp to promote growth, strengthen roots, and improve scalp health.



## 8. Ginger Root

Ginger root oil increases circulation in hair follicles, promoting stronger and faster growth. Ginger root is also an anti-septic and moisturizer, making it excellent for clearing up dandruff and other skin conditions which may interfere with healthy hair growth.



## 9. Gotu Kola

Also sometimes called brahmi, *Centella asiatica* or gotu kola has been traditionally used for thousands of years to treat many internal and external maladies, many of which are associated with the crown chakra. Mix gotu kola extract with olive oil and massage into the scalp to improve circulation and promote stronger hair growth.



## 10. Hibiscus

Hibiscus flowers contain vitamins and anti-oxidants that improve scalp and hair health. Add fresh blossoms to coconut oil and grind into a fine paste. When applied to scalp and hair regularly, this mixture increases hair growth while at the same time warding off premature greying and dandruff. For best results, allow mixture to soak into scalp and hair for at least two hours.



#### 11. Hops

The flowers of the hops plant, *Humulus lupus* contain nourishing oil that is widely recognized as a hair growth stimulant as well as for its ability to thicken and strengthen existing hair. Furthermore, hops flower oil is a natural antiseptic which can help to combat infections of the scalp and hair follicles that may stunt healthy growth.



## 12. Lavender

The oil of *Lavandula augustifolia* is a powerful antiinflammatory, anti-microbial, and anti-septic. Lavender oil stimulates circulation in the scalp, strengthens new hair growth, and helps to balance the natural oil production of the scalp, making it a popular choice for people of all skin types.



#### Advantage of Herbal Drugs over Chemical Shampoos

Natural shampoos contain beneficial natural plant and herb extracts which provide a number of positive results for the hair and scalp. You can enjoy these natural benefits and maintain healthy hair without having to put your body at risk by exposing it to harmful chemicals. Benefits of using natural shampoos are outline below;

- Promotes new hair growth by naturally stimulating the hair follicles
- Infuses natural oils, minerals, and herbal extracts into hair follicles to maintain moisture and improving the overall condition
- Because it contains all natural ingredients it is a nonallergenic product which makes it suitable for all skin types including sensitive and allergy prone skin
- Natural shampoos feature a more natural and mild aroma
- Natural shampoos are environmentally friendly as they contain bio-degradable materials rather than harsh chemicals

## Absorption of Shampoo Toxins through Skin

By the application of shampoo or conditioner onto the scalp, the 20 blood vessels, 650 sweat glands, and 1,000 nerve endings soak in the toxins. The truth is, while if it is never *eat* the shampoo, it may actually absorb fewer toxins when you eat something than do when they apply it to your skin.

According to evidence presented at 1978 Congressional hearings, the absorption of the carcinogen nitrosodiethanolamine (NDELA), which is commonly found in shampoo products, was shown to be more than 100 times greater when exposure came through your skin than via your mouth.

The truth is when consume toxins in foods, such as pesticides in fruit and vegetables, the enzymes in the saliva and stomach often break them down and flushes them out of the body. Food also passes through the liver and kidneys, so the toxins that make it through are detoxified to varying degrees by enzymes before they reach the remainder of the body. However, when toxins are absorbed through the skin, they bypass the liver and enter into the bloodstream and tissues with absolutely no protection. Journal of Medicinal Plants Studies

## Conclusion

Natural shampoos and conditioners have come a long way from the runny, earthy-smelling, tough-to-rinse-out substances that they used to be. Formulators have found innovative ways to use plant-derived ingredients in place of formaldehyde-emitting preservatives, harsh sulfates, endocrine-disrupting phthalates, and other potentially dangerous chemicals. Regular shampoo can wreak havoc on not only our hair but also our bodies. Because it contains harmful and synthetic chemicals that are absorbed through the skins pores we are putting ourselves at risk by directly applying carcinogenic chemicals into the scalp. By doing this on a regular basis we are basically inviting these dangerous ingredients in to damage our system and potentially putting ourselves at risk of cancer and disease. Ingredients typically contained in regular shampoos have been proven to reduce the size of hair follicles, irritate and disrupt oil glands, dry out the scalp, which ultimately can result in hair loss. Natural shampoos contain beneficial natural plant and herb extracts which provide a number of positive results for the hair and scalp. You can enjoy these natural benefits and maintain healthy hair without having to put your body at risk by exposing it to harmful chemicals.

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