

Okinawan recommendations on nutrition and cardiovascular disease

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Summary

1. Urbanisation appears to be responsible for the increasing prevalence of cardiovascular disease (CVD) in some countries. However, opposite trends are evident in some highly urbanised areas; for example, Japan, Hong Kong and parts of China.
2. Certain Asian foods and food patterns may lessen the adverse effects of CVD risk factors such as cigarette smoking, physical inactivity and adverse food factors (e.g., saturated fat, salt).
3. Visceral (abdominal) fatness has an earlier and greater impact on CVD risk in the Asia-Pacific region than in western industrialised societies. There may be a causal pathway from fetal undernutrition and growth retardation, followed by subsequent exposure to sedentariness and atherogenic diets, accompanied by the development of visceral fat, insulin resistance, dyslipidaemia, and hypertension and thus premature CVD.
4. The rapid changes in food consumption and mixing of different food cultures is likely to influence cardiovascular health in the Asia-Pacific region. The widespread application of Food Based Dietary Guidelines (FBDG as summarised in WHO, Manila, 2000) is likely to temper the negative consequences of such mixing.
5. Food security, safety and quality, as well as opportunities for regular, safe physical activity, recreation and relaxation, are essential for healthy cities and communities and the prevention of CVD.

Recommendations

1. The prevention of CVD in the Asia-Pacific region should be based on FBDG, which take account of sustainability, culture, social settings and broad health needs.
2. Emphasise a varied, nutritious food intake as the foremost dietary guideline.
3. Greater efforts should be made to identify culturally relevant cardioprotective foods and beverages.
4. A lifelong approach to CVD prevention, from conception to old age, is required.
5. Attention should be given to the role of food, and quality of life, in ageing populations.
6. Encourage food intake decisions which are inclusive of physical fitness, mental health and social activity.
7. Develop advocacy to health food policy and programs in relation to CVD in the Asia-Pacific region through inter-sectoral partnerships and good governance.

These recommendations should be applied within various social settings and sectors of society; for example, in health services, education institutions, community organisations, commercial enterprises as well as government and non-government organisations.

Research recommendations

A vigorous research agenda is necessary for the definition and development of cardioprotective foods and food patterns in the Asia-Pacific region. There is an urgent need to publish and propagate and act on research findings in an educative environment.

1. Create partnerships between researchers in the region. This can be done through collaborative research and exchange of research findings.
2. New CVD protective foods should be developed through partnerships between academic institutions and the food industry in the region.
3. Changes in food consumption patterns should be monitored regularly in relation to changing socioeconomic circumstances in order to understand the impacts of the nutrition transition in various communities.
4. Dietary assessment methodology workshops should be held regularly in order to foster research expertise in the region.
5. Where appropriate, researchers should be encouraged to adopt standardised protocols for the measurement of health outcomes and disease risk factors. This would facilitate regional comparisons, although the interpretation of such data may vary from country to country, e.g., body mass index cut-off points.
6. Consumer research is required to understand the ways food consumers acquire and use foods in various parts of the region. This would facilitate communication and health promotion programs.
7. Documentation of local cuisines, food uses and food preparation practices is urgently required to conserve knowledge of traditional foods, including medicinal foods.
8. It is important that each country should establish programs for the monitoring and surveillance of disease risk factors and food consumption patterns in relation to health outcomes. At present, there are major information deficits in various parts of the region.
9. In particular, behavioural risk factor monitoring systems could be developed relatively rapidly to evaluate the effectiveness of anti-CVD programs in the region. The People's Republic of China has recently established such a system.
10. More research on the possible interplay between genetic and early environment influences, such as the fetal nutrition environment, is required in order to understand the aetiology of CVD in the populations of the regions.
11. The activities in foods should be complemented through the development of phytochemical food composition tables.

The Asia Pacific Clinical Nutrition Society should lobby government and non-government organisations to bring these research recommendations into actuality in the next 5 years.