

Formulation and Evaluation of Herbal Onion Scrub

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Abstract: Nowadays cosmetic have become an important part in the day to day life for both men and women to lead a happy and confident life. To remain healthy and of good appearance, the skin surface requires frequent cleaning to remove grime, sebum and other secretion, dead cells, crusts and applied make-ups. Keeping in the mind that the cosmetic should be free from synthetic chemical, so we came on conclusion to prepare and evaluate a herbal scrub to prevent acne, tanning, wrinkles. This facial scrub contains herb which shows antioxidants, antiseptic, skin brightener and reducing inflammation properties. In the present work we have formulated the herbal scrub by using a different herbal powder such as turmeric, aloe vera, gram flour etc and onion juice. The scrub was evaluated by using the parameters like appearance, smoothness and effect on acne, effect on white and black heads, spreadability, irritations. The scrub shows excellent effect on oily skin, and satisfactory effect on normal and dry skin. All the ingredients so the chances for its side effects are less. The concept of beauty and cosmetics date back to ancient mankind and civilization generally herbal cosmetics are also referred to as natural cosmetics. Herbal cosmetics are formulated. Using different cosmetic ingredients to form the base in which one or more herbal ingredients are used to cure various skin ailments. Plants are highly used for development of new drug products for cosmeceuticals and pharmaceuticals application. Herbal cosmetics are the products in which herbs are used in crude or extract form. Compared to other beauty products natural cosmetics are safe to use they are hypoallergenic and tested and proven by dermatologist to be safe to use anytime anywhere. Since they are made of natural ingredients people don't have to worry about getting skin rashes or experience skinitchiness the aim of this research work is to formulate and evaluate herbal scrub by using various herbal ingredients in this study herbal scrub is formulated using onion juice, turmeric powder, aloe vera, gram flour, multani mitti, khushkhus, guargum, and rose oil.

Keywords: Onion juice, turmeric powder, aloe vera, gram flour, multani mitti, khushkhus, guargum and rose oil

I. INTRODUCTION

The body's largest organ is the skin. It acts as a key organ of protection for other body parts. The skin serves as a barrier to protect the inside from external dangers like the corrosive effect of the sun, wind, and pollution as well as dirt and germs that are present in daily air. The health of a person can also be determined by their skin, another sensory organ. It is made up of substances like amino acid, lipids, and carbohydrates, among other, thus skin needs a balanced diet to be shiny, clear, and healthy.

Cosmetics are defined as the products used for the purpose of use to beautify, cleansing, promoting, attractiveness or alternating the appearance. Cosmetics come in variety of forms and are used worldwide to enhance beauty. For the purpose of enhancing skin conditions are developed such as skin protection, sunscreen, anti-acne and anti-wrinkle products. Some people have natural beauty, while others have it artificially enhanced.

A facial scrub is a cosmetic or a beauty product used to exfoliate and clean the skin on the face and body. Blackheads, whiteheads, sebum and skin cells can all be removed with the help of facial scrub. It also supports keeping skin looking good.

To remain healthy and of good appearance, the skin surface requires frequent cleaning to remove grime, sebum and other secretion, dead cells, crusts and applied make-ups. Prepare and evaluate a herbal scrub to prevent acne, tanning,



wrinkles. this facial scrub content herb which shows antioxidants antiseptic, skin brightener and reducing inflammation properties.

The scrub shows

Excellent effect on oily skin skin, and satisfactory effect of normal and dry skin.

- The use of cosmetic and herbal products has substantially explained in the current climate. Despite the enormous health benefits of synthetic substances, which one more cause environmental destruction, demand for herbal items and cosmetic is rising daily
- Skin care products play a significant role in boosting people's confidence. Although it was always believed that women were the main consumers of skin care products, today's male are just a concerned with how they look products that are used to cleanse and enhance the skin are known as herbal cosmetics.
- Men have rough skin, and when they don't take proper care, the skin darkens from excessive sun exposure.
- The main benefits of using a herbal cosmetics is that it is pure and has no negative side effects on the human body. The name itself indicates that herbal cosmetics are natural and they do not contain any chemicals

The demand for herbal cosmetics is high Nowadays due to its ability to act as cosmetics And drugs. Skin care products are important factor To improve the confidence in individuals. Women Are the larger consumer of skin care products but in The present scenario men are equally concern about Their look. This concept about the beauty, look and Attractiveness leads to the boom in this field. The Cosmeceutical companies produce their product Based on the skin texture like men require special Type of products due to the roughness of their skin Than women. Cosmetics are used universally to Enhance beauty and are available in different forms. Various types of skin products are formulated like Skin protective, sunscreen, anti-acne, anti-wrinkle For beautifying skin. From ancient era people use Herbs for cleansing, beautifying, acne, blackheads, Pimples, and dark circles. According to Ayurveda, Impurities present in blood are major cause of skin Problems. Skin becomes dull, non-glowing due to Various causes and these can effectively be Overcome with the application of scrubs. There are Two types of scrub being used on the skin such as Facial scrub and body scrub. These two are differ Only with the ratios of oil and sugar added in each. Use of oil is high in facial scrub due to which it is Less abrasive. It removes the dead skin cell and Exfoliates the skin. Face scrubs exfoliates and Stimulate blood circulation and promotes skin glow By removing dead skin cells and adherent cells in The stratum corneum. Scrub cleanses the skin, Removes dirt, remove oil from pores, maintain the Elasticity and accelerates the renewal of skin cells. Herbal Cosmetics, here referred as Items, Are formulated, using different permissible Cosmetic ingredients to form the base in which one Or more herbal ingredients are utilized to supply Characterized corrective preferences as it were, Might be called as "Herbal Cosmetics" Starting 1990's cosmetic manufacturer update a term 'cosmeceuticals' to describe the OTC skin care Items that claims therapeutic advantage by addition Of plant based active ingredient such as alpha-Hydroxy acid, retinoic acid, ascorbic acid and Coenzyme These active ingredients serves Numerous purposes viz. increase in skin flexibility, Delay in skin aging by decreasing the wrinkles, Protection against UV radiation by antioxidant property and to check degradation of collagen respectively. The word cosmetic was obtained from the Greek word "kosm tikos" meaning having the power, order, and ability in decorating. The birth of beauty care products forms a continuous narrative throughout the history of man as they created. The man in old times 3000BC used colours for the enrichment to charm the creatures that he wished to chase additionally the man survived assault from the equal by colouring his skin and embellished his body for assurance to incite fear in an enemy (whether man or animal). Onions give flawless skin owing to their rich nutrition profile. It is rich in vitamins such as A, C and E. It also contains antioxidants and minerals to keep skin woes at a bay. SKIN DETOX when applied to the skin, onion scrub remove toxins and gives purified and bright skin. Here are some onion scrubs are available in market

Literature Review

J. Prathyusha, N.S. yamani (2019) cosmetic play a vital role for everyone to have a joyful and sanguine life. in present scenario herbal cosmeceuticals have more demand because they have no side effects. People having oily skin suffer from acne, whitehead and blackheads quite often so scrubbing become more essential. in our present study we formulated 3 different formulations F1, F2, F3, in gel for oily skin by using turmeric, aloe vera, cinnamon, potato starch, activated charcoal powder, honey, green tea, lemon juice, onion, walnut shell, coconut oil, beetroot juice powder,



sodium lauryl sulphate, water and evaluated by using various parameters such as physical appearance, viscosity, PH, Spreadability, irritability, washability, stability studies and got fruitful results with all the tests. The scrub F2 was found to show excellent effect on controlling oil secretion, and preventing formulation of new pimples. The herbal formulations F2 was having, light on irritant to the skin and quite elegant. The powder was smooth to touch and in gel form it spread satisfactorily. Thus the formulated scrub F2 can be utilised efficaciously without a side effects which exfoliate and makes glowing skin.

Vidya keshav kakad (2022) Many of the marketed products when applied on the skin cause dryness of the skin after its long-term use which results less life of skin problems of acne and redness. Solution for this problem is use of scrub which consists all herbal ingredients which increases cleansing, softening, moisturizing, fairness of skin. The use of natural ingredients to fight against acne, wrinkles and also to control secretion of oil is known as natural or herbal cosmetic. Herbal cosmeceuticals usually contains the plant parts which possess antimicrobial, antioxidants and anti-aging properties. Herbal cosmetic are the safest products to use routine with no side effects and cosmeceuticals are the products which influences the biological function of skin

Exfoliation is the process of removal of removing the old, dead skin cells that cling to the skin's outermost surface. The two types of exfoliation are mechanical and chemical of conditions, including acne, rosacea, striae, photo damage, and skin cancer have increased in recent years. Chronological aging is a process of intrinsic or normal aging of the skin. Chronic exposure to ultraviolet (UV) light leads to photo damage of the skin. Which is the leading cause of extrinsic aging, or alteration of the skin due to environmental exposure. Management option for.

Photo damaged skin including alpha hydroxy acids, antioxidants, antiandrogens, moisturizers and exfoliants. Many treatments are available to reverse the damage, but their efficacy remains to be proven and they may also produce unwanted side effects. Herbal exfoliant is a cleansing formula and treatment mask that detoxifies the skin and stimulates its metabolism. It enhances absorption and retention of moisturizing agents and restores the skin's exfoliation. Improves the quality and tone of skin by assisting in the removal of dead skin cells from the surface. Herbal exfoliant produces soft, supple, re-energized skin and prevents premature skin aging. The main objective of present study was to prepare a polyherbal scrub incorporated into gel. The use of natural ingredients to fight against acne, wrinkle and also to control secretion of oil is known as natural or herbal cosmetics. Herbal cosmeceuticals usually contain the plant parts which possess antimicrobial, antioxidant and anti-aging properties. Herbal cosmetics are the safest product to use routine with no side effects and cosmeceuticals are the product which influences the biological function of skin. In this preparation Green apple, cinnamon, Millet, Sandalwood, Neem, Turmeric and honey is used as active ingredients and incorporated into the gel which is prepared with carbopol of different grades. Other ingredients like propylene glycol, Triethanolamine; methyl parahydroxy benzoate was added along with sodium lauryl sulfate into the gel. The prepared gel was evaluated for various parameters such as appearance, pH, viscosity, Spreadability, washability, irritability and found to be satisfied with all required characterizations. Thus, the developed formulation can be used as an effective scrub for using it to bear a healthy and glowing skin.

Benefits of scrubbing:-

1. For a squeaky clean skin: scrubbing gives you clean skin, free from dirt, oil, and sweat. Actually, the bottles of cleansing milk, face wash and facial cleanser cannot pull out that accumulates in the pores of your skin. Scrubbing does this job successfully.
2. Frees your skin from flakes: flaky skin gives rise to dry patches. It allows dead cells accumulate over time. Scrubbing your skin can help you deal with flaky skin effectively.
3. Helps in removing dead cells: dead cells make your skin look dull and tired. Scrub them off with a gentle scrub.
4. Adds glow to skin: Exfoliation can actually make your skin glow.
5. Removes dark patches: use of scrub twice a week to get results. It is especially effective on knuckles, elbows and knees.
6. Removes acne scars: Exfoliation helps in doing away with acne scars. Recent ingrown hair: ingrown hair is a perennial problem and scrubbing is the solution to prevent this problem.



7. For smooth skin: smooth skin is the key to a more beautiful you. the scrub will not only make your skin look flawlessly smooth, but will also make it soft and well-nourished.

Advantages:-

- Rejuvenation (the act of restoring to a more youthful condition) of the skin.
- Removes dead skin.
- Imparts glow to the skin.
- Removes scars, acne
- Exfoliation improves the quality and tone of skin by assisting in the removal of dead skin cells from the surface.
- Healthy, glowing skin, minimise spore, reduces breakout and acne, Hides wrinkles

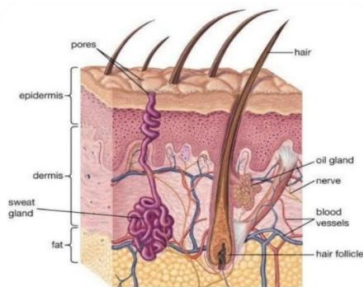
scrub :-

cosmetics come in a variety of forms, each with its function on the skin. due to a variety of factors, skin becomes dull and lifeless, which can be effectively with the use of scrubs. Facial scrub and body scrub are the two types of scrub used on the skin. the only difference between these two is the amount of oil and sugar added to each. Because of the large percentage of oil the facial scrub, it is less abrasive. it exfoliate the skin and eliminate dead skin cells. Scrub can be used on all skin types. only essential oil used as an ingredients in the scrub will differ depending on the skin type. dry skin, oily skin, and sensitive skin are three different types of skin. one of the most important elements in the facial scrub formulation is a mild abrasive agent.

Ideal properties of scrub :-

- ☐ Non toxic
- ☐ Possess small gritty particles
- ☐ Mild abrasive
- ☐ Non irritating
- ☐ Non sticky
- ☐ Able to remove dead skin cells.

Medicinal use of onion:-



Numerous traditional practices and scientific investigation have critically evaluated the beneficial effect of onion consumption on human health. most of this health benefits are due to its flavonoids component that have an antioxidant properties, anti-allergic, anti-asthmatic action, anti-carcinogenic, anti-inflammatory, cardiovascular protective effect, antibacterial and antifungal properties. due to these medicinal values the consumption of onion in our daily diet reduce the risks of heart disease, diabetes, cancer and many infectious disease. Onion has been used for healing both internally and externally, internally, onion has been recommended to treat colds, cough, bronchitis, whooping cough, asthma and other respiratory problems. it is believed to help in congestion of the lungs and expand the airway. Onion is also used internally to relieve excess gas and claim and upset stomach. A mixture of rue and onion is used toried of parasite of the digestive system. Onion is also through to stimulate appetite. when applied externally, fresh onion juice prevent bacterial and fungal infection it can be applied to wounds and stings on the skin, to remove warts and to stimulate hair growth



Aim:-Formulation and Evaluation of Herbal Onion Scrub .The aim of the study was to formulate and evaluate onion scrub (Allium Cepa linn) Extract: for Antioxidant, antiseptic, anti-inflammatory and skin glowing activity

Objectives:-

To formulate scrub using onion and other herbal Products.To Predicts shelf life of scrub.

To prepare scrub using WHO guidelines.to develop a safe and effective product for skin exfoliation, improve skin texture, and potentially address skin concerns like acne and blemishes, while ensuring the scrub is gentle and non-irritating.

Plan of work:-

- Literature of review
- Ingredients of profile
- Material and methods
- Formulation of onion scrub
- Evaluation test

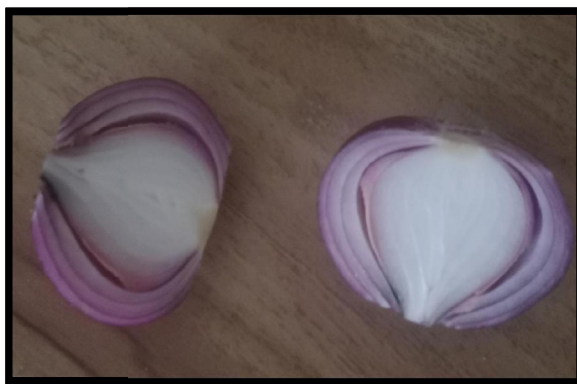
5. Drug profile :-

1. Onion juice
2. Turmeric
3. Alovera
4. Gram flour
5. Multani mitti
6. Khuskhus
7. Orange peels
8. Rose water

Chemicals:-

Methyl paraben

1. Onion



(Fig no.1)

- ☐ Synonyms :-japanese leek, Egyptian onion
 - ☐ Biological source:-Allium cepa
 - ☐ Family:-Alliaceae
 - ☐ Geographical source:-native to southwestern Asia, with the region stretching from Iran and parts of Pakistan and Afghanistan to China and Central Asia being the likely area of origin.
 - ☐ Chemical constituents:-
- Volatile oil



Flavonoids
Phenolicacid
Phenol

Uses:-

1. It is used exfoliating
2. It is used Reducing acne
3. It is used Reducing tanning
4. It is used brightening
5. It is used potentially healing properties

2. Turmeric



(Fig no :2)

- ☐ Synonyms:-saffron indian, Haldi, curcuma
- ☐ Biological source:- The rhizome of the curcuma longa plant
- ☐ Family:-Zingiberaceae
- ☐ Geographical source:- Turmeric is tropical south asia, the world's turmeric is produced in india, with erode in tamil nadu and sangali in Maharashtra
- ☐ Chemical constituents:-
Camphene
Linalool
Camphor
Eugenol

Uses:-

- It is used remove dead skin cells
- It is used improve skin texture
- It is used anti inflammatory
- It is used reduces inflammation
- It is used treats acne and pimples
- It is used stimulate blood circulation

3. Alovera



(Fig no :3)



- ☐ Synonyms:-Aloe barbadensis mill, aloe indica royle
- ☐ Biological source:-The dried juice the leaves the aloe barbadensis miller plant
- ☐ Family:-asphodelaceae (liliaceae)
- ☐ Geographical source:-africa, india and other arid areas
- ☐ Chemical constituents:-
 - Glycoside derivatives
 - Flavonoids
 - Phenylpropanoids
 - Naphthalene
 - Vitamin

Uses:-

- It is used soothing
- It is used remove dead skin
- It is used hydration
- It is used leaving the skin moistured
- It is used regular use enhance the skin natural radiance promoting a healthy skin

4.Gram flour



(Fig no:4)

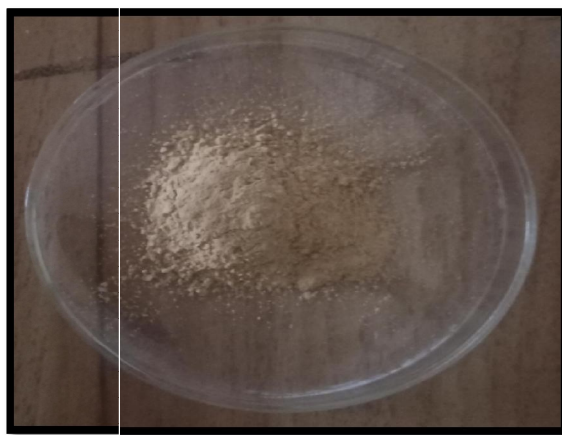
- ☐ Synonyms: Chickpea flour, garbanzo bean flour
- ☐ Biological source:-Gram flour also known as besan is a fine nutty- flavored powder made form ground chickpea
- ☐ Family:-Fabaceae
- ☐ Geographical source:-Asia and Europe
- ☐ Chemical constituents:-
 - Proteins
 - Carbohydrates
 - Fiber
 - Fat
 - Mineral, vitamins

Uses:-

- Gram flour is good for acne prone skin acne and can help to lighten any acne scars
- It can also be applied all over the body to remove dark spots
- It has been used as abase in preparation of herbal scrub



5. Multani mitti



(Fig no:5)

- ☐ Synonyms:- Multan clay
- ☐ Biological source:-It consists of hydrous aluminium silicate s
- ☐ Family:- clay minerals
- ☐ Geographical source:- India, pakistan, shrilanka
- ☐ Chemical constituents:-
 - Montrnonllonite
 - Kaolinite
 - Attaoulgite

Uses:-

- It is used nourishes skin
- It is used Reducing acne
- It is used remove blackheads and whiteheads
- It is used Cleansing skin
- It is used glowing effect of skin

6.Khus khus



Fig no:-06

- ☐ Synonyms:-raazii, shaad, khurram, khuub
- ☐ Biological source:-khus is obtained form the vetiver plant and is known for its earthy aroma, where as khuskhus is obtained form the poppy flowers
- ☐ Family:-Poaceae
- ☐ Geographical source:-geographical origins are in the Indian subcontinent, particularly in the regions of the Middle East and South Asia.



□ Chemical constituents:-

Sesquiterpenes
Sesquiterpenes
Sesquiterpenes
Khusimol

Uses:-

- It is used thickening agent
- It is used baking ingredients
- It is used flavour enhancer
- It is used hydration
- It is used stress relief

7. Orange peel



(Fig:- 07)

□ Synonyms:-orange peel, orange zest, orange rind

□ Biological source:-Orange peels are derived from the fruit of Citrus sinensis (sweet orange).

□ Family:-Rutaceae

□ Geographical source:-orange trees are cultivated in numerous regions worldwide, key producers include Brazil, China, India, the USA, and Mexico. India, particularly states like Maharashtra, produces a large quantity of oranges, generating substantial amounts of orange peel waste.

□ Chemical constituents:-

Polyphenols,
fiber,
pectin,
various sugars.

Uses :-

- Herbal scrub to exfoliate and rejuvenate the skin.
- This scrub can help remove dead skin cells,
- improve skin glow
- The skin form free radical damage
- Prevent acne



8. Rose water



(Fig no:8)

- Synonyms:-Rosa bankisia, Rosa Odorata
- Biological source:-A rose is a woody perennial flowering plant of the genus rosa
- Family:-Rosaceae
- Geographical source:- Persia(modern- day Iran)
- Chemical constituents:-
 - Especially citronellol
 - Geraniol
 - Phenylethyl alcohol
 - Nerol
 - Quercetin qlinaool

Uses:-

- Rose water is used in a lot of beauty products because of its ability to reduce the signs of ageing
- Rose water plumps the skin and improves the appearance of wrinkles
- Rose water also tightens the skin meanings that your skin looks firmer and more radiant
- When applied to an area

9.Methyl paraben:-

1. Methyl paraben is antibacterial since it's a preservative.
2. It is effective at preventing microbial growth and germs such as bacteria and mold in skincare and cosmetics formulation
3. They prevent harmful mold, bacteria and fungi from infecting your products



(Fig no:9)

What are the benefits of using onion scrub?

Onion scrub gives multiple benefits, like deep exfoliation, unclogging pores, brightening the complexion, fighting acne breakouts and scars, and reducing dark spots to give a healthy, radiant glow.



Preparation of herbal scrub:-

- Weigh accurately all the herbal ingredients and sieve through sieve no.24 and mix them together to form a uniform mixture in mortar and pestle
- Measure accurately onion juice in another mortar.
- Weigh Aloe vera then add to mortar
- Add methyl paraben and guar gum
- Mix all herbal powders and triturate them until the proper consistency occurred
- Add rose oil for fragrance

Material and Methods:-

All Ingredients were obtained in their crude form from a local distributor (Beed). All the ingredients were powdered and sieved through sieve no.24. The onion juice is obtained by grinding method. Cut the onion juice small slice and grind them in mixture until the juice is formed. All powdered ingredients were packed in moisture resistant, well closed containers. The different ingredients and their key uses are enlisted in table no. 1 Formulation of scrub

Sr.no	Ingredients	Quantity
1	Onion juice	5ml
2	Turmeric	2gm
3	Aloe vera	2gm
4	Gram flour	2gm
5	Multani mitti	As per requirement
6	Khus -khus	2gm
7	Orange peels	2gm
8	Rose oil	4-5 drops
9	Methyl paraben	2ml

Table: 1: Formulation of herbal scrub



Formulation of Herbal Onion Scrub

Method of Evaluation :-

Colour:-

Yellowish orange colour of scrub was observed by visual examination

Odour:-

Odour found to be aromatic.

State:-

Solid state of scrub observed by visually .



PH:-

Pho of the prepared scrub evaluated by using ph paper.small amount of scrub applied on ph paper.ph was found in the range of 5.5-6

Washability:-

Small quantity of scrub applied on the skin and wash with water.it is easily washable

Irritability:-

Small amount of scrub applied on skin and kept for few minutes and found to be non-irritable

Result and discussion:-

Sr.no	Parameters	Result
1	Colour	Yellowish orange
2	Odour	Aromatic
3	Ph	5.5-6
4	Washability	Easily washable
5	Stability	Stable
6	Grittiness	Small grittey
7	Irritability	Irritation
8	Feel on application	Greasy
9	Removal	Easily remove

Formulation F1, F2, F3 was tested using various evaluation parameters. Spreadability, viscosity and pH of F2 formulation was found very good when compared to F1 and F2.Stability studies of F2 formulation gives good results.All the ingredients used in this onion facial scrub are our food ingredients. So, the chances for its side effects are less. F2 is more effective than F1 and F3. We can use this herbal facial scrub for getting best results for oily skin. The efforts are on to reformulate the scrub in a gel form in order to achieve better spreadability along imparting emollient and smoothing action.

II. CONCLUSION

All the ingredients use in this herbal scrub Is our food ingredient. So, the chances for its Side Effects are less. We can use this herbal scrub for its Best result for oily skin. It can also be used dry and Normal skin. The efforts are on to reformulate the Scrub in a powder base. In order to achieve better Stability & spread ability along imparting emollient And smoothing action of the scrub. The prepared Scrub was evaluated using various parameters and Was found to be satisfied for the application on the Skin to make it healthy and glowing without any side effects.

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