



ANTIAGING CREAM BY USING PAPAYA LATEX

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ABSTRACT

Skin aging is a biological process affected by a combination of endogenous or intrinsic factors and exogenous or other factors. Since skin health and beauty is considered one of the main elements that represent the entire understanding of people's "health" and "wellness", many antiaging strategies have been developed in the last few years. The purpose of this article is to review the most important antiaging strategies available to dermatologists, including preventative, cosmetic strategies, cosmetic and medical procedures, and invasive procedures. Papaya is the popular name for papaya, a member of the papaya family. Papaya has long been used in Ayurvedic medicine. It has many properties, one of them is antiaging property. Scientific data show that they have a biological modification role that supports their daily use in the treatment of many diseases. According to phytochemical research, papaya plants mainly contain alkaloid series and pseudopapain, as well as sugars, tannins, flavonoids, carcinogens and gamma terpenes. Antioxidant, diuretic, antibacterial, abortifacient, hypoglycemic, antifungal, anthelmintic and immunomodulatory, hepatoprotective and anticonvulsant.

Key words: - antiaging, papaya latex, moisturizing cream, evaluation

INTRODUCTION

Aging is a modern decline in physiological function, mainly to both age-associated diseases or geriatric syndromes, inclusive of cardiovascular and obstructive pulmonary diseases, musculoskeletal issues, several forms of most cancers, neurodegenerative sicknesses, and pores and skin issues [1]. In recent times, the hypothesis that the getting old procedure, age-associated diseases, and geriatric syndromes percentage the identical molecular and mobile mechanisms has been highlighted [2]. Together, all age-related diseases, physiological ageing, and geriatric syndromes produce a heavy monetary and psychological burden for sufferers and their households [3] many of the various getting

older manifestations, skin getting old is a technique implicated with modifications in pores and skin look, aesthetic manifestations, and the development of several pores and skin sicknesses. skin getting old is a natural, physiological, biochemical, and time-structured system, resulting from a complicated interaction between intrinsic and extrinsic factors, which produce cumulative deleterious changes in skin layers, morphology, body structure, and appearance [4]. Intrinsic factors are decided by using genetic and physiological changes, while extrinsic factors are promoted by using outside stimuli, such as ultraviolet (UV) radiation, weight-reduction plan, air pollutants, abuse of tobacco and alcohol, way of life, toxins, and others [5]. Physiological skin adjustments affect the law of frame temperature, fluid stability, loss of electrolytes and proteins, manufacturing of diet D, waste elimination, sensory notion, immune reaction, and skin barrier characteristic [6]. Aesthetic results, inclusive of wrinkles, pores and skin spots, loss of elasticity, and thinning, affect the pores and skin's look and induce emotional, mental, and psychosocial issues [7]. on the other hand, the skin getting older procedure is also intently related to an extended occurrence of cutaneous issues and the development of dermatoses, benign and malignant tumors, itching, persistent wounds, dry skin, and skin depigmentation, which affect skin health and decrease the chance for a healthful getting old process [8]

human beings regularly surprise whether what they are experiencing as they age is regular or abnormal. although people age particularly in a different way, a few changes end result from inner strategies, that is, from getting older itself. as a result, such changes, although undesired, are taken into consideration ordinary and are now and again called "natural ageing." [9]those adjustments occur in each person who lives lengthy enough, and that universality is a part of the definition of pure getting old. The adjustments are to be expected and are normally unavoidable. for example, as humans age, the lens of the attention thickens, stiffens, and will become less capable of consciousness on near gadgets, consisting of studying materials (an ailment known as presbyopia). this transformation occurs in virtually all older adults. for this reason, presbyopia is taken into consideration normal getting older.[10] other phrases used to explain those changes are "regular aging" and "senescence." [11]

MATERIAL AND METHODS

1. Therapeutic agent: The API is the central component. APIs are made from raw materials with specific strengths and chemical concentrations.[12]
2. Thickening agent: Pharmaceutical thickening agents are a diverse group of excipients used to increase the viscosity of liquid pharmaceutical systems, without changing other basic properties.[13]
3. Humectant: In cosmetics, the moisturizing power of ingredients is important. Effective moisturizers in cosmetics can help prevent skin aging.[14]
4. Solubalizing agent: Solubilizers, like surfactants, are solubilizers added to pharmaceutical formulations to increase the solubility of poorly soluble drugs.[15]
5. Emulsifying agent: for example Cetyl Alcohol and Stearyl Alcohol, Emulsifiers of vegetable oils. It not only helps the texture of the product, but also keeps the skin moisturized. It is commonly used in moisturizers, body lotions, and other products.[16]
6. Preservative: The most common disinfectants are alcohols and their derivatives and carboxylic acids and their salts. The most abundant alcohols are phenoxyethanol (68%) and benzyl alcohol (36%), and the most abundant carboxylic acids are sodium benzoate (36%) and potassium sorbate (30%).[17]

EVALUATION AND RESULT

1. **Physical evaluation:** - Physical evaluation of formulated cream had been judged by using shade, smell and texture[18]

Sr. no.	Parameter	Evaluation
1	Colour	Faint pink
2	Odour	Pleasant
3	Texture	Smooth

2. **Washability:** - The cream applied on skin was without problems removed by way of washing with tap water[19]
3. **determination of pH:** - The pH of the cream can be measured on a widespread virtual pH meter at room temperature with the aid of taking sufficient amount of the formulation diluted with an appropriate solvent in an appropriate beaker
4. **Spread ability test:** - The spread ability test showed that the formulated cream has good spreadable property
5. **Irritancy study:** - Mark an area of 1sq.cm on the left-hand dorsal surface. The cream was applied to the specified area and time was noted. Irritancy, erythema, edema was checked, if any, for regular intervals up to 24hrs and reported.
6. **Viscosity:** - Viscosity of formulated cream changed into determined by brook field viscometer at 20 rpm the usage of spindle no. LV-4(sixty-four). The viscosity of cream became inside the range of 1,240 and 48,950 mashgiach shows that the cream is effortlessly spreadable by using small amount of shear. The formulated cream suggests the viscosity within range i.e., 8607.1mpa
7. **Microbial growth test:** - there has been no symptoms of microbial growth after 24 hrs. of incubation at 37°C and it became similar with the control.
8. **Dye test:** - The scarlet red dye is blended with the cream. area a drop of the cream on a microscopic slide covers it with a cover slip, and examines it underneath a microscope. The disperse globules appears colorless inside the red floor i.e., w/o type cream.
9. **Homogeneity:** - The homogeneity of the formulated cream was judged by way of the visual look and touch. the appearance and contact of the cream have been true.

CONCLUSION

The results showed that the formulated antiaging creams are safe and usable for the skin and have good potential for the development of cosmetic products. from above results it is concluded that papaya latex extract get effect such as antiwrinkle, antiaging effect on skin. These preparations had an almost constant homogeneous, emollient, non-greasy and easy to remove after application. Further research will be conducted to scientifically verify the synergistic action of the selected formulation. The use of natural cosmetics has expanded to the many folds in the personal care system and exists high demand for herbal cosmetics. Use the effect of bioactive ingredients in cosmetics biological functions of the skin and ensure nutrients essential for healthy skin.

Anti-aging cream slows down skin aging regenerates and activates cells and protects against ultraviolet radiation, free radicals, etc.

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