



Diet in the cities

by Dinesh P. Sinha

Over the past century, there has been an unprecedented increase both in total urban population and in the proportion of total population living and working in the great cities. So when one thinks of urbanization, the first picture that comes to mind is that of thousands of people moving physically from the countryside to the cities in search of better economic opportunities and—having failed to make a success of it—ending up living in slums under insanitary conditions, eating a substandard diet and suffering from infectious diseases and malnutrition. This is true of many large cities throughout the world and the situation needs urgent attention.

But there is another side of the coin. Urbanization also means adopting urban life-styles. At least for a good proportion of those who are economically better off, such life-styles include abandoning traditional sound dietary habits, practised over many centuries, adopting more sedentary living conditions, drinking more alcohol and smoking cigarettes as status symbols of modern social life, and leading a stressful life as they are caught up in the whirlwind of economic achievements.

Traditional rural societies have mostly lived off their land. Thus their diets have depended largely on staple crops of cereals, fruits and vegetables. Urbanization brings together a large number of people within a confined

area where each household is no longer dependent on its own produce. The food has to be brought in from where it is produced, which has implications for its processing, transport and storage; of necessity, it has become compact (occupying less storage space), more refined (needing less time in preparation) and energy dense. The diet of a city dweller, therefore, has increased in animal products, fats and sugars and has decreased in complex carbohydrates (staples, roots and tubers, pulses, nuts, fruits and vegetables). It also includes soft drinks, meat products, confectionery and convenience foods which are invariably rich in fats, refined sugar and salt.

Two dietary patterns

In the United Kingdom between 1870 and 1970, per capita consumption of fat increased from 75 grams per day to 145 and of sugar from 80 to 150. Over the same period per capita consumption of potatoes has decreased from 400 grams per day to 240, of wheat flour from 375 to 200 and of cereal crude fibre from 1 to 0.2. A peasant agriculturist society derives 60–75% of its energy from starch, 10–15% from protein, another 10–15% from fat and only about 5% from sugar. Modern affluent societies

In the slums of Dhaka, Bangladesh. Newly arrived in the big cities, migrants from the countryside live in squalor and have little or no chance of eating healthy foods.

in the cities, on the other hand, derive only 25–30% of energy from starch and another 10–12% from protein, but about 40% from fat and 20% from refined sugar. Those two distinct types of dietary patterns—peasant agriculturist and modern affluent—can be seen today in the rural population and the urban elite of the same country anywhere in the developing world.

Urbanization has also brought about more sedentary living conditions. Those who worked hard on agriculture in rural areas, having moved to the city, no longer need to work hard physically. They do not walk to work or market but instead use motorized transport. Mechanization and automation take away the hard physical work and the energy expenditure that goes along with it; it also leaves people with extra time, all too often spent in sitting in front of the television. There is, therefore, a progressive decline in total energy expenditure from physical activity.

Urban behaviour

The new city dwellers tend to have an excess of energy intake from alcohol. If you do not drink you are out of tune. Although not a dietary factor, cigarette smoking is a constant companion of alcohol in urban social behaviour and aggravates some of the health problems brought about by the changed dietary pattern. Many people react to the stress of city life by having more to eat and drink, especially foods that are energy dense or rich in calories. This further adds to the total caloric intake.

So urbanization has led to an increase in energy intake and a progressive decline in energy expenditure, contributing to a positive energy balance and storage of excess energy as fat. Even in the developing countries, the well-to-do urban population are obese compared to their relatives who did not migrate to urban centres and who still lead an economically comfortable life in the countryside. Nevertheless, people living in rural areas are also gradually and progressively adopting city life-styles. In the industrialized countries, there is hardly any difference between the diet of city dwellers and of people in the countryside.

Diet and disease

Anthropological studies indicate that the human species in almost all the 30 000 to 50 000 years of its social existence has survived on a low-fat and high-fibre diet, rich in vitamin C and micronutrients. The change to high-fat foods from animal sources and refined

sugar, and the progressive decline in complex carbohydrates and fibres, dates back no more than 250 years. Research carried out over the past 50 years strongly suggests that these dietary changes, together with a more sedentary way of life, cigarette smoking and excessive use of alcohol are responsible for the high prevalence of morbidity and mortality due to chronic diseases such as high blood pressure, diabetes, coronary heart disease and stroke. Some epidemiologists estimate that 30–40% of cancers in men and up to 60% of cancers in women in the industrialized countries are attributable to diet.

In the developing countries of the Caribbean, as in many similar societies, urban life-styles and their related diseases have already assumed epidemic proportions. Besides the migration from the countryside to the towns,



WHO/UNICEF/S. Rotner

Street scene in Brazil. What are the chances of clinging to beneficial traditions when you are lost in the back streets of a great city?

rapid movement of the population between the Caribbean and the large cities of Canada, the USA and the United Kingdom has brought “urban” life-styles even to rural areas.

Countries of the English-speaking Caribbean can be classified as middle-income economies. Over the past 200 years they have changed from primarily plantation economies to a more or less peasant society, and then to the present-day heavy dependence on

merchandise trade and export of services—agriculture, tourism, minerals and manufacturing. Life has become increasingly sedentary. In countries like Jamaica and Trinidad and Tobago, until as recently as the early 1940s, 78% and 62% respectively of the energy were derived from complex carbohydrates. Only 20% and 38% of energy came from fats and oils, food from animals and refined sugar. In the mid-1980s, within a span of 40 years, the contribution of complex carbohydrates had changed to 55% and 48%, while refined sugar, fats and oils and foods from animals had increased to 45% and 52% respectively. Up to 35% of adult males and 50% of adult females in the Caribbean are obese. Cardiovascular disease and cancers are the major killers of the adult population, and their rates are among the highest in the world. In the 1980s, a long-term study in Trinidad among people who have adopted city life-styles showed that the chronic disease pattern was similar to any “Western” urbanized society.

Life-style hazards

It is no exaggeration to say that the urban life-style which people have adopted for their personal comfort, enjoyment and well-being has been proved to be hazardous to life. Of course changes take place over time, but every change that disturbs the balanced state which confers healthful living ought to be compensated by a deliberate act to replace the beneficial effect which the particular change is eliminating. For example, a farmer gets enough exercise from his occupational work and does not need additional physical exercise. If his son becomes an office worker, thus doing very little physical work, he should find time to deliberately incorporate daily physical exercise in his life. Or, if he was accustomed to eating a variety of food items from his father's produce, he now has to make a deliberate attempt to buy and eat a mixed diet.

Urban life-styles do not necessarily have to be detrimental to the nutrition and health of people. With proper planning they could be adapted to help city dwellers to become healthier and more productive. ■

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