SINGAPORE

Population\(^1\)  3 378 300
Infant mortality rate\(^2\)  2.9 per 1000 live births
Life expectancy at birth\(^2\)  78.7 years
Fertility rate\(^1\)  1.41
Annual population growth rate\(^1\)  2.8%

NUTRITION OVERVIEW

The main nutrition-related health problems are obesity among schoolchildren and chronic degenerative disease, such as cancer and heart disease, in adults. Since 1992, there has been a National Healthy Lifestyle Programme to educate the public on the need to lead a healthy lifestyle, create a supportive social and physical environment for healthy living and foster community participation in these efforts. Proper nutrition, regular exercise, no smoking and managing stress are promoted as the four pillars of a healthy lifestyle.

Recognizing Singapore's rapidly ageing population and the increasing prevalence of lifestyle-related diseases, the Government decided to place greater emphasis on health promotion and disease prevention. The Health Promotion Board was established in April 2001 to spearhead national health promotion, health education and disease prevention efforts.

NUTRITIONAL PROBLEMS

Birth weight

In 1998, 8.3% of infants were born with a low birth weight (<2500 g).

Infant feeding

In 2001, the proportion of infants ever breast-fed was 95%, with 72% of infants being breast-fed at one month and 21% at six months of age.

Child growth

In 1996, a survey among children aged 6-18 years showed that 6.4% were underweight (<80% of weight-for-age), 7.2% of the males and 5.6% of the females.

In 1998, a survey conducted among schoolchildren in Primary 1 (seven years of age), Primary 6 (12 years of age) and Secondary 4 (16 years of age) showed 7.2% were underweight (<80% of weight-for-age), 8.1% of the males and 6.2% of the females.

Nutritional anaemia

In 1998, the prevalence of anaemia was 2.4% among Singaporean men and 18.4% among women (18-69 years old). The Definition of anaemia is 130g/L for men and 120g/L for non-pregnant women.

\(^2\) Ministry of Health. Health Facts Singapore 2003
**Obesity**

The prevalence of overweight in schoolchildren (>120% weight-for-height) (primary to pre-university) declined from 14% in 1992 to 9.8% in 2002, while among adults aged 18-69 years it increased from 5.1% in 1992 to 6% in 1998.

The WHO Global Database on BMI reports rates of overweight and obesity (%) in 1998 as follows:

<table>
<thead>
<tr>
<th>Country</th>
<th>Year survey began/ended</th>
<th>Sex</th>
<th>Age range (years)</th>
<th>Overweight (BMI ≥ 25)</th>
<th>Pre-obese (BMI 25-29.99)</th>
<th>Obesity (BMI ≥ 30)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singapore</td>
<td>1998</td>
<td>Male</td>
<td>≥18</td>
<td>33.9</td>
<td>28.6</td>
<td>5.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Female</td>
<td></td>
<td>27.0</td>
<td>20.3</td>
<td>6.7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Both sexes</td>
<td></td>
<td>30.4</td>
<td>24.4</td>
<td>6.0</td>
</tr>
</tbody>
</table>

**POLICIES AND PROGRAMMES DIRECTED AT NUTRITION**

The Health Promotion Board promotes healthy eating in the population by:
- promoting the availability of healthier food choices by working with restaurants, food centres, catering companies, schools, child care centres, workplaces and food manufacturers;
- encouraging the provision of nutrition information at points of sale (The Nutrition Labelling Programme was introduced in 1996 to encourage voluntary provision of nutrition information on food to help consumers make informed food choices. Products that meet specified nutritional guidelines carry a symbol called the Healthier Choice Symbol.); and
- educating the public education using locally relevant nutrition information. (The national dietary guidelines for adults were first formulated in 1988 and reviewed in 1993 and 2002. The Health Promotion Board also maintains a food composition database housing the nutrition information of more than 6500 foods for the purpose of nutrition education and monitoring of national food and nutrient intake.)

**Breast-feeding policies**

In 2001, the Singapore Breast-feeding Promotion Committee was formed to promote and set breast-feeding policies. The Health Promotion Board encourages breast-feeding in infants until at least six months of age.

There is a Baby-friendly Hospital Initiative and all hospitals with maternity wards provide facilities to mothers who wish to breast-feed. Several hospitals have teams of nurses whose specific function is to assist mothers, particularly first-time mothers, to initiate and maintain breast-feeding before discharge from hospital. Members of the voluntary group, the Singapore Breast-feeding Mothers Support Group, are often on hand to provide support to breast-feeding mothers. Most hospitals provide some form of follow-up activity after discharge, such as a hotline or domiciliary service on request.

The International Code of Marketing of Breast-milk Substitutes has been translated into the Code of Ethics on the Sale of Infant Formula Products, which is voluntarily adhered to. The Code aims to protect and promote breast-feeding and has served as a useful working document for all who are involved in the promotion and sale of infant formula products in Singapore. All milk firms subscribe to the Code and adherence is obligatory. The Code was revised in 2002.

In 2002, 53% of women were participating in the paid labour force. Paid maternity leave is eight weeks in both the public and private sectors, and since April 2001, the Government has been providing paid maternity leave for working mothers who give birth to their third child (previously it applied only to the first two children).
Monitoring and surveillance of nutritional status

Information is routinely collected on birth weight, child growth, nutrition, and anaemia in pregnant women, mainly through medical/health records. Schoolchildren in Primary 1 (seven years of age), Primary 6 (12 years of age) and Secondary 4 (16 years of age) are routinely screened to assess their nutritional status.

The National Health Survey and National Nutrition Survey are conducted every five years among adults aged 18-69 years. These surveys provide information on the health status of Singaporeans and nutrient adequacy of their diets. The National Health Surveillance System Survey is conducted every two years to monitor health practices.

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