CHINA

Population\(^1\)  1 284 530 000

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Infant mortality rate(^2)</td>
<td>32.2 per 1000 live births</td>
</tr>
<tr>
<td>Life expectancy at birth(^2)</td>
<td>70.2 years</td>
</tr>
<tr>
<td>Fertility rate(^2)</td>
<td>1.9</td>
</tr>
<tr>
<td>Annual population growth rate(^2)</td>
<td>0.96‰</td>
</tr>
</tbody>
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NUTRITION OVERVIEW

Micronutrient deficiencies, especially nutritional anaemia, are still a major problem in China, especially in the less developed areas. At the same time lifestyle-related diseases, such as obesity, are emerging as important public health problems.

NUTRITIONAL PROBLEMS

Birth weight

In 1998, 5.9% of infants were born with a low birth weight (<2500 g), 6.3% in rural area and 4.2% in urban area. In 1999\(^2\), 2.4% of babies were born with a low birth weight <2500 g.

Infant feeding

Breast-feeding declined rapidly during the 1980s due to the promotion of breast-milk substitutes and inappropriate medical practices. Two national surveys in 1997 and 1998 estimated an exclusive breast-feeding rate at four months of 64% and 67% respectively at national level, with 54% in rural areas and 72% in urban areas in 1998. It decreased to 48.7% in urban areas and 60.4% in rural areas in 2000.

The 1997 national survey reported that the exclusive breast-feeding rate was 60% for Beijing City. This was a great improvement compared with the 1980s when the rate in Beijing was only 16%. There were no national data for the number of children ever breast-fed, but individual hospitals reported rates of 90% to 100%. In Changzhou City, the rate for predominant breast-feeding at four months was 92% (exclusive breast-feeding 73%). In Jiangsu urban areas, a 1997 survey reported an exclusive breast-feeding rate of 58% and an ever breast-fed rate of 93%.

Child growth

The Third National Nutrition Survey, conducted in 1992, reported that 10% of children under five years of age were underweight, 17% were stunted and 3% wasted. There were, however, considerable differences between provinces.

The 2000 China National Nutrition Surveillance reported that, in urban areas, 3.0% of children under five years of age were underweight and 2.9% stunted; in rural areas, overall, 10.1% of children under five years of age were underweight and 14.8% stunted; in poor rural areas, 20.8% of children under five were underweight and 30.6% stunted.

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\(^1\) Data from the 2002 Annual Report of National Bureau of Statistics of China

Nutritional anaemia

In 1992, the Third National Nutrition Survey reported an iron deficiency anaemia prevalence rate of 11% for urban children of 0-6 years, and a 16% rate for rural children in the same age group. The survey also showed that 15% of men and 21% of women were anaemic.

In 1998, China National Nutrition Surveillance reported that the rate of iron deficiency anaemia in children under six years of age was 16.8%. It showed that anaemia existed, not only in poor areas, but also in developed areas such as Guangdong (22.4%) and Jiangsu (17.1%). Among children under two years old, more than one quarter (26.6%--30.9%) were suffering from anaemia.

In 2000, the prevalence of anaemia was 12.3% in children under five years of age in urban areas, and 26.7% in rural areas. Anaemia was highest among infants of six months, with a prevalence rate of 50% in rural areas.

Iodine deficiency

A 1995 national survey among children aged 8-12 years showed a total goitre rate of 20.4%.

A 1997 national survey of children in the same age group reported a total goitre rate of 10.9% and a median urinary iodine level of 300.2 µg/L.

According to the surveillance results of 2002, the coverage of iodized salt had reached 95.2%, and the coverage of qualified iodized salt had reached 88.8%. With the implementation of the new standards for edible salt, the quality of iodized salt improved, and in 2002, the median urinary iodine among children of 8-10 years was 241.2 mg/L. Furthermore, the study confirmed that the goitre rate among children in the 8-10 age group was continuing to decline over time, from 20.4% in 1995 down to 5.8% by 2002.

Vitamin A deficiency

There were very few reports of night-blindness and Bitot’s spots in the 1990s. However, a 1992 survey found that vitamin A intake among adults was 62% of the Chinese recommended daily allowance, ranging from 55% in rural areas to 75% in urban areas.

In 1999, the Vitamin A Deficiency Survey among children in 14 provinces reported that the rate of vitamin A deficiency for under-fives was 11.7% (urban 5.2%, rural 15%), the rate for children less than six months of age was 33.4%, and for children of 6-12 months, 17.9% (cut-off used was serum retinol level <20 µg/dl).

Vitamin D deficiency

Vitamin D deficiency is a problem in certain areas of China. A 1989 study showed a vitamin D deficiency prevalence rate of 34%. A 1993 survey among Tibetan children found that 46% had vitamin D deficiency.

Obesity

A 1992 national survey found that 15% of adults had a BMI>25 (17% for women and 12% for men), varying from 10% in rural areas to 23% in urban areas.
The WHO Global Database on BMI reports rates of overweight and obesity (%) in 1997 as follows:

<table>
<thead>
<tr>
<th>Country</th>
<th>Year survey began/ended</th>
<th>Sex</th>
<th>Age range (years)</th>
<th>Rates of overweight and obesity (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Overweight (BMI ≥ 25)</td>
</tr>
<tr>
<td>China</td>
<td>1997</td>
<td>Male</td>
<td>Adults</td>
<td>14.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Female</td>
<td></td>
<td>16.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Both sexes</td>
<td></td>
<td>15.4</td>
</tr>
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</table>

In 2000, the Working Group on Obesity of China (WGOC) organized a meta-analysis of the data from 13 large-scale cross-sectional surveys since 1990, among adults of 20-70 years old. Analysis was carried out on disease risks factors, such as high blood pressure; diabetes, including fasting blood glucose (FBG); serum cholesterol, HDL and triglycerides; and in relation to BMI and waist circumference (WC). Based on the analysis of disease risks regarding BMI levels, a BMI of 24 was recommended as the cut-off point for overweight, and 28 was recommended as the cut-off point for obesity for Chinese people. Waist circumference beyond 85 cm for men and beyond 80 cm for women were recommended as the cut-off points for central obesity.

Based on the above BMI cut-offs for Chinese adults, the overweight and obesity prevalence rates in China are 33.6% and 7.6%, respectively. However, if WHO criteria were applied, overweight and obesity prevalence rates of Chinese adults would be 24.5% and 3.0%, respectively.

POLICIES AND PROGRAMMES DIRECTED AT NUTRITION

The National Food and Nutrition Policy is in place and in 1997 the National Plan of Action for Nutrition was approved by the State Council. In 1998, responsibility for the National Plan of Action was transferred to the Department of Disease Control. In 2001, the National Strategic Plan for Food and Nutrition Improvement for 2001-2010 was issued by the State Council.

National Dietary Guidelines have been formulated and were revised in 1997. Chinese Dietary Guidelines, including the Food Guide Pagoda for Chinese residents were disseminated to different levels of the country.

Chinese Guidelines for Overweight and Obesity Prevention and Control for Adults were issued in 2003.

A National Coordinating Committee for the Control of Iodine Deficiency Disorders has been established, chaired by the Ministry of Health. In 1994, the State Council passed regulations on edible salt iodization as a means to eliminate iodine deficiency disorders. In 1996, the National Plan of Action for Iodine Deficiency Disorders was adopted.

In 2001, after China had achieved the Universal Salt Iodization (USI) goal of 2000 (90% of households with access to iodized salt), the General Office of the State Council issued a document on continuing efforts to strengthen IDD prevention and control. It put forward a new objective, that 95% of counties (and cities) should eliminate IDD by 2010. According to the national guidelines, the provinces, autonomous regions, and municipalities that achieved the year 2000 goal should make further efforts to consolidate their achievements, in order to reach the IDD elimination goal in five years (by 2005). Those that had not achieved the USI goal should ensure that that it is achieved in five years and that the IDD Elimination objective is reached by 2010.

Breast-feeding policies

In 1992, the Government endorsed the National Breast-feeding Policy, and the Baby-friendly Hospital Initiative was launched. There is a National Breast-feeding Committee and Coordinator. A 1994 law made it mandatory for mothers to
be informed about breast-feeding and given help to breast-feed. China set a target of baby-friendly designation for 7800 of the 8461 hospitals with maternity facilities (92%) by 2000, as well as an 80% exclusive breast-feeding rate at four months. By the end of 1999, 7329 of the targeted 7800 hospitals had been declared baby-friendly.

There is a National Code of Marketing of Breast-milk Substitutes (1995), but promotion of breast-milk substitutes persists in some areas.

A nationwide programme of training on breast-feeding has been established for health workers and families, together with a media campaign. China has recognized the need for a community-based initiative to support mothers to continue the exclusive breast-feeding practice established during their hospital stay. A draft assessment tool for baby-friendly areas was developed in 1995-1996, and field-tested in 1997.

Four months fully paid maternity leave is allowed by law for both the public and private sectors and extended leave of up to one year at 80% of pay may be provided. Implementation of the extended leave varies. The law also mandates paid breast-feeding breaks and there are crèche facilities in some workplaces.

**Monitoring and surveillance of nutritional status**

Besides the food and nutrition surveillance conducted on a regular basis, information is collected routinely on nutritional anaemia, iodine deficiency, vitamin A deficiency, and malnutrition of children under five years old.

The Chinese Nutrition and Health Survey in 2002 was approved jointly by the Ministry of Health, the Ministry of Science and Technology, and the Statistisc Bureau of China. The survey was conducted in 132 sites, which covered all 31 provinces. Five reports on hypertension, obesity, nutrition, diabetes and blood lipids will be produced. The database of this project will be available to both health professionals and the public in the future.

**Intervention programmes**

Intervention programmes are undertaken for the control of nutritional anaemia, iodine deficiency disorders, vitamin A deficiency and, in some provinces, vitamin D deficiency.

In 2003, two five-year Global Alliance for Improved Nutrition (GAIN) projects were approved: the NaFeEDTA (sodium iron ethylenediaminetetraacetic acid) Fortified Soy Sauce Project for Iron Deficiency Control, implemented by China CDC, and the Flour Fortification Project in the Western Region of China, to be implemented by the China Centre for Public Nutrition and Development. The target population of the NaFeEDTA project will be 360 million people, within five years (2003-2008), and it is expected to reduce the prevalence of iron deficiency anaemia by 30% in the 129 million people at risk. The goal of the flour fortification project in the Western Region of China is to reduce the prevalence of micronutrient deficiencies among 59 million people (49 million at risk).

A School Milk Programme has been implemented since 2000 with support from the Food and Agriculture Organization of the United Nations (FAO). By 2003, the project had covered 38 cities, including 31 provincial capital cities and seven big cities, more than 4400 schools and 2 million students.

Since 2001, 20 May has been celebrated as National Student Nutrition’s Day.

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