1. Role of Home Makers in Popularizing Millets at Household Level

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Abstract:

Home makers have direct involvement in culinary practices at household level. They play important roles in transforming dietary habits and dietary consumption pattern of the family members. Since millets are getting attention due to their high nutritional values and numerous health benefits. When vast population all over the world are victims of many lifestyle diseases, millets can be a healthy choice and replace rice and wheat to some extent. But majority of the population have more favorable attitude towards wheat and rice. Since millets are not known to the vast section of population and people are less aware of their magical health benefits. It needs efforts at all levels. It needs awareness campaign at large scale because transformation in dietary habit is not an easy job. Researchers, educationists, farmers, entrepreneurs, business houses and home makers are important stakeholders of the society who can play significant role in popularizing millets. Millets can get entry into Indian kitchen if female population/home makers understand nutritional values or health benefit properties of millets. They must be aware about nutritional values and health benefits of millets. Awareness and knowledge level of women on millets must be enhanced so that they willingly adopt millets at household level. Educational institutions have potent role in popularizing millets at ground level. This can be done by organising workshops, seminars, awareness programs at schools or college level. Students studying in schools and colleges can be made aware especially female students who will further aware their own families, neighbours and friends. Therefore, home makers may play an active role in increasing consumption of millets at household level.

Keywords:

Culinary practices, awareness, consumption, knowledge, dietary habits.

1.1 Introduction:

Millets are not new for India as they have been grown since very early years. In Kannada millets are called Siridhanya. In the very beginning millets had been used both as human foods as well as cattle fodder. The Green revolution mainly focussed on wheat and rice production and millets' production continuously received least attention. Gradually millets disappeared from our plate and became unpopular and unutilized. However, few states like Maharashtra, Madhya Pradesh, Gujarat Rajasthan and Karnataka are good performers in millets production and utilization but most of the states are reluctant towards production and consumption of millets.

Declaration of 2018 as National Year of Millets and further 2023 as International Year of Millets acted influential role in popularizing millets. Aim of this campaign is to popularize millets at all levels so that production and consumption of millets can be increased, and grains can be included in Indian diet. Since wheat and rice are mainly used as staple foods and inclusion of millets as main grains is a big challenge. People will adopt millets only when they understand their nutritional values and health benefits and perceive millets as superior to wheat and rice. Since there are numerous advantages of consumption millets but majority of population consider millets as poor man's food and not aware and well informed about nutritional and hidden health benefits of millets.

Undoubtedly, millets have incomparable benefits. They are nutritionally healthy and contain many micronutrients, bioactive substance, Phenolic compounds and antioxidants. Millets are rich in micronutrients such as iron, zinc, calcium and vitamins. Many millets like finger millet, pearl millet, barnyard millet are used in food fortification (Bhumika and Kalpana, 2010). They have low Glycemic Index which make them suitable for all the population at risk of diabetes. Again, high content of fibres makes millets slow digesting food and give a feeling of fullness.

Durairaj et al. (2019) reported in their study that millets help in improving the height, weight and haemoglobin level of school children. There are numerous health benefits which have been shown through studies and research. Millets have potential to give food and nutrition security to the fast-growing population. In addition to food security millets have immense potential to reduce the burden of many lifestyle

diseases such as diabetes, thyroid, hypertension, heart diseases, obesity etc. Here, some health benefits of millets have been discussed which are based on studies and research.

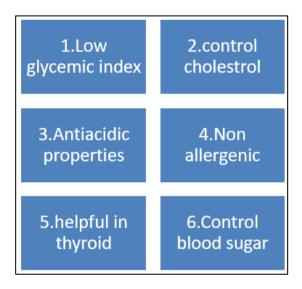


Figure 1.1: Milles With Marvelous Health Benefits

- Millets possess low Glycemic Index as compared to wheat and rice.
- Low glycemic index of millets makes the grains more suitable for people with diabetes or those who are vulnerable to the disease.
- Low glycemic index does not allow blood sugar level increase to much extent.
- They contain anti acidic properties which enhances their utilities for health benefits.
- Rich in fibres –this property of millets help in slow digestion and gives a feeling of satiety.
- Increases metabolic rate which is helpful in thyroid.
- absence of Gluten makes millets non allergenic.
- Helpful in reducing Cholesterol.
- Effective in reducing blood pressure.
- Very useful in treating respiratory related problems such as asthma.
- Helps to optimize kidney, liver and immune system health.
- Reduces risk of gastrointestinal conditions like gastric ulcers or colon cancer.
- Eliminates problems like constipation, excess gas, bloating and cramping.
- Millet acts as a prebiotic feeding microflora.
- Obesity can be reduced by increasing utilisation of millets in daily diet.

- Durairaj et al. (2019) reported in their study that millets help in improving the height, weight and haemoglobin level of school children.
- Further, it was also reported that millets helped to improve stunting and body mass index in school children who consumed them for three months (Anitha et al., 2019).

Table-1.1 Nutritional values per 100 grams millets

Millets	Protein	Fiber (g)	Minerals	Iron	Calcium
	(g)		(g)	(mg)	(mg)
Sorghum	10	4	1.6	2.6	54
Pearl	10.6	1.3	2.3	16.9	38
Finger	7.3	3.6	2.7	3.9	344
Foxtail	12.3	8	3.3	2.8	31
Proso	12.5	2.2	1.9	0.8	14
Kodo	8.3	9	2.6	0.5	27
Little	7.7	7.6	1.5	9.3	17
Barnyard	11.2	10.1	4.4	15.2	11

Source: ICAR- Indian Institute of Millet Research

1.2 Needs to Promote Millets:

In present scenario humans have two major challenges:

I. Food security for vast population and

II. Environmental protection:

To ensure food security to the vast growing population is a big challenge but fortunately millets have potential to ensure food security to the fast-growing population.

Millets can grow even in less fertile soil and do not need much agricultural inputs in terms of fertilisers, pesticides, irrigation etc. Another generous reason of adopting millets on mass level is immense health benefits. With passage of time, we human being achieved development at most of the front, but the most neglected thing

remained is our health. We have engaged ourselves in such a way that hardly get time for self. Majority of the population are suffering from different kind of lifestyle diseases.

Our unhealthy lifestyle which includes unhealthy food, lack of exercise, stressful environment, polluted environment and many other reasons lead to many health problems which can be managed or controlled with proper dietary management. Millets can give better food and nutritional security to population and act as immunity booster as millets have immense potential to fight against many diseases. Different millets have different health benefits which have already been discussed.

Secondly, millets can be grown in rainfed area and semi-arid land, dry land. They require low input costs. In addition to these millets being C4 crops, millets have very much potential to utilize atmospheric CO2 which make them climate smart crop.

Thus, millets are healthy not only for human beings but for the environment also.

1.3 Role of Home Makers in Promotion of Millets:

Women have decisive role in household chores especially culinary practices. Maintaining good health and happiness of the family is the prime responsibility of home makers. It is the home maker who plays an important role in developing good dietary habits among the family members. A good home maker always be aware and careful about health and nutritional needs of the family members. Since millets are rich sources of many nutrients and possess numerous health benefits.

Therefore, once home makers understand these attributes of millets, they will definitely promote millets' consumption at household level. Since wheat and rice have been in use for a long time. Most of the recipes are easy to prepare and tastes are acceptable so introduction of millets in daily diet at regular basis will not be an easy task. There are some factors like preparation of millets need little more processing methods before cooking and requires more time to cook. Again, in urban areas millets are not easily available and cost high. Further, majority of women are not very aware about kind of dishes which can be prepared from millets. They need awareness and knowledge enhancement on millets and millets' preparation.

Most of the recipes which are prepared from rice and wheat can also be prepared from millets. Dishes which are specially prepared from rice and wheat can also be prepared from millets e.g. pulao, rice, idli, Dosa, cheela, Uttapam, halwa etc.

Home makers can use their own innovative ideas and prepare different dishes which are healthy, nutritious and acceptable by the family members specially children and elderly members.

But this understanding must be developed among the home makers. Once they become aware of nutritional values and health benefits of millets, they will automatically adopt millets for wellbeing of the family members. But we need more effort to promote consumption of millets at household level. Unless demand will increase production cannot be augmented. But this needs awareness and knowledge enhancement regarding various uses of millets at household level.

If a woman values health of the family members, she will buy and cook millets and include them in daily diet of their families.

Here, schools and colleges can be used as platforms where students especially female students can be made aware about nutritional and health benefits of millets. Educational institutions especially home science colleges can take a lead role in popularizing millets and millet products.

Faculties of home science college and schools can organise workshop, seminars, awareness programs and generate awareness and enhance knowledge on millets. Awareness generation at college level will definitely create awareness at household level.

Some dishes have been given here which home makers can try and cook them very frequently.

1.4 Preparations from Millets:

A. Dosa:

Ingredients

Proso millet -100 gms

Black gram- 50 gms

Fenugreek seed -2.5 gm.

6

Method of Preparation:

Wash Proso millets and black gram separately and soak them in water separately for 5-6 hours. In the morning grind both ingredients along with fenugreek seeds. Leave grinded paste for 3 to 4 hours. Add salt according to taste. Keep the consistency of the mixture so that it can spread easily.

Heat pan on medium flame then sprinkle one tea spoon of vegetable oil and then spread batter on the pan with the help of spoon. After 3-4 minutes turn upside down to cook properly.

Cook until edges begin to leave the pan. Serve dosa with chutney or sambhar.



Figure 1.2: Dosa

B. Uttapam:

Kodo millet/Proso millet-100 gmas

Black gram-50 gms

Onion-1 medium size

Tomato -1 small

Green chilli-1 piece

Coriander leaves -Fine chopped

Ginger -small piece

Salt- according to taste

Paneer –if available

Capsicum-1 medium size

Oil- 2 tablespoons.



Figure 1.2: Uttapam

Wash both the ingredients separately and then allow to soak for 5-6 hours. Remove water and make a paste of soaked millets and black gram. While grinding add small piece of ginger and green chilli.

Cut onion and tomato into small square pieces and mix them with grinded paste. Heat frying pan on medium flame for 2-3 minutes . Put one tea spoon oil into the hot pan and spread the paste with the help of spoon. Spread cut onion, tomato and coriander leaves on uttapam then turn upside down. You can also use oregano and grated or small pieces of paneer on uttapam to make it tastier and healthier. Generally, utapam is liked by kids and can be given for lunch pack.

C. Halwa (Sawa rice):

Sawa rice -100 grams

Sugar -25 grams

Ghee - Two tablespoon.

Cashew-10 pieces

First of all grind Sawa rice in a mixer grinder. Heat a frying pan on medium flame and then put ghee.Roast grinded Sawa rice until its colour changes and aroma develops. Add warm water, grinded sugar and chopped cashews into the pan. Stir continuously to give a smooth texture.

A. Laddoo (Sawa rice):

Grinded sawa rice - 100 grams

Grinded sugar - 50 grams

Grated coconut- 25 grams

Ghee- 30 grams

Makhana- 25 grams

Peanuts- 25 grams



Figure 1.3: Laddu

Preparation Method:

To prepare laddoo from Sawa rice, first grind rice to make flour. Makhana and peanuts are also roasted separately and then grinded. Grind Sugar to make fine powder. Do not grind very fine. Heat pans on medium flame then put ghee into the pan and roast Sawa flour. When flour turns light brown and aroma develops add sugar, grinded makhana and peanuts and grated coconut also.

Mix all the ingredients well and off the gas. Allow the mixture to cool and then with moist hands give a shape of laddoo. There are many other nutritious and mouth-watering dishes which can be prepared from millets such as idli, upma, kheer, poha,pulao, fried rice etc.

1.5 Conclusion:

Home makers have big role in transforming dietary habits of their family members. A good home always thinks and practices for good health of the family members. With increasing burden of different lifestyle diseases on population, it is an emergent need of the time to adopt healthy lifestyle especially healthy food habits.

Inclusion of foods in daily diet which are nutritious, affordable, easily available and having health benefits is important and this responsibility mainly lie on shoulders of home makers. A good home maker always takes care of nutritional needs of each and every member of the family.

Millets are nutritionally superior with numerous health benefits. They are healthy for all age groups and more beneficial for people having some health complications like diabetes, hypertension, thyroid, high cholesterol, cancer etc.

Here, home makers must be aware with good knowledge of millets' nutritional values and health benefits. Increased awareness and knowledge level of home makers will definitely motivate them to develop positive attitude towards millets which will definitely encourage use of millets at household level.

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