

Dehydrated Herbs Used In the Creation of Premium Snacks

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Abstract: Ayurvedic practitioners use the word "ojas," which translates as "superior resilience of the body against diseases," to characterise their patients' immune systems. Medicinal plants have been utilised for treatment since ancient times, and various studies have shown that they may have comparable benefits to herbs and spices. This research was carried out to learn more about the use of traditional polyherbal formulation in the preparation of foods such as papaya laddoo, papaya mix jam, and herbalprash, which are loaded with antioxidant- and mineral-rich herbs and seeds to fight the effects of ageing and strengthen the body's defences. T2 (a mixture of raw papaya powder, amla powder, lemongrass powder, basil powder, and sesame seed powder in the following proportions: 90: 2.5: 2.5: 4: 1), papaya mix jam T2 (a mixture of raw papaya powder, amla powder, lemongrass powder, basil powder, and sesame seed powder in the following proportions: 55: 35: 2.5: 2.5: 5), and Herbalprash T2 (a mixture of raw papaya powder, amla powder, lemongrass powder, basil powder, and sesame seed powder in the following proportions: 55: 35: 2.5: 2.5: 5). Increases in these nutrients have been added to this product to boost its nutritional value. Value-added meals like those outlined here are useful for a broad variety of various health issues and age groups in addition to preventing covid-19 and boosting immunity.

Keyword: Immune boosting herbs, papaya laddoo, papaya mix jam and herbalprash

Introduction

The phrase "herbal medicine" is used to describe the practise of treating medical conditions using plants. Herbal therapies have been utilised for thousands of years, from nationalised standard treatments to standardised extracts of leaves, flowers, roots, seeds, or bark. There are now over 250,000 licenced Ayurvedic practitioners and about 20,000 distinct kinds of therapeutic plants have been identified (Pandey et al., 2013). [8]. India is the world's second-largest supplier of fresh food, behind China. In 2012-2013, the NHB estimated that 69.82 lakh hactar were used for its cultivation, with a resultant harvest of 812.85 lakh MT. The digestive enzymes chymopapain and papain are among the most potent biochemically active components of papaya, which makes it the most economically lucrative plant in the Caricaceae family of plants. Papain supplements and large quantities of raw papaya may cause negative effects. Women who are pregnant or breastfeeding should avoid using papain supplements since excessive dosages have been linked to foetal harm. You should never consume raw papaya without first processing it. Papain may be rendered inactive by heating it to 90 °C to 100 °C for a few minutes. Enzymes are rapidly inactivated when subjected to temperatures over 70 degrees Celsius or pH ranges outside of 3.0 to 9.0. Custom-Made Beer Solution (2010) [11] After harvest, it is estimated that anywhere from 5% to 30% of India's total papaya crop is

wasted. Aswagandha, giloy, tuloy, lemongrass, ginger, cinnamon, etc. are all examples of herbs and spices that may be used to cure microbial diseases and strengthen the immune system.

Many people throughout the globe also suffer from conditions such as diabetes, diarrhoea, cancer, rheumatism, inflammation, jaundice, hepatic obstruction, discomfort, cold, cough, etc.

Herbal medications including chyawanprash, hajma goli, herbal tea, amla candy, and herbalprash, also called chyawanprash, are consumed as food rather than medicine or treatment, and are effective in treating the ailment. Here are some of the more detailed goals of this research project:

One goal is to use papaya and herbs to make high-end culinary items.

Second, we need to test the finished value-added foods for their taste and texture.

Third, use a quantitative approach to determine the food items' nutritional worth.

In order to determine the prices of pre-made foods.

Materials and Methods

1. Location of the Experiment The research was conducted at Ethelind College of Home Science, SHUATS, Prayagraj-211007.U.P.India, in the Department of Food Nutrition and Public Health.
2. The Purchasing of Primary Components We shopped in a market in Prayagraj (U.P.) for raw papaya, Indian gooseberry, cinnamon, and sesame seed. The Forestry Department garden at SHUATS, Uttar Pradesh, India provided the lemongrass and Basil (Tulsi) leaves used in this recipe.
3. Third, make powdered tulsi and lemongrass. How to Make Powdered Basil with Lemongrass (Tulsi)

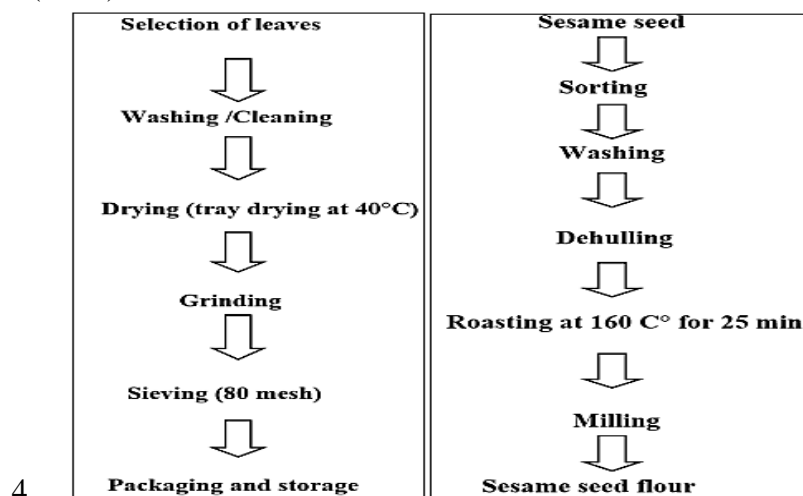


Fig a): Preparation of Sesame Seed Powder

Fig b): Preparation of sesame powder

Food processing with additional value Raw Indian ingredients including papaya, gooseberry, lemongrass, basil (Tulsi), cinnamon, and sesame powder are transformed into preserved dishes with significant commercial value. Directions for making "Papaya ladoo" T2, made with raw papaya, lemongrass powder, basil powder, sesame powder, and cinnamon powder in a ratio of 90:2.5:2.5:4:1, has been deemed the best papaya ladoo; T1, made with the same ingredients, scored 90:2:2:3:1, and T3, made with the same ingredients, scored 90:3:3:3:1.5, came in far behind. Snacks have been enjoyed all across the globe for centuries.

Only by eating food can one get the nutrients the body needs [1]. Cereals are a staple diet for people all over the globe [2].

Get your day off to a good start with some "Processed grain formulations suitable for human consumption without further cooking," aka breakfast cereals. In the United States, rice flakes are the preferred choice for breakfast [3]. Milled paddy, also called rice flakes (also aval, avalakki, poha, chivda, and beaten rice), has emerged as a healthy alternative to other types of breakfast cereal. The flavour of the convenient snack chivda mix is enhanced by the addition of dried herbs such lotus stem, garlic, ginger, mint, basil, and drumstick leaves. Herbs contain antibacterial and antifungal characteristics, which not only enhance the flavour of foods but also prolong their shelf life [5-8], and there are no known detrimental side effects when using these herbs in cooking.

Herbs are helpful because they include a number of compounds with positive effects [9]. Among them include fibre, antioxidants, phytochemicals, and vitamins. With their help, we may be able to avoid health problems like diabetes and atherosclerosis. As a result, the healing properties of many once prevalent medicinal plants are dwindling away. To improve the health benefits of rice flakes mixtures, herbs may be added as a replacement during cooking [10]. This research set out to find the best way to combine dried herbs with rice flakes to make a snack that would be both healthy and tasty.

Ratio for the preparation of "Papaya mix jam"

Picture 1 shows that the highest-scoring papaya jam was T2, which had a blend of raw papaya, Amla, Lemongrass powder, Basil, and Sesame seed powder in the following proportions: (55:35:2.5:2.5:5). T1 (50:40:1.5:1.5:5) and T3 (50:40:1.5:2.5:5) were close behind.



Picture 1: Papaya mix jam

Value-added Food Products From Iron Rich Underutilized Leaves

The leaves of the cauliflower plant, which are often thrown away, are an excellent source of the minerals iron and beta-carotene. Cauliflower leaves have been shown to reduce anaemia and increase haemoglobin levels in teenage females by the researchers Kumar and Bhavani (2004). The beta carotene, iron, and calcium in cauliflower leaves come at the cost of a higher waste index. Cauliflower leaves are another example of a by-product that may be put to good use in the fight against anaemia and the prevention of vitamin deficiencies. Moringa oleifera Lam, a member of the moringaceae family, is known as drumstick leaves. The leaves contain several beneficial phytochemicals and minerals, including calcium, potassium, iron, etc., as well as vitamins A, C, and E, beta-carotene, and flavonoids. Leaf extracts have been shown to have antioxidant, anticancer, anti-inflammatory, anti-diabetic, and antibacterial properties, and are used to treat malnutrition. Despite the fact that the protein quality of Moringa leaves matches that of milk and egg, its vitamin A content is higher than that of carrots, its calcium content is higher than milk, its iron content is higher than spinach, its vitamin C content is higher than oranges, and its potassium content is higher than bananas. Betel leaf chewing, also known as 'Paan', is very common in both rural and urban areas of India. It has a high concentration of therapeutic elements. Essential oils found in betel leaves may be utilised to make things like pharmaceuticals, breath mints, tonics, and culinary seasonings. Blood cancer medications make advantage of the leaves' anticarcinogenic characteristics and high nutritional value. However, betel leaves provide a risk of developing into mouth cancer if used in excess. In the meanwhile, it has far-reaching consequences in the economic, industrial, medical, and agricultural sectors. Most rural farmers in India rely on income from betel farming to support their families, making it one of the country's most significant commercial crops. The national economy benefits from increased exports. Enhanced value will result from improved research, expert technologies, management, and a wider variety of marketing channels. The mint leaf,

also known as pudina, is widely prized for its many therapeutic applications. Green salads, sweets, chutneys, raitas, smoothies, and mint tea all benefit from the inclusion of pudina leaves, which are also nutritious for you. To get the health advantages of mint leaves, it's best to take capsules containing mint leaf extract or utilise pudina leaf extract in a face pack or in aromatherapy. Mint leaves have several uses, including but not limited to those listed above, as well as for curing the common cold, asthma, and even bad breath. The advantages of mint leaves may be obtained whether the leaves are used fresh, dried, as an essential oil, or as a supplement. Recent studies have demonstrated that the micronutrient, vitamin, antioxidant, photochemical, and fibre content of mint leaves have positive effects on human health, particularly in the prevention of degenerative diseases and micronutrient deficiency. As a result, knowledge of the healing properties of many once-common medicinal plants is being forgotten, and those herbs themselves are becoming more uncommon. Therefore, herbs may be used as a substitute when cooking up high-end food. Cauliflower, drumstick, betel, and mint leaves powder were analysed for this article because of their widespread use in both traditional and fast cuisine. Thus, in the present study, an attempt was made to use the green leafy vegetables and leaves that are underutilised due to a lack of awareness about their nutritional value, such as cauliflower leaves, carrot leaves, beetroot green leaves, turnip leaves, curry leaves, betel leaves, and mint leaves, etc. These leaves are low in fat and protein while being high in iron, calcium, phosphorus, and carotene. The current study used dried powder of underutilised leaves to produce and standardise iron rich value-added goods, since dried leaves have a larger percentage of nutrients following moisture evaporation.

Conclusion

Raw papaya, amla, lemongrass powder, tulsi powder, sesame seed powder, and cinnamon powder are all added to the herbal food items, increasing their iron, calcium, phosphorus, fibre, vitamin C, and antioxidant content. The medicinal properties of both sesame seed powder and cinnamon powder lie in their anti-inflammatory and antibacterial properties. Herbalprash helps protect against the spread of infectious seasonal diseases, boosts the immune system, and encourages healthy growth and memory in individuals of all ages. Herbalists speculate that some plant chemicals might affect the immune system.

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