



To Study Effectiveness of Hair Serum in Terms of Moisturizer & Nourishment Property

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ABSTRACT :

In day to day life Mankind uses various products to boost beauty And elegance to seem young and charming. Now a days, herbal cosmetic are widely used thanks to the idea That they need fewer side effects for extended period of time & better safety products{12} This invention concerns nutritive and restorative hair care probiotic bacteria and other ingredients found in yogurt. Yogurt have emolient properties that contribute healthy and attractive hair compositions are designed to Soften, moisturize, condition, Straighten, Strengthen and repair hair to promoting a healthy Scalp. {7} Honey treats acne on the skin due to its Anti-inflammatory action and Antibacterial activity, tissue repair. The hair can Benefit of honey in a way that the hair has abundance, and becomes easier to comb.{2} Aloe Vera has significant potential for targeted, safe, efficacious therapy and can control bacterial attacks on the scalp. Skin-protective and wound-healing responses{3}. Vitamin E is acts as beauty vitamin , also a fat soluble that is insoluble in water. It is a least toxic component. , also acts as a antioxidants , It is also known as antisterility{5}. Rose extract used for aroma purpose {6}. It acts a perfuming agent.

KEY WORD : Hair serum, honey, humectant , casein & whey protein, Rose extract

INTRODUCTION :

There are many Cases of hair loss are being reported very frequently. A random survey that more than 60% of the population world wide is suffering from hair loss. It is very challenging for researchers to come up with safe treatment options. For its treatment, penetration of therapeutic molecules into the bulge region of the hair follicle is required to potentiate cell proliferation. particles have nanosized are important in hair follicle to target because they can penetrate hair follicles where larger globules cannot{1}. There have been pervious studies confirm that role of Aloe Vera in promoting hair growth and preventing hair loss{3}, then yogurt have restorative property{ & honey have moisturizer as well anti-inflammatory effects. It was konwn and used by human since very long time ago honey is part of diet also however we do not know there was any other uses of honey in term of medicinal purpose in decade 2002 the painting had flower like patterns parallel wavy line and winged insects these patterns introduced as life cycle of bee in honeycomb (crane 2013) use of honey that time as sweetner to treats wounds to use wax for paintings cosmetics it was also believed to be food of goods and goddessess that contribute their life of immortal (2009) {2}.

HONEY : Honey is the saccharine liquid prepared from the nectar of The flowers by the hive-bee Apis mellifica and bees of other Species of Apis.



Fig . Honey

Family Apidae.

Honey is a humectant used as thickening agent , also used as moisturizer.

FORMATION OF HONEY :

Honey is made by bees in beehive each beehive consists of one queen 500-1000 drones & 30,000-60,000 workers queen is the only female is sexually developed in hive main role of queen is to lay down

eggs after mating with drones . drones are sexually males that lack stings during mating queen receives millions of sperms the normal life span of queen about 3-4 year on other hand drones die quickly after mating then worker bees are sexually females they do all jobs in hive such as collecting nector caring of larvae making wax comb {2}.

STEPS :

- They collect nector from flower
- Then they the nector many times until it is partially digested and reaches certain level of quality
- Next nector will be stored in honeycomb & left unsealed for drying as row honey
- Then worker bees used their wings for evaporation of water honeycomb is sealed with wax in order to preserve honey the honey has long shelf & will not ferment if properly sealed {2}.

YOGURT :

yogurt contain ingredients that are beneficial to human health and well being it has been integral and nourishing. dietary it is particularly beneficial to healthy digestive tract it created by milk and yogurt both have emolient properties that contribute healthy and attractive hair



Fig. Yogurt

FORMATION OF YOGURT :

yogurt is created from milk using heat fermentation process yogurt is in more concertrated & thick form of milk. there are two proteins which are exist in yogurt are responsible for its benefits to hair are casein and whey .

casein is presented in lit as by product of fermentation by lactic acid casein has structural similarities with fibrinogen as fact is both are proteins with different physiological functions fibrinogen produce



molecular aggregation and the formation of protecting coating over damage cells it is fibrous proteins which is strongly tough and insoluble in water casein is globular proteins which has spherical shape alpha keratin casein present in yogurt produce the effect that formation of covalent effect that formation of covalent bond as it is responsible for healing and restorative process casein having PH 6-7 in milk which reduces to less than 5 in yogurt another one important protein found in yogurt and milk is whey it is rich in certain amino acids and low in fat whey proteins is composed of alpha - lactalbumin serum albumin immunoglobulin is the BLG beta lactoglobulin is the dominant. {13}

Vitamin E :

Property- Vitamin E is acts as antioxidant , also a fat soluble which is insoluble in water. It is a least toxic component. It is also known as antisterility , also used as a beauty vitamin. {5}



Fig . Vitamin E

Dietary sources – there are many sources of vitamin E as follows:

- Eggs
- Milk
- Almonds
- Spinach & other green leafy vegetables {5}

Metabolism –

- Absorbed in cell membrane
- Distributed to peripheral tissue.
- Cell membrane.
- Liver.
- Transported in very low density lipoprotein (VLDL)[cholesterol].
- Stored in adipose tissue{5}

Biochemical function –

It inhibits conversion of nitrites to nitrosamines in stomach which promotes cancer.

It closely associates with reproductive function as it preserves gonads for proper reproduction cause it's shows antisterile property.

Aloevera –

AloeVera is natural products are to have fewer side effects.

It is a xerophytic plant{3}

The aloe Vera plant has been known a used for the centuries for its health, beauty, medicinaland Skin care properties.

name of aloe Vera derives from the Arabic word.“Alloeh” meaning shining better substances While “Vera” in Latin

Aloe Vera is a popular medicinal plant with antioxidant and antibacterial properties.



Fig. Aloevera

Synonym:- Aloe barbadensis Mill. Aloe barbadensis var.

biological source:- Aloes is obtained from the dried juice of the leaves of aloe barbadensis miller.

Family:- Liliaceae

Chemical constituents: Barbadian, Aloin, Isobarbaloin, aloe-emodin, and aloesone, Aloinoside A&B, resins.

Uses:-

- Anti-inflammatory.
- Healing wound.
- Treats stretch mark aging.
- Treats dry skin.

Aloevera acts as an antioxidant, anti-inflammatory , antiviral, antimicrobial, antidiabetic, anticancerous, and skin-protective and wound-healing responses{10}.

Rose extract – it is used for fragrance purpose only.

Rose Extract

Author: Samira



Fig : Diagrammatic representation of preparation of rose extract .



How To Store:

This pure rose extract can be stored at room temperature, in a dark cupboard. This method will work for mint extract too. You need to keep the jar in a dark place for 1-2 months before the mint extract is ready. {6}

METHOD OF PREPARATION :

DIY Hair Serum

You Need:

- 2 tbsp. aloe Vera gel
- 2 tbsp. rose water
- 2 capsules Vitamin E

Directions:

To prepare this Hair serum, take a bowl and add Aloe vera gel and rose water to it. If you have an aloe Vera plant at your home, scrape out some gel by using a spoon. If you don't then you can use aloe Vera gel available at store. {8}

You can also prepare rose water at home using fresh rose petals. {8}

Ingredients for Rose essence

- .3 cups Organic Edible Rose Petals
- 2 cups vodka

How To Make Rose Extract :

- Wash the rose petals carefully to get off any dirt. Then dry well.
- Place the petals in a large sterilized glass jar and then pour the vodka over the petals, making sure to completely cover them in the liquid. Then close the jar and store in a dark, cool location, such as a cupboard, for 2-3 days.
- During this time, the smell, flavour, and even colour will leech from the petals into the vodka.
- Sieve the rose vodka mixture to remove the petals and then decant it into sterilized glass jars or even dropper bottles. {6}

Next, add 2 capsules of vitamin E to the bowl {8} Mix 2 tablespoons of plain yogurt with 1 tablespoon of honey. Your hair serum is ready. Take a dropper bottle {8} Apply the mixture to your hair, focusing on the ends. Leave it on for 20-30 minutes and then rinse it out thoroughly. Honey and yogurt both have moisturizing properties that can help soften and nourish your hair Mix all the ingredients well {9}.

FEATURES OF HAIR SERUM :

1. boosts smoothness
2. promotes shine
3. reduces tangles

Table :

Ingredients	Role of ingredients
Yogurt	Nourishment
Honey	Moisturizer
Aloe vera	Conditioner
Rose extract	Perfume
Vitamin E	For hair growth

Discussion:

In above article we have discussed about the healthy & safe hair serum as we have used ingredients yogurt, honey, aloe vera, vitamin e, rose extract they gives following benefits for healthy hair. we had discussed formation of honey, method of preparation. Overall Healthy hair is characterized as being pigmented soft, smooth, flexible, glossy and strong strength of hair depends on cuticles hair damages can easily happens due to lac of care environment factors such as excession UV exposure. studies have been proven that shampoos and conditioners containing honey gives beneficial effect like penetrate deep and gives flexibility and elasticity.

Conclusion:

This hair serum is shown the good appearance of hair of person. In this hair serum various ingredients are used such as yogurt, honey, vitamin E, aloe vera, rose extract. It also shown that this hair serum provides essential nutrients needed to support the growth of natural hairs it acts as a moisturizer as well *honey* is also has antiinflamatory effects. Studies done have proven that shampoos and conditioners containing honey gives beneficial effect as penetrate

deep and gives flexibility and elasticity. Yogurt shown restorative properties. *Vitamin E* acts as antioxidants as it can repair tissue. *Aloevera* acts as anti-inflammatory, antimicrobial, antiviral, antidiabetic, anticancer, and skin-protective and wound-healing responses. *Rose extract* acts as fragrance

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