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## Research Article

# Formulation and Evaluation of Multipurpose Herbal Face Pack from Cowdung

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## ABSTRACT

The main purpose of this work is to formulate and evaluate a cosmetic herbal face pack for having the glowing skin by using Panchgavyas. It mainly contains cow dung, curd, milk, ghee etc. It is a formulation containing various useful natural ingredients like sandalwood, black soil, ash, etc. All the ingredients were evaluated by different parameters like organoleptic properties, stability, irritancy test and microbial test. Panchgavyas are considered as amrita for better health of humans. It enhances the skin's resistance to fight against any disease or infection.

## INTRODUCTION

The products which are commercially available to use for beautifying and improving the skin are the cosmetics. Traditionally different herbs are used for cleaning, beautifying and to manage the skin. Here we using the Cowdung with *panchgavyas* for maintaining health of the skin. Face skin is very important to the individual because it represents him. It's important to take care of it. Balanced nutrition is necessary for skin to become glossy, flawless, and attractive. It is basically smooth powder which is used to apply on face. *Panchgavya* represents five major substances,

obtained from cow, such as cow's urine, milk, ghee, curd and dung. All of these five products possess medicinal properties and are used for the medicinal purpose singly or in combination with some other herbs.



Milk

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Cow's urine



Cowdung



Ghee



Curd

Fig.1 Components in Panchgavya

## APPLICATION/USES

- It helps to reduce acne on skin.
- Prevention of wrinkles and skin aging.
- Improves blood circulation of skin.

- Provides hydration and comfort to the dry and dull skin.
- Exfoliating the dead skin .
- Improves the skin tone and texture.

## MATERIALS AND METHODS

In this formulation we are using all the natural products, like cowdung, panchgavyas, black soil, sandalwood, ash, lemongrass are in a form of dried powder. The details of the material used for the formulation of face pack are mentioned below :-

1. **Cowdung** :- Cowdung is a commonly available component. It is useful in various traditional skincare remedies. It has different properties such as antibacterial, antifungal, antiseptic, etc. In various cultures cowdung is mixed with other natural ingredient to apply on face. It can cleanse and rejuvenate the skin.
2. **Cow's urine ( Gomutra )** :- Cow urine was traditionally used in natural beauty practices. It reduces acne, removes dark circles, pimples and black spots. It removes dead skin cells and promotes smoother skin. It gives long lasting beauty and glowing skin.
3. **Milk** :- Milk is an excellent natural moisturizer and helps to hydrate and soften the skin. It also gives relief to sunburn and gives even skin texture. Lactic acid in milk helps to exfoliate the skin.
4. **Ghee** :- It is rich in fatty acids and vitamins. It heals dry cracked skin and gives even skin texture. It contains antioxidants which reduce fine lines and promotes glowing skin.
5. **Curd** :- Curd is beneficial for skin due to the probiotic contents. It hydrates and provide nourishment to the skin. Regular use of curd may lightens the dark skin. Also reduces inflammation and redness on skin when topically applied.
6. **Black soil** :- Black soil draws out impurities and toxins from the skin and reduce

appearance of blemishes. When it is used regularly helps to tighten the pores. It may help inhibit some types of acne-causing bacteria. It produces a soothing effect on irritating skin and reduces redness.

7. **Ash:-** Ash can be used as a natural scrub on face. It contains alkaline properties which help to cleanse the skin. It removes the excess oil and impurities. It has astringent properties. It helps to reduce acne and prevents breakouts.
8. **Sandalwood:-** Sandalwood has antiseptic properties and also helps to treat acne breakouts and blackheads. It produces calming effects on skin. It has a strong aroma. It has natural anti-inflammatory and antimicrobial effects.
9. **Lemon grass:-** It is rich in antioxidants and protects the skin from free radical damage. The aroma of the lemon grass is calming and relieves the stress.

## METHODS OF PREPARATION

1. Collect and authenticate all the ingredients.
2. Take all ingredients and weigh them in accurate quantities and ground the dry components into fine powder by using sieve.
3. Mix all the ingredients by serial dilution method with uniform mixing.
4. To remove the moisture put it in hot air oven for 10-15 mins.
5. Again pass it through the sieve and then pack the face pack into polyethylene bag, labeled and used for further studies.

## PROCEDURE OF FACE PACK APPLICATION

1. Take prepared face pack powder in a bowl as much you need and add rose water or normal cold water to mix.

2. Mix it well and apply on the whole face. Keep it till it dries for 20 to 25 minutes and then wash with cold water.

**Table no. :- Formula for 50gm.**

| Sr. No. | Ingredients | Quantity |
|---------|-------------|----------|
| 1.      | Cow dung    | 9        |
| 2.      | Cow urine   | 5        |
| 3.      | Milk        | 5        |
| 4.      | Ghee        | 3        |
| 5.      | Curd        | 3        |
| 6.      | Black soil  | 10       |
| 7.      | Ash         | 8        |
| 8.      | Sandalwood  | 5        |
| 9.      | Lemon grass | 2        |

## METHODS OF EVALUATION

### Organoleptic Evaluation

The organoleptic parameters contain nature, color, odor, feel and consistency which were evaluated manually for its physical properties.

### Physical Evaluation

The flow properties of face pack are evaluated by performing angle of repose by funnel method, bulk density and tapped density by tapping method.

### Irritancy test

Mark an area (1sq.cm) on the left-hand dorsal surface. Definite quantities of prepared face pack is applied on the marked area and time was noted. Irritancy, erythema, edema, was checked if any for regular intervals up to 24 hrs and reported.

### Determination of Microbial Load

The prepared formulation is evaluated for Total Viable Count and presence of gram-negative bacteria.

### Washability



Facepack was evaluated for its ability to get washed off. Face pack was applied on the skin and then ease and extent of washing with normal tap water were checked manually.

### Accelerated Stability test

Store the sample at elevated temperatures and humidity levels to predict shelf life and store at recommended conditions and test at schedule intervals.

### RESULT

Following are the results of evaluation parameters of the facepack

**Table 3: evaluation parameters**

| Sr. No. | Evaluation Parameters | Observations                    |
|---------|-----------------------|---------------------------------|
| 1.      | Appearance            | Fine powder and free flowing    |
| 2.      | Colour                | Brownish Black                  |
| 3.      | Texture               | Fine                            |
| 4.      | Odour                 | Aromatic                        |
| 5.      | Smoothness            | Smooth                          |
| 6.      | Irritancy             | No sign of edema and irrigation |
| 7.      | Washability           | Easy to wash                    |
| 8.      | pH                    | 6-7.5                           |

### DISCUSSION

The results of various evaluation properties of prepared facepack shows that it is fine and smooth in texture. Irritancy test indicates that it does not cause any irritation, edema, redness, rashes, swelling. Also pH is 6-7.5 which indicates that the facepack is totally suitable for application on skin. It can be easily washed without any stains on skin.

### MARKETED EXAMPLES

Mama Earth, Himalaya, Miniso, Indus valley, Momo's, McCaffee, plum, Dot & key, minimalist, etc.

### RECENT ADVANCES/CURRENT TRENDS

Nowadays there are so many advances in facepack due to developing technology. Usually we used to make the facepack at home and use it. Now there are so many types of it. Also currently there is a trend of sheet masks for face. People now believe in foreign products more than our own home remedies. People are following the Korean beauty care but forgetting about our own ancient formulations.

### CONCLUSION

Nowadays, people want a solution of various skin problems but also don't want to use so much chemical on their skin. Herbal ingredients are helpful to form the products that have no or less side effects. It is required to formulate the facepack by using herbal ingredients which are easily available like black soil, sandalwood, lemongrass, ash, *Panchagavyas*. Also the systemic study on chemical nature, biological activity, microbiology and pharmaceutical aspects and Mechanism of bioactive compounds in *Panchagavya* is required to understand its importance in treating.

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