

Action Plan to Promote **Healthy Diet** and **Physical Activity** Participation in Hong Kong



Department of Health
Hong Kong Special Administrative Region of China



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Preface

Globally, we are facing a rising threat imposed by chronic non-communicable diseases or chronic diseases. Evidence shows that the risk of disease is mainly attributable to unhealthy lifestyle practices. The World Health Organization estimated that, worldwide, low fruit and vegetable intake and physical inactivity account for 2.7 million and 1.9 million deaths respectively. Increasing amounts of evidence are telling us that the earlier an individual adopts healthy lifestyle habits, the lower his or her risk of contracting non-communicable diseases during adulthood and beyond.

Hong Kong is in a process of change. As urbanization and economic growth are generally welcome, unsatisfactory diet and physical activity patterns have become more common in our population. People nowadays are more vulnerable to affluent diets than ever. Besides, many lead sedentary lives. As a result, increasing numbers of people are becoming overweight or obese. They in turn experience a higher risk of potentially lethal non-communicable diseases, such as diabetes mellitus, heart diseases and cancer. If the situation does not improve, the cost and impact of lifestyle-related diseases on our healthcare system, as well as society at large, will increase and eventually prove catastrophic.

To avert this from happening, we must work in a coordinated manner and aim to promote healthy eating and physical activity participation from all sides and at all levels: the individual, family, organization and the wider community. This responds to the call made in the Government's strategic framework document *"Promoting Health in Hong Kong: A Strategic Framework for Prevention"*



and Control of Non-communicable Diseases” published in 2008.

As Chairman of the Working Group on Diet and Physical Activity, I would like to thank all who helped in drawing up this Action Plan. The objective of this is to outline the framework of actions that will take place in the coming few years to support, and help set the direction for, the delivery of effective health promotion programmes.

This document is a critical step in what must be a broader process to promote healthy diet and physical activity participation in Hong Kong. It is a product of collaboration among stakeholders from different sectors of our society. Every individual and organization has a role to play. The actions set out here represent a start, not an end. With dedication, partnership, and coordinated effort called for in this Action Plan, we are better placed to empower individuals to take responsibility for their health as well as that of others, and to create a caring community that opens up a wider range of healthy choices for all. One will agree that, eventually, wellbeing and quality of life are choices that individuals and communities have to make. Make that choice today by playing your part in the Action Plan!

Professor Alfred CM CHAN, BBS, JP

Chairman

Working Group on Diet and Physical Activity

Abbreviations

Abbreviations

Full name

BRFS	Behavioural Risk Factor Survey
CHEU	Central Health Education Unit
CSC	Community Sports Committee
CUHK	Chinese University of Hong Kong
DH	Department of Health
EDB	Education Bureau
EHS	Elderly Health Service
EMACs	Estate Management Advisory Committees
FEHD	Food and Environmental Hygiene Department
FHB	Food and Health Bureau
FHS	Family Health Service
HA	Hospital Authority
HAD	Home Affairs Department
HBM	Health Belief Model
HD	Housing Department
LCSD	Leisure and Cultural Services Department
MCHCs	Maternal and Child Health Centres
NCD	Non-communicable diseases
NCDD	Non-communicable Disease Division
NGOs	Non-governmental organizations
PHS	Population Health Survey
PRH	Public rental housing
SC	Steering Committee on Prevention and Control of Non-communicable Diseases
SCT	Social Cognitive Theory
SHS	Student Health Service
STEPS	STEPwise approach to Surveillance
SWD	Social Welfare Department
TDS	Total Diet Study

Abbreviations

Full name

VHTs	Visiting Health Teams
WG	Working Group
WGDPA	Working Group on Diet and Physical Activity
WGPC	Working Group on Primary Care
WHO	World Health Organization
Y-HBSS	Youth-Health Behaviour Surveillance System

1

Introduction

Global situation of non-communicable diseases and their risk factors

- 1.1 With growing affluence, the world's population is living longer in terms of life expectancies in general. At the same time, there is an increasing number of people suffering from non-communicable diseases (NCD), such as cancer, stroke and ischaemic heart diseases, which cause ill-health, disability and premature deaths. The World Health Organization (WHO) estimated that of the 58 million deaths in 2005, approximately 35 million (60.3%) were caused by NCD.
- 1.2 NCD are closely related to the lifestyle practices, and many NCD share common behavioural risk factors such as unhealthy diet, physical inactivity and being overweight/obese. The presence of these behavioural risk factors can lead to the development of biomedical risk factors, notably excessive body weight, high blood pressure, adverse blood sugar and lipid levels that are the key risk factors for most NCD. The WHO estimated that by having healthy lifestyles including healthier diet, increasing physical activity and stop smoking, at least 80% of heart diseases and type 2 diabetes as well as one-third of cancers can be prevented. Therefore, to improve the community's health profile through prevention of NCD, high priority should be given to those interventions that tackle unhealthy diet, physical inactivity, overweight and obesity, and smoking.
- 1.3 Recognising that the rapid rise of NCD would represent one of the major health challenges in the coming century, the WHO developed the *Global Strategy for the Prevention and Control of NCD* in 2000, the *WHO Framework Convention on Tobacco Control* in 2003, the *Global Strategy on Diet, Physical Activity and Health* in 2004, and the *2008-2013 Action Plan for the Global Strategy for the Prevention and Control of NCD* in 2008 and called on its Member States to develop national policy framework and implement actions to tackle the issue.

Prevalence of NCD and their risk factors in Hong Kong

- 1.4 Hong Kong's health indices rank among the best in the world. Like many places, however, an increasing disease burden from NCD is evident owing to the changes in health risk profile with the expanding and ageing population, social changes and globalisation. For example, the proportion of registered deaths attributed to cancer, heart diseases and stroke had increased from 12.2%, 9.4% and 7.5% in 1961 to 30.0%, 16.3% and 8.9% respectively in 2008.
- 1.5 Among 41 530 registered deaths in 2008, over three-fifths were attributed to six major but preventable NCD, including cancer (30.0%), heart diseases (16.3%), stroke (8.9%), chronic lower respiratory diseases (5.1%), injury and poisoning (4.3%) and diabetes (1.3%). The importance of these six major NCD is also underlined in terms of hospital discharges and deaths. Altogether, they accounted for 21.5% (or about 351 438 episodes) of all hospital inpatient discharges and deaths in 2008.
- 1.6 Regarding the behavioural risk factors such as overweight and obesity, inadequate intake of fruit and vegetables, physical inactivity, and alcohol misuse, the Behavioural Risk Factor Survey (BRFS) April 2009 reported that about two-fifths (38.7%) of people aged 18-64 were overweight/obese; about four-fifths (79.0%) failed to meet the WHO recommendation of having at least five servings of fruit and vegetables per day; about one-fifth (21.0%) were classified as having "low" level of physical activity (based on International Physical Activity Questionnaire classification); and around one in twelve (8.4%) had binge drinking. The above findings have revealed that the behavioural risk factors of NCD are common in the local adult population.

Strategic framework for prevention and control of NCD in Hong Kong

- 1.7 There is convincing evidence that significant economic benefits can be achieved by preventing NCD in the community through health promotion to address the major risk factors of NCD. To halt and reverse the trend in NCD, a strategic approach with concerted efforts and effective means is required.
- 1.8 In this connection, the Department of Health (DH) published the strategic framework document entitled *“Promoting Health in Hong Kong: A Strategic Framework for Prevention and Control of Non-communicable Diseases”* on 28 October 2008. The overall goal of the strategic framework is to increase the positive health and quality of life of the people in Hong Kong. To optimise health gains, the strategic framework focuses on the major risk factors that are potentially modifiable and have significant impact on the health of the Hong Kong population.
- 1.9 Six strategic directions have been identified for focusing the attention, resources and actions with a view to achieving the overall goal of the strategic framework. These include:
- (i) Support new and strengthen existing health promotion and NCD prevention initiatives or activities that are in line with this strategy;
 - (ii) Generate an effective information base and system to guide action across the disease pathway;
 - (iii) Strengthen partnership and foster engagement of all relevant stakeholders;
 - (iv) Build up the capacity and capability to combat NCD;
 - (v) Ensure a health sector that is responsive to the NCD challenges and to improve the system of care; and
 - (vi) Strengthen and develop supportive health promoting legislation.

Implementation of the strategic framework and establishment of Working Groups

- 1.10 To steer and take the matter forward, a high-level Steering Committee on Prevention and Control of NCD (SC) was established to deliberate on and oversee the overall roadmap and strategy, including the setting up of Working Groups (WG) to advise on specific priority areas. The SC, chaired by the Secretary for Food and Health, comprises representatives of the Government, public and private sectors, academia and professional bodies, industry and other key partners.
- 1.11 The SC recognises that the issues of tobacco control have been actively tackled by the Tobacco Control Office of the DH, the Hong Kong Council on Smoking and Health and other organizations. Thus the SC considers that WG should be set up to tackle other important behavioural risk factors of NCD. Under the steering of the SC, the first WG was established in December 2008 to tackle the imminent problems caused by unhealthy dietary habits, physical inactivity and obesity. The second WG was set up in June 2009 to tackle the problems related to alcohol misuse. Another WG will be set up to tackle the problems related to injuries.
- 1.12 Under the chairmanship of Professor Alfred CHAN Cheung-ming, the Working Group on Diet and Physical Activity (WGDPA) has been set up with 17 members representing the key stakeholders in the public and private sectors including the academia, district council, education sector, business sector, food industry, healthcare professionals, social services sector and relevant government departments. The membership of the WGDPA is listed in Annex 1.
- 1.13 The WGDPA advises on the priority areas for action, and draws up targets and action plans related to issues of diet, physical activity and obesity for the SC's consideration. The terms of reference of the WGDPA is listed in Annex 2.
- 1.14 Since its establishment in December 2008, WGDPA had met four times and the topics discussed are listed in Annex 3.

2

Diet, physical activity and health: Hong Kong situation

- 2.1 Weight gain is a consequence of the imbalance between energy gained from food or beverages and energy expended in normal body functioning or daily activities. The rising trend of overweight and obesity has largely been attributed to unhealthy dietary habits, wide availability of high fat and sugary foods, lack of physical activity and engagement in sedentary lifestyles. In the following paragraphs, the local prevalence of major NCD risk factors including dietary habit, physical activity and overweight/obesity are reviewed. Furthermore, the local health promotion activities conducted by different government departments and non-governmental organizations (NGOs) are also presented. All these information is essential for identifying the priority areas for action and guiding the interventions on NCD prevention and control in future.

Local situation of dietary habit, physical activity participation and overweight/obesity

Dietary habit

- 2.2 For infant and toddlers, there is growing evidence suggesting that breastfeeding can prevent subsequent childhood overweight and that longer breastfeeding period gives greater protection for children. It was estimated that the percentages of newborns ever breastfed on discharge from hospitals rose from about 10% in 1981 to around 76.9% in 2009. The ever breastfeeding rate increased from 50% for babies born in 1997 to 73.7% for those born in 2008. The exclusive breastfeeding rate for over 4-6 months increased from 6% for babies born in 1997 to 12.7% for those born in 2008. However, for other dietary habits among infant and young children, there is limited information available.

2. Diet, physical activity and health: Hong Kong situation

- 2.3 According to the “Assessment of Dietary Pattern in Primary Schools 2008” conducted by the Central Health Education Unit (CHEU) of the DH in 2008 to assess the dietary habit of P4 and P5 students, there was a definite knowledge-attitude gap where healthy eating is concerned. Students possessed good knowledge of healthier food options did not necessarily synchronise with what they chose in food preference. Only about half had a habit of eating fruit (57.5% ate twice or more per day). Besides, only 9.8% to 25.6% of the students did not consume food items such as drinks with added sugar, deep-fried food, food high in fat/sugar/salt in the week prior to the survey. Furthermore, students showed preference for food items that were usually high in salt, sugar or fat, such as burger and fries, ice-cream and hot dog.
- 2.4 The WHO recommends 400g intakes of fruit and vegetables for adults per day for the prevention of chronic diseases. The BRFS April 2009 of the DH revealed that about four-fifths (79.0%) of people aged 18-64 failed to meet the WHO’s recommendation in 2009. Males (85.3%), young adults aged 18-24 (85.6%) and clerks (84.4%) had the highest prevalence of inadequate fruit and vegetable consumption.
- 2.5 The BRFS April 2007 also revealed that a substantial proportion of local population ate out for breakfast (30.2%), lunch (51.5%) and dinner (10.8%) five or more times a week in 2007. According to the Baseline Survey for the "EatSmart@restaurant.hk" Campaign of the DH in 2007, 84.5% and 53.9% of people aged 12 and above respectively perceived that fruit and vegetable ingredients were too little in food provided by food premises. On the other hand, 60.1%, 40.9% and 27.2% respectively perceived that fat/oil, salt and sugar ingredients were too much in food provided by food premises.

- 2.6 The “Better Health for Better Hong Kong” Campaign was a territory-wide health promotion campaign launched from 2000 to 2006 by the Health InfoWorld of Hospital Authority (HA). Health check-up was also provided to the participants to assess their general health status. From 2000 to 2002, over 4 500 subjects were recruited from two local labour unions to attend the health check-up, and the data were analysed and published in several studies. For dietary habit, over half of the participants had at least one of the six unhealthy dietary habits (no daily fruit intake, no daily vegetable intake, low fluid intake, having irregular meals, frequent sugary drinks and frequent dining out) and around 20% had more than one unhealthy dietary habit. Overall, men had less desirable dietary habit than women.¹
- 2.7 For elderly population, the Population Health Survey (PHS) 2003/2004 showed that 79.5% and 76.5% of people aged 65-74 and aged 75 and above consumed less than five servings of fruit and vegetables per day respectively.

Physical activity participation

- 2.8 The surveys of the Education Bureau (EDB) on students’ physical fitness showed that other than Physical Education lessons, less than half of the students engaged in moderate exercise for at least three times per week with 20 minutes or more per session (i.e. 48.1% for P1-3 and 50.0% for P4-6 in 2003/04; 40.1% for S1-3 and 30.1% for S4-7 in 2004/05; and 40.8% for P1-3 and 42.2% for P4-6 in 2005/06). The 2004/05 study also found that 46.4% of junior secondary and 40.5% of senior secondary students spent over four hours daily watching television, videos, using the computer or playing computer games.
- 2.9 In the Study on the Participation Patterns of Hong Kong People in Physical Activities of the Community Sports Committee (CSC), 61.2% of respondents aged 7-12 (i.e. mostly primary students) and 57.4% of respondents aged 13-19 (mostly secondary students) engaged in three days or more of 30 minutes of moderate to vigorous activity weekly, excluding Physical Education lessons. Although the figures are higher than those in paragraph 2.8, there is much room for improvement.

¹ Ko GT, et al. Associations between dietary habits and risk factors for cardiovascular diseases in a Hong Kong Chinese working population - the “Better Health for Better Hong Kong” (BHBHK) health promotion campaign. *Asia Pacific Journal of Clinical Nutrition* 2007;16:757-65.

2. Diet, physical activity and health: Hong Kong situation

- 2.10 According to the BRFSS in 2009, around 85.9% of people aged 18-64 did not have vigorous physical activity for three days or more per week; about 75.5% did not have moderate physical activity for three days or more per week; around 29.0% did not walk for 10 minutes daily. Overall, about one-fifth (21.0%) were classified as having “low” level of physical activity (based on International Physical Activity Questionnaire classification). Clerks were more common to be classified as having “low” level of physical activity. Furthermore, from PHS 2003/2004 findings, 20.9% of people aged 15 and above sat at least 10 hours daily and people in younger age group (15-34) spent more time on sitting.
- 2.11 According to the Sports Participation Survey 2001 of the Hong Kong Sports Development Board, 48% of people aged 15 and above had participated in at least one sports activity in the past three months. People aged 15-24 (65%) had the highest participation rate, while those aged 55-64 had the lowest (31%).
- 2.12 For elderly population, 8.3% and 16.6% of people aged 65-74 and aged 75 and above respectively did not walk for 10 minutes daily according to PHS 2003/2004. Furthermore, 18.7% and 30.9% of people aged 65-74 and aged 75 and above respectively were classified as having “low” level of physical activity. From the Sports Participation Survey 2001, 49% of people aged 65 and above had participated in at least one sports activity in the past three months.

Overweight/obesity

- 2.13 According to statistics of the Student Health Service (SHS), the prevalence of overweight including obesity (defined as more than 120% median weight for height) among primary school students rose from 16.4% in 1997/1998 school year to 22.2% in 2008/2009 school year. Similarly, the prevalence of overweight including obesity among secondary school students rose from 13.6% to 17.7% in the same period. Overall, the prevalence of overweight including obesity among students rose from 15.7% in 1997/1998 to 20.4% in 2008/2009. The prevalence remained higher among boys with the difference between boys and girls widening slightly over the years. It is clear that the cohort with a higher baseline prevalence of obesity will end up with a higher prevalence of obesity when they leave schools (both primary and secondary).

- 2.14 From 2003 to 2004, the Chinese University of Hong Kong (CUHK) conducted a cross-sectional study to examine the prevalence of overweight/obesity among local students aged 11-18.² The weight and height of around 2 100 students from 14 schools were measured. The study revealed that the prevalence of adolescent overweight/obesity ranged from about 10% to 14% based on different international classification. The problem of overweight/obesity was more common among boys than girls (boys: 14%-20%; girls: 7%-10%).
- 2.15 Another cross-sectional study of CUHK, which examined around 2 600 children aged 6-13, revealed that about 13% of boys and 11% of girls were obese.³ Furthermore, about 10% and 3% of the children were classified as having three or more and four or more of the six cardiovascular risk factors (high systolic blood pressure/diastolic blood pressure, high blood triglyceride, low blood high-density lipoprotein, high blood low-density lipoprotein, high blood glucose and high blood insulin) respectively.
- 2.16 For adult population, the BRFSS revealed that 38.7% of people aged 18-64 were overweight/obese (defined as body mass index greater than 22.9) in 2009. Weight problem was more common among males than females (male: 49.3%; female: 29.7%). People aged 35 or above and blue collar workers had the highest prevalence of overweight/obesity. Overall speaking, the prevalence of overweight/obesity remained stable from 2004 to 2009. However, an increasing trend (46.0% in 2004 to 49.3% in 2009) of overweight/obesity was observed among the male population.
- 2.17 Analysing the data from the “Better Health for Better Hong Kong” Campaign, it was revealed that the age-standardised percentage of overweight/obesity and central obesity among the participating working population were respectively around 60% and 27% in men, and 32% and 27% in women. Compared to the data collected from a local prevalence survey for glucose intolerance and lipid abnormality in 1990⁴, the percentage of central obesity doubled in men (12% to 27%) but remained similar in women.⁵

2 Ko GT, et al. The problem of obesity among adolescents in Hong Kong: a comparison using various diagnostic criteria. *BMC Pediatrics* 2008;8:10.

3 Sung RYT, et al. Waist circumference and body mass index in Chinese children: cutoff values for predicting cardiovascular risk factors. *International Journal of Obesity* 2007;31(3):550-8.

4 Cockram CS, et al. The prevalence of diabetes mellitus and impaired glucose tolerance among Hong Kong Chinese adults of working age. *Diabetes Research and Clinical Practice* 1993;21:67-73.

5 Ko TC, et al. Doubling over ten years of central obesity in Hong Kong Chinese working men. *Chinese Medical Journal* 2007;120(13):1151-4.

2. Diet, physical activity and health: Hong Kong situation

- 2.18 Furthermore, over a quarter of the subjects had more than one cardiovascular risk factor (smoking, being obese, having hypertension, having hypercholesterolaemia, having diabetes mellitus, past history of cardiovascular diseases). Despite this high prevalence of multiple risk factors, most (83%) perceived their health as satisfactory.⁶
- 2.19 For elderly population, the PHS 2003/2004 revealed that the prevalence of overweight/obesity was 49.4% and 41.9% for people aged 65-74 and aged 75 and above respectively.

Local health promotion activities to promote healthy lifestyles

Health promotion programmes by the Department of Health

- 2.20 The DH has committed to safeguarding the health of the community through promotive, preventive, curative and rehabilitative services. The DH promotes healthy living to the general public through various channels. The following paragraphs summarise these activities.
- 2.21 The NCD Division of the DH is responsible for surveillance and control of NCD of public health importance in Hong Kong and formulation of strategies in relation to NCD prevention. Through Behavioural Risk Factor Surveillance System, Public Health Information System and other health surveys, the Division regularly collects, collates, analyses and disseminates surveillance data on NCD and their related risk factors. The information collected is useful for planning, implementing and evaluating health promotion programmes, for development of NCD prevention and control activities, and for risk communication through a monthly publication "NCD Watch".

⁶ Ko GT, et al. Low levels of awareness of suboptimal health conditions in a high-risk working population: the "Better Health for Better Hong Kong" health promotion campaign. *International Journal of Behavioural Medicine* 2007;14:63-9.

- 2.22 The CHEU of the DH promotes the health of the community through collaborating with various agencies in health promotion. To promote healthy eating habit, the CHEU has all along committed to raising public awareness of the importance of healthy eating through various large-scale campaigns such as “2 Plus 3 A Day” Campaign, “EatSmart@school.hk” Campaign and “EatSmart@restaurant.hk” Campaign. The “EatSmart@school.hk” Campaign was launched in 2006-2007 academic year to raise public awareness and concern about healthy diet among children, and create an environment that is conducive to healthy diet in schools and the community. In 2007, the “EatSmart@restaurant.hk” Campaign was also launched to promote healthy eating in restaurants as part of the efforts to address NCD and obesity; also to formulate and implement strategies to empower the public to make and request healthier choices when eating out. For promoting physical activity, the CHEU collaborated with different government departments, non-government organizations and professional bodies to launch various initiatives such as “Healthy Exercise for All Campaign”, “Exercise Prescription Project” and “Stair Climbing to Health”.
- 2.23 Through the Community Liaison Division, the DH establishes close partnerships with District Councils, Healthy City Projects, community groups and the public to organize health promotion programmes and promote population health.
- 2.24 The Family Health Service (FHS), SHS and Elderly Health Service (EHS) of the DH provide a variety of health promotion and disease prevention activities for people in different life stages.

2. Diet, physical activity and health: Hong Kong situation

- 2.25 The FHS provides a comprehensive range of health promotion and disease prevention services for children from birth to 5 years and women below 65 years of age. These services are provided through a network of 31 Maternal and Child Health Centres (MCHCs) and 3 Woman Health Centres. Furthermore, the FHS has been actively involved in promoting, protecting and supporting breastfeeding. Since 2000, a breastfeeding policy has been implemented in the FHS to facilitate a supportive environment in all MCHCs. All medical and nursing staff of FHS were given structured training in breastfeeding counselling. Since August 2002, the DH has implemented a departmental policy to promote breastfeeding among all staff and support breastfeeding in the workplace. Information kits on breastfeeding are produced and distributed to pregnant women in antenatal clinics of hospitals and MCHCs. Every year, the FHS joins up with other community partners in launching publicity campaigns around the World Breastfeeding Week to raise public awareness on breastfeeding. The FHS also monitors the trend of local breastfeeding rate through collecting monthly reports from all public and private maternity units and conducting regular surveys in the MCHCs.
- 2.26 The SHS aims to safeguard both the physical and psychological health of school children through comprehensive, promotive and preventive health programmes to enable them to gain the maximum benefit from the education system and develop their full potentials. The SHS operates 12 Student Health Service Centres, which provides services such as health assessment (e.g. weight status measurement), health education (e.g. on healthy eating, physical activity participation) and individual health counselling for all primary and secondary school students.

2.27 The EHS provides primary health care to the elderly so as to improve their self-care ability, encourage healthy living and strengthen family support in order to minimise illness and disability. It offers integrated health services including health risk assessment, physical check-ups, counselling, curative treatment and health education to elderly people aged 65 and above through its 18 Elderly Health Centres. Tailored health education will be given to those with health risks, such as overweight, sedentary lifestyle or unhealthy diets, which are detected through health risk assessment. Collaborating with various elderly care providers, the 18 Visiting Health Teams (VHTs) reach into the community and provide health education for elders and their carers. The VHTs conduct educational outreach visits to residential care homes for the elderly to provide skill training for their staff on topics such as designing healthy menus for elders, enhancing fiber intake of residents, assessing residents' nutritional status. The EHS actively disseminates health information to the general public, including topics on diet and exercise, through pamphlets, internet webpages, telephone information hotlines, media programmes and interviews, and contributed articles to newspapers. To promote healthy eating and exercises for all, the EHS has produced various VCDs such as "Healthy Snacks", "Shopping Smart", "Exercise for Healthy Ageing" and "Maintenance Exercise for the Frail Elders". The EHS has also published a series of books including "Cookbook of Healthy Recipes" and "On Healthy Eating: The Science and Love of Food and Eating", which further promulgate the principle of healthy eating.

Health promotion programmes by other government departments and local organizations

2.28 Apart from the DH, other government departments such as the Leisure and Cultural Services Department (LCSD) and EDB also play a major role in promoting healthy lifestyles. Many local NGOs also actively participate in promoting healthy living. Based on the input from WGDPA Members, some 50 local health promotion programmes were identified and listed in Annex 4.

2. Diet, physical activity and health: Hong Kong situation

2.29 In accordance with the Ottawa Charter for Health Promotion, health promotion is defined as “the process of enabling **people** to increase control over and to improve their health”. For this process to make an impact on population health, the six elements of **PEOPLE**, namely **P**artnership, **E**nvironment, **O**utcome-focused, **P**opulation-based, **L**ife-course approach and **E**mpowerment, are considered as the core to planning and implementation of the health promotion programme. Using these six criteria, some examples of health promotion good practices are identified and outlined below.

Jump Rope for Heart Program

- 2.30 The Hong Kong College of Cardiology has launched the “Jump Rope for Heart Program” in 1999 to motivate young people to adopt a heart healthy lifestyle through having physical activity, thus reducing the risk of heart diseases and stroke. The programme comprises four components:-
- Teaching skipping skills through provision of a set of teaching kit with guide books, ropes, DVDs, and posters to participating schools;
 - Providing Heart Health Education through health talks by cardiologists, distribution of health education materials, slogan/poster design competitions, etc;
 - Fund Raising which is used for operating the “Jump Rope for Heart Program” and organizing heart health promotional activities. 15% of the fund raised will be allocated to participating schools for the expenses of organizing the “Jump Off Day” and other health-related activities. Furthermore, students can help to disseminate the heart health message to their relatives and friends during fund raising. Besides, the fund raising mechanism of the “Jump Rope for Heart Program” assures its sustainability; and
 - Organizing “Jump Off Day” by participating schools for their students to perform skipping skills so that more students will be motivated to join the programme.

Hong Kong Healthy Schools Award Scheme

- 2.31 The Centre for Health Education and Health Promotion of CUHK has launched the Hong Kong Healthy Schools Award Scheme for primary and secondary schools since 2001. The Scheme follows closely the Healthy Schools Programme promoted by the WHO. The Scheme covers six key areas, including health policies, health services, personal health skills, social environment, community relationships and physical environment. It builds on the concept of health promoting school to encourage educational achievement, better health and emotional well-being; thereby supporting students in improving their quality of life. It provides a structured framework for the development and implementation of healthy schools. A set of guidelines and standards with indicators for monitoring schools' progress and recognition of achievement are adopted. The organizer has recently launched the Hong Kong Healthy Pre-Schools Award Scheme to promote health among pre-school children. The Scheme has obtained part of its funding from the Quality Education Fund.
- 2.32 The above programmes comprise the six key elements for implementation of health promotion programme. The organizers closely collaborate with various parties such as the EDB, DH and participating schools to carry out the programmes. This draws together the strengths of people from different sectors with diverse knowledge and skills. The programmes adopt the setting approach and promote healthy living in schools, thus creating a supportive environment which enables students to cultivate the habit of healthy living. Clear guidelines and measurable indicators are established to gauge school development and monitor the progress. They are territory-wide programmes targeted for all schools in Hong Kong. The programmes promote healthy living in children which may help to reduce the risk of having NCD in their adulthood. Furthermore, the programmes also empower students with personal health skills, and equip the school managements with skills to create an environment that is conducive to students' health.

Analysis

Unhealthy dietary habit, physical inactivity and overweight/obesity are prevalent in the local population

- 2.33 Data from various sources have revealed that unhealthy dietary habit, physical inactivity, and overweight/obesity are common at different life stages of the local population starting from school age.
- 2.34 For dietary habit, the WHO recommends exclusive breastfeeding up to 6 months for newborns. Although many infants in Hong Kong have been breastfed on discharge from hospital, the exclusive breastfeeding rate remains low. Unhealthy dietary habit is also common among children and adults. Many children show preference and consume unhealthy food such as sugary drinks and deep-fried food. Similarly, majority of adults have certain unhealthy dietary habits such as inadequate fruit and vegetables consumption, and frequent sugary drinks. Overall, unhealthy dietary habit is more common among males.
- 2.35 Physical inactivity is prevalent in the territory. Local studies showed that about half of the students did not exercise enough. On the other hand, they spent a significant proportion of time on sedentary activities such as watching television and surfing internet. For adult population, about one-fifth are classified as having “low” level of physical activity and over half of them did not participate in any sports activity in the past three months. Similar to the children population, adults spend a lot of time on sedentary activities such as sitting. In general, females are less active than males.
- 2.36 The prevalence of overweight/obesity is on the rising trend in Hong Kong for both children and adults. As unhealthy dietary habit and physical inactivity are risk factors for overweight/obesity, it is not difficult to understand the reason behind. Overall, overweight/obesity is more common among males. Furthermore, the presence of cardiovascular risk factors such as high blood pressure and adverse lipid profile are not uncommon among both children and adult population.

Information gap on local epidemiology of unhealthy dietary habit and physical inactivity

- 2.37 It is clear that the unhealthy lifestyles practices are common in the local population. However, **information on the prevalence of unhealthy dietary habit and participation in physical activity among children, especially infants and young children, remains inadequate.**
- 2.38 Several government departments are conducting population-based surveys related to the dietary habit and physical activity participation of the local population. For example, the Study on the Participation Patterns of Hong Kong People in Physical Activities is being conducted by the CSC of the Sports Commission to examine the patterns of physical activity participation by the local population aged seven and above. The Food Consumption Survey 2005-2007 and the Total Diet Study (TDS) of the Food and Environmental Hygiene Department (FEHD) are being conducted to collect information on the food consumption patterns of the local adult population. While the above studies are expected to shed light on the behavioural and biomedical risk factors affecting the population at large, information focusing on infant and young children remains limited.
- 2.39 On the other hand, the DH has conducted the first population-based Child Health Survey to collect health information of local children aged 14 and below, such as health-related behaviours, health status and parenting issues. While the Child Health Survey of the DH may add to the current knowledge on health status of infants and young children, the survey has not been specifically designed for collecting data on dietary habit and physical activity, and the information generated from the survey may not be comprehensive to guide interventions that focus on children's dietary habit and physical activity. More information on this area is required to better define their health needs.
- 2.40 Besides, majority of local studies focus on revealing the prevalence of unhealthy dietary habit, physical inactivity or overweight/obese. **Information on the knowledge, attitude and practice, as well as incentives and barriers to people's adoption of healthy lifestyles is limited.** Thus, it is difficult to identify people's root reasons of having these risk factors.

Gap on local health promotion activities

- 2.41 As can be seen from Annex 4, **local health promotion activities are varied in nature and majority are organized independently by various organizations with minimal coordination among them.** Activities tend to promote healthy living, with school children and adults as the main target groups. Furthermore, despite the lack of detailed information, **the small scale and short-term nature of some of the local health promotion activities might imply a limited impact on improving population health.**
- 2.42 Besides, **health promotion activity targeting at young children is apparently scanty.** Individuals are influenced by factors acting at all stages of life and the risks of developing NCD accumulate with age. A good and healthy start in life creates a strong platform for the health of later life. By utilising opportunities at early life stages, it may be possible to achieve reduction in premature deaths and fewer disabilities in adulthood. Furthermore, it is far easier to establish good patterns of activity and eating habit than to change unhealthy habits that have become ingrained. Thus, intervention that promotes health in early life is important in reducing the risk of NCD in later years.
- 2.43 According to the WHO, the workplace has been established as one of the priority settings for health promotion into the 21st century. The workplace is not only one of the places where most of the time is spent; it also directly influences the physical, mental and social well-being of workers and in turn the health of their families and communities. There are more than three million people working in Hong Kong and workplace offers an ideal setting to promote healthy lifestyles for a large audience. However, **activities to promote healthy living in workplace for the working population are also limited.**

The role of NGOs and business sector in promoting health

- 2.44 The Ottawa Charter for Health Promotion presented by the WHO in 1986 recommended that health promotion lies beyond the health sector, emphasising that individuals have to take greater responsibility for their own health. The importance of partnership for health promotion was reiterated in WHO's *The Bangkok Charter for Health Promotion in a Globalized World* issued in 2005 (information on the concepts and practice of health promotion as an approach and tool to improving people's health is attached in Annex 5). In the *Western Pacific Regional Action Plan for NCD*, the Regional Office for the Western Pacific of WHO also urged Member States to encourage and promote community participation and grassroots mobilisation so as to establish a broad base of support for prevention and control of NCD and to ensure acceptability and effectiveness of policy and population-based interventions. The public health issue of overweight/obesity in Hong Kong thus cannot be tackled solely by the health care system, government or healthcare workers. Joint participation of all sectors is the key to success.
- 2.45 Many NGOs work for the welfare of the citizens and long-term sustainability of the society. They value social justice and equality, and the intrinsic rights of every individual. While society is obliged to provide individuals with the basic social and economic resources to develop their potentials, many NGOs encourage individuals to carry out their responsibilities towards their families and society, to be self-reliant and to achieve self-actualisation. In fact, many NGOs share common values in health promotion by motivating the community to take responsibilities for health and empowering individuals with knowledge and skills to make healthier decisions for health, while being mindful of the need to minimise the health equity gap. Thus on top of the efforts by the Government, NGOs' participation and support in health promotion is essential to enhance its effectiveness.
- 2.46 In Hong Kong, about 52% of the population is in the labour force and people spend more than one-third of the daily life at work. At individual level, promoting health in workplace can improve the well-being of the employees which will enhance their productivity. As such, a healthy workplace will be important for sustainable social and economic development. On the other hand, unhealthy workforce results in economic losses through absenteeism, injury and disease, direct and indirect health expenditures, and significant social costs to families, communities and society. Therefore, the commitment and contribution from the business sector is indispensable in improving and protecting population health.

3

Actions to promote healthy diet and physical activity participation

Preamble

- 3.1 It is envisioned that with the successful implementation of the Strategic Framework for NCD Prevention and Control, Hong Kong will have a well-informed population that is able to take responsibility for their own health, a caring community that integrates the public and private sectors to ensure healthy choices for the public, a competent healthcare profession that views health promotion and preventive medicine as priorities, and a sustainable healthcare system that incorporates strong elements of health promotion, disease prevention and curative care for our people, thereby significantly reducing the toll of disease burden related to NCD.
- 3.2 To achieve the above vision, WGDPA recognises the importance of concerted efforts of the Government and different sectors in the community in order to create a sustainable environment conducive to promoting healthy diet and physical activity participation. It is of equal importance that individual citizens should take responsibility for their own health, as well as the health of their families and the communities, by making informed and healthier choices with regard to diet, physical activity and other lifestyles.
- 3.3 Although WGDPA is mainly tasked to recommend actions to promote healthy eating and physical activity participation in Hong Kong, WGDPA also recognises the synergistic health benefits that can be brought about by modifying other major behavioural risk factors including smoking and excessive drinking at one go. Therefore, WGDPA wishes to call for continuing actions for tobacco control and avoidance of excessive drinking, in addition to adoption of healthy diet and active living.

3. Actions to promote healthy diet and physical activity participation

Goals

- 3.4 In making recommendations to promote healthy eating and physical activity participation, WGDPA aims to halt the rising tide of overweight/obesity and achieve the ultimate goal of preventing NCD and enhancing the quality of life of the population. After careful review and in-depth discussion regarding the local situation on NCD and the major risk factors including unhealthy dietary habit, physical inactivity and overweight/obese, as well as the local health promotion activities conducted by government departments and various organizations in Hong Kong, WGDPA has drawn up this *Action Plan to Promote Healthy Diet and Physical Activity Participation in Hong Kong (Action Plan)*. In this Action Plan, WGDPA sets out priority areas for action, and draws up a list of proposed actions with targets and timeframes where applicable.
- 3.5 In developing this detailed Action Plan, WGDPA consulted different key stakeholders in the public and private sectors including the academia, district councils, education sector, business sector, food industry, healthcare professionals, social services sector and relevant government departments. It is intended to outline the framework of actions that will be taken to support, and help set the direction for, the delivery of health promotion programmes.
- 3.6 Together with the continuing actions for tobacco control and avoidance of excessive drinking, this Action Plan aims to bring about synergistic health benefits by modifying major behavioural risk factors and eventually reduce the prevalence and mortality rates from NCD such as heart diseases, stroke and cancers in the long run.

Details of 30 specific actions

- 3.7 To achieve the set goals and in line with the NCD prevention and control strategy, the SC Members have endorsed four priority areas for action with a total of 11 recommendations. Another three recommendations are made regarding securing of resources for the proposed health promotion actions. This section sets out the 30 specific actions we suggest to implement to support people to make healthier choices in their daily lives. Our recommendations have been made after consulting stakeholders from across sectors, disciplines and organizations, and most importantly soliciting their support for implementing the recommendations. The list of recommended actions are summarised in Table 1.

Priority area 1: Generate an effective information base and system on dietary habit and physical activity participation to guide actions

(Recommendation 1A) Strengthen surveillance of NCD and behavioural risk factors

- 3.8 Research and surveillance of NCD and their related risk factors help generate evidence-based information and inform actions. WGDPA recognises that there is information gap regarding the dietary habit and physical activity participation among infants and young children and their significant others. Besides, WGDPA recognises inadequacy in information related to the understanding of trends in unhealthy behaviours, the reasons for these, and effective ways of promoting healthy living in the population.
- 3.9 In this connection, **WGDPA recommends strengthening surveillance of NCD and tracking changes in the behavioural risk factor profiles of unhealthy dietary habit, physical inactivity and overweight/obesity of the population.** The surveillance data will be useful for monitoring the trends of health-related behaviours, planning, implementing and evaluating health promotion programmes. Currently, the Behavioural Risk Factor Surveillance System of the DH systematically and regularly monitors the trends of health risk factors in the local population. The following paragraphs describe the three specific actions targeting this recommendation.

Action 1: Conduct a pilot study on a web-based Youth-Health Behaviour Surveillance System (Y-HBSS)

- 3.10 Recognising the importance of sound surveillance information for tracking changes in health behaviours of the youth, the DH has conducted a pilot study to assess the feasibility and acceptability of using a web-based survey questionnaire to collect health behaviour information from secondary school students. More than 1 300 students studying in 8 secondary schools in different districts in Hong Kong have been invited. The study will be completed in the second quarter of 2010. The study results will provide useful information on the feasibility of developing a territory-wide web-based Y-HBSS to monitor the priority health behaviours among the local youth. Support from the EDB will be solicited to enhance the acceptance by the stakeholders.

3. Actions to promote healthy diet and physical activity participation

Action 2: Explore the use of growth parameters measured in schools to track changes of obesity

3.11 At present, there is a lack of comprehensive mechanism to capture the anthropometric measurements of students. Noting that schools have been measuring the height and weight of their students periodically in each academic year, the DH and EDB will work together to explore the arrangements to allow the use of growth parameter measured in schools to monitor the long term trend of overweight/obesity in children and adolescents such as by issuing guidelines to schools and standardising the instruments used and methods of measurement.

Action 3: Conduct Total Diet Study to assess dietary intake of the population

3.12 Healthy eating is an important determinant of health. Imbalanced diet is associated with some chronic diseases and conditions including obesity, heart diseases, hypertension, diabetes and cancers. In this connection, the FEHD has commissioned the Food Consumption Survey 2005-2007, which is a territory-wide and population-based study to collect information on food consumption patterns of the general public. The FEHD plans to review the findings of the Food Consumption Survey 2005-07 in 2010. To further assess the dietary intake of the population, a Task Force on TDS consisting of members from various government departments has been established by the FEHD to develop a TDS in Hong Kong. The TDS measures the amount of nutrients ingested by people of different age and sex groups. It enables the identification of the population groups that are most at risk and facilitates the formulation of action plans tailor-made for the specific groups. The actual fieldwork will be conducted in 2010-11 and the findings of the study will be published in phases between 2011-14.

(Recommendation 1B) Conduct population-based health surveys with reference to WHO's 'STEPS'

- 3.13 Apart from strengthening surveillance of NCD, **WGDPA recommends that population-based health surveys with measurement of biomedical risk factors should also be conducted regularly to monitor the health status of local population.** Furthermore, **NCD and risk factor surveillance should follow the “STEPwise approach to Surveillance (STEPS)” as recommended by the WHO.** In the long term, it is important to develop a mechanism to integrate all locally available health data from different sources and to facilitate data sharing among government departments, academia, healthcare professionals and other stakeholders.

Action 4: Conduct the second Population Health Survey

- 3.14 The STEPS instruments, as recommended by WHO to monitor the trend of chronic disease risk factors, cover three different levels of “steps” of risk factor assessment, including questionnaire, physical measurement and biochemical measurements, e.g. blood glucose and blood lipid profiles. In year 2003/04, the DH has collaborated with the Department of Community Medicine of the University of Hong Kong to conduct its first PHS to report the patterns of health status and health-related issues of the general population in Hong Kong for adults aged 15 or above. It is envisaged that the information collected every 10 years would facilitate planning, management and evaluation of health promotion programmes. Hence, the DH plans to conduct the second PHS based on the WHO STEPwise approach in collaboration with the academia, which will take five years to complete (from 2011 to 2015). Commissioning of the study will start in 2011 while the pilot study and the actual fieldwork will be conducted in 2012 and 2013/14 respectively. A report will be published in 2014/15.

3. Actions to promote healthy diet and physical activity participation

(Recommendation 1C) Promote and support research related to risk factor modification and effective interventions

- 3.15 To deepen the understanding of causes and consequences of the rise in unhealthy eating and physical inactivity, and what works to promote healthy living, **WGDPA recommends promoting and supporting research in areas related to the behavioural risk factor modification and the effective interventions in promoting healthy eating and physical activity participation.** The research results will be valuable for guiding future evidence-based interventions in promoting healthy eating and physical activity participation in infants and young children.

Action 5: Conduct a series of surveys on infants and young children and their parents

- 3.16 Lifestyle habits in the early years play a crucial role in shaping an individual's eating and physical activity patterns. To fill the existing information gaps regarding the lifestyle habits of infants and young children, the DH will take the lead to conduct a series of surveys on parental knowledge, attitude and practice of feeding infants and young children, milk consumption of infants and young children, level of physical activity of infants and young children, and food and nutrient intakes of infants and young children. Data collection and analysis of the above surveys are expected to be completed by the end of December 2010. The results of the surveys will be published in March 2011.

Action 6: Conduct review on the existing provision of recreation and sports programmes

- 3.17 Provision of a wide variety of organized recreation and sports programmes is a key measure of the LCS D to promote sports to the community at large. These programmes serve the objectives of fostering a stronger sporting culture, arousing public awareness of the benefit of regular participation in physical activities, enhancing our quality of life as well as social solidarity. In order to enhance the programme mix and to design more new programmes to cater for the need of different target groups, the LCS D plans to conduct a review on the existing provision of recreation and sports programmes in 2010-14 with a view to providing more attractive programmes for family members, adults and people in the workforce.

Action 7: Conduct review on the existing provision of leisure facilities, booking arrangements and charges of venues

3.18 The LCSD pledges to provide, manage and maintain safe and high-quality recreation and sports facilities to foster public participation in recreational and sports activities at an affordable cost. Guidelines on the priorities and quota for individual and group uses are in place to enable the venue management to process applications for these facilities from different users. In order to meet the foreseeable increase in the public's demand for leisure facilities as a result of the enhanced publicity of "Sport for All" in near future, the LCSD plans to conduct a review on the existing provision of leisure facilities, booking arrangements and charges of venues in 2010-14, which aims to enable a fair allocation of facilities among different users.

Priority area 2: Support new and strengthen existing health promotion activities on healthy eating and physical activity participation

(Recommendation 2A) Support new health promotion programmes

3.19 WGDPA agrees that a healthy start in life is fundamental for the health of adult life. WGDPA also noted that the workplace has been recognised as an important setting for health promotion internationally, such as the Ottawa Charter for Health Promotion and the Bangkok Charter for Health Promotion in a Globalized World. At present, there are limited health promotion activities on healthy diet and physical activity participation for infants and young children as well as for people in the workplace. To address the issue, **WGDPA recommends supporting new health promotion programmes on healthy eating and physical activity participation targeting at young children and their parents, and people in the workplace.** The following paragraphs detail the health promotion programmes to be launched in the years ahead.

3. Actions to promote healthy diet and physical activity participation

Action 8: Develop and launch a new parenting programme on weaning targeting all infants and young children in MCHCs

3.20 Weaning is the stage during which a baby changes from a purely fluid diet to a semi-solid diet which contains all varieties of food typical of the family's diet. It is an important stage because it influences the development of the dietary habits of a child. Hence, the DH will develop and launch a parenting programme on weaning in Hong Kong. Before rolling out of the programme, all relevant medical and nursing staff of the DH will be trained in 2010. The implementation of the programme will take place in the third quarter of 2011 with ongoing evaluation.

Action 9: Develop a Hong Kong Code of Marketing of Breastmilk Substitutes

3.21 Breastfeeding provides ideal nutrients for the healthy growth and development of infants. The anti-infective properties of breastmilk also help protect infants against certain diseases. Nevertheless, various factors/barriers may influence the mothers to feed their infant with breastmilk substitutes, such as infant formula. In this connection, the WHO International Code of Marketing of Breast-milk Substitutes was developed in 1981 to recommend restrictions on the marketing of breast milk substitutes, to ensure that mothers are not discouraged from breastfeeding and that substitutes are used safely if needed. Since the marketing of formula milk is wide-spread and aggressive, the DH aims to set up a taskforce to develop a Hong Kong Code of Marketing of Breastmilk Substitutes by the second quarter of 2010 with a view to developing and promoting the Code by the fourth quarter of 2011.

Action 10: Explore models to promote healthy diet and physical activity in workplace

3.22 The workplace is an ideal setting for reaching the majority of adults. However, while studies in North America and Europe revealed that health promotion in workplace have been effective, workplaces are generally under-utilised as a setting for promoting health and well-being in Hong Kong. To this end, the DH aims to develop and pilot suitable model(s) to promote healthy eating and physical activity in workplace in Hong Kong by 2010-11.

Action 11: Expand the “Ideal BMI” Disease Prevention Project

3.23 The “Ideal BMI” Disease Prevention Project is a health programme launched by the HA in collaboration with different corporates and organizations to raise the employees’ awareness of obesity and related health problems, encourage them to adopt healthy lifestyles and promote a culture of healthy living for disease prevention. By year 2010-11, the HA aims to engage around 20 business enterprises and public organizations as partners. Through this programme, employees may experience the benefits of having healthier lifestyles and provision of healthy working environment. On the other hand, the employers may also benefit from an improvement in productivity, increase staff morale, and help promote their corporate images.

(Recommendation 2B) Strengthen the EatSmart programme of the DH

3.24 For the existing territory-wide health promotion activities on healthy diet and physical activity, WGDPA recognises the success of the EatSmart programmes (i.e. “EatSmart@school.hk” Campaign and “EatSmart@restaurant.hk” Campaign) of the DH in terms of the active participation of schools and restaurants, and wide acceptance by students/parents and staff/customers. Building on the early success of the campaigns, **WGDPA recommends strengthening the existing EatSmart programme and broadening its coverage, and may consider extending the EatSmart programme to cover all walks of life** in future.

Action 12: Broaden the coverage of the EatSmart School Accreditation Scheme

3.25 Schools offer important support for children and young people to make informed choices about their diets and provide them with access to healthier foods. An ideal EatSmart School should continuously implement administrative measures, provide healthy lunch and snacks, carry out education and publicity, and shoulder the responsibility of advocating a healthy eating environment in the school sector. The EatSmart School Accreditation Scheme organized by the DH in 2009 aims to motivate and assist all primary schools in Hong Kong to formulate and implement healthy eating policy, establish a favourable learning environment for promoting healthy eating, and cultivate and strengthen the good eating habit of the students. With the support of the EDB, the Accreditation Scheme is an ongoing project which encourages the family, the school and the community to jointly formulate specific school policy and measures so that the school will ultimately achieve the standard of ‘ideal EatSmart school’.

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(Recommendation 2C) Strengthen public education on nutrition information on food labels and energy imbalance

- 3.26 Nutrition information on food labels is an important public health tool to promote a balanced diet, hence enhancing public health. This information enables consumers to compare nutritional values of similar food products and then make healthy food choices. For those who require special diets, e.g. people with diabetes or high blood lipid, nutrition information on food labels enables them to select suitable food and help manage their health conditions. Therefore, **WGDPA recommends strengthening the public education on nutrition information on food labels**, with a view to empowering members of the public with the ability to make healthy food choices.
- 3.27 Apart from strengthening public education on nutrition labelling, WGDPA recognises the importance of disseminating information on the cause of overweight/obesity in health promotion programmes. At heart, excess weight is caused by energy imbalance. Eating healthier to reduce energy intake or being more active to increase energy expenditure alone may not be able to optimize the body weight. Achieving energy balance through healthy eating and regular physical activity is the key to maintaining optimal body weight. In this connection, **WGDPA also recommends strengthening the public education on energy imbalance from unhealthy eating and physical inactivity as the cause of overweight/obesity**. Besides, important health messages should be disseminated in the community through mass media so that a very large audience could be reached for raising the issues for public attention.

Action 13: Continue public education on nutrition information on food labels

3.28 Providing nutrition information on food labels has been recognised as one of the means to promote healthy eating. A Task Force on Nutrition Labelling Education comprising representatives from professional organizations, trade, consumers, academia and government departments has been formed to oversee the publicity and education campaign on nutrition labelling. To tie in with the implementation of the mandatory nutrition labelling scheme, the FEHD conducts a three-year Nutrition Labelling Publicity and Education Campaign, which aims to drive home the advantages of the nutrition labelling scheme and enhance public understanding on how to read nutrition labels and make use of such information to maintain a healthy diet. This campaign includes, among others, the Announcement of Public Interest in TV and radio, release of results of various studies on nutrients in food, production of a variety of publicity and educational materials such as thematic video, posters, booklets, and souvenirs, and organization of roving exhibitions and health talks.

Action 14: Continue public education through EatSmart programmes

3.29 Enabling people to make informed choices that affect health is important. To this end, the EatSmart Programmes (i.e. “EatSmart@school.hk” Campaign and “EatSmart@restaurant.hk” Campaign) of the DH aim to educate, empower and enable the community to have easier access to healthier diet. Building on the success of these campaigns, the DH will continue its public education through the EatSmart programmes to empower school personnel, parents, food suppliers, media and the public with healthy eating tips.

Action 15: Educate public on the importance and benefits of regular participation in sport and other physical activities

3.30 To meet the goal of promoting the level of physical activity in Hong Kong, people’s awareness and knowledge of the benefits of being active should be enhanced as the first step. In this connection, the LCSD plans to organize large-scale sports promotional programmes with a view to educating the general public on the importance and benefits of regular participation in sport and other physical activities. Members of the public and community stakeholders will be invited to join these events. Furthermore, various publicity materials will be produced and disseminated through the media, schools, hospitals and leisure venues of the LCSD.

Priority area 3: Strengthen partnership and foster engagement of all relevant stakeholders

3.31 The health determinants are so pervasive that health promotion and disease prevention requires whole community involvement and extends beyond the scope of the health sector. Working in partnership with all relevant stakeholders at community level is crucial for the success of health promotion work. By drawing people with different backgrounds and expertise, it helps maximise the strengths and create synergy. Given the complexity of human behaviours and the challenges in tackling unhealthy behaviours, WGDPA recognises the importance that health authority, healthcare professionals, government departments and other NGOs to work closely together in a more coordinated approach in order to address these complex issues.

(Recommendation 3A) Intra-governmental partnership

3.32 Close cooperation with all government departments responsible for health improvement and protection, food, physical exercise, environment, transport, employment and community development can ensure that relevant health-related strategy is effectively integrated and implemented. In this connection, **WGDPA recommends government departments/bureaux working together to develop and implement policies that are sensitive to the needs of the public in achieving healthy eating and physical activity participation, and to create an environment, including the built-environment, that facilitate people in making healthier choices.**

3.33 For instance, provision of safe exercise facilities, walking paths, along with other town planning designs that are conducive to good health, can increase the opportunities for, and reduce barriers to physical activity. Introduction of healthy eating policy in schools can also help promote healthy eating at an early age. The DH, LCSD and EDB are working closely to promote physical activity and healthy eating in schools and/or community settings. Such collaborative networks will strengthen the platform to harness community support and optimise synergistic effect through intersectoral action. The following paragraphs highlight our work plan in the years to follow.

Action 16: Solicit support from relevant government bureaux and departments in developing and implementing healthy public policies

3.34 Commitment and coordinated efforts from government bureaux and departments are crucial to facilitate promotion of healthy diet and physical activity participation in the population. In this connection, officials from relevant bureaux and departments will be invited to attend WGDPA meetings and brief members regarding their work on promotion of healthy eating and physical activity participation in 2010. This will also enhance communication between the DH and other government bureaux and departments regarding the NCD framework and strategies, and solicit their participation in building healthy public policies in year 2010-11.

Action 17: Solicit support from the Estate Management Advisory Committees (EMACs) to promote healthy diet and physical activities/health education at estate level

3.35 EMACs work as an effective communication channel between the Housing Authority and tenants of public rental housing (PRH) estates. The leverage and operation of EMACs also serve as a useful platform for NGOs to introduce a wide range of services, including promotion of community health and fitness such as the pilot neighbourhood active ageing project. Hence, the DH will work with the Housing Department (HD) to promote healthy diet and physical activities/health education at the estate level, e.g. arrange visits to EMACs to introduce the Action Plan. Moreover, with the recent endorsement by the Housing Authority, EMACs can provide funding for NGOs (about \$30,000 to \$50,000 per programme) to run community building functions and the like in PRH estates. NGOs are invited to use EMAC fund to organize health promotion activities at the estate level.

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(Recommendation 3B) Working with other health promotion partners to develop and implement policies and practices

3.36 Furthermore, successful implementation of any health promotion programmes would not be possible without the active support and participation of the community. **WGDPA recommends other health promotion partners to develop and implement policies and practices that are supportive of healthy eating and physical activity promotion for members of the public.** For example, Healthy City and Safe Community Associations set up in different districts can help cultivate a healthy living lifestyle in the community through close collaboration with the Government, local organizations and the public. The DH could also explore opportunities in the workplace to promote healthy eating and physical activity among the workforce.

Action 18: Promulgate the action plan to other health promotion partners

3.37 Changing lifestyle habits may begin at the individual or family level, but maintaining the desirable changes requires the presence of a conducive environment for reinforcement at the community level. Health promotion programmes/policies need to focus on the community as a whole, making it supportive and enabling so that all community members can play an active role in changing the behavioural risk factors. Therefore, when developing and implementing health policies, participation of community health promotion partners is important so as to understand their views and solicit their support. In this connection, the DH met with chairmen/representatives of Healthy Cities Projects Committees in December 2009 and will continue to work with the Home Affairs Department (HAD) to promulgate the action plan at district level including various health promotion partners.

Action 19: Assist trade to produce food that are supportive of healthy eating

3.38 The FEHD plans to develop trade guidelines on reducing sodium, sugars and other nutrients that excessive intake is not advisable in foods in 2012. It provides guidance to the food trade to modify the manufacturing process so as to lower unhealthy contents in foods, which in turn enables the community to have easier access of healthier food commodities to prevent diet related diseases like cancers, high blood pressure, heart diseases and stroke.

Action 20: Promote healthy lifestyle and self-management through enhancement of primary care services

3.39 A good primary care system which provides the public with access to continuous, comprehensive and holistic care is important for promoting health and prevention and control of diseases. To enhance primary care services in Hong Kong, the Working Group on Primary Care (WGPC) chaired by the Secretary for Food and Health has formulated a set of recommendations. Amongst them are strategies to strengthen the prevention and management of NCD, starting with hypertension (HT) and diabetes mellitus (DM), the two commonest NCD in Hong Kong. As set out in the 2009-10 Policy Agenda, conceptual models and clinical protocols for HT and DM are being developed by the WGPC for use as common reference to facilitate cross-sectoral collaboration among different healthcare professionals in both public and private healthcare sectors. Lifestyle modifications and enhanced self-management for the prevention and better control of these major NCD are emphasised in these clinical protocols, as well as in the pilot projects underway to strengthen primary care service delivery.

Action 21: Enlist support of stakeholders in the community to encourage and support physical activity

3.40 The CSC of the LCSD is committed to lowering the ratio of the inactive population, thus achieving the ultimate goal of “Sport for All” in the community. As such, the LCSD will disseminate the findings and recommendations of the Study of “Sport for All” to various major stakeholders in the community, e.g. government departments, District Councils, National Sports Associations, District Sports Associations, business organizations, schools, etc., through letters and other channels. The LCSD will also continue to enlist the stakeholders’ support to promote physical activity participation to their service customers and staff.

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Action 22: Solicit support to strengthen training on sport and other physical activities for kindergarten

3.41 Being physically active in childhood lays the foundation for active participation in physical and sports activities in adulthood. The health message on regular participation in physical and sport activities have been disseminated to students, parents and teachers through primary and secondary schools. To integrate physical and sport activities into early childhood, the LCSD will work with the EDB from 2010 onwards to strengthen training on physical and sport activities for kindergarten teachers and pre-school students by organizing workshops to enhance their knowledge in this aspect.

Priority area 4: Build the capacity and capability to promote healthy eating and physical activity participation

(Recommendation 4A) Review overseas and local literature on health promotion interventions

3.42 From the public health perspective, health promotion is an important strategy in primary prevention to improve the health of the population as a whole. As health behaviours are intricately connected with the living environment in many ways, health promotion needs to be evidence-based and outcome-focused. Conventional means of health information dissemination singly through distribution of health education materials and organizing publicity campaigns are not as effective as one would have thought. In planning health promotion programmes, organizers should take reference from effective health promotion intervention, and should consider factors that will enhance the sustainability of effective programmes. Thus, **WGDPA recommends reviewing overseas and local literature of health promotion interventions on healthy eating and physical activity participation, so as to identify elements of success and factors which enhance programme sustainability.**

Action 23: Review, summarise and communicate findings with stakeholders on regular basis

3.43 The DH is committed to building the evidence base for the effectiveness and cost-effectiveness of public health interventions, including those related to diet and physical activity. The DH has been conducting ongoing reviews and summarising important findings from evidence-based literatures, aiming to develop evidence-based data for sharing with health promotion partners on regular basis using thematic websites in year 2010-11 so as to lead action to improve the health of the people in Hong Kong. Other service units in the DH will also conduct ongoing reviews related to other areas of interest and will communicate useful data/information to health promotion partners through various means.

(Recommendation 4B) Organize forums and workshops for fostering partnerships, better coordination of efforts and capacity building

3.44 It is important to empower the partners and stakeholders with the knowledge and skills in addressing the problems of unhealthy dietary habit and physical inactivity. In this connection, WGDPA recommends organizing forums and workshops for fostering partnerships, better coordination of efforts and capacity building among health promotion partners. The DH has organized capacity building programmes for its staff and NGOs to enhance their knowledge and skills in health promotion. Basic health promotion concepts and theories as well as good practices are shared in these settings. More training opportunities should be considered to equip health promotion partners in the community with the skills in organizing effective and evidence-based health promotion programmes to complement government's role.

Action 24: Organize a conference on NCD prevention

3.45 In order to effectively raise the awareness of NCD prevention and control and bring about the synergistic health benefits of modifying major behavioural risk factors, the DH plans to host a conference in early 2012, putting special emphasis on the promotion of healthy diet and physical activity, prevention of alcohol misuse and injuries, as well as community participation and capacity building. Through this event, we aim to bring together major local as well as international health promotion partners to share their experience on successful health promotion approaches and best practices.

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Action 25: Identify health promotion agencies through various forums

3.46 Successful community projects acknowledge and involve the groups or individuals who have a stake in the issue. Isolated action will only bring limited impact, and a partnership approach is desirable at the community level. In this connection, the DH will organize different forums in year 2010-12 to identify as many health promotion agencies as possible, and engage them for collaboration in future in relation to promoting healthy diet and physical activity participation in Hong Kong. Building coalitions and potential partnership among the stakeholders can further champion the effort in promoting the health of our citizens in Hong Kong.

Action 26: Develop education kits on breastfeeding for health professionals and organize workshops

3.47 Good nutrition in early years of life is a major determinant of growth and development and will directly influence the health in adulthood. As breastfeeding provides clear short and long term health benefits for both infants and mothers, breastfeeding is recommended as the best nutrition for infants in the first six months of life. In view of the low exclusive breastfeeding rate in Hong Kong, WGDPA urges health professionals to support women in choosing breastfeeding for their infants. The DH thus plans to develop an education kit on breastfeeding for health professionals and organize workshops to teach them the necessary skills to support and empower the mothers and their families to achieve their breastfeeding goals. The education kits will be launched in the second quarter of 2010 while training workshops will be organized in 2011.

(Recommendation 4C) Apply theories, concepts, evidence and skills in planning and organization of activities

3.48 In addition to appraising evidence on successful elements for health promotion programmes, it is also important to incorporate these success factors into the programmes. Likewise, elements demonstrated to be not effective should not be introduced again, hence avoiding reinventing the wheel. This is an essential way to achieve better outcome given limited resources. Therefore, **WGDPA recommends the health promotion agencies to apply health promotion theories, concepts, evidence and skills in planning and organization of healthy eating and physical activity promotional activities, which could take the form of ‘demonstration projects’.**

Action 27: Arrange training workshops for health promotion partners to build up their skills on organizing health promotion programmes

3.49 Putting research findings into practice is important when organizing health promotion programmes. To equip the health promotion partners with the necessary knowledge and skills in applying health promotion theories, concepts and evidence in planning and organizing health promotion programmes, the DH will arrange at least four training workshops for these target audience in year 2010-12.

Priority area 5: Secure resources for health promotion on healthy eating and physical activity participation

(Recommendation 5A) Share the vision and plans with stakeholders and community members

3.50 WGDPA believes that the small-scale and short-term health promotion activities may not generate significant impact on improving population health. Resources should be pooled together to better utilise the funding available as well as to maximise the impact of health promotion activities. In this regard, **WGDPA recommends the Government to share the vision and plans of the Strategic Framework for NCD Prevention and Control with stakeholders and community members.**

Action 28: Organize forum for health promotion partners to promulgate the NCD Strategic Framework and the Action Plan

3.51 WGDPA recognises that in order to make healthier choices easier, interdepartmental collaboration and partnership with key stakeholders and community sectors are of vital importance. Thus, the DH will organize at least four forums/workshops in year 2010-12 for different health promotion partners to promulgate the Strategic Framework for NCD Prevention and Control and the Action Plan, aiming to enlist their support for activities and policies that will contribute directly and indirectly to the promotion of health of the population.

3. Actions to promote healthy diet and physical activity participation

(Recommendation 5B) Applications for funds

3.52 **NGOs and academic institutions should also be encouraged to submit applications for funds provided by the Administration and other sources to conduct research studies relating to health promotion.** Such funding sources include the Health Care and Promotion Fund, the Health and Health Services Research Fund, Research Grants Council of the University Grants Committee, the Community Investment and Inclusion Fund, the Hong Kong Jockey Club Charities Trust, the SK YEE Medical Foundation, and the Board of Management of the Chinese Permanent Cemeteries, etc.

Action 29: Conduct workshops for NGOs to enhance their understanding of various funding sources and applications

3.53 In Hong Kong, funding sources are available for various research/project themes, including health promotion initiatives. However, many funding sources may impose various requirements, and understanding such requirements is fundamental for NGOs to secure more resources for health promotion programmes on healthy diet and physical activity participation. In this connection, the DH plans to organize at least four forums/workshops in year 2010-12 for NGOs and other health promotion partners to enhance their understanding on various funding sources and applications.

(Recommendation 5C) Encourage health promotion partners to explore innovative means of funding

3.54 It is important to find ways to mobilize local resources to promote health in the community through building partnership between public, private and non-governmental organizations. In this regard, WGDPA encourages health promotion partners to explore innovative means of funding such as charitable trusts (set up by business corporations with emphasis on social responsibility), matching funds and seeding grants.

Action 30: Explore the possibility of securing different sources of funding from established channels to promote healthy eating and physical activity

3.55 WGDPA recognises that diversified sources of funding for health promotion can attract the participation of community partners and NGOs in promoting healthy eating and physical activity participation. Thus, various funding sources, including innovative means of funding such as charitable trusts, matching funds and seeding grants, would be explored regularly with a view to pooling together existing resources from different channels for better utilisation and to create synergy.

Table 1 List of detailed actions with targets and timeframe

Priority Areas	Recommendations	Actions	Lead action party	Target(s)/Indicator(s)	Timeframe
1) Generate an effective information base and system on dietary habit and physical activity participation to guide actions	(1A) Strengthen surveillance of NCD and track changes in the behavioural risk factor profile of unhealthy dietary habit, physical inactivity and overweight/obesity of the population.	<ul style="list-style-type: none"> Pilot Youth-Health Behaviour Surveillance System to identify behavioural risk factors, including those for obesity, in secondary school students [Action 1] 	<ul style="list-style-type: none"> DH EDB 	<ul style="list-style-type: none"> Complete the study by Q2 2010 Complete the review by Q4 2010 	2010
		<ul style="list-style-type: none"> Explore the use of growth parameter measured in schools to track changes of obesity [Action 2] 	<ul style="list-style-type: none"> EDB DH 	<ul style="list-style-type: none"> Develop logistics to monitor the prevalence of obesity in school children 	2010

Priority Areas	Recommendations	Actions	Lead action party	Target(s)/Indicator(s)	Timeframe
		<ul style="list-style-type: none"> Conduct Total Diet Study to assess the dietary intake of the population [Action 3] 	<ul style="list-style-type: none"> FEHD 	<ul style="list-style-type: none"> Review the findings of the Food Consumption Survey in 2010 Conduct fieldwork of Total Diet Study in 2010-2011 Publish reports of Total Diet Study in phases from 2011 to 2014 	2010-14
	<p>(1B) Conduct population-based health surveys with biomedical risk factor measurement regularly to monitor the health profile of the population with reference to WHO's 'STEPS'.</p>	<ul style="list-style-type: none"> Conduct the second Population Health Survey for adults aged 15 or above with biochemical measurements e.g. anthropometric measurements, blood glucose and blood lipid profiles [Action 4] 	<ul style="list-style-type: none"> DH Academia 	<ul style="list-style-type: none"> Commission the study in 2011 Conduct pilot study in 2012 Conduct fieldwork in 2013/14 Publish the report in 2014/15 	2011-15

3. Actions to promote healthy diet and physical activity participation

Priority Areas	Recommendations	Actions	Lead action party	Target(s)/Indicator(s)	Timeframe
	<p>(1C) Promote and support research in areas related to the behavioural risk factor modification and the effective interventions in promoting healthy eating and physical activity participation, e.g. research on parental knowledge, attitude and practice of feeding infants and young children, including breastfeeding and weaning; food and nutrient intakes of infants and young children.</p>	<ul style="list-style-type: none"> Conduct a survey on parental knowledge, attitude and practice of feeding infants and young children (6-month-old to 2-year-old and 4-year-old) Conduct a survey on milk consumption of infants and young children (12-month-old to 2-year-old and 4-year-old) Conduct a dietary survey on infants and young children (6-month-old to 2-year-old and 4-year-old) Conduct a survey on physical activity of young children (2-year-old and 4-year-old) <p>[Action 5]</p>	<ul style="list-style-type: none"> DH Academia 	<ul style="list-style-type: none"> Complete data collection & analysis by end of December 2010 Publish report by March 2011 	2010-11

Priority Areas	Recommendations	Actions	Lead action party	Target(s)/Indicator(s)	Timeframe
		<ul style="list-style-type: none"> Conduct review on the existing provision of recreation and sports programmes so as to provide more attractive programmes for family members, adult and people in the workforce [Action 6] 	<ul style="list-style-type: none"> LCSD 	<ul style="list-style-type: none"> To enhance the programme mix and to design some new programmes catering for the need of different targets 	2010-14
		<ul style="list-style-type: none"> Conduct review on the existing provision of leisure facilities, booking arrangements and charges of venues, etc. to cope with the promotion of sport for all [Action 7] 	<ul style="list-style-type: none"> LCSD 	<ul style="list-style-type: none"> To enhance the provision of leisure facilities 	2010-14
2) Support new and strengthen existing health promotion activities on healthy eating and physical activity participation	(2A) Provide support for new health promotion programmes on healthy eating and physical activity participation targeting young children and their parents, and people in workplace.	<ul style="list-style-type: none"> Develop and launch a new parenting programme on weaning targeting all infants and young children (6-month-old to 2-year-old) in Maternal and Child Health Centres [Action 8] 	<ul style="list-style-type: none"> DH 	<ul style="list-style-type: none"> Train relevant medical & nursing staff of DH in 2010 Implement the programme in Q3 2011 Ongoing evaluation of the programme 	2010-12

3. Actions to promote healthy diet and physical activity participation

Priority Areas	Recommendations	Actions	Lead action party	Target(s)/Indicator(s)	Timeframe
		<ul style="list-style-type: none"> Develop a Hong Kong Code of Marketing of Breastmilk Substitutes [Action 9] Explore models to promote healthy diet and physical activity in workplace [Action 10] Expand the workplace health promotion programme, namely "Ideal BMI" Disease Prevention Project, which aims to improve health at individual and organization levels in collaboration with community partners [Action 11] 	<ul style="list-style-type: none"> DH DH HA 	<ul style="list-style-type: none"> Set up a taskforce by Q2 2010 Code developed by Q4 2011 Develop suitable model(s) to be considered for pilot testing Engage around 20 commercial and public organizations to join the project and encourage/ support the organizations to provide a supportive environment for the health of their staff 	2010-11
	(2B) Strengthen the EatSmart programme of DH and broaden its coverage in schools and consider extending the programme to other settings.	<ul style="list-style-type: none"> Broaden the coverage of the EatSmart School Accreditation Scheme [Action 12] 	<ul style="list-style-type: none"> DH EDB 	<ul style="list-style-type: none"> Engage all primary schools 	2010-15

Priority Areas	Recommendations	Actions	Lead action party	Target(s)/Indicator(s)	Timeframe
	(2C) Strengthen public education on nutrition information on food labels and energy imbalance as the cause of overweight/obesity.	<ul style="list-style-type: none"> Continue public education on nutrition information on food labels [Action 13] Continue public education through EatSmart programmes [Action 14] Educate public on the importance and benefits of regular participation in sport and other physical activities [Action 15] 	<ul style="list-style-type: none"> FEHD DH EDB LCSD 	<ul style="list-style-type: none"> Conduct a 3-year Nutrition Labelling Publicity and Education Campaign with 3 phases Empower school personnel, parents, food suppliers, media and the public with healthy eating tips Organize large-scale sports promotional programmes and invite public and stakeholders to join Produce various publicity materials, such as DVD and broadcast through TV, Roadshow, schools, hospitals and leisure venues of LCSD 	<p>2010-12</p> <p>Ongoing</p> <p>2010</p>

3. Actions to promote healthy diet and physical activity participation

Priority Areas	Recommendations	Actions	Lead action party	Target(s)/Indicator(s)	Timeframe
3) Strengthen partnership and foster engagement of all relevant stakeholders	(3A) Government departments/ bureaux work together to develop and implement policies that are sensitive to the needs of the public in achieving healthy eating and physical activity participation, and create an environment, including the built-environment, that facilitate people in making healthier choices, e.g. provide access to safe exercise facilities, walking paths, along with other town planning designs that are conducive to good health; introduce healthy eating policy in schools, etc.	<ul style="list-style-type: none"> Solicit support from relevant government bureaux and departments in developing and implementing healthy public policies [Action 16] 	<ul style="list-style-type: none"> WGDPA DH 	<ul style="list-style-type: none"> Invite relevant bureaux and departments to brief WGDPA members and introduce their work on promotion of healthy eating and physical activity participation 	2010-11

Priority Areas	Recommendations	Actions	Lead action party	Target(s)/Indicator(s)	Timeframe
		<ul style="list-style-type: none"> Solicit support from EMACs to promote healthy diet and physical activities/health education at estate level [Action 17] 	<ul style="list-style-type: none"> DH HD 	<ul style="list-style-type: none"> Arrange visits to EMACs to promote healthy diet and physical activities/health education Invite NGOs to use EMAC fund for organizing health education/promotion activities at estate level 	2010-11
	(3B) Other health promotion partners to develop and implement policies and practices that are supportive of healthy eating and physical activity promotion for members of the public.	<ul style="list-style-type: none"> Promulgate the Action Plan to other health promotion partners, e.g. through meeting with Healthy Cities Projects [Action 18] Assist trade to produce food that are supportive of healthy eating [Action 19] 	<ul style="list-style-type: none"> DH HAD FEHD 	<ul style="list-style-type: none"> Brief members of the Healthy Cities Projects Committees in 18 districts on the Action Plan Develop trade guidelines on reducing sodium, sugars and other nutrients that excessive intake is not advisable in foods 	2010 2012

3. Actions to promote healthy diet and physical activity participation

Priority Areas	Recommendations	Actions	Lead action party	Target(s)/Indicator(s)	Timeframe
		<ul style="list-style-type: none"> Promote healthy lifestyle and self-management through enhancement of primary care services [Action 20] 	<ul style="list-style-type: none"> DH 	<ul style="list-style-type: none"> Consult and liaise with healthcare professionals 	2010
		<ul style="list-style-type: none"> Enlist support of stakeholders in the community, such as District Councils, National Sports Associations, schools, corporations, etc. [Action 21] 	<ul style="list-style-type: none"> LCSD 	<ul style="list-style-type: none"> Letters to various stakeholders to introduce the findings and recommendation of the "Study of Sport for All" Enlist their support to promote physical activity participation to their service customers and staff 	2010
		<ul style="list-style-type: none"> Solicit support to strengthen their training on sport and other physical activities for kindergarten [Action 22] 	<ul style="list-style-type: none"> LCSD EDB 	<ul style="list-style-type: none"> Provide training plan for kindergarten teachers and pre-school students 	2010 onwards

Priority Areas	Recommendations	Actions	Lead action party	Target(s)/Indicator(s)	Timeframe
4) Build the capacity and capability to promote healthy eating and physical activity participation	(4A) Review overseas and local literature of health promotion interventions on healthy eating and physical activity participation to identify elements of success and factors which enhance programme sustainability.	<ul style="list-style-type: none"> Review, summarise and communicate findings with stakeholders on regular basis [Action 23] 	<ul style="list-style-type: none"> DH 	<ul style="list-style-type: none"> Develop evidence-based data for sharing with health promotion partners on thematic websites Communicate useful data/information through various means 	2010-11 Ongoing
	(4B) Organize forums and workshops for fostering partnerships, better coordination of efforts and capacity building among health promotion partners.	<ul style="list-style-type: none"> Organize a conference on NCD prevention emphasising on promotion of healthy diet and physical activity, prevention of alcohol misuse and injuries, as well as community participation and capacity building [Action 24] 	<ul style="list-style-type: none"> DH 	<ul style="list-style-type: none"> Involve major key health promotion agencies in the conference 	Early 2012
			<ul style="list-style-type: none"> Identify health promotion agencies through various forums [Action 25] 	<ul style="list-style-type: none"> DH 	<ul style="list-style-type: none"> Identify as many key health promotion agencies as possible for collaboration

3. Actions to promote healthy diet and physical activity participation

Priority Areas	Recommendations	Actions	Lead action party	Target(s)/Indicator(s)	Timeframe
		<ul style="list-style-type: none"> Develop education kits on breastfeeding for health professionals and organize workshops [Action 26] 	<ul style="list-style-type: none"> DH 	<ul style="list-style-type: none"> Launch education kits in Q2 2010 Organize workshops in 2011 	2010-11
	<p>(4C) Health promotion agencies to apply health promotion theories, concepts, evidence and skills in planning and organization of healthy eating and physical activity promotional activities which could take the form of 'demonstration projects'.</p>	<ul style="list-style-type: none"> Arrange training workshops for health promotion partners to build up their skills on organizing health promotion programmes [Action 27] 	<ul style="list-style-type: none"> DH 	<ul style="list-style-type: none"> Organize at least four forums/ workshops 	2010-12

Priority Areas	Recommendations	Actions	Lead action party	Target(s)/Indicator(s)	Timeframe
5) Secure resources for health promotion on healthy eating and physical activity participation	(5A) Share the vision and plans of the Strategic Framework for NCD Prevention and Control with stakeholders and community members.	<ul style="list-style-type: none"> Organize forum for health promotion partners to promulgate the NCD Strategic Framework and the Action Plan to Promote Healthy Diet and Physical Activity Participation in Hong Kong [Action 28] 	<ul style="list-style-type: none"> DH 	<ul style="list-style-type: none"> Organize at least four forums/ workshops 	2010-12
	(5B) Encourage NGOs and academic institutions to submit applications for funds provided by the Administration and other sources to conduct research studies relating to health promotion.	<ul style="list-style-type: none"> Conduct workshops for NGOs to enhance their understanding on various funding sources and applications [Action 29] 	<ul style="list-style-type: none"> DH 	<ul style="list-style-type: none"> Organize at least four forums/ workshops 	2010-12
	(5C) Encourage health promotion partners to explore innovative means of funding.	<ul style="list-style-type: none"> Explore the possibility of securing different sources of funding from established channels to promote healthy eating and physical activity [Action 30] 	<ul style="list-style-type: none"> DH 	<ul style="list-style-type: none"> To pool together existing resources from different channels for better utilisation and to create synergy 	Ongoing

4 Making it happen

- 4.1 To take forth the proposed intersectoral collaboration as recommended in this Action Plan, consultation with local NGOs and other community stakeholders will be conducted to seek their views on the actions and their interests to participate. In order to ensure that people in all parts of the society will get involved and act together, the implementation of the Action Plan will be publicised through various means.
- 4.2 The current NCD challenge Hong Kong faces is greater than previously realised. In the actual implementation of the Action Plan to promote healthy diet and physical activity participation in Hong Kong, there are many foreseeable barriers that need to be overcome in order to achieve the vision and goal as set out in the NCD prevention and control strategy. Moreover, WGDPA recognises that the active participation by everyone in the community is the key to success.
- 4.3 With a leadership role in combating the challenge of NCD, the Government could provide the people with information on nutrition and physical activity pertaining to healthy living, and work closely with the stakeholders in both the public and private sectors to create a supportive environment for people to make the right choices for themselves and their families. It is time to call for individuals in the society to take their own responsibility for their health, and to make their own choices of health behaviours. Relevant stakeholders also play an important role in health promotion activities, for example, food industry to supply healthier choices of food, and employers to provide a healthy working environment for their staff.
- 4.4 It is time for everyone in the community to act together in combating the NCD battle. By working in partnership, everyone can make Hong Kong a healthier place to live.



Annexes

Membership of Working Group on Diet and Physical Activity

Chairman

Prof Alfred CHAN Cheung-ming, BBS, JP

Vice Chairman

Dr LAM Ping-yan, JP

Members

Prof Juliana CHAN Chung-ngor

Mr CHAU How-chen, GBS, JP

Dr CHEUNG Wai-lun, JP

Mr Michael LAI Kam-cheung, MH, JP

Ms Catherine LEE Oi-wa

Dr Lobo LOUIE Hung-tak

Mr James NG Chi-ming

Dr Mary SCHOOLING

Mr TANG Kwai-tai

Dr Joyce TANG Shao-fen

Dr TSE Hung-hing

Mr WONG Ka-wo, JP

Dr WONG Man-sau

Ex-officio Members

Ms Olivia CHAN Yeuk-oi

Mr Tony LIU King-leung

Dr Thomas TSANG Ho-fai, JP

Mr Benjamin YUNG Po-shu

Secretary

Dr LEUNG Ting-hung, JP

Terms of reference of Working Group on Diet and Physical Activity

- (a) To assess the epidemiology, risk factors and socioeconomic determinants of specific NCD with reference to diet and physical activity of local population;
- (b) To make recommendations on the health and health improvement needs of the local population in relation to healthy diet and physical activity;
- (c) To review local and international good practices and intervention strategies to promote healthy diet and physical activity; and
- (d) To make recommendations on the development, implementation and evaluation of a plan of action for promotion of healthy diet and physical activity in Hong Kong.

Discussion topics of Working Group on Diet and Physical Activity meetings

	Date	Topics
First Meeting	16 December 2008	<ul style="list-style-type: none"> Highlights of the Strategic Framework for Prevention and Control of Non-Communicable Diseases Diet, Physical Activity and Health: Hong Kong Situation (WGDPAPaper No. 01/2008) Health Promotion Programmes by the Department of Health (WGDPAPaper No. 02/2008)
Second Meeting	23 February 2009	<ul style="list-style-type: none"> Environmental Scanning of Information, Research and Health Promotion Activity on Diet and Physical Activity in Hong Kong (WGDPAPaper No. 01/2009) Health Promotion: Concepts and Practice (WGDPAPaper No. 02/2009) Presentation on Health and Health Services Research Fund and Health Care and Promotion Fund
Third Meeting	27 April 2009	<ul style="list-style-type: none"> Discussion on the draft Report on Recommended Actions to Promote Healthy Eating and Physical Activity Participation in Hong Kong
Fourth Meeting	9 November 2009	<ul style="list-style-type: none"> Discussion on the draft Action Plan to Promote Healthy Eating and Physical Activity Participation in Hong Kong

**Summary of Members' input on local health promotion activities
(The titles of some programmes are in Chinese only)**

Organization	Diet	Physical activity	Healthy lifestyle
	Infant and young children		
Playright Children's Play Association		<ul style="list-style-type: none"> • Outreach services, play safety inspection service 	
Hong Kong Childhealth Foundation		<ul style="list-style-type: none"> • Pre-school Motor Performance Award Scheme 	
Centre for Health Education and Health Promotion of the CUHK			<ul style="list-style-type: none"> • Healthy Schools (Pre-School) Award Scheme
Watchdog Early Learning and Development Centre			<ul style="list-style-type: none"> • Innovations in Health and Wellness: a Fitness and Nutrition Program For Special Needs Children project
	School children and adolescent		
The CUHK	<ul style="list-style-type: none"> • Healthy University Programmes 	<ul style="list-style-type: none"> • Healthy University Programmes 	<ul style="list-style-type: none"> • Healthy University Programmes
Hong Kong Council of Early Childhood Education & Services	<ul style="list-style-type: none"> • Building Healthy Tuck Shop – Healthy Primary School Tuck Shop Program 		
Yang Memorial Methodist Social Service Shatin Integrated Centre for Youth Development	<ul style="list-style-type: none"> • Healthy eating classes such as 親子美食DIY 		

Organization	Diet	Physical activity	Healthy lifestyle
United Christian Nethersole Community Health Service	<ul style="list-style-type: none"> Healthy eating events such as “Breakfast Club”, “Healthy Snack Workshop” Community nutrition placement and career talk for tertiary students 		<ul style="list-style-type: none"> School and Home Involvement, Nutrition and Exercise (SHINE) programme for healthy lifestyle project Health Promoting School Project
Education Bureau		<ul style="list-style-type: none"> Outdoor Education Camp 	
Education Bureau & Hong Kong Schools Dance Association		<ul style="list-style-type: none"> Schools Dance Festival 	
Education Bureau, Hong Kong Childhealth Foundation, Physical Fitness Association of Hong Kong, China		<ul style="list-style-type: none"> School Physical Fitness Award Scheme 	
Leisure and Cultural Services Department and Education Bureau		<ul style="list-style-type: none"> School Sports Programme 	
A.S. Watson Group		<ul style="list-style-type: none"> A.S. Watson Group Hong Kong Student Sports Awards 	
Hong Kong College of Cardiology		<ul style="list-style-type: none"> Jump Rope for Heart Program 	
Hong Kong Schools Sports Federations		<ul style="list-style-type: none"> Inter-school, inter-district, inter-port and international student sports competitions 	

Organization	Diet	Physical activity	Healthy lifestyle
The Boys' & Girls' Clubs Association of Hong Kong, Department of paediatrics and adolescent medicine of the United Christian Hospital			<ul style="list-style-type: none"> Integrated and Sustainable Community Pioneer Project for Obese children
Centre for Health Education and Health Promotion of the CUHK			<ul style="list-style-type: none"> Hong Kong Healthy Schools Award Scheme "Home-School Joint Venture to Combat Childhood Obesity"
Haven of Hope Christian Service			<ul style="list-style-type: none"> 「真」健美大行動—身心健康區校推廣教育計劃
Hong Kong Evangelical Church Bradbury Sheung Shui Family Center			<ul style="list-style-type: none"> 「健康活力小種子」計劃
Hong Kong Playground Association			<ul style="list-style-type: none"> 「健康新營人」計劃
Pamela Youde Nethersole Eastern Hospital and the Hong Kong Center for Health Promotion and Disease Prevention of the Hong Kong Tuberculosis, Chest and Heart Diseases Association			<ul style="list-style-type: none"> School Health Promotion, Hong Kong East Cluster project

Organization	Diet	Physical activity	Healthy lifestyle
The Salvation Army Yaumatei Integrated Service For Young People			<ul style="list-style-type: none"> Educate young people on reading nutritional label, promote healthy eating and active living
St. James' Settlement			<ul style="list-style-type: none"> 「叻營仔女全攻略」計劃
Adult			
Hong Kong Nutrition Association	<ul style="list-style-type: none"> Eat Smart for Total Health Recipe Design & Cooking Competition 		
United Christian Nethersole Community Health Service	<ul style="list-style-type: none"> Food labelling and fun cooking class Community Nutrition Service Healthy cooking classes 		<ul style="list-style-type: none"> Weight Management Classes Health promotion programme for professional drivers and South Asian community
Department of Orthopaedics and Traumatology of the CUHK and the Family Planning Association of Hong Kong		<ul style="list-style-type: none"> Post-menopausal women walk towards a healthy life 	
Caritas – Hong Kong			<ul style="list-style-type: none"> Promotion of Wellness in Workplace with an East-Meet-West Approach
Care For Your Heart			<ul style="list-style-type: none"> Eat healthy and get active: a lifestyle to start and keep!

Organization	Diet	Physical activity	Healthy lifestyle
Elderly			
United Christian Nethersole Community Health Service	<ul style="list-style-type: none"> Outreach Nutrition Consultation Services for elderly centres 	<ul style="list-style-type: none"> Tai Chi classes 	
Castle Peak Hospital			<ul style="list-style-type: none"> Life Style Redesign Program
Whole community			
Association of Green Organic @ Living	<ul style="list-style-type: none"> Cooking classes Health food recipes Health seminars 		
Healthy Cities Projects in various districts	<ul style="list-style-type: none"> Health promotion events 	<ul style="list-style-type: none"> Health promotion events 	<ul style="list-style-type: none"> Health promotion events
United Christian Nethersole Community Health Service	<ul style="list-style-type: none"> Public nutrition education via magazine 「健康動力」 Health talks Regular media interview 	<ul style="list-style-type: none"> Tai Chi and folk dance classes for patients with chronic diseases through “Good Neighbour Network” 	<ul style="list-style-type: none"> School and Home Involvement, Nutrition and Exercise (SHINE) @ the community Mass community health promotion events
Leisure and Cultural Services Department		<ul style="list-style-type: none"> Healthy Exercise for All Campaign 	
District Sports Association of Home Affairs Department		<ul style="list-style-type: none"> Organize recreation and sports activities at district level 	
Hong Kong Medical Association		<ul style="list-style-type: none"> Healthy 8,000 Steps Campaign Exercise Prescription Project 	
National Sports Association		<ul style="list-style-type: none"> Organize sports training programmes 	

Organization	Diet	Physical activity	Healthy lifestyle
Health InfoWorld of the Hospital Authority			<ul style="list-style-type: none"> • “Better Health for a Better Hong Kong” health promotion campaign • “Ideal BMI” Disease Prevention Project
Aberdeen Kai-fong Welfare Association			<ul style="list-style-type: none"> • 「運動保方 - 糖尿病」計劃
Hong Kong Evangelical Church Bradbury Sheung Shui Family Center			<ul style="list-style-type: none"> • 「健樂每一步」計劃
Hong Kong Red Cross			<ul style="list-style-type: none"> • 「五星健康五星家」之「健康生活模式」推廣
HKSKH Lady MacLehose Centre			<ul style="list-style-type: none"> • 「營養身心，健康人生」計劃

Health promotion: concepts and practice

1. Application of 'health promotion' to improve population health dated back to its embryonic beginnings in the late sixties which blossomed into an international discipline in the eighties. At the first Global Conference on Health Promotion organized by the WHO in 1986, the Ottawa Charter⁷ was presented. Health promotion became recognised as the process of enabling people to increase control over, and to improve, their health. To reach a state of complete physical, mental and social wellbeing (i.e. health as defined by the WHO), an individual or group must be able to identify and to realise aspirations, to satisfy needs, and to change or cope with the environment. Health is therefore, seen as a resource for everyday life, and not the objective of living. Health is a positive concept emphasising social and personal resources, as well as physical capacities.
2. Clearly, health promotion is not only the responsibility of the health sector, but goes beyond to include actions directed at changing social, environmental and economic conditions, strengthening skills and capabilities of individuals, as well as causing healthy choices easier to make. The five key action areas for effective health promotion are to build healthy public policy, to create supportive environments for health, to strengthen community action for health, to develop personal skills, and to re-orient health services.
3. In today's globalised world, increasing inequalities within and between countries and communities are seen, making vulnerable groups such as women, children, elderly, disabled, poor, unemployed, immigrants at particularly high risk of unhealthy lifestyle practices and ill health. Recognising the enjoyment of the highest attainable standard of health as a fundamental right of human race, it remains for every government, community, civil society and corporate to place health at the centre of its development agenda. In essence, each sector has its unique role to play to contribute to improvements in public health, and partnerships will provide exciting and rewarding ways to bring them together. Building on the values, principles and action strategies of the Ottawa Charter, the Bangkok Charter⁸ in 2005 reaffirmed that policies and partnerships to empower communities and to improve health and health equality should be central to global and national development.

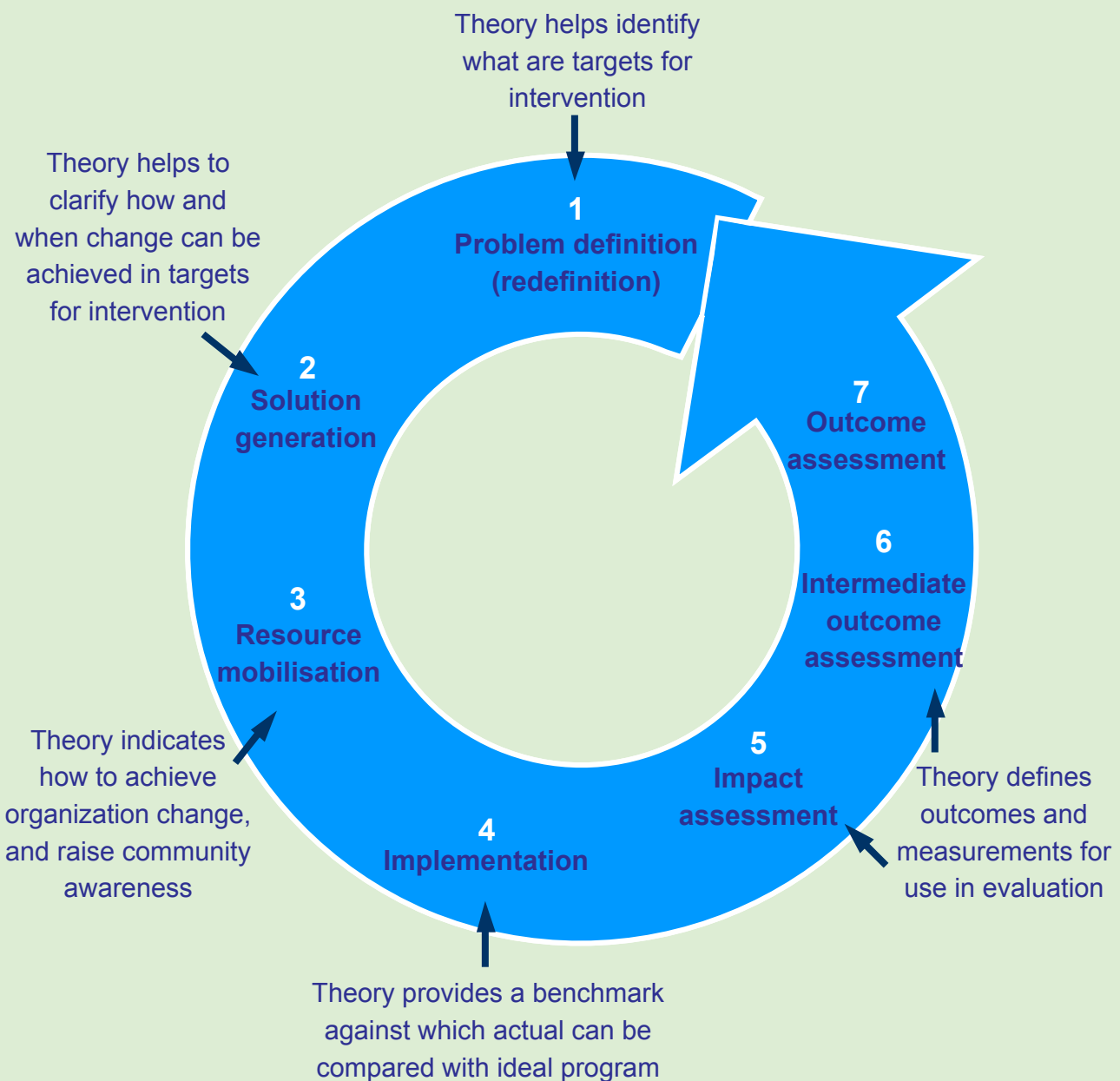
7 Ottawa Charter. WHO, 1986

8 The Bangkok Charter for Health Promotion in a Globalized World. WHO, 2006

When is health promotion effective?

- 4 The ultimate goal of health promotion is to improve an individual's physiological and/or social aspects of health. For health promotion action to be effective, one must do the right thing and do it well. This underscores the need to build capacity in the health promotion workforce, be it in the public, private or non-governmental sector, in order that limited resources could be put to best use. Good health promotion follows a planning and evaluation cycle⁹ (see Figure 1).

Figure 1. Health promotion planning and evaluation cycle⁹



9 Theory in a Nutshell, A Guide to Health Promotion Theory. Nutbeam D and Harris E, McGraw-Hill, 2002 (reprinted)

- 5 Nutbeam¹⁰ proposed a Six Stage Developmental Model for health promotion research, planning and evaluation, pointing out the strategic relationship between cause, target population, content and method of intervention. That is to say, every project in health promotion must begin with problem definition (understanding what the problem is, why and how it arose), followed by solution generation (how it may be solved), intervention testing (whether the solution worked), intervention demonstration (how the action could be repeated and refined), dissemination (if the action could be widely reproduced) and finally programme monitoring (whether the programme could be sustained). Once a health promotion programme has reached stage six, emphasis should be on supporting project management and assessing cost and benefits for the sake of maximising programme cost-effectiveness.

- 6 In the effort to demonstrate effectiveness of a health promotion intervention, one must distinguish between the different types of outcome in order to communicate what constitutes success. Three levels of outcome exist. The first level comprises 'health promotion outcomes' representing the more immediate result of actions. Examples are health literacy, social influence, public policy and organizational practices that affect an individual's ability to make healthy choices. The next level is 'intermediate health outcomes' such as healthy lifestyles, effective health services and healthy environments that determine the health of individuals thereby impacting on the highest level of 'health outcome', typically described by mortality, morbidity, disability, quality of life, and so on. Implicit in this three-level construct is the notion that changes generated in the different levels of outcome will occur according to different time scales, depending on the intervention and type of problem being addressed. For this reason, it is not unusual to take a decade to prove certain interventions are effective at the health outcome level, and even this may be difficult given the presence of confounding factors during the interim.

10 Nutbeam D. Evaluating Health Promotion: Progress, Problems and Solutions. *Health Promotion International* 1998;13(1):27-44.

- 7 For a health promotion programme to succeed, there must, first and foremost, be an effective intervention. Formative evaluation will examine how well the intervention has achieved the planned changes or set objectives. Then, every aspect of the intervention must be carried out properly to achieve the expected results. Process evaluation will provide the information that the programme has indeed been implemented as planned. For some programmes, outcome evaluation may not be required so long as the programme has been conducted as planned, and the expected results will follow. For example, it will not be necessary to evaluate success of a tobacco control programme since inevitably fewer people will die from lung cancer if there is a reduction in smoking uptake and prevalence. For other programmes, impact evaluation to examine knowledge, skill, attitudinal, behavioural, service use, environmental or policy changes will be required.

Finding an intervention that fits

- 8 Experience shows that programmes are more likely to be successful when the determinants of the health problem are well understood, where the needs and motivations of the target population are addressed, and the context in which the programme is implemented has been taken into account. The use of theories¹¹ that explain and predict health behaviour and behaviour change can help in the understanding of the nature of the problem, the needs and motivations of the target population and the context, thus promoting a better fit between problem and programme. Health promotion theories are broadly categorised according to the level of intervention – individual, interpersonal and community level.

11 Theory at a Glance, A Guide for Health Promotion Practice (second edition). National Cancer Institute US DHHS, 2005

- 9 Notable examples of theories that explain behavioural change in individuals include the Health Belief Model (HBM) and the Stages of Change (Transtheoretical) Model. The HBM addresses an individual's perceptions of the threat (such as susceptibility and severity) posed by a health problem, the benefits of avoiding the threat and factors influencing the decision to act (barriers, cues to act and self-efficacy). Since health motivation is the central focus, the HBM is a good fit for addressing problem behaviours that evoke health concerns, e.g. HIV infection. The Stages of Change Model, on the other hand, argues that behaviour change is a process rather than an event. People go through five stages of behavioural change from pre-contemplation, contemplation, preparation, action to maintenance. Those at different stages of change have different informational needs and benefit from interventions designed specifically for that stage. The model is circular since people do not systematically progress from one stage to the next, but enter the change process at any stage, relapse to an earlier stage, and begin the process again, until the model stops at some point. A typical example is quit smoking behaviour.
- 10 Theories at the interpersonal level assume individuals exist within, and are influenced by, the social environment consisting of family, friends, coworkers, professionals, and so on. Social Cognitive Theory (SCT) is a frequently used theory. SCT describes the ongoing dynamic process in which personal factors, environmental factors and human behaviour exert influence on one another. If individuals have a sense of self-efficacy, they can change behaviours even when faced with obstacles. If they lack the sense of control, they are not motivated to act and cannot persist through challenge. SCT has been used successfully in areas ranging from dietary change to pain control.
- 11 Community level models explore how social systems function and how to mobilise community members and organizations. They offer strategies that work in a variety of settings such as schools, worksites, community groups, and so on. A well-known example is the Diffusion of Innovations Theory which states that public health practitioners must attend to the reach, adoption, implementation and maintenance of programmes to optimise their efficiency. For example, cancer control programmes will not realise their full potential for improving population health until they are broadly diffused and disseminated. Diffusion of innovations that prevent disease and promote health requires a multilevel change process taking place in diverse settings. This theory has been used in the promotion of condom use, smoking cessation and use of new tests and technologies by health professionals.

- 12 In practice, no single theory dominates health education and health promotion, nor should it. Adequately addressing an issue may require more than one theory, and no one theory is suitable for all cases.

Health education is not health promotion

- 13 A distinction needs to be made between health education and health promotion. Health education, according to the Glossary of Public Health Technical Terms¹², represents consciously constructed opportunities for learning, for individuals, groups, organizations and communities which are designed to facilitate changes in behaviour towards a pre-determined goal and so as to improve health status. Common modalities include media publicity, pamphlet distribution, poster exhibitions and health talks. Health education has a long history in disease prevention characterised by emphasis on transmission of information, based upon a simplistic understanding of the relationship between communication and behaviour change. It is clear that information transmission alone cannot achieve impacts on behaviour change as it does not take into account social and economic circumstances of the target group. Only the educated and economically advantaged benefit as they possess personal skills and economic means to receive and respond to health messages communicated through conventional means. Despite strengthening of health education by the development and use of behavioural theories in the eighties, health interventions relying on communication of information have mostly failed to achieve substantial and sustainable results in terms of behavioural change, and have made little impact in terms of closing the gap in health status between social and economic groups in society. To be effective in improving health, more personal forms of communication, and community-based educational outreach, focused on better equipping people to overcome structural barriers to health are needed.

12 Glossary of Public Health Technical Terms. European Commission, 1996

Effective health promotion in action

- 14 One of the most successful health promotion stories can be found in North Karelia. Karelia used to be a low socio-economic area in the eastern part of Finland in the 1970s which relied on dairy farming as the major source of livelihood. People smoked heavily and consumed a high-fat diet with low fruit and vegetable intake. Finland had the world's highest death rate from cardiovascular diseases as a result of widespread and heavy smoking, high fat diet (e.g. heavy consumption of dairy products) and low vegetable intake. North Karelia had a heart-disease rate twice that of Finland as a whole at that time.
- 15 The North Karelia Project was launched with assistance from local and international experts. It was a large-scale community-based intervention, involving NGOs, consumers, schools, food industry, supermarkets, mass media, agriculture and social and health services. It included legislation banning tobacco advertising, the introduction of low-fat dairy and vegetable oil products, changes in farmers' payment schemes (linking payment for milk to protein rather than fat content), and incentives for communities achieving the greatest cholesterol reduction. Doctors and nurses were asked to help modify risk factors of their patients and clients. Opinion leaders in various villages have become project assistants and many health promotion activities took place at workplaces. People understood their health risk and took responsibility for their own health, whether by watching their diet or exercising.
- 16 The project caused significant reductions in risk factors and cardiovascular disease mortality by 73%. Success factors included a focus on risk factor reduction, multisectoral collaboration, population-based approach, community support and strong government commitment.

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Education Bureau
Leisure and Cultural Services Department
Kowloon Tong School (Primary Section)
St. Paul's College Primary School
Mr Justin LAW Kai-chun
Ms LAU Ka-yee
Mr Cliff LUI