**COOK ISLANDS**

<table>
<thead>
<tr>
<th>Population</th>
<th>18 700</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infant mortality rate</td>
<td>19.4 per 1000 live births</td>
</tr>
<tr>
<td>Life expectancy at birth</td>
<td>69.9 years</td>
</tr>
<tr>
<td>Fertility rate</td>
<td>2.6</td>
</tr>
<tr>
<td>Annual population growth</td>
<td>1.5%</td>
</tr>
</tbody>
</table>

**NUTRITION OVERVIEW**

The major outstanding problems continue to be noncommunicable diseases, particularly overweight. In 1996, 32% of all deaths were related to hypertension, coronary heart disease or diabetes. One recent major achievement was the Weight-loss Programme organized during 1996-1997.

**NUTRITIONAL PROBLEMS**

**Birth weight**

A retrospective monitoring of the growth of 613 infants aged 0 to 23 months born between 01/01/1995 and 30/04/1998, using data collected on clinic records cards (1998, Rarotonga Infant Growth monitoring project), showed that 4.4% of infants were born with a low birth weight (<2500 g), including pre-term infants. At the same time, 13.1% of infants were born weighing >4000 g at birth (large-for-gestational-age). In 2000, 3% of infants were born with a low birth weight (<2500 g).

**Infant feeding**

A survey of 222 women with infants less than 24 months of age (1998 Rarotonga Infant Feeding Survey) showed that, grouping all mothers with infants less than six months old, the proportion of infants ever breast-fed was 89.5%. The survey also showed that, for all mothers with infants less than 4 months old, 18.9% were being exclusively breast-fed. Fifty-nine per cent of mothers had initiated breast-feeding within one hour of delivery. Over half of the mothers (54%) had introduced drinks (coconut water, water and juice) before one month of age and 45.1% had introduced solid foods (commercial baby foods, cereals, rice and fruits) before four months. The median duration of breast-feeding in the survey sample was seven to eight months.

**Child growth**

Results from the 1998 survey (Rarotonga Infant Growth monitoring project) showed that, using WHO criteria, over 30% of infants of five months and below, and over 20% of infants six to seven months old, were overweight.

**Nutritional anaemia**

The 2001-2002 study on helminthiasis among schoolchildren, showed a prevalence of anaemia (Hb <11.5 g/dl) of 4.1% and 1.7% in two different schools. The results indicated that iron deficiency anaemia does not appear to be a significant public health problem in this age group.

---

2 Hughes R. *Environmental influences on helminthiasis and nutritional status among Pacific Schoolchildren*. Not yet published. For the purpose of this study, country governments selected two schools to be surveyed, one from the capital or commercial centre and the other less accessible. Approximately 150 children aged 5-12 years of age were selected from each school.
Iodine deficiency

Iodine deficiency is not considered a problem in Cook Islands at present.

Vitamin A deficiency

The Department of Public Health, in conjunction with the Vitamin A Field Support Project (VITAL), conducted a survey in 1992 to determine whether vitamin A deficiency posed a public health problem in Cook Islands. The survey results indicated that vitamin A deficiency was not a significant public health problem.

Obesity

In 1980, the Cook Island Government and the Secretariat of the Pacific Community (SPC) undertook a baseline survey among 1127 adults living in the urban area of the main island of Rarotonga. Nearly one half of the women were obese (>140% of ideal weight). In 1987, a follow-up survey was undertaken, showing that over 20% of the men and over 50% of the women surveyed were defined as obese. Among the cohort members, 22% of men and 38% of women had become obese since the 1980 survey. The majority were aged between 35 and 54 and had been overweight in 1980. Between 1980-1987, the mean BMI for males increased from 28.2 to 29.1, and for females from 28.5 to 31.0.

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>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>Cook Islands</td>
<td>1998</td>
<td>Male</td>
<td>Adults</td>
<td>76.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Female</td>
<td></td>
<td>81.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Both sexes</td>
<td></td>
<td>77.6</td>
</tr>
</tbody>
</table>

In 2002, the Paran no te Oraanga Meitaki Project was undertaken to determine the prevalence of diabetes and hypertension in a small Rarotogan community of approximately 3600 people. Crude (unpublished) results show that at least 80% of the individuals screened were overweight or obese, 12% had diabetes and nearly one third had high blood pressure. Also in 2002, six outer islands carried out screening campaigns. Results show that 75.7% of the individuals screened were overweight or obese. The mean BMI for males was 31.4 and for females 33.2.

School surveys carried out in Arorangi School in Puaikura Vaka in 1991 and 1996 showed an increasing trend in overweight among primary-school children. In 1991, 6% of children were found to be underweight and no children were found to be overweight. In 1996, no children were found to be underweight but 12% were classed as overweight. In 2002, a WHO survey at the same school showed the proportion of children overweight to be 15.7%. Another school survey (primary and secondary) was carried out in March 2003 and the results showed that 16.9% of the children screened were overweight. In secondary students 28.4% were overweight, while in primary schools 12.5% were overweight.

POLICIES AND PROGRAMMES DIRECTED AT NUTRITION

The first draft of the National Plan of Action for Nutrition was finalized in 1997 and is scheduled to be updated. The Non Communicable Diseases Plan of Action is in place and has been the basis for many programmes.
There is a National Food and Nutrition Committee, established in the 1980s, which should be revived to enhance cooperation between the different sectors involved in implementing the National Plan of Action.

National Dietary Guidelines (Cook Islands Health and Nutrition Guidelines) were established in 1992.

The Ministry of Health has also developed, with support from WHO, Guidelines for the Prevention and Management of Hypertension, Diabetes and Obesity.

**Breast-feeding policies**

The National Breast-feeding Policy, the Infant Feeding Policy (1994) and the Baby-friendly Hospital Initiative Policy have all been adopted, but have not been revised yet.

The Nutrition Unit of the Department of Public Health developed some infant feeding guidelines in 1997. Breast-feeding Week is celebrated.

There is no Code of Marketing of Breast-milk Substitutes yet, but some of its principles are observed in the National Breast-feeding Policy.

Maternity leave of six weeks is available in the public sector only.

**Monitoring and surveillance of nutritional status**

Monitoring and surveillance of nutritional status has not been established yet, although information is collected routinely on birth weight, nutrition during pregnancy, breast-feeding and child growth.

Data on noncommunicable diseases (NCD) have been collected from surveys in 1980, 1987, 1988, in addition to government medical surveys which include records on the prevalence and incidence of diabetes and hypertension in most of the outer islands.

A national NCD survey is currently under way.

**Intervention programmes**

Some projects have already been implemented in the field of breast-feeding and infant-feeding practices, and health and lifestyle promotion, such as World Food Day activities and weight loss campaigns.

Following the Puaikura survey, the Public Health Department initiated a series of community workshops and sessions/cooking demonstrations on healthy lifestyles. The Public Health Department is also working closely with its local council to develop activities to improve lifestyles. Following the school survey, the Public Health Department approached the Ministry of Education to present the results. This resulted in a strengthening of the partnership and a successful (joint) application to the Secretariat of the Pacific Community (SPC) to be included in the piloting of their School Obesity Project "The Strengthening". This will commence in 2004.

*Prepared by Karen Tairea, Nutritionist, Ministry of Health, Cook Islands.*