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Development of ponnanganni green soup powder

Karolin A.
motcha.caro@gmail.com
Holy Cross Home Science College, Thoothukudi, Tamil Nadu

ABSTRACT

People are passing hectic life due to urbanization. They do not have enough time to cook foods and are becoming habituated to consume fast foods and something like that. Ponnanganni leaves are cultivated in India especially Tamil Nadu people used commonly. Objectives are to prepare the green soup powder, To Analysis of the nutrient content and microbial content of green soup powder, to standardize the acceptability of the soups, to cost analysis and Popularize of green soup powder. Alternanthera sessils washed the thoroughly and kept it for drying in room temperature for 8 days. Greens Powder has roasted it for 20 minutes grinds to a fine powder. Green gram dhal was roasted it for 15 minutes grinds to a fine powder, pepper was roasted it 5 minutes grind to fine powder, cumin was roasted it 5 minutes grind to fine powder. Corn flour was taken, Parboiled rice flour was taken. It acts as a thickening agent and it is a shining agent salt was taken. It gives the taste of the product. Ponnankanni keerai soup powder nutritive value was moisture 6.10, calories152.35 Kcal, protein 10.37gm, fat 1.78g, vitamin A 1057.75mcg, vitamin C 60.35 gm, calcium 351.25, iron 11.45gm, fibre2gm were evaluated of 100 gm green soup powder. The microbial count was analyzed 2.2×103 cfu/g of the sample in the total viable count. Total coliforms <0.3bassessed up to 90 days. The product was popularized in Thoothukudi self-help group women and school students.

Keywords— *E.Coli- Essaritia Coli, MPN- Most Probable Number*

1. INTRODUCTION

Nutrition plays a great role in our daily life. The food or liquids affect our body and health because each food or liquid contain particular nutrition which is very necessary for our physical and mental growth. A particular level of any particular nutrition is essential for our body. So we should know what food we have to take, how much and what type of nutrition contain a particular food. Whenever we take any food or nourishing liquids, our body digests and absorbs the simple but essential minerals, vitamins, fats, proteins, carbohydrates, fats and water from these food or nourishing liquids and converts it into the bloodstream and energy that help our body to grow and keep it healthy. The nutrition value is more important for any individual's health. Dried soup powders have an advantage of protection from enzymatic and oxidative spoilage and flavor stability at room temperature over long periods of time. In addition, they are ready for reconstitution in a short time for working families, hostels, hospitals, restaurants and institutional use as well as to military ration, moreover, they exert light weight for shipping and availability at all time of the year. This perennial plant has prostrate stems and the obovate leaves measure 1-15 cm long and 0.3-3 cm wide. The shiny white flowers measure 0.7-1.5 mm long and the sepals measures 3 mm long.

2. OBJECTIVES

- To prepare the green soup powder.
- Analysis of the nutrient content and microbial content of green soup powder.
- To standardize the acceptability of the soups.
- To cost analysis and Popularize of green soup powder.

3. SIGNIFICANCE OF THE STUDY

Significant proportions of the children were underweight. Maternal decision-making power persists as a strong predictor of children's weight. Therefore, intervention programs focusing on improving mothers' decision-making power on child nutrition would contribute to the efforts towards alleviating the problem. Hurried breakfast in the morning, limited lunch in school and namesake dinner before going to sleep amidst parents' pressure can take a toll on school-going children. So, what is recommended by nutrition experts is a balanced diet comprising vegetables, fruits, greens and healthy food so as to ensure the physical and mental health of growing children.“It is the parents who have to take initiative and make their children eat good nutritious food. Significant health and economic consequences so prevent in childhood period health problem. Nutritive and healthy diet supplements are very important for school going children.

4. MATERIALS AND METHODS

4.1 Preparation of green soup powder

Alternanthera sessils washed the thoroughly and kept it for drying in room temperature for 8 days. Greens Powder has roasted it for 20 minutes grinds to a fine powder. Green gram dhal was roasted it for 15 minutes grinds to a fine powder, pepper was roasted it 5 minutes grind to fine powder, cumin was roasted it 5 minutes grind to fine powder. Corn flour was taken, Parboiled rice flour was taken. It acts as a thickening agent and it is a shining agent. Salt was taken.Green soup powder was tried five different combination rice powder, green gram dhal powder, combining the pepper powder, cumin powder, and chilli powder, salt . The mixing was standardized by preparing soups from the above-mentioned mixes. The green soup powder was packed in a poly propeline and stored for the future purpose by keeping it in the cover the possibility of spoilage can be maintaining The Packaging must be clean and neat. The changes in the chemical composition and microbial load were analyzed at regular intervals 90 days during the period of storage

4.2 Nutrient analysis

The nutrient content of the product was carried out to estimate Moisture, Calories, Protein, Fat, Vitamin A, Vitamin C, Iron.

4.3 Microbial analysis

A number of chemical substance was produced by the activity of bacteria when any product was kept for longer periods, which was done during the storage of greens mixes By using the standard method the two total Viable Count, E.Coli, yeast , Molds, in units of the product prepared was assessed. Microorganisms might be from improper handling, improper surrounding and preparation. The cost of the perishable and non-perishable ingredients used for the preparation of 100 gm powder was calculated.

4.4 Popularization of the product

Soup made out of different greens mixes and garlic, tomato, coriander leaves, oil were displayed in Public school, Lurthammal Puram Thoothukudi. The students were invited to taste the product and acceptability trials were done using the scoring method.

4.5 Scorecard analysis

Organoleptic evaluation is a valuable tool in solving problems involving food acceptability. It is useful in product quality maintenance, new product development and market research, sensory evaluation depends upon the responses given by different sense organs. The samples were evaluated for its colour and appearance and texture, flavour and taste. Scorecards were provided to judge to evaluate the product by 9 points hedonic scale.

4.6 Nutrition Education

Nutritional awareness was defined as self-perception of the importance assigned to eating balanced meals and classified as high, moderate, or of little importance. The impact of nutritional awareness on diet quality seems to be a promising area for both health promotion and health policy research.

5. RESULT AND DISCUSSION

5.1 Nutrient content analysis

Ponnankanni keerai soup powder nutritive value was moisture 6.10,calories152.35 Kcal, protein 10.37gm, fat 1.78g, vitamin A 1057.75mcg, vitamin C 60.35 gm, calcium 351.25, iron 11.45gm, fibre2gm were evaluated of 100 gm green soup powder.

5.2 Microbial analysis

Table 1: Microbial analysis

The parameters name	0 Days	90 Days
Total Viable Count	2.7×10^{2}	2.2×10^{3}
Total Coliforms (MPN)/G	$<0.3^{b}$	$<0.3^{b}$

5.3 Keeping quality

The selected green soup powder was kept in room temperature for three months they were examined once in fifteen days, for the growth of microorganism development of flavor and production of gases. Green soup powder was incorporated in greens once in 15 days and it was evaluated organoleptically. During the shelf life study of the green soup powder, it was observed that there was no change in flavour and taste.

5.4 Cost analysis

Cost analysis is an economic tool to social decision making and is typically used by the government to evaluate the desirability at a given intervention in Market. The aim is to gauge of the efficiency of the intervention relative to the status. The costs and benefits of the impact of an intervention are evaluated in terms of the opportunity costs the value in their best alternative use. The cost of each green soup was Alternanthera sessils Rs.20 (ponnanganni leaves).

5.5 Score card analysis

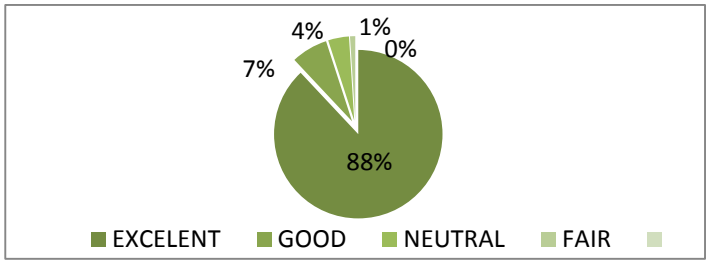

Fig. 1: Appearance content in the green soup

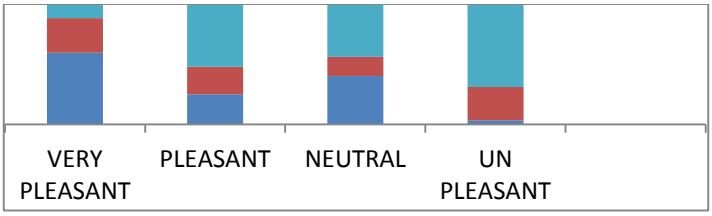

Fig. 2: Taste content in the green soup

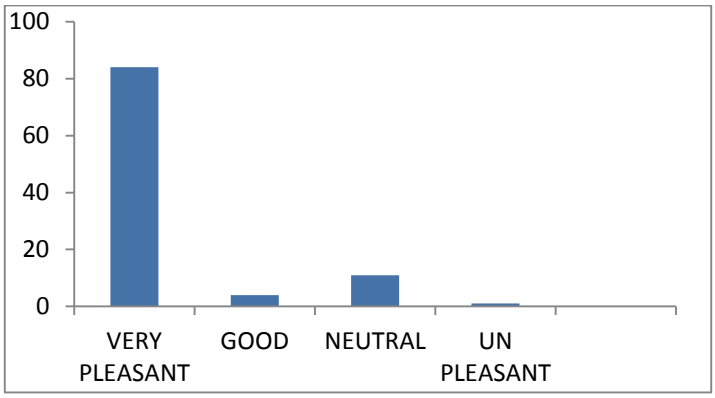

Fig. 3: Colour content in the green soups

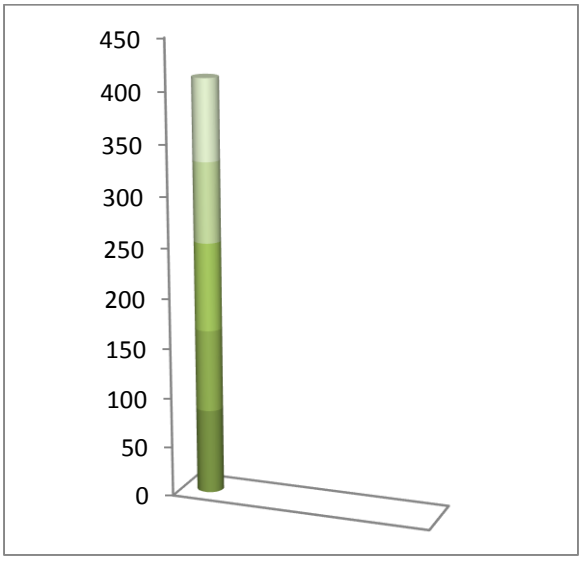

Fig. 4: Consistency content in the green soup

6. POPULARIZATION OF THE PRODUCT

Soup made out of different greens mixes were displayed in **Public School, Lurthammal Puram, and self-help group women, Thoothukudi**. Were invited to taste the product and acceptability trials were done using the scoring method.

7. CONCLUSION AND RECOMMENDATION

Ponnanganni green soup powder was low cost, It is highly present in protein and other nutrients so it prevents deficiency disorder, It is recommended for school going children, pregnant women, normal adult person. If include the school menu mid-morning snacks form good health human beings future in world.

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