

## **Nutrition Transition**

# **Table of contents**

- 1. Nutrition transition
- 2. Compliance to recommended dietary allowances
- 3. References

Nutrition is a basic human need and a prerequisite to a healthy life. A proper diet is essential from the very early stages of life for proper growth, development and to remain active. Food consumption, which largely depends on production and distribution, determines health and nutrition of the population <sup>1</sup>. Diets evolve over time, being influenced by many factors and complex interactions. Income, prices, individual preferences and beliefs, cultural traditions, as well as geographical, environmental, social and economic factors all interact in a complex manner to shape dietary consumption patterns. The pace of these changes seems to be accelerating, especially in the low-income and middle-income countries <sup>2</sup>. It is therefore necessary at this juncture to examine trends in consumption patterns and promote healthy diets and lifestyles to reduce the global burden of noncommunicable diseases.

### **Nutrition transition**

Changes in diets, patterns of work and leisure often referred to as the *'nutrition transition'* are already contributing to the causal factors underlying noncommunicable diseases even in the poorest countries. The dietary changes that characterize the *'nutrition transition'* include both quantitative and qualitative changes in the diet. The adverse dietary changes include shifts in the structure of the diet towards a higher energy density diet with a greater role for fat and added sugars in foods, greater saturated fat intake (mostly from animal sources), reduced intakes of complex carbohydrates and dietary fibre, and reduced fruit and vegetable intakes <sup>3</sup>. These dietary changes are compounded by lifestyle changes that reflect reduced physical activity at work and during leisure time <sup>4</sup>. At the same time, however, poor countries continue to face food shortages and nutrient inadequacies

In urban areas rapid nutrition transition is taking place. A study conducted in Chennai among the age group of 30 to 60 years of low to middle income status with normal glucose tolerance for their food consumption pattern reported that macro nutrient intake of the subjects portrayed a surplus intake of energy in men (10.31%) and women (27.59%) in comparison with Recommended Dietary Allowance (RDA) for Indians. Micro nutrient deficit intake was common in the group. Nearly 14 per cent of men and 4 per cent women had total cholesterol of above 200 mg/dl and belonged to high-risk group for Cardio Vascular Disease (CVD) and other life style disorders. In the selected sample, 88 per cent of males and 38 per cent of females had High-density lipoprotein (HDL) below 45 mg/dl. Thus 40 percent of males and 18 percent of females were at risk of hypertriglyceridemia. The study revealed that there is a prominent influence of consumption pattern on the nutritional profile of the people and pose them to the risk of CVD and other lifestyle disorders<sup>5</sup>.

## **Compliance to recommended dietary allowances**

The recommended dietary allowances (RDA) are nutrient-centered and technical in nature. Apart from supplying nutrients, foods provide a host of other components (non-nutrient phytochemicals) which have a positive impact on health. Dietary guidelines are a translation of scientific knowledge on nutrients into specific dietary advice. They represent the recommended dietary allowances of nutrients in terms of diets that should be consumed by the population. The guidelines promote the concept of nutritionally adequate diets and healthy lifestyles from the time of conception to old age<sup>1</sup>.

Compliance to recommended dietary allowances is the need of the hour, to balance the nutrition transition that people are undergoing. A dietary pattern devoid of balanced diets across all classes is responsible for the incidence of micronutrient deficiencies and related problems such as iodine deficiency disorders, anaemia and growth disorders in children. The situation requires a three-pronged strategy of nutrition education, food fortification and enhanced safety nets for the poor <sup>6</sup>. Healthy and nutritious food product development considering the demand, economy and ease of consumption, has to be empowered. Systematic reviews of the association between the food consumption pattern and their impact on nutritional status of the people will give a clear understanding of the relationship between food and diseases and may provide a direct scientific basis for practical dietary guidelines for prevention of chronic diet related diseases.

#### References

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