



ISSN (E): 2277- 7695
ISSN (P): 2349-8242
NAAS Rating: 5.23
TPI 2021; 10(7): 1764-1766
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www.thepharmajournal.com

Received: 19-05-2021

Accepted: 23-06-2021

Dr. Rashmi Shukla

Senior Scientist & Head KVK,
JNKVV, Jabalpur, Madhya
Pradesh, India

Entrepreneurship opportunities in millets: Ready to eat products

Dr. Rashmi Shukla

Abstract

Millets are important crop, it is highly nutritious which are required for human health. In millets essential nutritional contains like- minerals, vitamins, micronutrients, etc., millet grains also contain a considerable amount of anti-nutritional content. In the World we are the largest producer and fifth largest exporter of the commodity, credit goes to the policy, Government of India promote the consumption of millets, the Government of India introduced the word 'Nutri-cereals'.. In India's dry lands, they play a significant role in meeting food and fodder requirements of farming (Hirdeek, 2018).

Keywords: Millets super food, promotional strategies, ready to eat

Introduction

Indian people mostly prefer easy way of cooking meal without taking too much timing. Due to change of lifestyle. Most of the people prefer instant food ready to eat. So the Ready- To- Eat products popular in trends. People like it because some reasons- easy available, taste is good, easy to cook, texture is good, attractive packaging and promotional strategies etc. Ready- To-Eat packaged food is the food which is ready to eat just in few minutes. (Praveen Nishad 2021). Millets are important crops. It is highly nutritious for human health. India is one of the major global producers of millets. In Millets larger proportion of non-starchy polysaccharides and high dietary fiber compared to staple cereals and comprise 65-75% carbohydrates. Millets provide multiple health benefits with dietary fiber - improving gastrointestinal health, blood lipid profile, and blood glucose clearance. Millets healthy options for celiac with minimal gluten and low glycemic index are disorder and diabetes [Sharma 2020]. In millets available - minerals, vitamins, micronutrients, etc. essential nutritional contains. And millet grains also contain a considerable amount of anti-nutritional constituents. Purpose of the study is primary processing, secondary processing is the new trends of food processing. Different types of Millets products are developed, such as biscuits, vermicelli pasta, flakes, nutri-bar, and biscuits etc. These products were made ready for commercialization and developed entrepreneurship in millets products. Some of the ready-to-eat millets food products -, Instant ragi Poha, Instant Upma mix, Instant millets Idly mix and dosa millets Mix, millets flour, Indian Snacks etc. In millets food several opportunities in the area of processing and value addition of millets food for developing enterprising youth. Its role in the promotion of rural livelihood,

Methods and Materials

The study was undertaken in the adopted villages of Jabalpur district Three villages namely Panagar, Urdua Imaliya were selected for the study. The villages were selected based on the distance from, block headquarters, market growth centres, and road to bus points. This study discusses the factors that influence consumers to purchase and consume Ready-To-Eat Food Products. Analyse the consumer perception about millet food and consumer satisfaction towards Ready-To-Eat Food Products. This study provides various Ready To Eat millets value added products. These are the super foods. Millets market has expansion over the past few years, various opportunities in millets food products. Many food entrepreneurs turn in the area of millets. It will create activities of income generation in the villages and engaged women and youths in this activity apart from the routine work. This will also help to protect the ignored, low market value crops. This study will definitely divert the youths towards the self-employment who are migrating from rural to the urban areas.

Millets-based products come in the market in various categories, catering to diverse consumer liking.

Corresponding Author:

Dr. Rashmi Shukla

Senior Scientist & Head KVK,
JNKVV, Jabalpur, Madhya
Pradesh, India

Different types of flour like- ragi flour, jwar flour bajra flour makka flour, millets snacks, breakfast cereals, and ready-to-eat millets. Meals and beverages. According to this study, urban consumers prefer millet-based breakfast cereals and snacks for convenience and healthiness of super food they are very nutritious it means, millet flour and grains more use in traditional rural cooking. Shgs –Mahila shakti manch and Gangotri swo sahayata samooh both shg prepared ready-to-eat millets - Instant millet mix, Sorghum idli mix, Instant dosa mix, Millets flour.

Objectives

1. To Increase the socio-economic status of farm women and youth.
2. To empower the SHG women physically and economically.
3. To generate the employment for youths & farm women.
4. To empower the NGOs women physically and economically.
5. To generate the extra income through entrepreneurship in millets products.

Instant millets mixes

In the modern days instant foods (Ready To Eat) demand heavy for all peoples because the life is so fast. The time is very important to every person, They need Ready To Eat Foods and easily cooked food ". Ready To Eat Foods" play an important role in everyone's. In western countries Instant food and ready to eat foods become well established products. It is the need of the present time developing sorghum based instant mixes.

Sorghum idli mix

In southern Indian Idli an indigenous traditional breakfast food. which is a steamed product made from instant made from rice semolina and ground pulses and typically served with a spiced vegetable filling or chutney or whatever people choice. We have made an attempt to prepare instant sorghum idli mix sorghum fine semolina, blackgram dhal, salt and food grade additives; citric acid and sodium bicarbonate were used as main ingredients. All the ingredients were mixed uniformly in a blender. The formulated mix was packed and ready for use.

Product advantages

- Instantly sorghum idli can be prepared reducing the cumbersome time for fermentation.
- It is rich source of phenolic compounds and causes satiety resulting in slower digestibility.
- Reduces oxidative stress (Antioxidant)
- The shelf life of idli mix is 3 months.
- The nutritive value of instant idli mix - high amount of calcium, iron, zinc.

Sorghum Idli mix (Flow chart)

- Sorghum Semolina & Blackgram dhal
- Sieving
- Add salt, citric acid & sodium bicarb
- Mixing
- Packaging (Technology of millets value added products, 2018).

Nutritional Composition of Instant Idli -100 g

S. No.	Nutrients	Quantity
1.	Value Energy	364 (kcal)
2.	Carbohydrates	71.7 g
3.	Protein	12.4 g
4.	Fat	1.6 g
5.	Riboflavin	1.5 mg
6.	Folic acid	45.7 µg)
7.	Calcium	10.2 mg
8.	Iron	7.2 mg
9.	Zinc	0.9 mg
10.	Magnesium	102.3 mg

Instant dosa mix

Dosa is most popular breakfast, In southern India dosa is an indigenous traditional breakfast food, which is a pancake made from rice semolina and ground pulses served with a spiced vegetable filling or chutney. We have made an attempt to prepare instant sorghum dosa mix sorghum flour, blackgram dhal, salt; citric acid and sodium bicarbonate were used as main ingredients and mixed uniformly in a blender. The formulated mix was packed in packing material.

Instantly sorghum dosa can be prepared with added flavor and taste. It is Gluten Free and safe for Celiac Patients. Rich source of phenolic compounds and causes satiety resulting in slower digestibility. Reduces oxidative stress (Antioxidant) Low calorie diet (through Dietary fibre) promotes healthy digestion. The shelf life of dosa mix is 6 months. The instant dosa mix has high amount of fibre and protein when compared to traditional dosa.

Nutritional Composition of Instant Dosa - 100 g

S. No.	Nutrients	Quantity
1.	Value Energy	364 (kcal)
2.	Carbohydrates	71.7 g
3.	Protein	12.4 g
4.	Fat	1.9 g
5.	Riboflavin	1.5 mg
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9.	Zinc	0.9 mg
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Process flow chart for Instant Dosa Mix

- Instant Sorghum Dosa Mix
- Sorghum Flour & Bengal gram dal (Weighing)
- Add Salt, Citric acid & sodium bicarbonate
- Mixing
- Packaging (Technology of millets value added products, 2018).

Millets flour

Millets Flour is used as a main ingredient for various recipes which is used in millets recipes. Millet grains (Pearl Millet, Finger Millet and Foxtail Millet) are processed by dry milling. The dry milling process starts with the cleaning of grains. The cleaned grain is milled by the hammer mills to separate the endosperm, germ and bran from each other to get fine flour. Different types of millets flour is prepared by different types of millets grain like- Ragi flour, Bajra flour and foxtail millet flour: These flours (atta) have been developed. We used millets flour for making various recipes.

It is rich in magnesium, zinc, iron, dietary fiber and protein. Used to make rotis and bakery foods (cakes and biscuits). Sorghum flour, Ragi flour and Bajra can be stored for 2 months at ambient temperature.

Rev. 2014;2:164-170.

Nutritional Composition of Millet Flour (100 g) Bagra Floor

S. No.	Nutrients	Quantity
1.	Protein	6.1 g
2.	Fat	2.2 g
3.	Fibre	1.5 g
Ragi Flour		
5.	Protein	7.1 g
6.	Fat	2.4 g
7.	Fibre	1.2 g
Korra Flour		
8.	Protein	5.1 g
9.	Fat	2.5 g
10.	Fibre	1.4 g

Process flow chart of Millet flour

- Cleaning.
- Hammer mill.
- Cooling.
- Flour.
- Packaging.

Outcome

These entrepreneurs have swiftly recognised the potential of millet as a sustainable and healthy food source or super food prompting them to diversify their product portfolios accordingly. Furthermore, many entrepreneurs in India have plans to increase the production, consumption, and exports of millet-based products-Ready to Eat. In this field various entrepreneurship opportunities for millet crops can be established in future. In the present days, these grains Sorghum, bajra, maize, kodo, kutki, ragi, barley, oat and their flour are used as a food for the patients. SHG provide the Ready to Eat products for the needy customers Hence, it may be used for making of desired food material as a business for the rural unemployed women and rural youth. The outcome of the study is tremendous entrepreneurship opportunities for processing and value addition of millets which can be successfully pursued by the enterprising youth living in the production catchment. (Chakrorty, 2021).

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