



URBANIZATION AND ITS POTENTIAL IMPACT ON DIET AND HEALTH

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Abstract:

India has recently undergone rapid social and economic change which leads to rapid growth in urbanization resulted in rapid shifts from mostly a agricultural economy. Urbanization lead to rapid change in the structure of diet, physical activity pattern and are negatively associated with health.

Keywords: Urbanization, Diet, Health

INTRODUCTION

The greater wealth and economic vitality of urban areas is one of the reasons why people are migrating from rural to urban areas. The possibilities of employment to meet basic needs are another reason for the growth in urban population. It has been estimated by the United Nations that in 2007, for the first time in history, half of the world's population were living in urban areas (Leon D.A., 2008).

Urbanization have a far broader influence on eating habits. Urbanization is accompanied by shifts in a broad array of elements such as access to mass &

electronics media (mobile usage), modern technologies related to work & leisure & transportation & enhanced access to a variety of foods across all seasons of the year. Because of the multiple shared paths through which urbanization & globalization may influence food availability & choices in developing countries, it is difficult to unravel the effects of the two sets of forces on diet & health. Throughout the developing world, overweight prevalence among women tends to be highest in countries where the greatest proportion of the population lives in urban centers (Mendez & Popkin, 2007). There has been



increasing evidence that the structure of dietary intakes & the prevalence of obesity around the developing world have been changing at an increasingly rapid pace (Popkin, 2002). History finds a resonance in contemporary concerns about the impact of cities and urbanization on health. Increasing global urbanization is classed as a threat to 'Public Health security' as the unprecedented level of population agglomeration may facilitate the spread of epidemic diseases (Leon D.A., 2008).

The effects of urbanization on dietary patterns & nutritional status are complex. Numerous studies have shown that consumption of energy-dense (high-fat, added sugar) food tends to promote excessive energy intakes (Rolls, 2000). These adverse dietary shifts have contributed to the rise in overweight & obesity.

In many urbanized intakes of processed foods, ready-to-eat meals & snacks, & street vendor, restaurant & fast food meals have

increased (Regmi & Gehlar, 2001). These eating patterns associated with higher intakes of fat, sugars & energy.

Urbanization is associated with the nutrition transition, is the shift from preindustrial agrarian economy to industrialization. This transformation then accelerates, the service sector grows rapidly, industrial production is dominated by capital intensive processes & time-allocation patterns change dramatically (Popkin B.M., 1999). Urbanization leads to modernization & industrialization, reduces the use of human efforts & energy to produce goods & services. It shows that physical activity levels are negatively associated with urbanization. Use of automation in manufacturing industries, computers in IT sectors & home appliances in home shows a significant change from high physical pattern seen in rural residents (agriculture) toward a moderate & low activity patterns in urban residents. Thus urbanization affects job functions



& will contribute most to changes in physical activity levels.

Urbanization & the structure of diet

Countries are rapidly becoming urbanized. By 2030, around 40% of the population will live in urban areas. This growing urbanization consequently changes the diet structure from traditional rich in fibers and grains with diets that include a greater proportion of fats and caloric sweeteners.

There have been large changes over time in diet and physical activity, especially their structure and overall composition. These changes are reflected in nutritional outcomes such as stature and body composition. Furthermore, these changes are paralleled by changes in life-style and health status, as well as by major demographic and socioeconomic changes. People living in urban areas consume diets distinctly different from those of their rural counterparts. Key factors responsible for urban-rural differences in dietary intake and

resulting differences in nutritional status include:

- > better transportation and marketing systems in urban areas that provide greater availability of food during periods of seasonal shortage,
- > greater penetration of marketing activities of the processed commercial food sector into the denser urban markets,
- > greater heterogeneity of urban populations with respect to dietary pattern,
- > different occupational patterns, characterized in urban areas of reduced compatibility of jobs with home food preparation and child and elder care,
- > different household structures related to a wide range of economic and social factors

An important dimension of urban growth is its associated pattern of migration. Migration from rural to cities and international migration have affected diet profoundly (Popkin B.M., 1997).

Most researchers have focused on the shift from diets



high in complex carbohydrates and fibre to those with a higher proportion of fats, saturated fats and sweeteners (Popkin B.M., 1997). The nutrition transition typically involves a shift from a limited number of high-carbohydrate staples to a more diverse diet that becomes available to progressively more people. As incomes grow, diets become more diverse and more people incorporate meat and fish, milk, eggs and cheese, as well as vegetables and fresh fruit, into their habitual diets. As a result, dietary diversity and the proportion of fats in the diet are sometimes directly linked. For higher rates of urbanization, model predicts a substantial increase in the consumption of sweeteners and fats. The clear implication is that a shift from 25% to 75% urban population in very low income countries would be associated with an added four percentage points of total energy from fat and an additional 12 percentage points energy from

sweeteners (Drewnowski A. and Popkin B.M., 1997).

Urbanization leads to changes in diet include increase in the level & shares of processed products to cook at home & prepared foods bought away from home. Consumption of non-grains is growing faster in urban areas.

People living in urban areas consume diets distinctly different from those of their rural counterparts and the general shifts in their diets enhance energy and fat density and lead to great potential for chronic disease-related health problems. A large descriptive literature on comparisons of urban and rural diets can be summarized as urban diets show trends toward consumption of superior grains, food higher in fat, more animal products, more sugar, more food prepared away from home, more milled & polished grains & more processed foods (Popkin & Bisgrove, 1988). Higher rates of urbanization show a substantial increase in the consumption of sweeteners & fats. Analyzing the



impact of urbanization on diet structure is a key public health issue.

Urbanization: Health Implications

A number of striking statistics about urbanization are frequently cited in reports and research papers. It has been estimated by the United Nations that in 2007, for the first time in history, half of the world's population were living in urban areas. This follows decades of continuous increase in the proportion of the global population living in urban areas (Leon D.A., 2008).

Urbanization have profound effect on diets, nutrition & health. Urbanization & Westernization have a far broader influence on eating habits & dietary pattern results in adverse health effects of the nutrition transition include growing rates of obesity. Easy availability of fast foods in markets & restaurants has been driving the increase in fat consumption. A diet containing approximately 30% energy from fat will become or has become the global norm & high-fat

diets beyond this limit are generally regarded as unhealthy.

Diversification of diets from the traditional diet & increase use of processed foods (processing steps includes, extruding, freezing, & adding preservatives, chemicals or artificial flavors), refined carbohydrates & lower in fiber, excess consumption of sweeteners resulting in the emerging epidemic of non-insulin-dependent diabetes mellitus. Many other related diseases such as hypertension, dyslipidemia & cardiovascular diseases are on the rise. The anticipated increase in the world's urban population from 2000 to 2030 would be a key driver of the projected rise in global diabetes prevalence from 2.8% to 4.4%. A recent review of hypertension found that rates were consistently higher in urban compared with rural areas (Leon D.A., 2008).

One consequence of this nutrition transition has been a decline in undernutrition accompanied with a most rapid increase in obesity. In all age groups, there is evidence of rapid



increase in obesity and also an array of dietary excess and body composition-related health outcomes such as glucose intolerance and diabetes (Popkin B.M., 1997).

A major changes associated with the urbanization are increase trend in population density, industrialization, transportation & pollution (air & water) results in increasing the chronic ailments like asthma & allergies. Recently a most provocative cancer study has laid a strong basis for linking the diet, activity & body composition trends discussed above to the likelihood of increased rates of prevalence for a larger number of cancers (World Cancer Research Fund, 1997). Mortality rates of urban child and infant living in slum areas is also higher due to malnutrition and common infections of diarrhoeal and respiratory diseases. In the National Family Health Survey (NFHS)-3, the under-five mortality rate was 73 for every 1000 live births among urban poor,

compared to the average 48 in India.

CONCLUSIONS

Economic development associated with urbanization & globalization. This paper presents the negative consequences of urbanization on dietary changes, pattern of physical activities & health. Urbanization mostly dominated by refined foods, higher fat diet, high use of sweeteners, more sedentary lifestyle resulted in reduced physical activities. Growing urbanization lead to rapid change in diet, physical activity & obesity are linked with many chronic diseases. The growing stress of non-communicable diseases is also a one of the problem associated with the urbanization.

The purpose of this paper is to understand the effect of urbanization on dietary pattern, lifestyle, physical activities & health. The impact of reduced physical activity in urban as opposed to rural societies is another issue. Urbanization developed a culture associated



with increased availability of fast foods in markets & restaurants have been increasing the fat & sugar consumption.

It is therefore necessary to develop policies to create awareness among the urban people for healthful diet through nutrition education. Reversing the diet by lowering the fat consumption by preserving dietary structure is also one of the strategies to promote a healthy diet. Another issue that must be addressed is the environment protection, sustainable use and protection of trees, water, air and soil help to ensure healthy living in urban areas.

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