

Sri Lanka
State of the Economy Report 2014

Chapter 11
Changing Lifestyles in Asia: Food Habits and
Health Risks

by
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11. Changing Lifestyles in Asia: Food Habits and Health Risks

11.1 Introduction

Rapid changes in economies with greater globalization, urbanization, modernization and westernization, have resulted in many countries and regions seeing shifts in food habits and lifestyles. Indeed, the evidence suggests that the main determinants of the changes in food habits are income growth, population growth and urbanization.¹ Asia, as one of the fastest growing regions in the world, has seen significant changes across these variables, albeit with varying country experiences within the region. As a result, significant shifts in food demand, food supply and food habits are taking place. Increasingly, populations are thus shifting away from staple foods such as rice to a variety of modern/processed food.

In fact, available literature suggests that the demand for high-quality grains, meats, and processed foods will rise over time. This is already very evident in rapidly urbanizing countries in Asia such as China, where the urban sector demand for fragrant rice, high quality wheat for breads, etc., is on the rise.² Conversely, as urbanization levels rise, and rural populations grow at a slower pace, there will be reduced demand for food grains over time. Lifestyle changes that accompany urbanization and related external influences are expected to raise demand for not only foods such as meat, fish, and dairy products, but also for highly processed convenience

foods. Consumers are more apt to experiment with more diversified diets, particularly with the influx of supermarkets and fast food outlets in urban centres.

Changing food habits and lifestyles are often accompanied by new disease patterns. They can arise as a result of changing food and nutritional security.³ New threats to health can also arise from unhealthy lifestyles in more urbanized settings, as well as exposure to environmental pollution, etc. However, health-related risks from changing food habits are especially important as they lead to serious health problems. Unhealthy food consumption habits - an excessive consumption of

Consumers are more apt to experiment with more diversified diets, particularly with the influx of supermarkets and fast food outlets in urban centres.

¹ Delisle, H. (1990), "Patterns of Urban Food Consumption in Developing Countries: Perspective from the 1980s", Food and Agriculture Organization, Rome.

² Hsu, H.H., and W. Chen (2002), "How will Rising Income Affect the Structure of Food Demand?" in Gale, F. (ed.), *China's Food and Agriculture: Issues for the 21st Century*, Department of Agriculture, US.

³ Food and Agriculture Organization (2010), "Changing Food System", available at <http://www.fao.org/asiapacific/rap/home/issues/changing-food-systems/en/>.

Changing food habits and lifestyles are often accompanied by new disease patterns.

sugar and fats for instance - cause obesity and poor overall health outcomes as evidenced by non-communicable diseases (NCDs). Nutritional well-being is threatened by vitamin and mineral deficiencies creating a simultaneous double burden of over-nutrition and under-nutrition.

11.2 Asia's Changing Food Habits

Food habits will change in both quantitative and qualitative terms with income and population growth, urbanization and lifestyle changes. With these developments, the composition of the diet tends to veer towards a higher energy density diet, with a greater proportion of fat and added sugars in foods (mostly from animal sources), and reduced intakes of complex carbohydrates and dietary fibre, as well as reduced intakes of fruit and vegetables.⁴

These trends are visible across the world. In Africa, there is increasingly a marked preference for maize and cassava as opposed to yams and millet. In Europe, there is less consumption of oats, barley and rye, in favour of wheat and potatoes.⁵ Food products made from wheat, particularly bread, is gaining popularity across countries in Africa, Latin America and Asia, even though wheat is not the

staple food of the population. These changing food habit patterns are not only the outcome of changing tastes, but also of other factors such as convenience.⁶

Across the world, per capita consumption of food has been on the increase with greater affordability and access (Table 11.1). The data indicate that the per capita food consumption in the world would have increased by 25 per cent when compared to the 1960s. It is noteworthy however, that per capita food consumption in East Asia- which had the lowest level in the 1960s - will outstrip this, with a growth rate of over 56 per cent. Thus, the region has experienced a relatively high rate of increase in food consumption over recent decades. Growth in per capita food consumption has also been fairly high in South Asia at 34 per cent over the same period. Asian countries as a whole have far outpaced other regions, although this is expected to slow considerably in the run-up to 2030. The rate of per capita food consumption in South Asia, however, will still be twice that of global growth rates.

The data in Table 11.2 indicate that most developed and emerging economies in Asia are seeing an increase in the share of fats in their total dietary consumption. The intake of fats as a percentage of dietary consumption was nearly 38 per cent in 2005-07 in countries such as the US and UK. However, rapidly growing economies in East Asia and Southeast Asia are catching up, with an average share of around 27 per cent. South Asian economies such as India and Sri Lanka still indicate lower shares of around 18 per cent, but the trend is on the rise. Thus, the consumption of fats in diets will continue into the future, indicating that there will be growing pressure on the livestock and fisheries sectors to meet rising demand for high-value animal protein across the world.

⁴ Food and Agriculture Organization (2002), "Diet, Nutrition and the Prevention of Chronic Diseases", available at <http://www.fao.org/docrep/>.

⁵ C. Latham, M., (1997), "Human Nutrition in the Developing World", Food and Nutrition Series No. 29, Food and Agriculture Organization, Rome.

⁶ *Ibid.*

Table 11.1
Changes in Global and Regional Per Capita Food Consumption (kcal per capita per day)

Region	1964-1966	1974-1976	1984-1986	1997-1999	2015	2030
World	2358	2435	2655	2803	2940	3050
Developing countries	2054	2152	2450	2681	2850	2980
Near East & North Africa	2290	2591	2953	3006	3090	3170
Sub-Saharan Africa	2058	2079	2057	2195	2360	2540
Latin America & the Caribbean	2393	2546	2689	2824	2980	3140
East Asia	1957	2105	2559	2921	3060	3190
South Asia	2017	1986	2205	2403	2700	2900
Industrialized countries	2947	3065	3206	3380	3440	3500
Transition countries	3222	3385	3379	2906	3060	3180

Source: FAO, "Diet, Nutrition and the Prevention of Chronic Diseases", available at <http://www.fao.org/docrep/>.

These changes are most apparent in Asia, with economies undergoing rapid economic transformation and urbanization, associated with changing tastes and lifestyles brought about by urban living. Such changes in turn lead to significant impacts on food demand. For instance, East Asian economies that underwent the earliest phases of economic transformation in Asia such as Japan, South Korea and Taiwan have seen a drop in the direct per capita consumption of cereals as a staple food over the past three decades.⁷ The shift overall is away from staple foods to consumption of meat, fish, and dairy products, and this is expected to recur

Table 11.2
Contribution of Fats in Total Dietary Consumption in Select Countries (%)

Country	1990-92	1995-97	2000-02	2005-07
Japan	26	27	28	29
China	20	23	25	27
Malaysia	29	26	27	26
Thailand	18	18	19	20
Sri Lanka	17	17	17	18
India	16	17	18	19
US	36	35	38	38
UK	39	39	37	38

Source: FAO (2010), Food Balance Sheets, Food and Agriculture Organization.

across Southeast Asian and South Asian economies as they too undergo similar transformation in their economies.

As evident from the data in Table 11.3, the consumption of livestock products has grown significantly over the years, and is expected to keep on increasing. The East Asian region has seen a sharp increase in meat consumption, whilst in South Asia the increase is more notable in milk. Meat consumption in East Asia is forecast to rise by more than 56 per cent by 2030 compared to consumption levels in the late 1990s.

With lifestyle changes, food purchasing habits will also change, facilitating the shift in consumption patterns. Those living in urban-metropolitan areas will tend to buy food products from Western-style supermarkets, shopping centres, and 'box stores' which sell food and other household items in bulk. These trends are already very evident in Southeast Asian cities such as Bangkok and Manila.⁸ In addition, busy urban lifestyles and dual income earners will also tend to encourage shifting demand patterns. As more women join the labour force demand for convenience foods, 'take-aways', and

⁷ Huang, J., and H. Bouis (1996), "Structural Changes in the Demand for Food in Asia," International Food Policy Research Institute, Washington, D.C.

⁸ Food and Agriculture Organization (2001), "Food Supply and Distribution to Cities", proceedings of the FAO-City Net-AFMA Sub-regional seminar, available at <http://www.fao.org/docrep/003/x6982e/x6982e05.htm>.

Table 11.3
Per Capita Consumption of Livestock Products

Region	Meat (kg per year)			Milk (kg per year)		
	1964-1966	1997-1999	2030	1964-1966	1997-1999	2030
World	24.2	36.4	45.3	73.9	78.1	89.5
Developing countries	10.2	25.5	36.7	28.0	44.6	65.8
Near East & North Africa	11.9	21.2	35.0	68.6	72.3	89.9
Sub-Saharan Africa	9.9	9.4	13.4	28.5	29.1	33.8
Latin America & the Caribbean	31.7	53.8	76.6	80.1	110.2	139.8
East Asia	8.7	37.7	58.5	3.6	10.0	17.8
South Asia	3.9	5.3	11.7	37.0	67.5	106.9
Industrialized countries	61.5	88.2	100.1	185.5	212.2	221.0
Transition countries	42.5	46.2	60.7	156.6	159.1	178.7

Source: FAO, "Diet, Nutrition and the Prevention of Chronic Diseases", available at <http://www.fao.org/docrep/>.

eating out is likely to become more evident in urban settings.⁹ As women continue to bear primary responsibility for food preparation at household level in most Asian societies, aside from convenience, the affordability of eating-out is also greater. In Southeast Asia, where most countries record a high level of female labour force participation, the demand for traditional fast foods such as take-away, catering enterprises and street food is increasing. Other influences include advertisements that promote fast/processed food, particularly targeted at children, creating supply-driven demand for fast/processed food. Some studies have shown that even a short food advertisement can exert considerable influence on food demand among pre-school children.¹⁰

11.3 Sri Lanka's Changing Food Habits

11.3.1 Shifting from Carbohydrates to Proteins

In Sri Lanka, the relative share of food expenditure in the total expenditure of households has reduced

sharply over time (Table 11.4). This is of course to be expected as income levels rise, and other factors such as changing consumer preferences, relative price variations, supply condition variability, and changes in demographic conditions apply.¹¹

Table 11.5 highlights food consumption pattern changes in Sri Lanka over the years. As in the case of other Asian economies discussed previously, Sri Lanka too has seen a decline in consumption of its staple food - i.e., rice. At the same time, the consumption of meat, fish and eggs has been increasing. This shows that the quantity of carbohydrate intake (including rice, wheat flour and bread) is reducing, while protein intake has slightly increased through consumption of fish, meat and eggs.

11.3.2 Eating Away from Home

Modern lifestyles and time scarcity have contributed to an increase in food consumption away from home in Sri Lanka as well. A growing number of women employed outside their homes, increased number of two-earner households, higher incomes, more affordable and convenient fast-food outlets,

⁹ *Ibid.*

¹⁰ Borzekowski D.L. and T. N. Robinson(2001), "The 30-Second Effect: An Experiment Revealing the Impact of Television Commercials on Food Preferences of a Preschooler", *Journal of the American Dietetic Association*, Vol. 101, No. 1.

¹¹ IPS (2013), "Changing Food Demand and Consumption Patterns" in *Sri Lanka: State of the Economy 2013*, Institute of Policy Studies of Sri Lanka, Colombo.

Table 11.4
Proportion of Household (HH) Expenditure on Food

Mean HH expenditure per month (Rs.)	1,232	2,079	3,905	6,525	13,147	22,952	31,331
Food ratio (%)	65.0	57.6	64.6	54.4	44.5	37.6	42.3

Sources: DCS, HIES data, various years.

increased advertising and promotion by large foodservice chains, etc., tend to influence the way in which households' food habits change.

The above trends are also being facilitated by other developments, including a fast growing network of supermarkets in the country. The number is currently estimated at 516, categorized as supermarkets, hypermarkets and convenience stores.¹² Aside from the convenience factor, access to supermarkets can also change food and eating habits. For instance, it is suggested that people are also attracted to processed food items found in supermarkets which are much easier to prepare. Going forward, Sri Lanka's supermarket trade is expected to see an unprecedented growth within the next few years, backed by increasing per capita

income, an increase in the workforce and the changing consumption patterns.¹³

These trends are also influenced by greater exposure to advertisements as more and more households have access to different media outlets. For example, some studies have found advertisement to be one of the determinants in creating demand for fast food, soft drinks, and sweet products.¹⁴ Of 100 school children in the Galle district, 78 per cent of children's demand for food was found to be influenced by advertisements. A majority (44 per cent) believed that advertisements have a considerable influence on their demand for food, while the rest (34 per cent) considered advertisements to be highly influential.

Table 11.5
Average Monthly Household Expenditure and Consumption of Major Food Items

Selected food items	Monthly HH Expenditure (as a % of total expenditure)			Monthly HH Quantity Consumed (kgs.)		
	1980/81	1990/91	2009/10	1980/81	1990/91	2009/10
Rice	20.45	15.62	7.33	46.7	44.3	36.3
Wheat flour	1.54	0.90	0.60	3.6	2.6	2.7
Bread	3.00	2.74	1.36	7.8	9.9	5.1
Pulses	1.54	2.94	1.75	1.4	2.6	2.8
Meat	1.14	2.05	1.65	0.8	1.2	1.4
Fish	3.25	3.51	3.71	3.5	2.4	3.8
Dried fish	2.27	2.59	1.57	1.4	1.3	1.3
Milk & milk products	2.19	3.12	3.31	2.7	1.4	1.9
Eggs	0.49	0.67	0.43	7.0	11.0	10.0

Source: Adapted from IPS (2013), "Changing Food Demand and Consumption Patterns" in *Sri Lanka: State of the Economy 2013*, Institute of Policy Studies of Sri Lanka, Colombo.

¹² Equity Research Cargills (Ceylon) PLC (2012), Bartleet Religare Securities, Colombo, Sri Lanka.

¹³ *Ibid.*

¹⁴ Samaraweera, G.R.S.R.C. *et al.* (2010), "Television Advertising and Food Demand of Children in Sri Lanka: A Case Study from Galle District", Colombo, Sri Lanka.

According to DCS data, prepared food is categorized as 'food which is not being prepared at home', effectively meaning that it comprises of food that is considered to be a 'take-away' or eating out. Table 11.6 indicates Sri Lanka's monthly household expenditure on prepared food in 2002, 2006/07 and 2009/10. The trends on whether or not Sri Lankan households are increasingly 'eating away from home' is somewhat mixed.

The national figure on monthly prepared food expenditure as a percentage of total food expenditure of households increased only marginally from 2002 to 2006/07. However, there were significant shifts in spending habits on foods amongst urban, rural and estate sector households during the same period. Urban households are spending less on prepared food whilst rural and estate sectors appear to be spending more out of their total food expenditures. The latter does suggest a change in food consumption patterns in Sri Lanka is taking place, albeit at a fairly modest pace. The drop in the urban share of spending on prepared food could partly be explained by price variability, arising from a number of factors. For one thing, Sri Lanka saw a period of high food inflation, particularly in 2007/08,¹⁵ that also meant an escalation in prices of prepared food. Price variability can also be reflected in changing food

habits. Finally, price variability can arise from competitive pricing as more and more sources of prepared food become available.

11.4 Changing Food Habits and Health Impacts

As already discussed, a traditional healthy meal comprised of a high fibre, low-fat, and low-calorie diet, including whole grains, fruits, and vegetables, has been shifting towards calorie-dense foods.¹⁶ The latter include high saturated fats, trans-fats, salt and sugar. In addition to changing diet patterns, urbanization and related lifestyles - consumption of processed and unhealthy foods, lack of opportunities for physical activity, increased exposure to environmental pollutants and stress, etc. - open high risk avenues for NCDs. As these trends become more pronounced in regions such as Asia, countries will face rising health risks associated with changing food habits.

11.4.1 Unhealthy Diet and NCDs

Changing food habits can lead to unhealthy diets and cause significant health problems. Indeed, the food intake is identified as a key determinant in ensuring a healthy life. As stated by the World Health Organization (WHO), an unhealthy diet is one of four

Table 11.6
Monthly Household Expenditure on Prepared Food

	2002		2006/07		2009/10	
	Prepared Food (Rs.)	Share in Total Food Expenditure (%)	Prepared Food (Rs.)	Share in Total Food Expenditure (%)	Prepared Food (Rs.)	Share in Total Food Expenditure (%)
Urban	1,277	21.8	1,894	17.2	2,419	15.2
Rural	572	9.8	919	11.1	1,278	9.9
Estate	198	3.4	479	6.4	692	5.7
Sri Lanka	640	10.9	1,032	11.9	1,409	10.6

Sources: DCS, HIES data, various years.

¹⁵ IPS (2008), "Does 'Foodflation' Call for Agricultural Reforms?" in *Sri Lanka: State of the Economy 2013*, Institute of Policy Studies of Sri Lanka, Colombo.

¹⁶ WHO/SEARO (2011), "Non-Communicable Diseases in the South-East Asia Region: Situation and Response", WHO, Geneva.

A traditional healthy meal comprised of a high fibre, low-fat, and low-calorie diet, including whole grains, fruits, and vegetables, has been shifting towards calorie-dense foods.

modifiable (behavioural) risk factors.¹⁷ Unhealthy foods are defined as the foods that are high in saturated fats, trans-fats, free sugars or salt. Eating these types of food frequently increases obesity, which is a risk factor for chronic NCDs such as cardiovascular disease (CVD), diabetes, and cancers. It is also important to note that the consumption of an unhealthy diet is particularly high in lower resource settings, and increasingly lower middle-income countries are more prone to consuming fatty diets.¹⁸ As already indicated in Table 11.2, dietary fat consumption has been increasing over time, especially in the Asian region.

Many countries across Asia are experiencing unhealthy diets, reflected by a low intake of fruits and vegetables, high consumption of salt, and extensive use of trans-fats by the food industries.¹⁹ According to related WHO statistics, half a million deaths in the Southeast Asian region are attributed to low intake of fruits and vegetables.

In addition, approximately 80 per cent of the region's population does not eat sufficient quantities of fruits

Table 11.7
Consumption of Fruits and Vegetable in Select Asian Countries (%)^a

	Male	Female	Both Sexes
Bangladesh (2010)	94	93	93
Bhutan (2007)	65	69	67
India (2007/8)	NA	NA	86
Indonesia (2007)	94	94	94
Maldives (2004)	97	93	97
Myanmar (2009)	90	91	90
Nepal (2007)	61	64	62
Sri Lanka (2007)	81	83	82
Thailand (2005)	83	82	82

Notes: a. Percentage of male and female adults eating less than five servings of fruits and vegetables a day.

Source: "National NCD Risk-factor Surveys" in relevant countries.

and vegetables. As indicated by Table 11.7, the average prevalence of inadequate consumption of quantity of fruits and vegetables a day is greater than 60 per cent in both males and females for many Asian countries. In particular, inadequate fruits and vegetable consumption is seen to be higher among females than males.

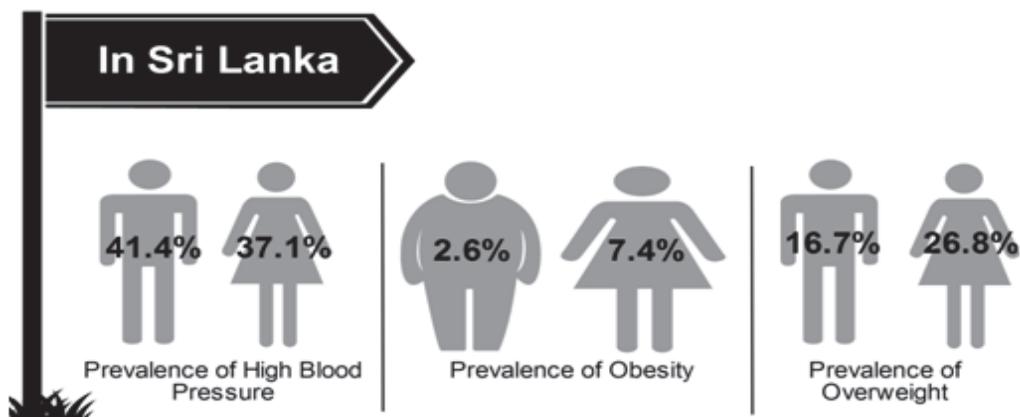
Apart from a low intake of fruits and vegetables, high consumption of salt is associated with hypertension and cardiovascular issues on the other hand. The prevalence of hypertension is found to be significantly higher in the highest quintile of mean salt intake of 13.8 g per day, than the lowest quintile of mean salt intake of 4.9 g per day.²⁰ In addition, another serious issue is that both body mass index (BMI) and waist circumference are higher among people with high salt intake. Further, when salt intake rises, the total calories and percentage of calories arising from fat diets also increase significantly. Some available data indicate that the average salt consumption per person per day is higher than the recommended limit by the WHO (5 g or less/day) in countries such as Malaysia and

¹⁷ WHO/SEARO (2011), "Non-Communicable Diseases in the South-East Asia Region: Situation and Response", WHO, Geneva; WHO (2011), "Global Status Report on Non-Communicable Diseases 2010," WHO, Geneva.

¹⁸ WHO (2011), "Global Status Report on Non-Communicable Diseases 2010," WHO, Geneva.

¹⁹ WHO/SEARO (2011), "Non-Communicable Diseases in the South-East Asia Region: Situation and Response," WHO, Geneva.

²⁰ *Ibid.*

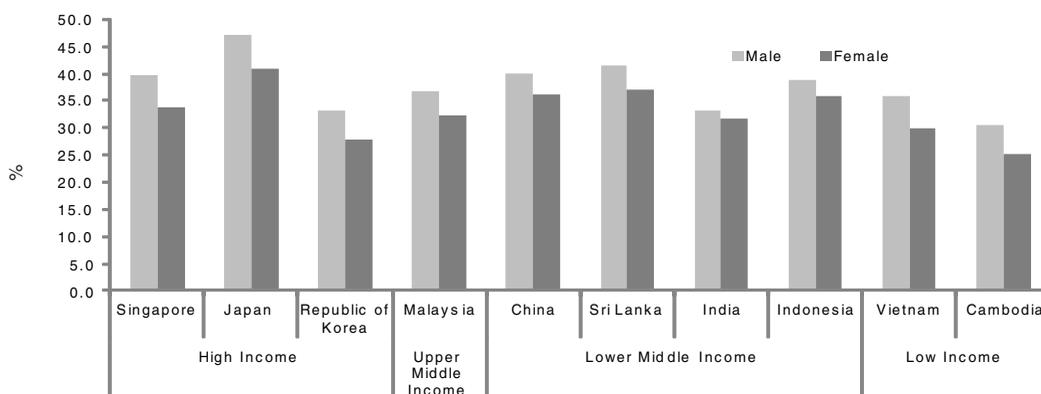


Sri Lanka. A Sri Lankan adult is estimated to consume over 12.5 g of salt per day, while a Thai adult is estimated to consume 10.8 g of salt per day.²¹

Worldwide, the population with high blood pressure/hypertension increased to nearly one billion in 2008, from 600 million in 1980.²² Of global annual deaths, 12.8 per cent of deaths (almost 7.5 million deaths) are estimated to occur due to raised blood pressure. Of the total adult population in the Asian region, 30 per cent of adults are estimated to have high blood pressure, and of total deaths, 9.4 per cent are attributed to hypertension.

The prevalence of high blood pressure among males is higher when compared to females (Figure 11.1). Cambodia, with a population of 13.4 million reports one of the lower percentages of adult population with high blood pressure - 30.5 per cent for males 25.1 per cent for females - among a sample of Asian countries. By contrast, Japan records a much higher percentage of the population with high blood pressure, 47.1 per cent for males and 41 per cent for females. This is partly explained by its population demographics of a high elderly and ageing population, given that high blood pressure is more prevalent among those 60 years and above.

Figure 11.1
Percentage of Adult Population with High Blood Pressure in Select Asian Countries, 2008



Source: WHO (2011), "Global Status Report on Non-Communicable Diseases 2010," WHO, Geneva.

²¹ Wolfson Institute of Preventive Medicine (2012), "Consensus Action on Salt and Health (CASH)", Annual Report May 2012-April 2013, University of London, UK; WHO/SEARO (2011), "Non-Communicable Diseases in the South-East Asia Region: Situation and Response", WHO, Geneva.

²² WHO (2011), "Global Status Report on Non-Communicable Diseases 2010," WHO, Geneva.

Obesity and overweight is another by product of an unhealthy diet. More than one billion people worldwide are said to be overweight while more than 300 million are obese.²³ In addition, due to overweight or obesity at least 2.8 million people die annually. These problems are also found to be more prevalent in higher socio-economic settings. For instance, obesity prevalence in lower middle-income countries at present is 7 per cent, and that in upper middle-income countries is 24 per cent.²⁴ Another important fact is that prevalence of overweight and obesity is higher in females than in males.

As illustrated in Figures 11.2 and 11.3, the prevalence of obesity and overweight is higher in females than in males in each Asian country considered. With regard to the lower middle-income countries, China and India show the highest prevalence for both obesity and overweight for both sexes. However, there is little to differentiate experiences by income levels. Even a high income economy such as South Korea has significant prevalence of an overweight population (34.3 per cent for males and 29.2 for females) while an LDC such as Cambodia also reports high prevalence of

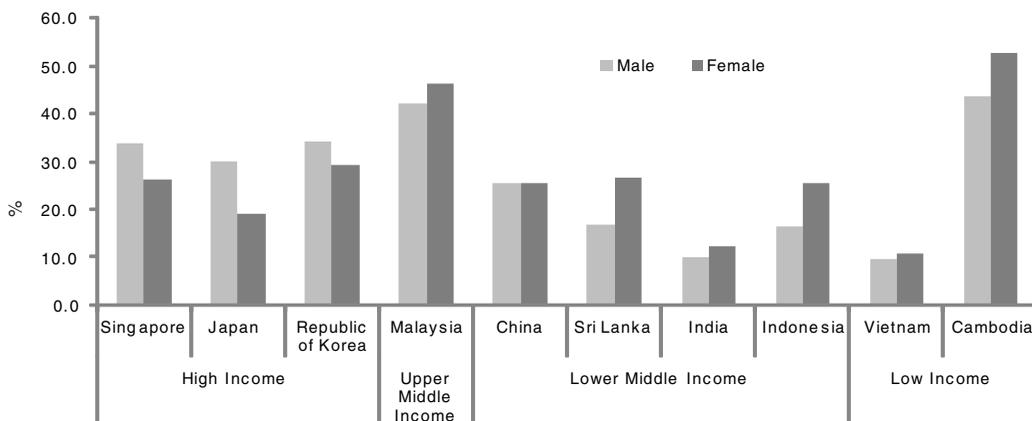
overweight (43.5 per cent for males and 52.7 for females).

The problems of obesity and overweight become even more acute in the case of children. Childhood obesity and overweight is one of the most serious public health issues in the world, particularly in urban settings. As children have greater accessibility to eat processed and fast foods, coupled with more sedentary modern lifestyles, they are more prone to increased weight problems. Children are also increasingly exposed to advertisements that promote fast/processed food which can have a detrimental impact on their diets.

11.5 NCD Prevalence in Sri Lanka

It is evident that NCDs are creating a considerable burden on Sri Lanka's health system over the years; in particular, Sri Lanka's NCD prevalence is substantial compared to countries in other parts of Asia. In terms of NCD mortality, Sri Lanka is placed third (66 per cent) in the ranking, behind the Maldives (79 per cent), and Thailand (71 per cent).

Figure 11.2
Prevalence of Overweight in Selected Asian Countries, 2008

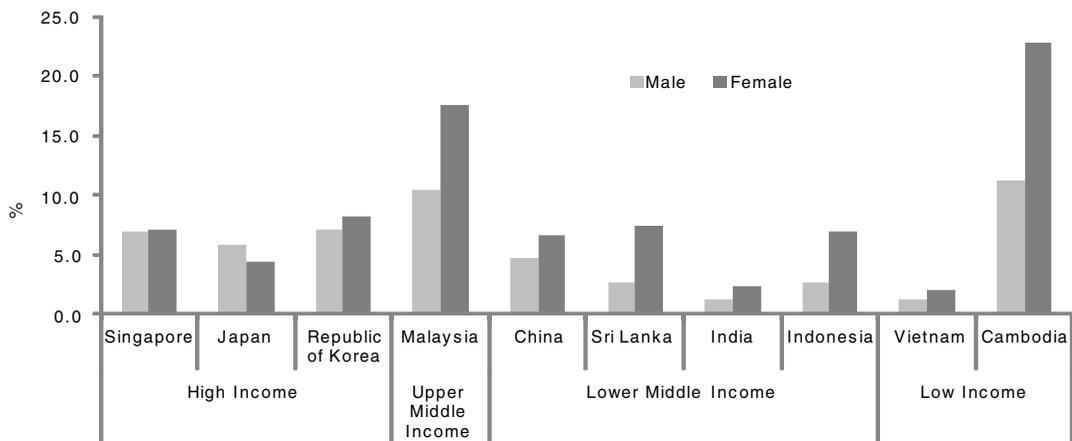


Notes: Overweight and obesity are defined as Body Mass Index (BMI), a measure of weight relative to height, with overweight measured as BMI \geq 25 Kg/m².
Source: WHO (2011), "Global Status Report on Non-Communicable Diseases 2010," WHO, Geneva.

²³ WHO (2012), "Obesity: Key Facts", available at <http://www.wpro.who.int/mediacentre/factsheets/obesity/en/>.

²⁴ *Ibid.*

Figure 11.3
Prevalence of Obesity in Select Asian Countries, 2008



Notes: Overweight and obesity are defined as Body Mass Index (BMI), a measure of weight relative to height, with obesity measured as (BMI) ≥ 30 Kg/m².

Source: WHO (2011), "Global Status Report on Non-Communicable Diseases 2010," WHO, Geneva.

In addition, Sri Lanka's age standardized mortality rates for all NCDs are higher by 20-50 per cent, compared to developed countries.²⁵

At present, Sri Lanka's disease morbidity pattern is heavily weighted towards NCDs (including injuries) accounting for 85 per cent of the country's disease burden. For instance, indoor morbidities due to cancers in 1990 at 142.1 cases per 100,000 population almost doubled to 329 cases per 100,000 population in 2007. During 1995 to 2008, hospitalization due to hypertension and Ischaemic Heart Disease (IHD) has increased by 62 per cent and 61 per cent, respectively. In addition, a significant increase of almost 277 per cent was reported from diabetes cases, on the basis of those admitted to hospitals.

On the other hand, 65 per cent of all deaths in Sri Lanka are due to NCDs. The rest comprise of 26 per cent due to injuries, and 9 per cent due to communicable diseases, maternal, perinatal, and nutrition conditions. In addition, NCD deaths for all causes by gender in 2008 were 66,765 for males, and 51,140 for females. Particularly, the prevalence

of CVD, which is the leading cause of NCD deaths in Sri Lanka is higher for males (384.9 per 100,000 population) than females (240.8 per 100,000 population). In addition, the proportion of indoor morbidity due to IHD for males in 2008 was 52.9 per cent, while the same indicator for females was 44.3 per cent.²⁶

11.6 Conclusion and Way Forward

Empirical evidence indicates that increasing income, urbanization and lifestyle changes are key determinants of changing food habits. These changes are most evident in the fast-growing Asian region, albeit with differences amongst countries across East Asia, Southeast Asia and South Asia. Sri Lanka too is seeing structural transformations, by way of rising incomes, higher levels of urbanization, changing lifestyles and food consumption habits.

Changing food habits leads to substantial health risks arising from increased obesity and overweight,

²⁵ IPS (2013), "The Emerging Challenge of Non-Communicable Diseases", in *Sri Lanka: State of the Economy 2013*, Institute of Policy Studies of Sri Lanka, Colombo.

²⁶ *Ibid.*

high blood pressure, and diabetes. These trends are evident across regions, including Asia. Studies reveal that 60 per cent of Sri Lankan consumers are unsatisfied about the quality of their food, with many foods available in the market considered to be not healthy as expected.²⁷ In particular, many food products are considered to have additives - such as artificial colours and preservatives - that exceed permitted levels. Even though Sri Lanka has comprehensive regulations on food safety - for instance on food preparation (coloring, sweetness, iodized edible salt content, etc.), food packaging and labeling - the extent to which these regulations are practiced is questionable. Consequently, it is important to strengthen the existing monitoring mechanisms with respect to the implementation of public policies and regulations.

Sri Lanka, already prone to a significant health burden from rising levels of NCDs, has initiated some important and useful programmes. These include a national policy initiative to tackle NCDs, promoting healthier lifestyles through concepts such as the 'Super 8' (see Box 11.1), conducting health screening campaigns and awareness building programmes, implementing nutritional programmes both at household and school levels, etc.

Nevertheless, there are unaddressed areas, which require further policy attention. Sri Lanka is seeing a rapid increase in fast food outlets as demand grows. For instance, the largest percentage (62 per cent) of regular users of fast food restaurants in Colombo and Kandy are reported from poorer socio-economic group.²⁸ Despite the Food Act, No.26 of 1980 to regulate and control the manufacture, importation, sale, and distribution of food, it is questionable that all small and medium food



manufactures/sellers meet the standards set out in the Act. There are regular media reports on expired food being sold in the market. Therefore, existing policies and regulation need to be strengthened to prevent such unethical practices.

Unregulated advertisements can also have adverse impacts on food choices. In fact, some studies have found advertisements to be one of the determinants of an obesogenic environment that promotes unhealthy food choices and minimizes opportunities for physical activities.²⁹ Many developed and developing countries, such as the US and Taiwan for instance, have established effective initiatives to prohibit unethical food advertisements in order to prevent obesity and other chronic diseases. Taiwan, which has the highest obesity rate in Asia - 19.2 percent in males and 16.6 percent in females - has drafted a Bill recently to prohibit advertising five kinds of junk food on children's television channels.³⁰ Sri Lanka at present does not have adequate regulation to ban unethical advertisements. However, enforcing stricter rules and regulations on unethical food advertisements is perhaps another area that will need policy attention, especially in regard to safeguarding the health of the country's young population.

²⁷ Liyanage, U. (2009 and 2010), "The Sri Lankan Post-Modern Consumer", *Sri Lankan Journal of Management*, Vol. 14, No. 4, October-December 2009, and Vol. 15, No. 1, January-March, 2010.

²⁸ *Ibid.*

²⁹ De Silva, A. (2012), "Marketing Obesity and Chronic Disease: Unethical Food Advertising and the Role of Nutrition Professionals", *Nutrition Focus*, Issue 1, Nutrition Society of Sri Lanka, Department of Applied Nutrition, Wayamba University, Sri Lanka.

³⁰ *The China Post* (2014), "Ministry Aims to Ban Ads for Junk Food on TV Channels for Kids", <http://www.chinapost.com.tw/taiwan/national/national-news/2014/04/10/404947/Ministry-aims.htm> (accessed 10th April 2014).

Box 11.1

Current Policies and Action for Nutrition Security

Divi Neguma

This programme was implemented in 2012, with the aim of strengthening people economically, and minimizing their dependence on the market for food requirements. Further, it aims to improve nutritional levels of families and to reduce cost of living of households by way of consuming their own grown vegetables and fruits in their gardens by using organic fertilizer. It aims to increase vegetable and fruit production by 25 per cent and increase per capita consumption of vegetable from 134 grams to 175 grams per day.

Phase 1 of the Divi Neguma programme mainly focuses on 'home gardening', which encourages people to grow their own fruits and vegetables.

School Nutrition Programmes

School health promotion programme

In order to improve health, the School Health Promotion programme was commenced by the School Health and Nutrition Unit of the Ministry of Education in collaboration with the Ministry of Health. This programme covers school children, and teachers in each school across the country and conducts a variety of activities -i.e., identifying nutrition issues of the children; creating awareness to address such issues; improving the nutritional food habits; and evaluating the nutritional status of school children.

School canteen management programme

To promote healthy and hygienic food habits of children, a School Canteen Policy was introduced in 2007. Subsequently, a Circular (Running School Canteens-No. 2007/02) issued by the Ministry of Education requires school canteens to be responsible for providing a healthy meal (e.g., pulses, fruits and vegetable items, fresh milk, herbal porridge, king coconut, and clean water). The policy also requires that schools maintain a clean environment inside and outside the canteens, meeting the standards of the Food Act of 1980. This policy bans the sales of artificial foods in school canteens (i.e., fast food, sweets/fat food diets), and promotes indigenous food habits.

School mid-day meal programme

In order to improve the nutritional status of school children, particularly in disadvantaged areas, a mid-day meal programme was introduced with government assistance and other international development partners. A meal is provided to students in grades 1 to 5 in schools with less than 100 students, and other selected school across the country.

Glass of milk for students: Kiri Weeduruwa

With the aim of improving the nutritional levels in school children, a glass of milk is provided to the children in selected schools of the country.

Chronic Non-Communicable Disease (NCD) Policy

In 2010, the Ministry of Health launched the National Policy for Prevention and Control of NCDs, aimed at reducing premature mortality (less than 65 years) due to NCDs by 2 per cent annually over the next 10 years. In order to reduce the NCD burden, the Ministry of Health conducts programmes to promote healthy lifestyles in order to reduce the prevalence of common risk factors; provides integrated evidence-based treatment options for diagnosed NCDs; and promotes the integration of NCD policy into other policies across all government ministries, and private sector organizations.

Concept of 'Super 8'

The Ministry of Health has launched the concept of 'Super 8' to change lifestyles via eight good practices: (1) maintain a BMI between 18.5 to 24.9; (2) avoid excess salt in food; (3) avoid excess added sugar in food; (4) engage in at least 30 minutes of moderate physical activity; (5) consume 5 servings of fruits and vegetable per day; (6) avoid food with trans-fat; (7) avoid smoking and alcohol; and (8) check your blood pressure once a year.

Sources: Ministry of Economic Development/Ministry of Health (2010), "National Policy for Prevention and Control of Non-Communicable Diseases"; National Nutrition Secretariat-Presidential Secretariat, (2013), "A Nourished Nation Multi-sector Action Plan for Nutrition".