

NUTRITIONAL STATUS OF POWER LOOM WORKERS AND IMPARTING NUTRITION EDUCATION TO THEM

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Abstract

Nutrition plays an important role in an individual lifestyle. It is essential for the individuals to go on with their regular activities. The components involved in helping the people with their physical, mental and wellbeing is referred to as Nutrients. Mental health of an individual is highly needed by to have a good physical wellbeing. This study involves assessing the nutritional status of a group of people in an area and educating them on the improvement of their health through nutrition education. It was found that from the clinical appraisal of the people analyzed, a greater number of people suffered with hair loss, head ache, etc.

Introduction

Nutrition is the sum total of the processes involved in the taking in and the utilization of food substances by which growth, repair and maintenance of the body are accomplished. It involves ingestion, digestion, absorption and assimilation. Nutrients are stored by the body in various forms and drawn upon when the intake is not sufficient. In addition, nutrition involves identifying how certain diseases, conditions or problems may be caused by dietary factors such as poor diet (malnutrition), food allergies, metabolic diseases, etc.

Nutritional status assessment is done to get an objective estimate to know whether an individual or a community is well nourished, poorly nourished or over nourished. This is mainly done by, Patient history, Clinical examination, Laboratory examination and Recording dietary intake

1. Clinical Appraisal: It is an essential feature of all nutritional surveys, as its primary goal is to assess the health status of individuals or groups within a population in accordance with the type of food consumed.
2. Anthropometric Measurements: It includes height, weight, skin fold thickness and circumference, etc. could detect the change of body composition to assess the nutritional status in groups including new born, children under age of five and adults.
3. Laboratory and Bio-chemical Investigations: These are extremely helpful in detecting each change in body metabolism and nutrition, before the appearance of overt clinical signs.
4. Functional Indicators: This is an important category of diagnostics tools and supporting the biochemical investigations. The commonly used functional indices are hemostasis and nerve conduction.

5. Vital Statistics: It is obtained from the community, health care professionals and surveillance network, etc.

6. Dietary Intake Assessment: Dietary survey is a scientific assessment of eating pattern that could detect nutrient deficiency.

7. Ecological Factors: Nutritional assessment is being used in different settings. For instance, for evaluating the level of cognitive impairment in the early finding potential nutritional risk of the patients during the transplantation process in leukemia patients; assessing the cardiovascular risk of people suffering from heart condition and identifying the prognosis of tuberculosis patients.

Methodology

The study was conducted at Kittampalayam of Palladam (taluk) near Karumathampatti, where the majority of people are power loom workers. This survey was taken to study the dietary pattern and nutritional status of these people. The subject chosen for the study were housewife and power loom workers of both genders. The questionnaires were formulated to gather information on general aspects and food expenditure pattern. The questionnaire also included question regarding their food intake pattern, physical and sports activities. Nutrition education was given to the people through the direct counseling method and pamphlets were distributed to people to create awareness.

Results and discussion

The food frequency patterns were discussed below:

Table 1 (Food Frequency Consumption pattern)

Food	Daily	Weekly	Monthly	Occasionally	Never
Cereals					
Rice	218	2	-	-	-
Wheat	27	156	26	5	6
Ragi	10	44	50	40	76
Bajra	-	48	16	35	121
Maize	4	12	43	46	115
Others	6	13	46	36	119
Pulses					
Bengal gram	95	112	3	1	9

Black gram	92	110	10	2	6
Green gram	24	179	8	4	5
Red gram	42	155	7	3	13
Horse gram	12	146	25	14	23
Others	2	89	28	35	66
Green Leafy Vegetables					
Sirukeerai	9	135	28	14	34
Araikeerai	10	139	29	8	34
Manathakkali	11	144	31	7	27
Drumstick leaves	10	140	38	9	23
Fenugreek leaves	7	98	29	27	59
Others	3	75	39	24	79
Other Vegetables					
Ash gourd	11	133	30	8	38
Bitter gourd	10	156	24	6	24
Lady's finger	16	177	17	2	8
Drumstick	16	173	12	8	11
Plantain stem	12	92	43	22	51
Others	6	92	34	25	63
Roots and Tubers					
Carrot	29	164	17	3	7
Beet root	20	161	22	4	13
Onion	206	14	-	-	-
Potato	10	157	33	10	10
Radish	16	119	49	17	19
Others	10	84	41	41	44

Fruits					
Apple	42	84	26	32	36
Banana	93	97	12	8	10
Guava	14	78	53	38	37
Papaya	13	60	52	45	50
Tomato	203	11	3	-	3
Others	22	62	60	43	33
Milk					
Milk	190	3	2	6	19
Fats and Oils					
Oil	201	11	-	-	8
Fried Foods					
Fried foods	7	59	26	49	79
Non Vegetarian					
Chicken	2	89	50	15	64
Mutton	1	83	66	25	45
Food	Daily	Weekly	Monthly	Occasionally	Never
Fish	19	49	59	17	76
Others	7	19	20	49	125
Nuts					
Almonds	-	7	12	37	164
Coconut	119	70	6	3	22
Groundnut	24	63	32	48	53
Cashew nut	6	19	26	42	127
Others	2	10	17	71	120
Junk Foods					

Junk foods	2	18	13	37	150
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The above table brings out a detailed view on the consumption of various food groups by the population.

The major cereals consumed by the people include rice, wheat, ragi and maize. 218 number of the population consumed rice daily; 156 number consumed wheat once in a week; 50 number consumed ragi monthly while majority of the population were not consuming Bajra and maize due to lack of availability.

The pulses consumed in larger quantity by the population include Bengal gram, black gram, green gram, red gram, horse gram, etc. The major population (42 nos) consumed red gram daily; green gram once in a week (179 nos) while other pulses were consumed in lesser quantity as compared to others.

Sirukeerai, araikeerai, manathakkali, drumstick leaves and fenugreek leaves were a few green leaves consumed by the study population. Off these greens, 10 number of the population consumed araikeerai and drumstick leaves regularly while a major population (144 nos) consumed the above mentioned greens weekly. Other greens were consumed monthly and occasionally by few number of the people [5].

A few other vegetables consumed by the families include ash gourd, bitter gourd, lady's finger, drumstick, plantain stem, etc. 16 number of the families consumed lady's finger and drumstick regularly; 177 number of families consumed lady's finger once in a week; 43 number of the families preferred plantain stem monthly and few other vegetables were consumed occasionally. The roots and tubers consumed by the population include the following such as carrot, beet root, onion, potato, radish, etc. Onion is the prime vegetable consumed by majority of the population while carrot was consumed once in a week and radish was consumed monthly and several other roots and tubers were consumed occasionally.

Apple, banana, guava, papaya and tomato are few fruits consumed by the population. Tomato was the prime important fruit used by the population regularly. Apple was consumed once in a week; guava was consumed once in a month; papaya was consumed occasionally and few families consumed other fruits regularly.

Milk is an important dairy source that is easily available in any village. Majority of the population (190 nos) consumed milk regularly and only a minimum number of the population (19) never consumed milk. Oil being an important source of fat and important ingredient in cooking was used daily by the population.

Fried foods were consumed once in a week by 59 number of the population while 79 numbers never consumed fried foods. Non-vegetarian food items form the protein source of the food groups. Off this, fish was consumed regularly by 19 number of the population; poultry was consumed once in week by majority of population; mutton was consumed by 66 number of population; other non-vegetarian food items were consumed occasionally and 125 number of the population never consumed any of these food products.

Almonds, coconut, groundnut, cashew nut are a few nuts consumed by the population. Off these food products, coconut was consumed by majority of the population regularly; ground nut was consumed once in a week and several other families consumed other nuts monthly, occasionally and majority of the population never consumed any of these products.

Junk food products were not being consumed by the population. Majority of the population never consumed any junk food items while a few members consumed it occasionally.

Nutrition Education

The nutrition education to the community about personal hygiene, health and fitness, food patterns and overall cooking ideas was explained. Diet counseling was also given considering their likes and dislikes with inclusion of different healthy foods [6]. Their doubts were clarified on the individual basis. They were very much interested and responsive to know about the nutrient role in their body requirement. Pamphlets were also distributed to them [7].

Conclusion

The community response was very good which brought on better exposure for us and developed good communication skills. Pamphlet was distributed that includes personal hygiene, health and fitness, food patterns and overall cooking ideas [8]. Diet counseling considering their likes and dislikes with inclusion of different healthy foods. More research activities can be explored in the above study and clinical trials can be made mandatory on handling of the people [9].

References

1. Divisi D., Di Tommaso S., Salvemini S., Garramone M., Crisci R., (2006), "Diet and cancer", In: "Acta Biomedica", vol. 77, no. 15, pp. 118–123.
2. Farquar J N., (1996), "Plant Sterols, their biological effects in human", In: "Handbook of Lipids in Nutrition", 2nd, BOCA Rotan HL CRC Press, pp. 101-105.
3. Fedirko V., Lukanova A., Bamia C., Trichopolou A., Trepo E., Thlings U., Schlesinger S., Aleksandrova K., Boffetta P., Tjenneland A., (2013), "Glycaemic index, glycaemic load, dietary carbohydrate, and dietary fiber intake and risk of liver and biliary tract cancers in Western Europeans", In: "Annals of Oncology", vol. 24, no. 12, pp. 543–53.

4. Food and Agriculture Organization of the United Nations., World Health Organization., Summary report of the sixty-fourth meeting of the Joint FAO/WHO Expert Committee on Food Additives (JECFA). Retrieved JUNE 24, 2015, from:
http://www.who.int/entity/ipcs/food/jecfa/summaries/summary_report_64_final.pdf
5. Mary Ann Kaylor., Alan Marr B., (2004), "Diet and cancer", In: "Nutrition Secrets", 1st, Black Stone Audio Inc, pp. 77-78.
6. Peter K V., (2000), "Introduction: Functional role of spices", In: "Handbook of Herbs and Spices", 1st, Woodhead Publishing Limited, pp. 5-10.
7. Pokorny J., Yanishlieva N., Gordon M., (2001), "Antioxidants", In: "Antioxidants in food, Practical Applications", Cambridge Woodhead publishing limited, vol. 72, no. 5, pp. 145-171.
8. Proestos C., Boziaris I S., Nychas G J E., Komaitis M., (2006), "Aims and Scopes", In: "Food Chemistry", vol. 95, no. 4, pp. 664-671.
9. Willett W C., (1995), "Diet, Nutrition, and Avoidable Cancer", In: "Environmental Health Perspectives", vol. 103, no.8, pp. 165-170.