Background information of overweight and obesity among Indigenous peoples

There are a host of influences contributing to the development of overweight and obesity, including genetic, metabolic, environmental, behavioural, socioeconomic and cultural factors [1]. Weight gain is caused by consumption of macronutrients in excess of the body's requirements creating a situation of positive energy balance. An energy imbalance over a sustained period of time leads to a person becoming overweight [2].

Body mass index (BMI) - calculated by dividing weight (in kilograms) by height (in metres) squared - is commonly used to categorise people in terms of appropriateness of weight (Table 1).

<table>
<thead>
<tr>
<th>Classification</th>
<th>BMI</th>
<th>Risk of co-morbidity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Underweight</td>
<td>&lt;18.50</td>
<td>Low</td>
</tr>
<tr>
<td>Normal</td>
<td>18.50-24.99</td>
<td>Average</td>
</tr>
<tr>
<td>Overweight</td>
<td>25.00-29.99</td>
<td>Increased</td>
</tr>
<tr>
<td>Obese</td>
<td>30.00+</td>
<td>Further increased</td>
</tr>
</tbody>
</table>

Source: WHO Consultation on Obesity (2000) [3]

A complementary measure to BMI is waist circumference, as excess fat carried in the abdominal area is associated with increased risk of ill health. A waist circumference of 94 cm or more in men and 80 cm or more in women indicates increased risk of ill health and a waist circumference of 102 cm or more in men and 88 cm or more in women indicates substantially increased risk [4]. (This and the BMI classification may not be suitable for people aged 18 years or below and the cut-off points may not be suitable for all population sub-groups.)

A combination of macro and micronutrients are required to provide energy and to maintain normal metabolic function, growth and

More detailed information about overweight and obesity in Indigenous people can be found at:
http://www.healthinfonet.ecu.edu.au/obesity_review
repair. The National Health and Medical Research Council’s Nutrient Reference Values provides information on recommendations for daily energy and nutrient intakes for children and adults based on the latest scientific evidence [5]. The NHMRC recommends a dietary intake of different types of foods, where all nutrients can be obtained within energy requirements and energy-dense, nutrient-poor foods are replaced with plenty of vegetables, fruits, wholegrain cereals, moderate amounts of lean meats, fish, and poultry, and small amounts of polyunsaturated or monosaturated fats and oils, and plain water. By increasing levels of activity, dietary choices become more flexible and have the benefits of assisting the maintenance of normal bodyweight and reducing the risk of a range of chronic diseases.

The actual energy requirements needed to maintain current body size and level of physical activity may be different to the desirable energy requirements needed to maintain a body size and levels of physical activity consistent with good health [5]. For people who are overweight or obese, desirable energy requirements may be lower than actual requirements. For people who are both overweight or obese and physically inactive, the difference between actual and desirable will depend on the balance between degree of overweightness and level of inactivity.

Overweight and obesity are associated with a range of debilitating and life-threatening conditions, such as cardiovascular disease, type 2 diabetes, high blood pressure, certain cancers, sleep apnoea, osteoarthritis, psychological disorders and social problems [2].

In terms of the association of overweight and obesity with specific health outcomes, there is good evidence of the association with:

- cardiovascular disease (CVD) among young to middle-aged men and women but not among older people
- increased risk of coronary heart disease (CHD) in adults

and moderate evidence of the association with:

- the duration of obesity and CVD mortality among adults which may mediate the protective factor of overweight in older age
- obesity and CVD mortality among adults
- abdominal obesity and risk of CVD particularly among older men
- abdominal obesity and risk of CHD in older men and younger women
- overweight and obesity and risk of heart failure
- overweight and obesity and increased risk of ischaemic stroke among adults
- abdominal adiposity and risk of stroke in men and women. [6]

Obesity is a significant risk factor for the development of type 2 diabetes, a metabolic disease characterised by hyperglycaemia (high blood glucose levels) [7]. The chronic hyperglycaemia of diabetes is associated with long-term damage, dysfunction and failure of body organs, especially the heart and blood vessels, eyes, kidneys and nerves. The Australian Diabetes, Obesity and Lifestyle Study found that people who were obese were six times more likely to develop metabolic disorders than those of normal weight [7]. Physically inactive people are also at increased risk of developing such disorders.

For more information:


Strategies for dealing with overweight and obesity include psychological interventions and changes to nutrition and/or physical activity. Intensive, individually-tailored interventions have been shown to provide some success for overweight and obese people, and those at high risk of weight-related chronic disease. Obesity, however, is not just an individual problem: it is a population problem, and the World Health Organization recommends that it needs to be tackled as such [3]. In terms of interventions to address overweight and obesity in adults and older Australians there is plenty of evidence of the efficacy of interventions for those who are already obese, but there is less evidence for interventions that aim to prevent weight gain at a population level.

References


7. NSW Centre for Overweight and Obesity (2005) A literature review of the evidence for interventions to address overweight and obesity in adults and older Australians (with special reference to people living in rural and remote Australia and Aboriginal and Torres Strait Islanders). Sydney: Australian Department of Health and Ageing
The Australian Indigenous HealthInfoNet is an innovative Internet resource that contributes to ‘closing the gap’ in health between Indigenous and other Australians by informing practice and policy in Indigenous health.

Two concepts underpin the HealthInfoNet’s work. The first is evidence-informed decision-making, whereby practitioners and policy-makers have access to the best available research and other information. This concept is linked with that of translational research (TR), which involves making research and other information available in a form that has immediate, practical utility. Implementation of these two concepts involves synthesis, exchange and ethical application of knowledge through ongoing interaction with key stakeholders.

The HealthInfoNet’s work in TR at a population-health level, in which it is at the forefront internationally, addresses the knowledge needs of a wide range of potential users, including policy-makers, health service providers, program managers, clinicians, Indigenous health workers, and other health professionals. The HealthInfoNet also provides easy-to-read and summarised material for students and the general community.

The HealthInfoNet encourages and supports information-sharing among practitioners, policy-makers and others working to improve Indigenous health – its free on line yarning places enable people across the country to share information, knowledge and experience. The HealthInfoNet is funded mainly by the Australian Department of Health and Ageing. Its award-winning web resource (www.healthinfonet.ecu.edu.au) is free and available to everyone.

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