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## A study of problems of nutritional imbalances in public health of Darbhanga block

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### Abstract

Food security is of supreme importance in improving the nutritional status of many millions of people who suffer from persistent hunger and undernutrition and many others who are at the risk of facing the same situation. There is a need to clarify the issues involved in achieving food security and to help formulate appropriate policies and measures to strengthen it. This paper focuses on the conditions necessary for ensuring access to adequate and safe food by the household and in general leaves the other issues related to nutrition for consideration under other ICN theme papers. However, while considering each of these themes, the linkages between them should be kept in mind.

**Keywords:** public health, household and general leaves, humans interact

### Introduction

Few subjects are more important to public health than food. One of the major ways in which humans interact with their environment is through our food. The science of nutrition has developed through the study of the components of foods that are required to sustain life and to maintain health. Improper diet can cause disease if important nutrients are missing from the diet, and inappropriate dietary practices can increase the risk of certain diseases. Food is any substance consumed to provide nutritional support for the body. It is usually of plant or animal origin, and contains essential nutrients, such as carbohydrates, fats, proteins, vitamins, or minerals. The substance is ingested by an organism and assimilated by the organism's cells in an effort to produce energy, maintain life, or stimulate growth.

National food consumption surveys are essential policy instruments and have been carried out successively in many countries. They serve many purposes, such as identifying nutrient inadequacies at the population level, assessing the risk of hazardous substances, and developing dietary guidelines.

The 24-h dietary recall (24HR) has been frequently used as the primary dietary assessment method for collecting national food consumption data. As an open-ended and retrospective method, 24HR is less likely to alter diet behaviour and has a lower literacy requirement for the participants than food records. Traditionally, interviewers collect information about the foods consumed during the preceding day or the previous 24 h by triggering the participant's memory using different cues to increase the completeness of the survey. This method collects sufficient food consumption data but has a long interview duration and a rather complicated data handling procedure.

In the multiple-pass protocol of Globo Diet, the most time-consuming step is the collection of detailed information on each consumed food (i.e., food description). Details of each food item are collected through prompt windows for facets, which represent various characteristics of food, such as fat content, cooking method, and brand name. The predefined answers to the facet questions were called descriptors, such as full fat, semi-skimmed, and skimmed. The use of facets and descriptors standardize the interview among different interviewers and characterize the consumed foods in aspects relevant for the study purposes, such as the content of nutrients and potentially hazardous chemicals.

The Darbhanga district of Bihar is situated between latitude N25°53'26.27", longitude E85°45'25". The total population of the district is 39,21,971 (Census 2011). First incidence of arsenic contaminated groundwater was reported from Biraul block of Darbhanga districts in 2005. The incidence of Health problem was increased at a high rate in several districts of

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Bihar in last decades and previous studies suggest that arsenic contamination is most prevalent in rural areas.

### Women and nutrition in Darbhanga

Darbhanga Block is a Small City of rich natural resources and talented human resources and yet its dream of becoming self sufficient and considered a 'developed country' rather than a 'developing country' seems a distant reality due to the complexity of its problems. Majority of Darbhanga population lives in rural areas. (72% rural as compared to 28% urban population) where the pace of progress in literacy, education, employment and technology is slow; urban areas get the maximum benefits of the progress.

The patriarchal system prevalent in Darbhanga (Except in one village) makes women the worst victims of poverty as their multifaceted responsibilities include that of a career, giver and a protector. Women are socialized to be self sacrificing from childhood onwards to give first and take only if somebody chooses to give or if there is something extra to give.

Darbhanga social customs and traditions dictates differential attitudes, behaviour and practices related to their food entitlements - girl babies tend to be breast fed for shorter periods of time and as they get older receive smaller portions of food, particularly quality foods, e.g. milk, fruits and vegetables, than that of boys. From a very early age itself, girls are taught to deny themselves of their own needs. When serving food, women serve larger portions to their husbands and male children first only then do they feed their female children and they tend to ignore the importance of their own food requirements.

In the Darbhanga rural context, due to the patriarchal set up. Women are also expected to follow several social and religious rituals, which limit their food intake without reducing her work load. In addition, Indian women are socialized to eat less, last, the least and leftovers. This gender discrimination begins in childhood itself, which is further compounded by food taboos, and religious beliefs.

### Cooking food "Are women decision makers or victims"

In Darbhanga urban it is commonly believed that since women generally cook the food at home they are the decision makers on what to cook and what to eat. In some families they are also called "Queen of the kitchen". However on deeper probing, we realize that while women are only doing the labor of cooking, the decision of what to cook is generally made by the choices of their husbands or families. This is amplified by the women who report that "when my husband is away, I feel tired to cook, and do not cook a full meal". This clearly indicates that the food choices are male dominated and the women do not exercise their right of cooking food of her choice. This is true of women from all classes, caste and creed. In some Indian communities, the men also purchase the food thereby ensuring that whatever food is cooked at home is of their choice

The current study aims to evaluate facet importance in predicting nutrient contents of foods, the impact on population nutrient intake distributions and the time saved after deleting less important facets from the data collection procedure.

### Relation of food to health

Food is essential for human existence just like the air. We

breathe or the water we drink. The food that we eat is utilized in the body and the assimilated substance is used for the growth and maintenance of tissues.

The health of a person depends on the types and quantity of food stuff he chooses to make his diet. Diet should be planned according to the principles of nutrition. The effect of food on our body is explained in nutrition. Nutrition is defined as food at work in the body. Nutrients are defined as the constituents of food which help us to maintain our body functions to grow and to protect our organs. There are six major nutrients in our body. They are carbohydrates, proteins, lipids, vitamins and minerals.

The human body requires 17 vitamins and 24 mineral elements for various day to day activities. The composition of human body is 60-70 percent water, 17 percent proteins, 14 percent fat, 6 percent minerals and 1 percent carbohydrates. In infants the percentage of water is more as compared to an adult. In women water content is slightly lower whereas fat content is more than in man. Fat deposition in the body increases with age.

### Nutrition problem

In the past years much concern has been expressed about the nutritional status of segments of the population in the united status. As a result, in the late 2002, congress directed the department of Health, Education and welfare to conduct a National Nutrition survey. The stages in nutrition planning are not always sequential, clear cut or well ordered.

The first stage in the planning sequence should be to identify the malnourished groups determine why they are malnourished. What the nutritional deficiencies are and their severity and alternative programmers relevant to the need of the malnourished.

- Problem Identification
- Problem identification enables the planner to pinpoint the need, identify the type and cause of nutritional deficiencies.
- Locate the population groups which are affected and measure the severity of malnutrition.
- To access the problem, nutrition it's largely employ nutritional parameters and provide data on food expenditure.
- Planners typically identify population groups as malnourished on the basis of age physiological status.
- Traditionally the 'vulnerable' groups are preschool children, pregnant women and lactating mothers but this classification is unsatisfactory since we cannot assume for example that all preschool children are suffering from protein calorie malnutrition.
- The amount of nutrient that diffuse into solution can be limited by the following steps :-
  1. Keep the surface area of the food small.
  2. This is easily achieved by leaving the food whole in large pieces.
  3. Decrease the amount of water to which the foods exposed.
  4. Steaming can greatly reduce solution losses while minimizing danger of scorching.
  5. Decrease the length of time the food is exposed to the water, vegetables that are cooked just tender retain more nutrients, color and flavor than vegetables that are overcooked, pressure cooking, shortcuts cooking time.
  6. Avoid changing the water in which the food is cooked.

7. Avoid soaking value, cut up vegetables or fruits in water for a period of time before cooking.

The health status and the level of personal hygiene of the food handlers in the eating establishments were found to be unsatisfactory. The cooks and suppliers who handled food were not maintaining a satisfactory personal hygiene, thereby increasing the risk of food contamination considerably. Food hygiene can be best promoted by educating the food handlers; to inculcate the practices of good personal hygiene.

Although most of the workers in the organized sectors are covered under the Employee's state Insurance scheme and are entitled to medical and other benefits, it is not the case with the unorganized sectors, and small food establishments. Daily inspections of the workers with regard to their health and hygiene, Periodic medical examination along with necessary treatment such as de-worming should be done.

Training in hygiene and sanitation for all employees working in food establishments is an essential step towards ensuring food safety.

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