

**FORMULATION AND EVALUATION OF HERBAL
CHOCOLATE AS A NERVINE TONIC****Yogesh B. Raut, Sanjay K. Bais, Shweta Badure****Fabtech College of Pharmacy, Sangola**Tal-Sangola, Dist.-Solapur**Maharashtra -413307***ABSTRACT**

In recent years, the creation of new foods with nutritional and health benefits has become increasingly popular. In this context, the development and evaluation of herbal chocolate as a neurotherapeutic approach offers a new idea that combines herbal-based health services with chocolate with calming and euphoric effects. Plant-based chocolate is a new approach to the confectionery industry by combining the health benefits of plants with the rich, rich taste of chocolate. The content provides an overview of the herbal chocolate production process, focusing on the integration of herbal extracts into the chocolate matrix.

*Research should select appropriate drugs based on their treatment and suitability for chocolate. The design process involves refining vanilla to deliver maximum health benefits without compromising the taste, texture and full acceptance of chocolate. Herbs like Tulsi (*Ocimum sainttum*), Ginger (*Zingiber officinale*) and Ashwagandha (*Withania somnifera*) are infused into the chocolate base.*

Precise control of many variables including chocolate viscosity, melting point and tempering. Sensory testing is performed by a panel of tasters to evaluate taste, texture, aroma and overall acceptance. Physicochemical analyzes were also performed to determine the nutritional content, antioxidant activity and shelf life of herbal chocolate. The study found that the herbal extract contained more antioxidants than the control, which may indicate additional health benefits.

Keywords: *tension, heart attacks, hypertension, schizophrenia, and memory boosters, among others.*

*Corresponding Author Email: - badureshweta9@gmail.com

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INTRODUCTION

In recent years, consumers have changed and prefer foods that are better for you. As a result of these trends, the food industry is creating fun and healthy new products.^[1] Herbal Chocolate is a new product that combines the delicious taste of chocolate with the goodness of herbs. It is considered a symbol of happiness and perseverance.^[2] But because chocolate is often high in sugar and fat, health-conscious consumers are starting to look for other ways to help them reach their goals.^[3]

This product exemplifies the marriage of innovation and tradition; They follow modern trends and trends while being inspired by centuries-old plants. It integrates intelligent design and technology.^[4] The secret to the success of the recipe lies in the rich cocoa content and unique flavor profile of the cocoa beans used.^[5] The chocolate and plant-based base is made from cocoa beans as well as other ingredients such as sugar, milk and cocoa butter. Unique aroma.^[6] Each vanilla is carefully selected to pair perfectly with the chocolate and enhance the overall flavor of the product.^[7] Changes were carefully monitored. Herbs can be extracted, softened and infused to produce bioactive compounds while retaining their flavor and potency.^[8]

Herbal chocolates offer consumers desserts that nourish the body and soul, with their careful design and emphasis on quality.^[9] As we begin this investigation, let's explore the fascinating possibilities of the intersection of chocolate and vanilla.^[10] The chocolate and vanilla market is growing. With its extensive history and supporting literature, the herb has begun to attract new attention for the treatment of this condition.^[11] A smart way to deal with problems such as anxiety, worry and mental disorders is to use the flower brain, which stands out from many other plant species for its positive effects on the brain.^[12] Physical balance is a beneficial effect of neuro pharmaceuticals.^[13]

These herbs have been used by many people around the world for thousands of years, and scientists and health enthusiasts are interested in them due to their ability to reduce stress.^[14] By bringing together science and current knowledge, the health benefits of chocolate are combined with herbal plants.^[15] This general concept has the potential to address the stress epidemic as well as self-care. By carefully creating and carefully evaluating our recipes, we strive to unlock the healing potential of herbal chocolate, a daily calming agent for the mind.^[16] We aim to elucidate the benefits and functions of herbal medicines through a comprehensive analysis of physicochemical properties, antioxidant activity, susceptibility and stability.^[17]

Neurological disorders such as anxiety, depression and insomnia are more common. Therefore, there is a greater need for natural and holistic treatments that support and improve brain health.^[18] Herbal chocolates can cure this condition because they combine the nutritional benefits of herbs with the decadence of chocolate.^[19]

Chocolate, especially dark chocolate, is not only a popular treatment method, but is also known for its health benefits due to its high flavonoid and antioxidant content.^[20] This study focuses on the creation and evaluation of herbal chocolate as a nervous system treatment, aiming to offer a delicious and effective way to support the nervous system.^[21] This medicine helps improve thinking, clarity of thought and intelligence.^[22]

The general treatment of chocolate made with special herbs can heal, add flavor and provide health benefits.^[23]

Zingiber officinale, known for its calming and anti-inflammatory Ashwagandha (*Withania somnifera*), adaptogenic and anti-anxiety properties, is the herb chosen for this formula.^[24] This plant-based technique has long been used to improve mental health and strengthen the immune system against stress.^[25] Qualitative analysis methods, including stability tests, physicochemical property tests and analysis, are used in this study.^[26] As it can be created as a health supplement, herbal medicine will become increasingly popular as food in health and wellness.^[27]



Figure No.1.: Chocolate

OBJECTIVES:

1. Improve patient compliance.^[28]
2. Increase safety and quality.
3. Improved drug use.
4. Strengthen mental health.
5. Extend the shelf life of the medicine

ADVANTAGES:

1. Health Benefits
2. Advantages of Antioxidants
3. Special taste characteristics
4. Work Love ^[29]
5. Flexibility
6. business attraction

MATERIAL & METHODOLOGY:

1. Extraction of herbal drug:

Extraction is done using the cold maceration method. Initially, ground ashwagandha plant material was placed in a bottom glass (RBF) and softened in a 70:30 mixture of alcohol and water with constant shaking for 24 hours. The solvent was filtered after 24 hours and the ashwagandha extract was collected.^[30]



Figure No.2: Extraction Process

2. Preparation of Chocolate formulation:

1. All ingredients are measured by weight.
2. Add sugar and cocoa powder into the bowl and mix well.
3. Add the melted cocoa butter to the flour mixture in separate bowls and mix the mixture until it reaches a good consistency.^[31]
4. The extracted herbs are then measured accurately and added to pre-made desserts.
5. Add vanilla as an ingredient before pouring the mixture into the mold.
6. Then, the chocolate prepared with herbal extracts is placed in a mold and frozen overnight.^[32]

FORMULATION TABLE:

Sr. No.	Ingredients	Quantity	Role Of Ingredients
1	Cocoa Butter	2.8g	Emulsifying agent
2	Honey	3.6g	Sweetner
3	Vanilla	0.05g	Neuroprotector
4	Vitamin C	0.05g	Antioxidant
5	Drug extract	12mg	API

Table No.1.: Formulation

EVALUATION TESTS:

Sensory Analysis:

Check the appearance of vegetable chocolate, pay attention to its color, shine and uniformity. Aroma: Consider the intensity and depth of the aroma, paying particular attention to a strong chocolate or vanilla note. Check out beauty features like masks, smoothness and creaminess.^[33]

Evaluation of Stability:

Shelf-life measurement: Shelf-life measurements have been established to determine the shelf life of herbal medicines under various storage conditions (e.g., temperature, humidity, light).^[34]

Overall look:

The personal face and overall elegance of the chocolate recipe affects its overall appearance, which is important for customer satisfaction and trouble-free production.^[35]

Determining moisture content:

Check moisture content using a dehydrator. The purpose of this experiment is to see how dry the chocolate is. After careful measuring, use a desiccator containing anhydrous silica gel to collect the final chocolate. After 24 h, the layers were removed, weighed, and the percent moisture absorbed was calculated using equation.^[36]

$$\% \text{ Moisture} = \frac{\text{Initial Weight} - \text{Final Weight}}{\text{Final Weight}}$$

Change in Weight:

Six chocolate cakes were weighed separately and combined together. The weight of all chocolate bars was used to determine the average weight. We compare individual weight with average weight. The percentage difference in weight change must be within permissible limits. Use the following formula to calculate percentage variance.^[37]

$$\% \text{ Deviation} = \frac{\text{Individual Weight} - \text{Average Weight}}{\text{Average Weight}} \times 100$$

Test of hardness:

The chocolate should be hard enough to break in diameter. The hardness of chocolate is a good indicator of its strength. Hardness is measured with a Monsanto hardness tester. kg/cm² is used to express numbers.^[38]

Stability of body:

Chocolate samples were stored in an airtight container at 28°C for one month to check their physical stability. At the end of the month, samples are checked for chemical degradation and quality.^[39]

RESULT:**Organoleptic evaluation:**

Sr. No	Parameters	Observation
1	Colour	Dark Brown
2	Odour	Chocolate with no brunt
3	Taste	Sweet
4	Texture	Smooth and even

Table No.2.: Evaluation Tests

DISCUSSION:

Research should select appropriate drugs based on their treatment and suitability for chocolate. The design process involves refining vanilla to deliver maximum health benefits without compromising the taste, texture and full acceptance of chocolate. Herbs like Tulsi (*Ocimum sainttum*), Ginger (*Zingiber officinale*) and Ashwagandha (*Withania somnifera*) are infused into the chocolate base.

Precise control of many variables including chocolate viscosity, melting point and tempering. Sensory testing is performed by a panel of tasters to evaluate taste, texture, aroma and overall acceptance. Physicochemical analyzes were also performed to determine the nutritional content, antioxidant activity and shelf life of herbal chocolate. The study found that the herbal extract contained more antioxidants than the control, which may indicate additional health benefits.

CONCLUSION:

In conclusion, the herbal chocolate creation is the taste of history, modernity and health. Herbal Chocolate provides taste, pleasure and health benefits with carefully selected natural ingredients and whole plants. Herbs are carefully selected for their unique flavor profiles and curing properties and carefully mixed into the chocolate matrix. Manufacturers obtain important information about the sensory properties, nutritional properties, physiological effects, marketability and marketing of their products through various methods such as opinion polls, customer feedback, safety and business analysis. Herbal extracts of asparagus racemosa and Bacopa monnieri are well combined with milk chocolate to provide the key ingredients of memory-improving Shatavarin and Ashwagandha. Medicinal extracts are safe when taken in large amounts as they have no side effects.

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