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MULTIPURPOSE SWEET HERBAL POWDER

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Multipurpose sweet herbal powder was made to incorporate herbs in daily diet. It can be added in beverages like tea, coffee, milk as well as cookies, khakras, etc. The recipe can be made without adding sugar as Stevia was used as a natural sweetener with ginger, cardamom, cinnamon, mint, lemon grass adding all herbs in standard amount the multipurpose herbal powder was made. It contains many minerals necessary for daily diet such as vitamin A, vitamin B-Complex, vitamin C, zinc, chromium, potassium, calcium, manganese, copper, iron, etc. Sensory evaluation using scoring test was done for shelf life and standardization. Packing, labeling, budgeting and marketing was also included in study.

Keywords: Sweet herbal powder, Beverages, Stevia, Natural sweetener

INTRODUCTION

“Multipurpose sweet herbal powder” It has been designed to complement beverages like tea, coffee, milk as well as cookies, khakras, etc. without adding sugar as it contains stevia which is a natural sweetener without adding calorie. It can be happily given to a diabetic. It is made with an intention to include herbs in our daily diet. It contains stevia which is natural sweetener which helps to lower blood sugar level. It can be taken by anyone including diabetic and those interested in reducing calories in their diet. Best product for the ones who are addicted to tea and coffee. It can also be given to a person suffering from hypertension as it helps to normal the heart rate (Liu *et al.*, 2003). It also contains trace minerals like zinc, chromium. Cinnamon acts as a powerful insulin regulator and increases insulin sensitivity (Ruitang Deng, 2012). It has anti-viral antiulcer, anti-inflammatory, anti-oxidant, anti-cardiovascular (Khan *et al.*, 2003; and Azimi *et al.*, 2016) and anti-cancer effects. It also helps in wound healing. Ginger is both a spice and herb. It helps with menstrual cramps indigestion, joint pain, arthritis and asthma. It helps

to lower lipid levels, serum total cholesterol, LDL, VLDL and also blood sugar level and also hypertension (Akinyemi *et al.*, 2016). It also helps to prevent various types of cancers (Nafiseh Shokri Mashhadi *et al.*, 2013). Cardamom is an excellent detoxifier as it has diuretic properties (Gilani *et al.*, 2008). It is also good for oral health. Mint is natural anti-microbial agent and breath freshener. It helps in aiding stomach upsets and indigestion. Lemongrass contains essential elements like vitamin A, vitamin B1, vitamin B2, vitamin B3, vitamin B5, vitamin B6, folate and vitamin C. It also contains minerals such as potassium, calcium, magnesium, phosphorous, manganese, copper zinc and iron which are required in healthy functioning of the body. It possesses hyperlipidemia and anti-hypercholesterolemia properties that supports cholesterol levels (Costa *et al.*, 2011). Studies have shown that regular consumption of lemon grass shows a significant result in maintaining healthy level of triglycerides and reducing LDL cholesterol in the body. Lemon grass also acts as a detoxifier due to its diuretic properties. ‘cital’ a component present in lemon grass

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has anti cancerous properties (Patel *et al.*, 2015). It also helps in maintaining insulin level in diabetic as well as increases tolerance of glucose in body citral has also been proven to be effective in combating obesity. Mint has anti-allergenic properties as it contains antioxidants and anti-inflammatory agent. It is natural anti-microbial agent and breath freshner.

OBJECTIVE

- 1) To standardize innovative and healthy product.
- 2) To learn various entrepreneur skills.
- 3) To study the shelf life of the product.
- 4) To understand marketing and budgeting aspects of the product.

METHODOLOGY

Many products like ragisev, nutria lollipop and multipurpose sweet herbal powder were thought of out of these multipurpose sweet herbal powder was finalized as it contains herbs which also act as functional foods (ginger, mint, cinnamon) and also provide trace elements. It is a good way of incorporating herbs in our daily life.

MATERIALS

Materials used to prepare this product were: dry ginger powder, stevia, lemon grass powder, cardamom powder, mint powder, cinnamon powder.

Product Before Standardization

It was observed that when all the ingredients were added in same amount cinnamon dominated the flavor and the product was less sweet so the other ingredients were increased along with stevia except cinnamon.

Table 1: Amount of Ingredient Used Before Standardization	
Ingredients	Amounts
Dried ginger powder	¼ tsp
Stevia	¼ tsp
Dried lemon grass powder	¼ tsp
Cardamom powder	¼ tsp
Dried mint powder	¼ tsp
Cinnamon	¼ tsp

Product After Standardization

Table 2: Amount of Ingredient Used After Standardization	
Ingredients	Amount
Dried ginger powder	¾ tsp
Stevia	½ tsp
Dried lemon grass powder	¾ tsp
Cardamom powder	½ tsp
Dried mint powder	¼ tsp
Cinnamon	¼ tsp

METHOD OF PREPARATION

Dry all the ingredient separately in hot air oven (can also be sun dried)

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Grind all the ingredients separately

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Mix the ingredient as per standard

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Multipurpose sweet herbal powder is ready can be used in milk, water, tea, coffee, khakra, cookies.

Packaging

Packaging minimizes the damage to the product that can be physical, chemical or microbial. Packaging material used was BOPP (BIAXIALLY ORIENTED POLYPROPYLENE). It has a very low moisture transmission rate which is used to increase the shelf life and maintain low moisture content of multipurpose sweet herbal powder (www. Plastemart.com/ BOPP packaging material). Apart from moisture transmission BOPP packaging is cost effective.

Labelling

It is important tool for marketing a product. Information like net weight. manufacturing date, major nutrients, veg logo and ingredients with its usage were added.

Budgeting

Budgeting is an important for making pricing decision. The price of a product should neither be too high that consumer may not afford and if the price is too low the product has no value and Is counted as inferior product.

Figure 1

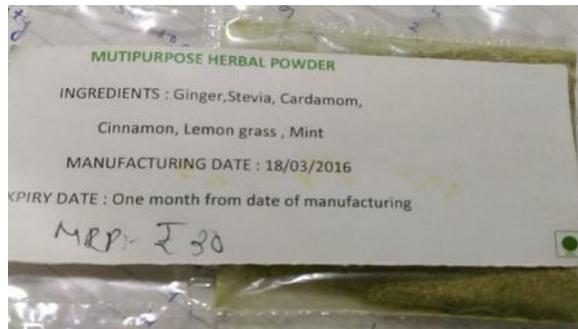
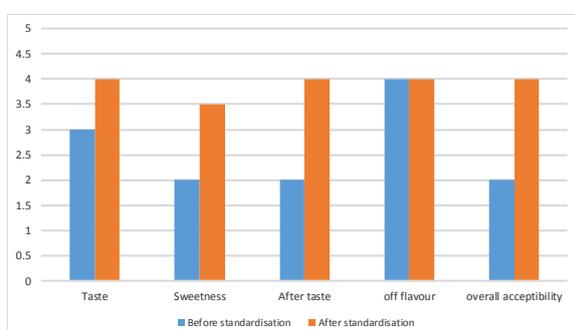


Table 3: Cost Calculation for Ingredients Used in Multipurpose Herbal Powder

Ingredients	Price
Stevia	110
Ginger	70
Cardamom	108
Lemon grass	80
Mint	40
cinnamon	60
Packaging material	35
Electricity	50
Gas	30
Label print out	20
Total	603

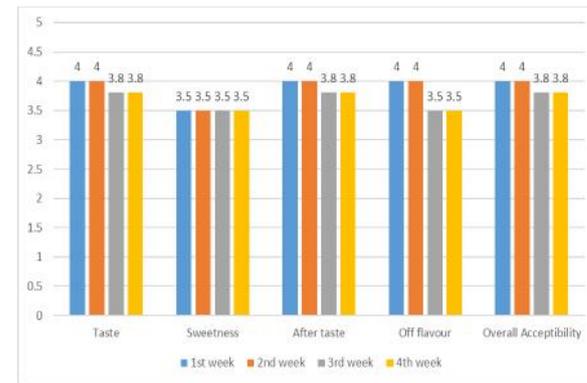
Figure 2: Result of Sensory Evaluation Before and After Standardization



Rating Characteristics

A sensory evaluation was done by 10 panelists. A score card with Five-point scale was used. The characteristics for evaluating the product were taste, sweetness, after taste, off flavor and overall acceptability. The results were noted of before and after standardization. And with the help of these product was standardized.

Figure 3: Result of Sensory Evaluation of Four Weeks for Shelf Life



Rating Characteristics

In order to study the shelf life of the product the sensory evaluation was done for four weeks. In first two weeks there were no changes in the product. Later in third and fourth week the score went down. As such no major changes were observed so the product was label as 30 days' edible.

CONCLUSION

Multipurpose sweet herbal powder is a zero calorie sweetener. It contains many minerals necessary for daily diet such as vitamin A, vitamin B-Complex, vitamin C, zinc, chromium, potassium, calcium, manganese, copper, iron, etc. It can be used by everyone and also be consumed by person with diabetes, hypertension, cholesterol, etc. The limitation of the powder was it was less sweet to the person who tend to have more sugar but for them more stevia can be added as per their taste. The sales were profitable. And these powder can also be made by adding more herbs or can be dominated by a single flavor.

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