IJCRT.ORG ISSN : 2320-2882

INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

ENHANCING NUTRITIONAL KNOWLEDGE ON DIET DIVERSITY AMONG RURAL HOUSEHOLD WOMEN.

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ABSTRACT: Household food security is an important measure of well-being. Although it may not encapsulate all dimensions of poverty, the inability of households to obtain access to enough food for an active, healthy life is surely an important component of their poverty The objective of the study was to understand and improve the variety of food consumed among rural households, specifically in terms of diet diversity. By analysing the effectiveness of interventions about the specific needs and challenges of rural communities and improving women's understanding about nutrition and food diversity in rural families. Totally 200 subjects, under various age groups, were conveniently selected from the rural household families of Wayanad, Kerala. A study was conducted among the subjects. The collected data was sorted and evaluated using a statistical package for the social sciences. The data shows that the consumption of various food groups that provide adequate nutrients to their diet is consumed in less by rural household women Choosing foods from all food groups ensures that household women, as well as everyone else, obtain the necessary nutrients for optimal health, energy, and well-being.

KEY WORDS*:* Rural household, Consumption, Cereals, optimal health, well-being.

INTRODUCTION

Food systems are a key influencer of diet quality and can play an important role in addressing the double-burden of malnutrition that is, both undernutrition and overnutrition - in low- and middle-income countries. Diversification of household agricultural production is a strategy to improve women's diets and provides a direct pathway to improved consumption through increased availability of diverse foods for home consumption. Agricultural production also indirectly improves diets, as it is a source of livelihood for rural farmers and provides income to purchase nutrient-dense foods for women ***(Madzorera,2020***)

Dietary diversity previously has been defined as the number of different foods or food groups consumed over a given reference period of time. It encompasses both inter- and intra-level variety of foods groups for which increased availability, access to and consumption of adequate quantities of foods and appropriate varieties of safe, good quality food is a prerequisite. Dietary diversity had long been recognized as an important component of which ensures diet quality. ***(Nair, M. K etal.,2016***)

Dietary diversity has also been consistently associated with better child growth in a number of studies in developing countries. The magnitude of association is large, including in the few studies that have controlled for socioeconomic factors. Dietary diversity is clearly a promising measurement tool, but additional research is needed to validate and test alternative indicators for different purpose***. (Ruel, M. T.2003).***

Nutrition education is defined as any combination of educational strategies, accompanied by environmental support, designed to facilitate voluntary adoption of food choices and nutrition-related behaviors beneficial to health and well-being ***(Contento,2008)***

Nutrition education plays a pivotal role in nutrition behavior change efforts, as it can enhance participants' attainment of nutrition- and food literacy. Nutrition literacy refers to the set of abilities needed to understand and interpret information about food and their nutrients, while food literacy encompasses nutrition literacy as well as the ability to apply that information in making appropriate decisions ***(Spronk etal.,2014)***

OBJECTIVE

- To understand and improve the variety of food consumed among rural household specifically on diet diversity.
- To analyze the effectiveness of intervention about the specific needs and challenges of rural communities.
- To improve women's understanding about nutrition and food diversity in rural families.

LITERATURE REVIEW:

Dietary diversity refers to the variety of foods consumed across and within food categories within a certain period, as well as a rise in the range of foods available across and within food groups that can ensure optimal intake of key nutrients for good health***. (Arimond,2011)***

All people must consume a variety of foods to meet their nutritional needs; a diverse diet is important and helps to ensure optimal intake of micronutrients; No one food has all the nutrients; The possibility of fulfilling nutrient needs is higher when more food types are consumed daily. Low dietary intakes and unfair intra-household food distribution are the leading causes of undernutrition, and food taboos and misconceptions contribute significantly to the high levels of undernutrition among vulnerable groups. ***(Merga,2022)***

Dietary diversity can be measured at either the household or the individual level and higher scores represent a more diverse diet. For households, a higher score is an indicator of increased economic access to a varied diet for household members (though the indicator does not reflect intra-household dietary patterns).

Household dietary diversity has been shown to be associated with caloric and protein adequacy and household income. ***(Swindale,2006)***

MATERIALS

The precise process or strategies used to locate, pick, process, and analyse data on a certain subject are known as methodology. Dietary pattern has to be checked as there is an emerging need to maintain a healthy lifestyle. The aim of the study is to enhance nutritional knowledge on diet diversity among rural household women.

- Selection of sample and sampling techniques
- Selection of Area
- Statistical analysis

Selection of sample and sampling technique

A statistical strategy known as the sampling methodology or sampling method is used to choose a representative sample from a population. It entails carefully analysing the demographic data that has been collected and choosing a suitable sample based on that data. The target population, from which the sample is actually drawn, is subdivided into the study population. Study population is a subset of the target population from which the sample is actually selected. It is also known as accessible population. The sampling method used for this study is progressive sample. Progressive Sampling starts with a small data sample from the full dataset and use progressively larger samples until the model accuracy cannot increase substantially.

Selection of Area

Study area is the land surface which is mapped and quantitatively sample for conducting the survey. The area selected for conducting this study is Wayanad district, of Kerala. Wayanad is home to a diverse population, including various tribal communities and other rural households.

Statistical Analysis

To select a representative sample from a population, a statistical technique called the sampling methodology or sampling method is applied. It requires carefully examining the gathered demographic data and selecting an appropriate sample in light of such data. The study population is a subset of the target population, from whom the sample is actually taken. In this study self-nominal data scale is done by SPSS (Statistical Package for the Social Sciences) Method. The statistical analysis test which is being used is t value and p value.

RESULT:

In this study the consumption pattern among rural household women were assessed through data collection from households. The collected data was analyzed using the standards.

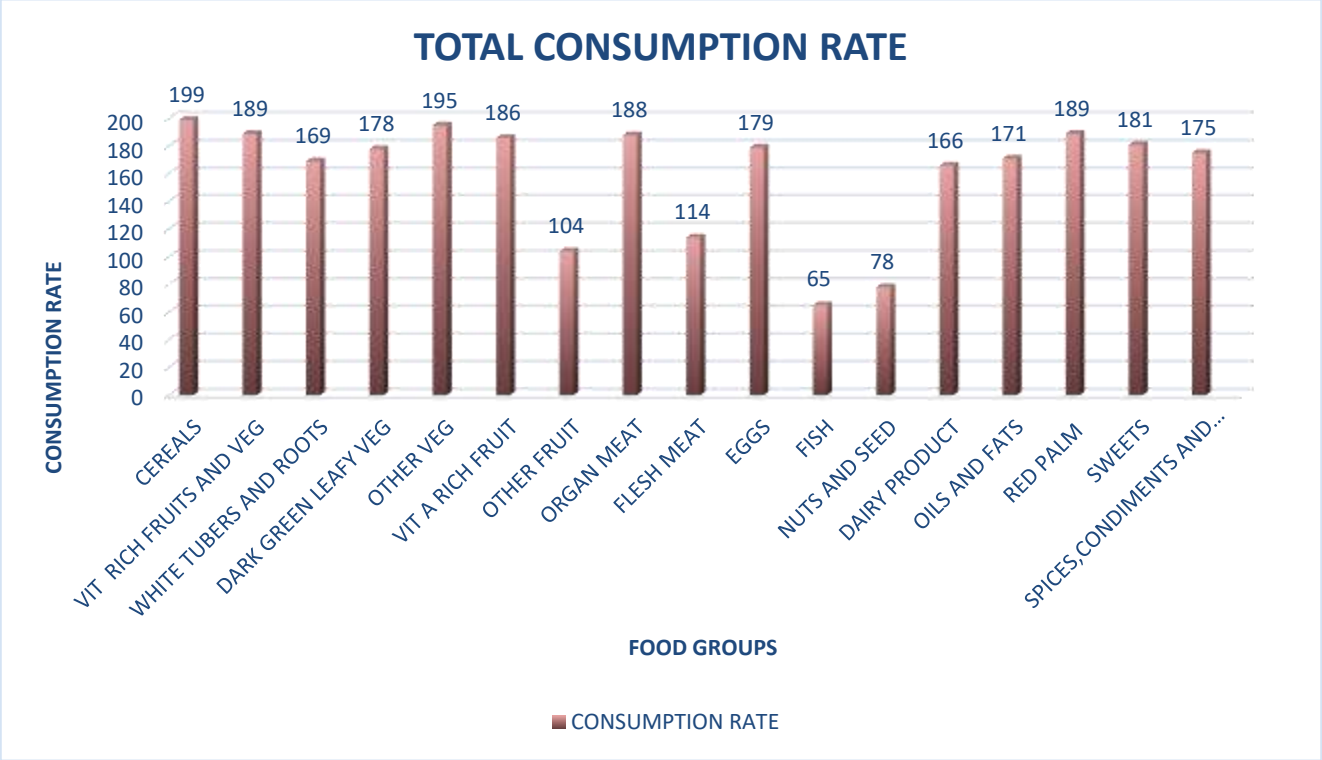

Figure 1 Total Consumption Rate

From the above graph it is stated that the consumption of various foods groups which provide adequate nutrients to their diet are consumed in less by the rural household women which include consumption of Fish is about 32.5%, Nuts and seeds are about 39%, fruits are about 52%, Meat are about 55.5% and Dairy products are about 83% and the consumption of cereals are in high amount it is about 99.5%.

SL. NO	QUESTIONS	SCORE	MEAN±S.D
1	CEREALS	199	0.995±0.070711
2	VITAMIN A RICH FRUITS AND VEGETABLES	189	0.945±0.228552359
3	WHITE TUBERS AND ROOTS	169	0.845±0.362813
4	DARK GREEN LEAFY VEGETABLES	178	0.89±0.313675
5	OTHER VEGETABLES	195	0.83±0.376575
6	VITAMIN A RICH FRUITS	186	0.93±0.255787

7	OTHER FRUITS	104	0.985±0.121857
8	ORGAN MEAT	188	0.94±0.238083
9	FLESH MEAT	114	0.565±0.497001
10	EGGS	179	0.67±0.471393
11	FISH	65	0.325±0.4695502
12	LEGUMES, NUTS AND SEEDS	78	0.39±0.4889739
13	MILK AND MILK PRODUCTS	166	0.83±0.37657542
14	OILS AND FATS	171	0.855±0.352984405
15	RED PLAM PRODUCTS	189	0.445±0.498212887
16	SWEETS	181	0.905±0.293950736
17	SPICES, CONDIMENTS AND BEVERAGES	175	0.875±0.33154882

Table I Mean comparison of the subjects

Table I reveals the knowledge level assessment of the subjects. The knowledge criteria of the questionnaire consist of 17 questions based on the various foods groups being consumed and intake of various nutrient by the rural household women. The questions answered by the subjects were compact and the "t" value was obtained for every question a significance of 5(>5). The questionnaire about diet diversity well explained to the subjects and the data was assumed from those subjects. The questionnaire was about knowledge assessment and dietary practice. This knowledge assessment section has 17 questions which was about consumption of various food groups which includes cereals, vitamin a rich fruits and vegetables, white tubers and roots, dark green leafy vegetables, other vegetables, vitamin a rich fruits, other fruits and organ meat. As the result of this study the consumption of cereal group is high, about 99.5%. Followed by vegetable consumption 97.5%, fish consumption 32.5%, fruit consumption is about 52%, meat consumption is about 55.5%, dairy products consumption is about 83%, and nuts and seeds consumption are about 39%

CONCLUSION

For household women specifically, ensuring diet diversity is particularly important due to their often-multifaceted roles, which may include caregiving, household management, and potentially income generation. A diverse and nutritious diet supports their physical health, mental well-being, and ability to fulfill their various responsibilities effectively. Additionally, promoting diet diversity within households can have positive ripple effects on the health and nutrition of the entire family.

The findings demonstrated that the women living in rural households recognized very little about different food groups, consumption patterns, and dietary options. Adequate nutritional information on food diversity was provided to the populations that could have a favorable impact on this research. The unveiling of a variety of food categories into their daily diet will significantly improve as a result of the intervention. Thus, it can enhance the Entire family's overall health and well-being.

This study's key conclusion was that the population's consumption of cereals was high but its consumption of other food groups, like fish, eggs, nuts, and seeds, was quite low. Overall, choosing foods from all food groups ensures that household women, as well as everyone else, obtain the necessary nutrients for optimal health, energy, and well-being.

ACKNOWLEDGEMENT

We sincerely acknowledge the DBT.GOVT. OF INDIA, NEW DELHI for their support on our study.

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