HEALTH PROMOTION BLUEPRINT 2011 - 2015

MINISTRY OF HEALTH
BRUNEI DARUSSALAM

Ministry of Health

Together Towards A Healthy Nation

Empowering People Towards Healthy Living

PUSAT PROMOSI KESIHATAN

Kebawah Duli Yang Maha Mulia Paduka Seri Baginda Sultan
Haji Hassanal Bolkiah Mu'izzaddin Waddaulah ibni Al-Marhum Sultan Haji
Omar 'Ali Saifuddien Sa'adul Khairi Waddien, Sultan dan Yang Di-Pertuan
Negara Brunei Darussalam

Duli Yang Teramat Mulia Paduka Seri Pengiran Muda Mahkota
Pengiran Muda Haji Al-Muhtadee Billah ibni Kebawah Duli Yang Maha Mulia Paduka
Seri Baginda Sultan Haji Hassanal Bolkiah Mu'izzaddin Waddaulah,
Menteri Kanan di Jabatan Perdana Menteri

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Excerpts from His Majesty's Titah

"In health, we are committed in providing medical and health services that are of high quality and to ensure that all the people of Brunei Darussalam are able to enjoy the benefits of quality health care"

On the occasion of His Majesty's 50th Birthday, 15th July 1996

"On the matter of health, Our goverment is not neglecting to give due attention and emphasis to the importance of health promotion programmes, with the aim of raising awareness about the importance of leading healthy lifestyles as part of our efforts to raise the quality of life in the country."

On the occasion of His Majesty's 51st Birthday, 15th July 1997

"My government will always give priority to health issues. Our concept is to emphasize on the prevention of diseases rather than treatment. We do not wait for diseases to develop then administer treatment but as far as possible, to identify the causes of the diseases as preventive measure."

On the occasion of His Majesty's 57th Birthday, 15th July 2003

"Besides providing the necessary treatment, (the Health Services) cannot stop from guiding and advising the community to practise a healthy lifestyle, by taking proper diet, exercising and creating clean environments"

On the occasion of the 100 Years Anniversary of the Health Services and Launching of the Health Convention, 15th November 2007

"How do we go about taking care of health? Through various means such as monitoring foodstuff, maintaining cleanliness and exercise and the likes. This comes down, in the end, to an individual's self-discipline. However, self-discipline alone is inadequate because not everyone has the ability to do so and hence needs guidance and advice of relevant authorities."

On the occasion of His Majesty's Working Visit to the Ministry of Health, 20th October 2010

"In the field of health, aside from building up the nation's medical services capacity at the specialist level, efforts to improve health should also be intensified through prevention and awareness programmes. This includes strengthening efforts to completely eradicate the dangerous habit of smoking through the amendments made in the duty and excise of cigarettes, tobacco and tobacco products."

On the occasion of the New Year's Day, 1st January 2011

Foreword

Over the years, much progress has been made to increase the standards of living in Brunei Darussalam and to ensure the health and well-being of the population. As a result, many of our global health indicators are on par with most developed countries worldwide. In Brunei Darussalam free health care is made available and accessible to all citizens. A lot of resources have gone into strengthening the health care system particularly medical and health facilities.

However changing patterns in demography means that Bruneians are living longer than before, well past retirement age with all its associated health problems and risks. A modern sedentary lifestyle is now the norm nationwide; diets are richer in fats, affordable and high utilisation of cars as well as automated work processes and technology all contributes to physical inactivity. As a result, non-communicable diseases (NCDs) such as obesity, diabetes, heart disease and cancer are now the main disease burden in the country and so efforts must now be made to address this rising problem through disease prevention and health promotion. Indeed the importance of health promotion has been highlighted frequently by His Majesty Sultan Haji Hassanal Bolkiah Mu'izzaddin Waddaulah Ibni Al-Marhum Sultan Haji Omar 'Ali Saifuddien Sa'adul Khairi Waddien, Sultan and Yang Di-Pertuan of Brunei Darussalam, who has always advocated for health and healthy living.

The Health Promotion Blueprint has been developed in line with the Ministry of Health's strategic plan and also aims to fulfill one of the three aims outlined in Brunei Darussalam's National Vision for 2035, that is, for the country to be recognised for its quality of life. The Blueprint sets out a number of strategic objectives and measures which directly addresses the prevention and control of NCDs and the promotion of healthy lifestyle. It includes a broad spectrum of initiatives which impacts on policies across government and emphasises the importance of inter-sectoral collaboration and community participation. It identifies a number of strategic programmes and initiatives which addresses main risk factors for NCDs and the promotion of healthy lifestyle in the short to medium term. This Blueprint will also be reviewed and revised periodically according to prevailing needs and disease as well as risk factor trends.

I wish to take this opportunity to commend the efforts of all those who have contributed to the development of the Blueprint, in particular the National Committee on Health Promotion and the Health Promotion Centre (HPC) for taking a lead role in its inception. I am confident that with the HPC's strong leadership coupled with commitment, excellent teamwork and active partnership within and outside the Ministry of Health, the objectives in the Blueprint will be achieved. It is my greatest hope that with the implementation of the Blueprint, we will be able to realise the vision of the Ministry of Health – **"Vision 2035: Together Towards a Healthy Nation by 2035".**

Pehin Orang Kaya Johan Pahlawan Dato Seri Setia
Awang Haji Adanan bin Begawan Pehin Siraja Khatib Dato Seri Setia Haji
Mohd Yussof
Minister of Health

Preface

Health promotion plays a significant role in influencing individuals, groups and communities to change their way of life in order to enhance their health, live longer and healthier thus leading to a better quality of life. Health promotion is also a salient feature in the Ministry of Health's strategy to improve the general health of the population of Brunei Darussalam. The Ministry recognises the need for a comprehensive framework of actions to address current priority health issues. This is embodied in the Health Promotion Blueprint 2011-2015, and in the work of the Health Promotion Centre (HPC) which is the national infrastructure to oversee health promotion. The Health Promotion Centre was officiated by His Majesty Sultan Haji Hassanal Bolkiah Mui'zzadien Waddaulah Ibni Al-Marhum Sultan Omar'Ali Saifuddien Sa'adul Khairi Waddien, Sultan and Yang Di-Pertuan of Brunei Darussalam on 13 November 2008. The US$5 million Centre was funded by the Royal Dutch Shell in conjunction with His Majesty's 60th birthday.

The Health Promotion Blueprint 2011 – 2015 for Brunei Darussalam is a comprehensive document that informs, rationalises and outlines the key directions for the promotion of healthy living for the population of Brunei Darussalam over the next 5 years. Its development is guided by the decisions contained in the Ottawa Charter (1986) and Bangkok Charter (2005), in particular, to address the prevention and control of non-communicable diseases. It highlights the importance of a comprehensive, integrated, multi-sectoral approach at all levels in addressing the issue effectively. The Blueprint further enhances various existing actions and measures to encourage and promote healthy eating and physical activity as well as reduce smoking and obesity among Bruneians. It also includes developing relevant healthy living policies and programmes, capacity building and strengthening health promotion resources. Working with other agencies is also important in leveraging on existing policies, infrastructure and programmes to promote healthy lifestyles. This includes promoting measures such as nutrition labelling and encouraging the availability of healthy food choices and portion sizes and the monitoring of smoking prevention programmes and activities. The Blueprint also recognises the importance of involving relevant stakeholders directly in the planning, implementation and monitoring of the various programmes and Initiatives.

The Ministry is confident that, with the successful implementation of the initiatives laid out in the Blueprint, it will result in heightened awareness and can lead to a reduction in chronic non-communicable diseases in Brunei Darussalam, as well as better health outcomes for the population. Only in this way can our **'Vision 2035: Together Towards a Healthy Nation'** be realised.

Dato Paduka Haji Abd Salam bin Abd Momin
Permanent Secretary, Ministry of Health

Introduction

The World Health Organization's definition of Health is ***'A state of complete physical, mental and social wellbeing and not merely the absence of disease and infirmity'.*** There are many determinants that can affect health such as age, gender, genes, lifestyle choices as well as family, social, economic, environmental and political influences including the negative effects of globalization and increasing urbanisation.

To reach a state of complete physical, mental and social wellbeing, we must be able to identify and to realise health aspirations, to satisfy needs and to change or cope with the environment. Health must be seen as a resource for everyday life and not the objective of living.

Health Promotion is defined as ***'a process of enabling people to increase control over, and to improve, their health'*** (Nutbeam 1998). Through effective health promotion, individuals and communities can be helped to recognise and achieve their health goals. Promoting health is a collaborative effort between individuals, communities and government and not just the responsibility of the health sector as stated in the Ottawa Charter for Health Promotion (1986). The Ottawa Charter also defines 5 action areas for health promotion, namely:

- Building healthy public policy
- Creating supportive environments
- Strengthening community action
- Developing personal skills
- Reorienting health services towards prevention

These actions were further reaffirmed in the Jakarta Declaration on Leading Health Promotion into the 21st Century (1997) which called for actions to:

- Promote social responsibility for health
- Increase investment for health development
- Consolidate and expand partnerships for health
- Increase community capacity and empower the individual
- Secure an infrastructure for health promotion

Emphasis on using a multi-sectoral approach in health promotion was adopted in the Bangkok Charter for Health Promotion (2005). The Charter identifies major challenges, commitments and actions needed to address public health in a globalised world. It provides a new direction to health promotion by calling for policy coherence as well as investment and partnering across governments, international organisations, civil society and the private sector.

Therefore, health promotion plays a vital role in reducing the negative impact and consequences of unhealthy living. Health promotion strategies need to focus on comprehensive, integrated and multi-sectoral approaches that take into account the social, economic and cultural determinants of health. This requires participation of all relevant stakeholders within and outside of the health sector. Studies have shown that these strategies are effective in controlling and reducing unhealthy lifestyle that contributes to the development of diseases including non-communicable diseases (NCDs).

The global growth of these NCDs is becoming one of the major challenges in the 21st century that needs to be addressed. WHO estimated that without action, total deaths from chronic diseases will increase by 17% between 2005 and 2015. Chronic diseases, which include heart disease, stroke, cancer, diabetes and chronic respiratory diseases claim 35 million lives every year and contributes to 60% of all deaths globally, of which 80% occur in low and middle-income countries. NCDs undermine global economic development leading to a worsening of poverty and illnesses.

NCDs also affect every aspect of life and over time, can cause further complications leading to deterioration in quality of life, participation in activities and work performance. They contribute to increasing health care costs as well as the psychological and socio-economic impacts to the families and carers.

The risk factors of NCDs are established and well known, such as unhealthy diet, physical inactivity, alcohol and tobacco use (see figure 1, Understanding NCDs, Situational Analysis, Page 9). Preventing or delaying illness and death from chronic diseases is possible. At least 80% of all cardiovascular diseases and Type 2 diabetes and over 40% of cancers could be avoided through healthy diet, regular physical activity and avoidance of alcohol and tobacco use.

Ageing populations and the tendency for people to live with one or more chronic conditions for decades, places new, long-term demands on health care systems. Not only are chronic conditions projected to be the leading cause of disability throughout the world by the year 2020 but if not successfully prevented and managed, they will become the most expensive problems faced by our health care systems.

In Brunei Darussalam, health indicators are generally on par with those of other developed countries with an average life expectancy of 76.6 years for males and 79.8 years for females in 2008.

Selected Health Indicators for Brunei Darussalam 2005 - 2008

	2005	2006	2007	2008
Crude Birth Rate (per 1,000 Popn.)	18.7	17.0	16.2	16.1
Total Fertility Rate (per Women (15-49)	2.0	1.8	1.7	1.7
Crude Death Rate (per 1,000 Popn.)	2.9	2.9	3.0	2.7
Infant Mortality Rate (per 1,000 LBs.)	7.4	6.6	7.6	7.0
Under 5 Mortality Rate (per 1,000 LBs.)	9.4	9.2	9.5	9.5
Maternal Mortality Ratio (per 100,00 LBs.)	14.4	15.3	15.8	0.0
Life Expectancy At Birth - Male	75.2	75.9	75.2	76.6
Life Expectancy At Birth - Female	77.8	77.5	77.8	79.8

Note:

Popn.	Population
LBs.	Live-births
(#)	Census in 2001
Red Text	Millennium Development Goals (MDGs) Indicators
*	as per registered and published by Birth, Death and Adoption Section, Immigration and National Registration Department, not accounting for misclassification.

Likewise, the health problems faced and in particular, NCD patterns, reflect the global trend. For over ten years now, NCDs, particularly cancer and heart diseases, have been reported as the leading causes of death in the country.

With regards to risk factors for NCDs, the 1st National Health and Nutritional Status Survey (1st NHNSS) in 1997 showed that 44.5% of the subjects were either overweight or obese. More recently, preliminary findings from the Integrated Health Screening and Health Promotion Progarmme for Civil Servants (2007 – 2009) have shown that:

- 64.4% of participants were either overweight or obese
- 55.4% have high fasting blood cholesterol levels
- 14.5% have high fasting blood glucose levels
- 14.8% have high blood pressure

The 2nd National Health and Nutritional Status Survey (2nd NHANSS), is currently being implemented and results of Phase 1 is due by mid 2012. Meanwhile, data from the School Health Services annual anthropometric measurements of all students from Years 1, 4, 6 and 8 in the country in 2009, have shown that 14.8% students were overweight and 13% were obese.

Actions to prevent NCDs should therefore, focus on the prevention and control of these risk factors in a comprehensive, integrated and holistic manner as well as addressing their environmental, economic, social and behavioural determinants. Strategies should aim at both reducing the risk factor levels in the population and also directed at high-risk individuals to get the most health gains. Experience indicates that the success of community-based interventions requires appropriate legislation, supportive policy decisions, inter-sectoral collaboration with other government agencies, NGOs, industries and private sector, community participation and health care reforms.

At the national level, an inter-sectoral mechanism on health promotion already exists, that is, the National Committee on Health Promotion. This multi-sectoral committee is currently chaired by the Minister of Health and its members include representatives from several government agencies, non-government agencies and the private sector.

The development of the Health Promotion Blueprint 2011 – 2015 is a crucial step to formalising a national response to the increasing burden of NCDs and its risk factors in the country. The Blueprint has been formulated in consensus with relevant stakeholders, from both within and outside of the Ministry of Health, to improve the health of the nation through a holistic approach. This document accords priority to the prevention and control of NCDs especially cancer, diabetes and cardiovascular diseases in Brunei Darussalam. It particularly focuses on their associated risk factors, namely, obesity, unhealthy diet, physical inactivity and tobacco use. These risk factors, if not addressed, have potentially serious implications on the health of the population as well as on the social and economic development of the country.

The Blueprint proposes a strategic framework of objectives, initiatives and targets within a timeframe that supports one of the 5 strategic themes of the Ministry of Health's strategic plan -'A Nation that Embraces and Practises Healthy Lifestyle'. It will also ultimately fulfill one of the aims outlined in Brunei Darussalam's National Vision for 2035, that is, for the country to be recognised for its high quality of life. The formulation of the Blueprint is also in line with a number of WHO policy documents responding to the NCD epidemic. These include the Global Strategy for the Prevention and Control of NCDs in 2000 and the Global Strategy on Diet, Physical Activity and Health in 2004.

In the Blueprint, four strategic objectives have been identified, namely:

1. Establishing and strengthening health in all policies across Government, where relevant public policies will need to be strategically aligned and more inclusive of health and well-being outcomes;

2. Developing effective, quality and innovative health promotion programmes, particularly to address risk factors for NCDs;

3. Enhancing inter-sectoral collaboration and partnership between Government agencies, NGOs, private sector, civil societies and communities in the implementation of specific initiatives; and

4. Developing and enhancing skills and competencies in health promotion.

The initiatives proposed in this Blueprint are also in line with the Health Promotion Centre's mission of 'Empowering People Towards Healthy Living' and address both of its strategic themes, which are:

1. Excellence in Health Promotion
2. Healthy Communities

Many challenges and barriers will be encountered in the implementation of the Blueprint but with perseverance, dedication and commitment by all parties concerned, these can be overcome. The Blueprint will be continuously reviewed and revised according to prevailing needs and health trends, and will continually evolve and be dynamic to also address other pertinent issues such as adolescent health, mental health, oral health and healthy ageing.

Although NCDs are the main challenges currently addressed in this Blueprint, the Ministry of Health will also continue to remain vigilant against emerging and re-emerging infectious diseases. Much effort has already been done in the prevention of communicable disease through public health laws and legislation, national immunisation and other preventive programmes. There is also a need to ensure the continuation of existing health education programmes and other important issues such as personal hygiene, environmental sanitation and cleanliness as well as vector control activities.

Lastly, it is also essential that a well-coordinated and integrated mechanism be in place in the health care system, where curative, preventive, promotive and rehabilitative services particularly aimed at NCDs, are provided at the primary, secondary and tertiary levels. Together with the initiatives outlined in the Blueprint, this will help ensure the successful prevention and control of NCDs in the country.

Situational Analysis of Non-Communicable Diseases (NCDs)

1. Understanding Non-Communicable Diseases (NCDs)

NCDs or non-communicable diseases are caused by a number of risk factors (Figure 1). The common risk factors: physical inactivity, unhealthy diet and tobacco use are largely modifiable and can be influenced by a combination of interventions.

The occurrence of the intermediate risk factors of raised blood pressure, raised blood sugar, abnormal blood lipids and overweight/obesity can be a manifestation of the presence of the combined modifiable and non-modifiable risk factors, age and heredity, within the individual. The presence of these risk factors, if not controlled, would cause heart disease, stroke, cancer, chronic respiratory diseases and diabetes. If these risk factors were eliminated, at least 80% of heart disease, stroke and Type II diabetes and over 40% of cancer would be prevented (WHO fact sheet 2).

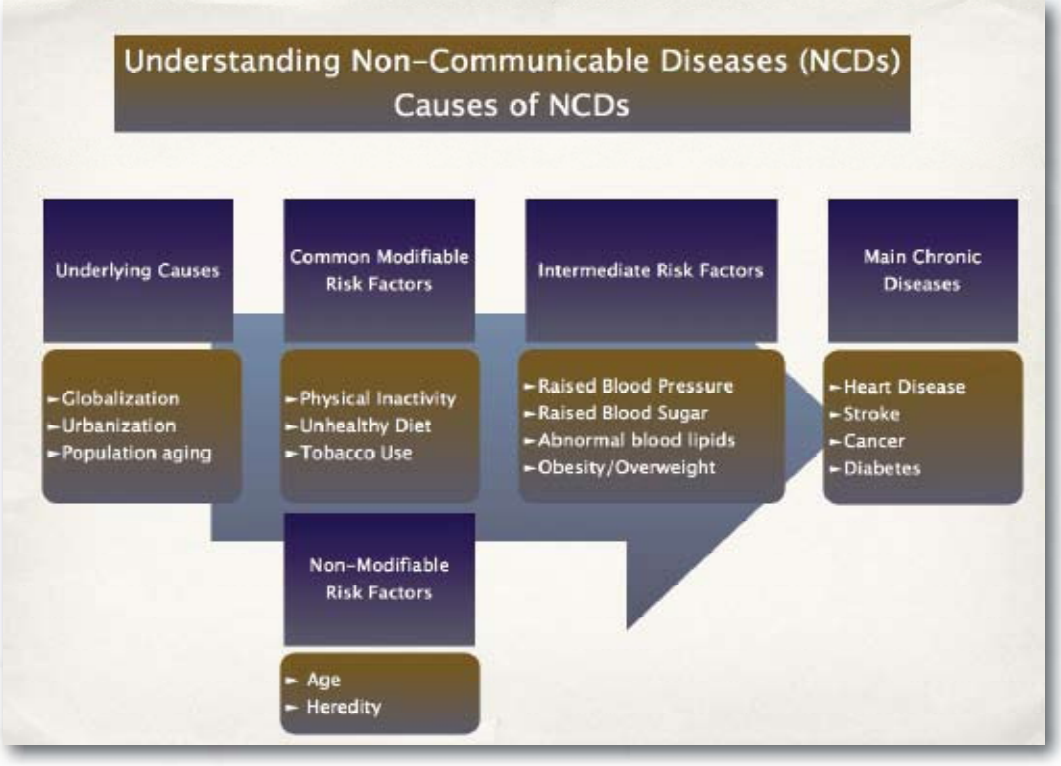


Figure 1: Understanding NCDs - adapted from World Health Organization, Preventing Chronic Diseases : A Vital Investment

2. Status Of NCDs Globally And Locally

NCDs are considered a major public health concern worldwide. They account for 60% of total deaths globally (with 40 million deaths estimated occurring annually), and contributes 43% to the universal burden of disease (2001). The total number of people dying from NCDs is double that of all infectious diseases (including HIV/AIDS, tuberculosis and Malaria), maternal and perinatal conditions, and nutritional deficiencies combined (see Figure 2).

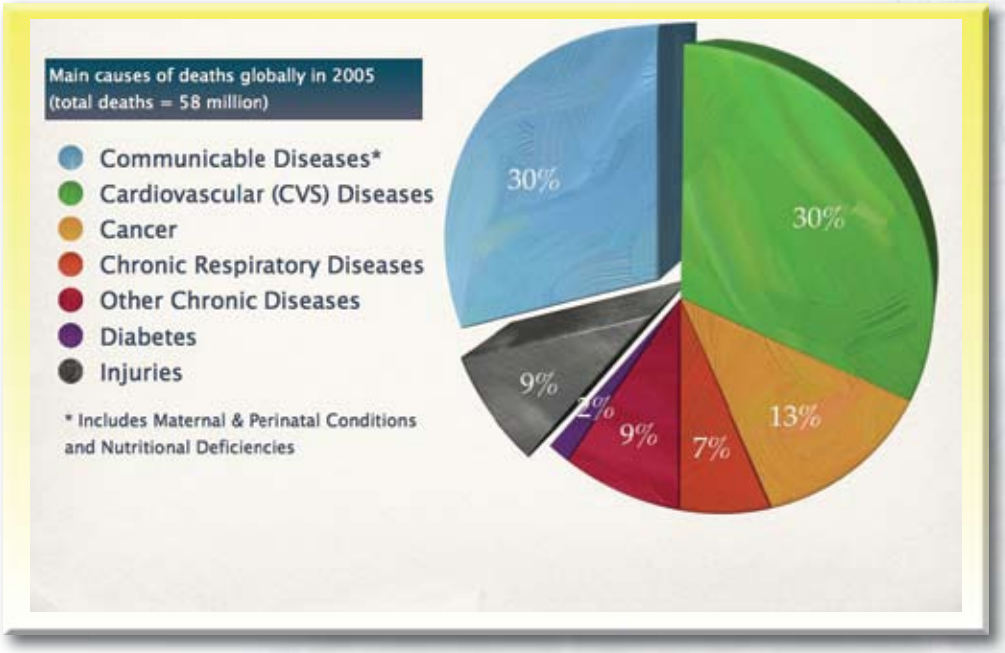


Figure 2: Projected main causes of deaths, worldwide, all ages, 2005
Source: World Health Organization, Preventing Chronic Diseases : A Vital Investment

It is projected that these figures could increase to as high as 73% of total deaths and 60% of disease burden respectively by 2020. The majority of these deaths and disease burden would be borne by underdeveloped and developing countries. Though Brunei Darussalam is a developed country, a similar trend of increasing numbers of NCD cases can be seen. For example, in 2009, more than half (58.04%) of total deaths in the country were caused by NCDs.

The majority of these NCDs are linked by common preventable risk factors related to lifestyle which include unhealthy diet, physical inactivity and tobacco use. Data from 2005 to 2009 show that NCDs, particularly cancer, diseases of the heart, diabetes and diseases of the vascular system have consistently occupy the top-most common causes of deaths in the country (Table A).

Overall, NCDs have increased in Brunei Darussalam over the years and are of significant socio-economic importance due to the potential loss of healthy life-years and premature death and disability attributable to these diseases.

Table A: Top 4 Leading Causes of Death in Brunei Darussalam in absolute numbers (2005- 2008)

	Cancer	Heart Disease	Diabetes Mellitus	Cerebrovascular diseases (stroke)
2005	215	175	117	71
2006	220	186	116	101
2007	215	177	139	86
2008	201	210	97	92

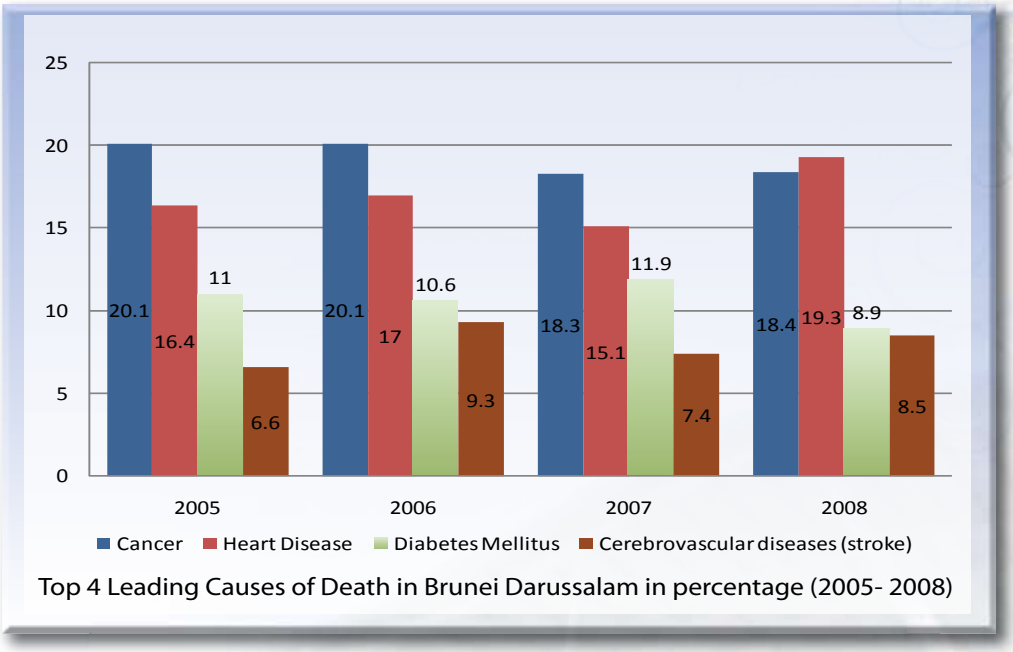


Figure 3: Top 4 Leading Causes of Deaths in Brunei Darussalam, 2005 to 2009
Source: Health Information Booklet, 2009 Ministry of Health, Brunei Darussalam

3. Impact of Major Modifiable Risk Factors

Major causes of deaths worldwide are also attributed to modifiable risk factors for NCDs (See figure 4). In 2004, WHO estimated that almost 8 million deaths alone were due to high blood pressure.

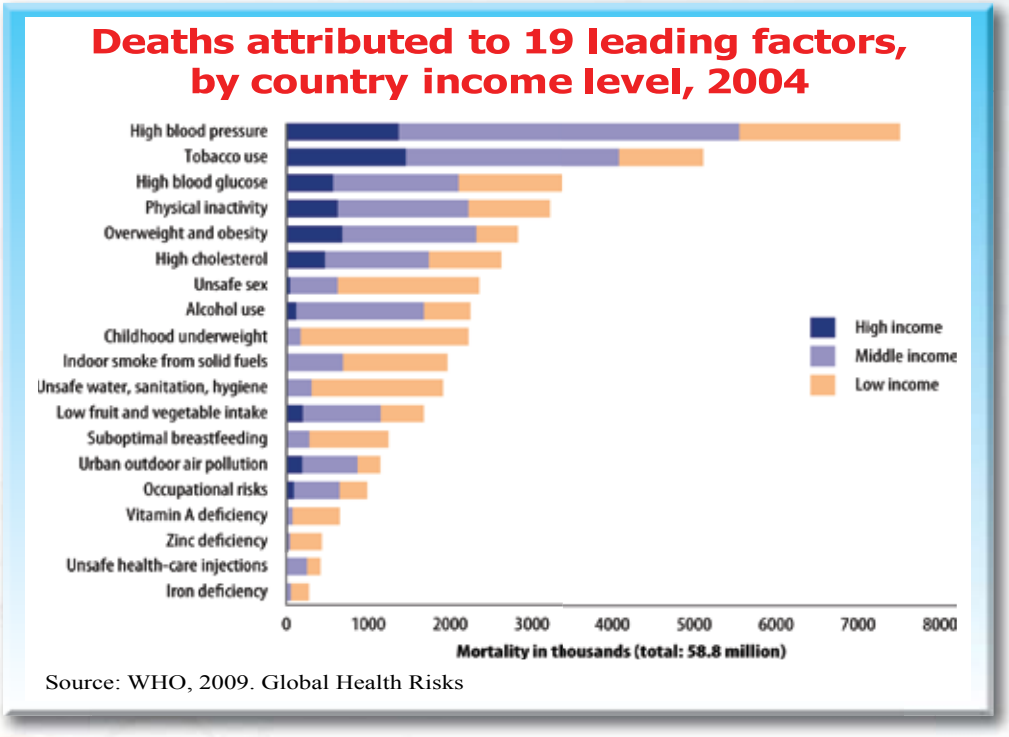


Figure 4: Deaths attributed to 19 leading factors by country income level

I. Physical Inactivity

WHO estimated in 2005 that physically inactive lifestyles accounted for 3.3% of deaths and 19 million Disability Adjusted Life Years (DALYs). It is recognised as an important risk factor for multiple causes of death and chronic morbidity and disability. The apparent protective effect of being active was identified through many studies of occupational activity over many years.

Today, there is a significant amount of literature quantifying and qualifying the role of physical inactivity as a risk factor and worldwide interest and efforts to increase levels of participation. The independent causal relationship between physical inactivity and ischaemic heart disease, ischaemic stroke, type 2 diabetes, colon cancer and breast cancer is well established.

For example, globally physical inactivity accounted for 21.5% of ischaemic heart disease, 11% of ischaemic stroke, 14% of diabetes, 16% of colon cancer and 10% of breast cancer (Figure 5). Furthermore, the same study shows small differences between males and females, due in part to differences in level of exposure and to different distribution of events between men and women.

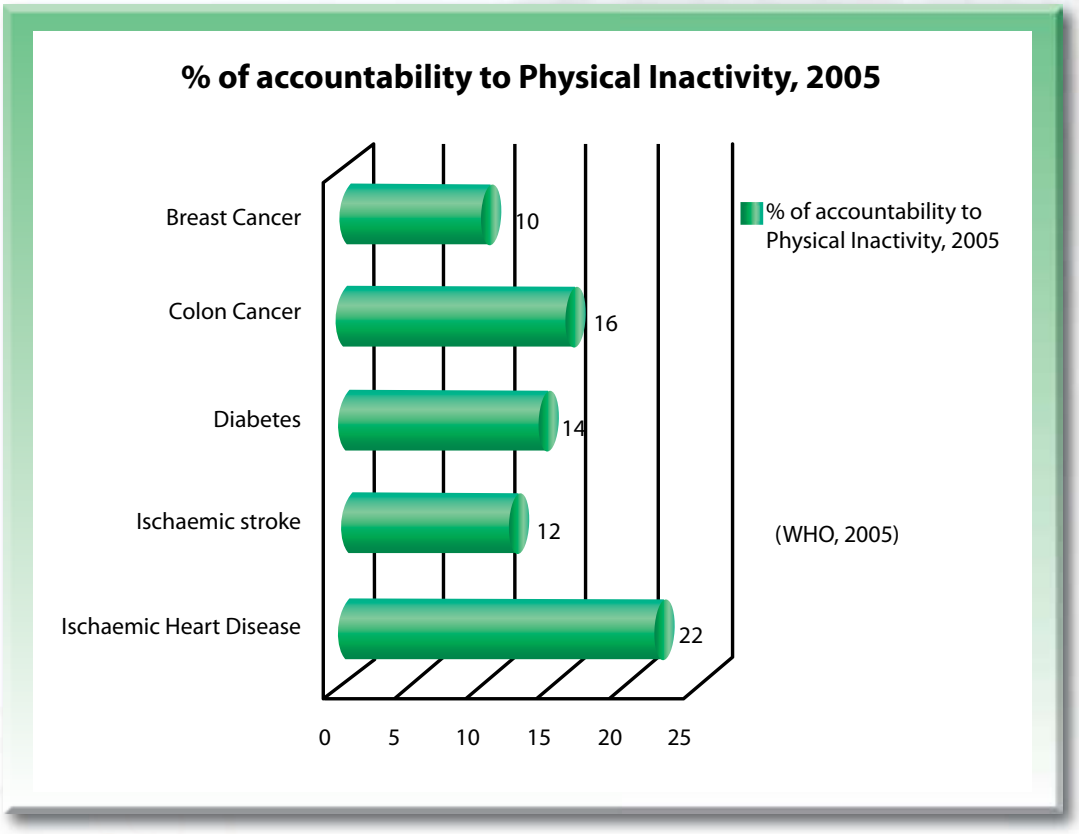


Figure 5: Percentage accountability attributed to physical in activity of various NCDs, WHO fact sheet 2005

II. Unhealthy Diet

An unhealthy diet is typically high in processed foods, which provide few nutrients and dietary fibre, but have significant amounts of calories, fat, sugars and sodium. Consuming an unhealthy diet increases the risk of developing chronic diseases, such as cancer, heart diseases and diabetes. Unhealthy diet may also mean low fruit and vegetable consumption which increase the risk for several NCDs. It is estimated that up to 2.7 million lives could potentially be saved each year if fruit and vegetable consumption were sufficiently increased.

The population of overweight people has expanded rapidly in recent decades off-setting the health gains from the modest decline in hunger. The number of overweight people nearly rivals the number of underweight people. While the world's underfed population has declined slightly since 1980 to 1.1 billion, the number of overweight people has surged to 1.1 billion. The relationship between excess body-weight gain and Type II diabetes is now considered so strong that there is increasing use of the term "diabesity" as a unifying concept.

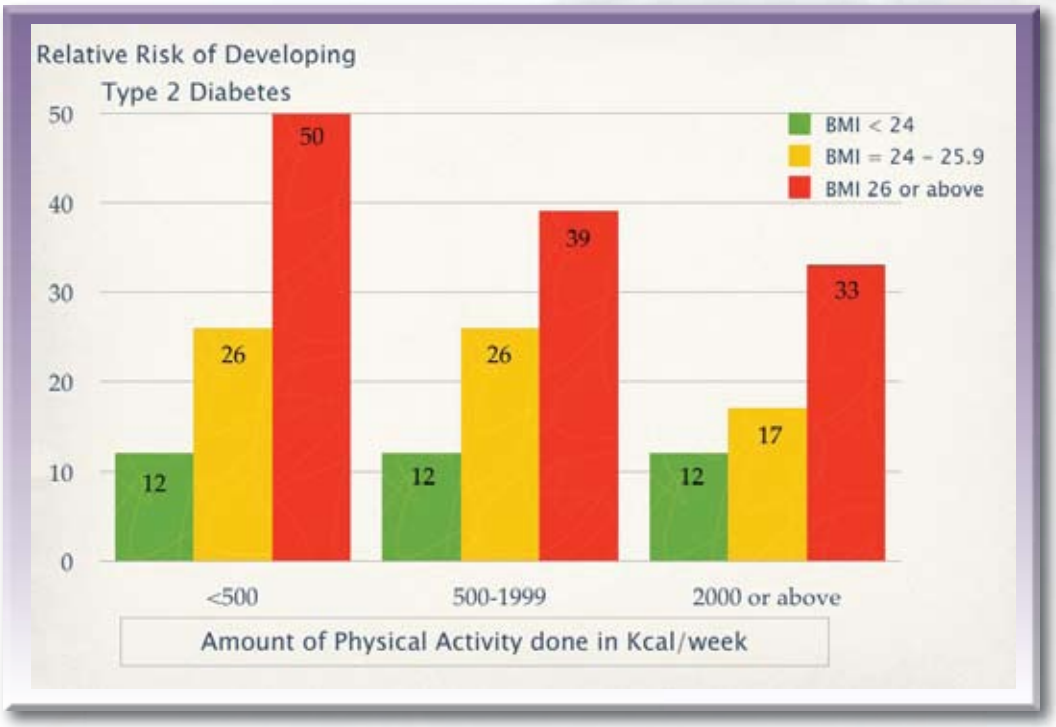


Figure 6: Percentage accountability attributed to physical in activity of various NCDs, WHO fact sheet 2005

As shown in figure 6, not only is there a close relationship between higher body mass index (BMI) and the risk of developing Type II diabetes, (those ≥ 26 BMI have a 50% chance of developing Type II diabetes) but weight gain itself has also been identified as a particularly important risk factor. Studies have shown that the impact of weight gain is markedly enhanced if it occurs in young adults who were already overweight or obese when they enter adulthood.

In Brunei Darussalam there is a similar trend in the number of overweight and obese individuals over the years. Routine data from the School Health Services and Maternal and Child Health Clinics' data showed the prevalence of overweight and obesity among children in the country has generally increased over the years (Table 1 & 2).

Table 1: Nutritional Status of Children in Brunei Darussalam, (2005 - 2009)

School children in Years 1, 4, 6 & 8	Percentage (%)				
	2005	2006	2007	2008	2009
Normal	69.4	70	64.9	69.8	68.9
Overweight	14.7	13.7	16	13.3	14
Obese	1.8	11.9	14.1	12.3	12.4
Underweight	4.1	4.4	5.1	4.5	4.7

If these overweight and obese children are to stay overweight and obese, they are more likely to develop NCDs like diabetes and cardiovascular diseases when they grow to adulthood as mentioned above.

Table 2: Nutritional Status of Children below 5 years old in Brunei Darussalam, (2005 - 2009)

Children attending MCH Clinic under the age of 5 years	Percentage (%)				
	2005	2006	2007	2008	2009
Normal	36.0	33.0	33.5	40.1	42.0
Overweight	57.2	60.1	60.3	54.3	48.9

Similarly, there is also an increased trend on the number of overweight or obese among adults in the country. More than half of the civil servants in the country were overweight or obese (≥25 kg/m2) and high level of blood cholesterol, as shown by the preliminary result of the Integrated Health Screening and Health Promotion Programme for Civil Servants conducted in 2007 (Figure 7). Studies have shown that there is a higher chance of developing non-communicable diseases in individuals with one or more of the risk factors.

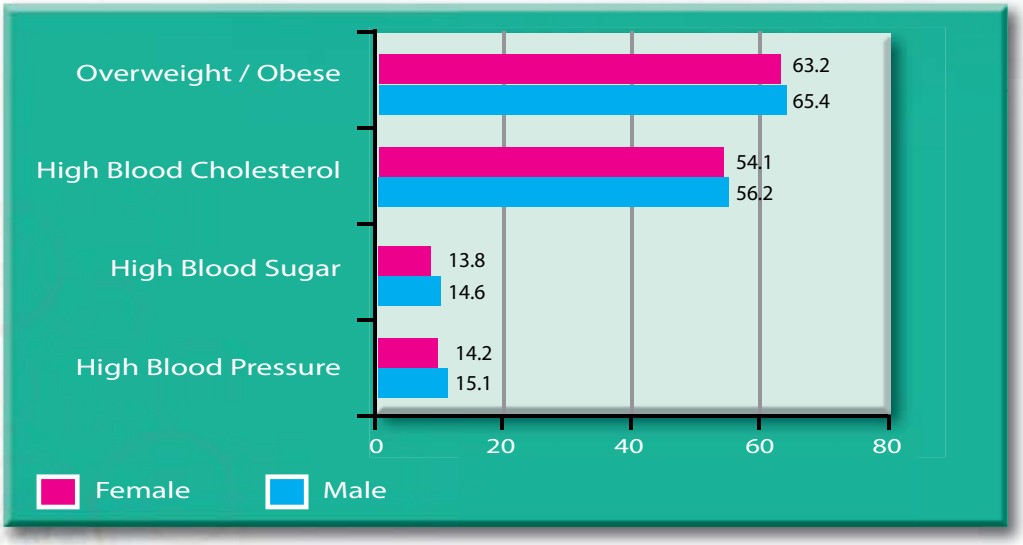


Figure 7: Relationship between diabetes and higher Body Mass Index (BMI)

In summary, the following are some of the adverse effects of unhealthy diet:

i. Development of atherosclerosis – where a plaque of cholesterol in the blood vessels cause impediment to blood flow or may cause rupture to the blood vessel and cause an acute heart attack. The accumulations of cholesterol can begin as early as childhood and adolescence.

ii. Development of osteoporosis – where a bone becomes fragile and can break easily - this is associated with inadequate intake of calcium.

iii. Overweight and obesity – influenced by poor diet and inactivity and these are significantly associated with an increased risk of diabetes, high blood pressure, high cholesterol, asthma, joint problems and poor health status.

iv. Poor intellectual performance seen in children not eating breakfast.

v. Development of certain types of cancer is associated with diets that are too high in fat and low in fibre-containing foods.

vi. Stress and low self-esteem is also associated with poor diet.

III. Tobacco and Smoking

The World Health Organization reports that most people start smoking before the age of 18, almost a quarter of these individuals begin using tobacco before the age of 10. An estimated 1.3 million people smoke worldwide and 84% of these smokers live in developing countries.

At present, 47.5% of smokers are men compared to 10.3% of women. Smoking has been predominantly associated with male culture. However, the rate of women smokers is rising and this is observed as well locally during routine enforcement activities.

Smoking has been associated with increased mortality from several diseases. It is known to be responsible for 90 percent of all lung cancer cases, 75 percent of chronic bronchitis and emphysema and 25 percent of ischaemic heart disease globally.

Relatively, the impact of tobacco and smoking is greatly manifested in the Disability – Adjusted Life Years (DALYs). This is the total years of potential life lost due to premature death and the years of productive life lost due to disability. In short, the premature death and disability brought about by NCDs and in this case as a consequence of tobacco use. Generally more premature deaths and disability occur in males than in women because of the high prevalence of male smokers than women.

In Brunei Darussalam, the 2001 Population Census showed that there were 40819 ever-smokers (15.1%) with the biggest group of smokers amongst 20-39 years old (26,188 individuals).

Role of the Health Promotion Centre (HPC)

The focus of HPC is on promoting good health and well-being and preventing ill health. It is the leading agency for the coordination and monitoring of initiatives laid out in the Health Promotion Blueprint 2011 – 2015. It will also be directly responsible for the planning, development and evaluation of some of the programmes identified. By adopting various multisectoral strategic approaches to promote health, HPC has many important roles to play which include the following:

1. Leadership and advocacy role
2. Supportive and facilitating role
3. Empowerment role

His Majesty The Sultan and Yang Di-Pertuan of Brunei Darussalam signing the plaque to officiate the opening of the HPC on 13 November 2008

1. Leadership and advocacy role

Apart from driving some of the strategic initiatives in the Blueprint, HPC is responsible for advocating and influencing policy changes to integrate the promotion of healthy lifestyle into policies across government ministries and departments, and other agencies. It is hoped that such policy changes can also help create supportive environments for behaviour change. For this, HPC needs to develop innovative mechanisms and processes to help coordinate the subsequent actions needed for the various agencies involved.

Advocacy activities must be based on scientific evidence. Such evidence can be obtained through various sources including existing surveillance systems, which in turn, can inform policymaking.

2. Supportive & facilitating role

One of the core functions of HPC is to help people adopt behaviour change to lead healthier lifestyles. Therefore, HPC need to draw diverse groups together to help improve the social, cultural and environmental conditions to enable these changes and sustain health. This is achieved by working in collaboration with government, NGOs, private sector, communities and individuals within and outside of the health arena including Education, Religious Affairs, Urban Planning, Youth and Sports and others.

HPC's role therefore, includes the development and provision of various programmes and facilities as well as provision of necessary technical support and training to facilitate behavior change. Current programmes and facilities provided for the public, include:

- a Healthy Lifestyle Clinic (for weight management)
- the Integrated Health Screening and Health Promotion Programme for Civil Servants
- Health Galleria
- Youth Outreach Programmes
- Mukim Sihat Programme
- various other healthy lifestyle activities

HPC will also need to work with other departments in the Ministry of Health to develop a comprehensive system for the surveillance of NCDs. This includes the identification and definition of key indicators of NCDs, their determinants and risk factors; the collection of relevant data and indicators; and the management and analysis of this data. This surveillance system is also required for the monitoring and evaluation of health promotion programmes and activities.

To strengthen the preventive aspects of patient care, HPC needs to work with and support health care providers at all levels in the health care system. This is to ensure that holistic care can be given to all patients, particularly those with NCDs.

3. Empowerment role

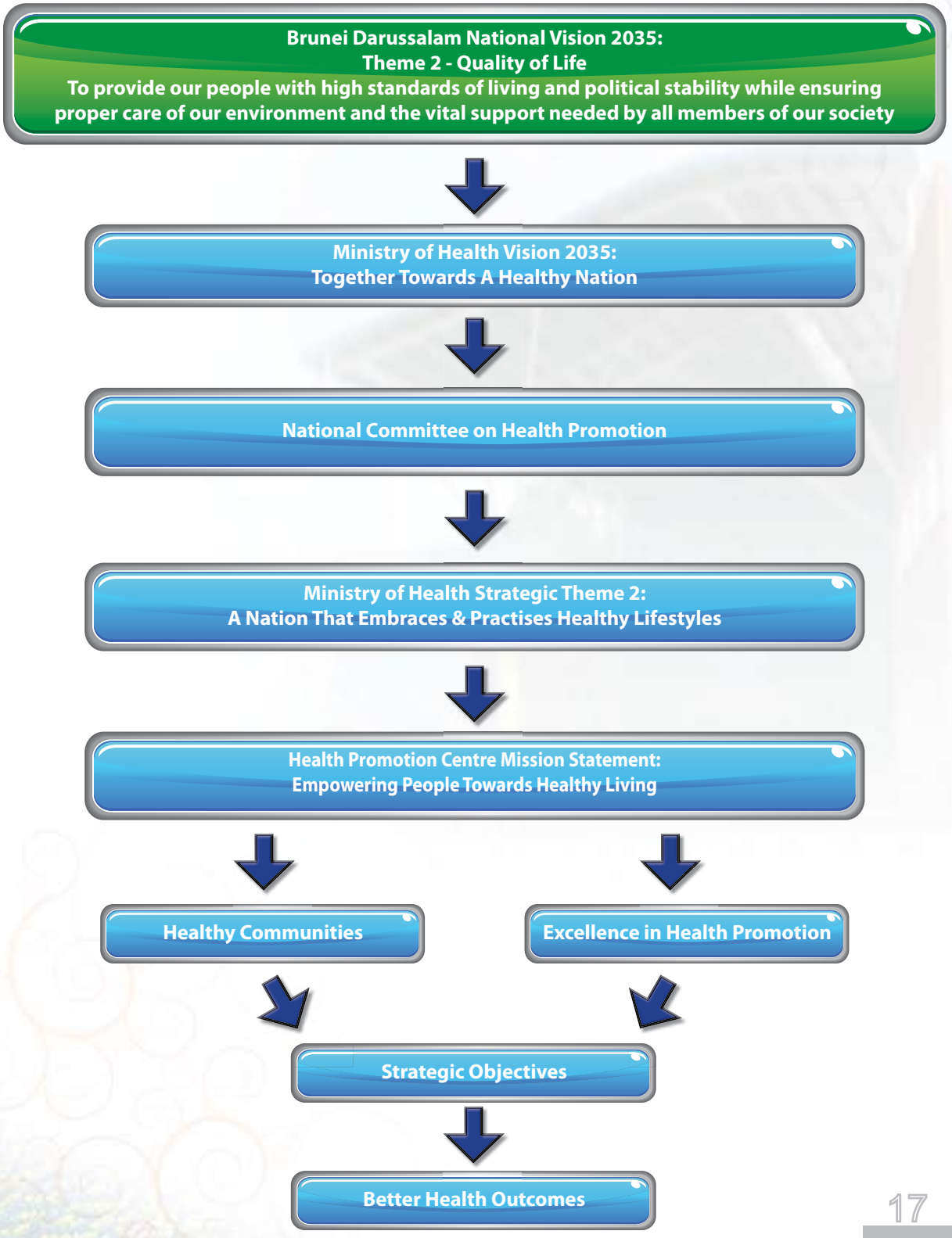
Health promotion is about empowering people to increase control over, and to improve their health. To empower people, measures to improve the social, economic, cultural and physical environments must be developed or strengthened. Apart from that, measures must also be in place to help develop the skills and competencies of individuals, community and service providers alike. In this way, communities and individuals can then be empowered to draw on their social and personal resources as well as physical capacities to promote their health and not just rely on the health services. HPC can help with the empowerment process through all the actions mentioned above.

General Director with HPC officers and Mukim Sengkurong Consultative Council members, together organising Mukim Sihat Sengkurong

The Honourable Minister of Health with HPC staff and members of BDAC during World AIDS day

Children being taught at HPC about healthy diet through interactive education

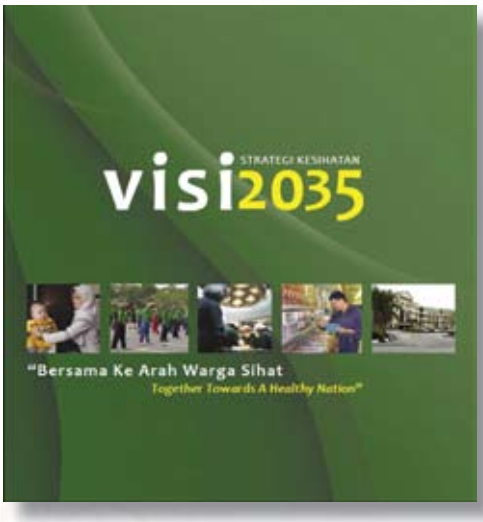
Strategic Framework of the Health Promotion Blueprint 2011-2015

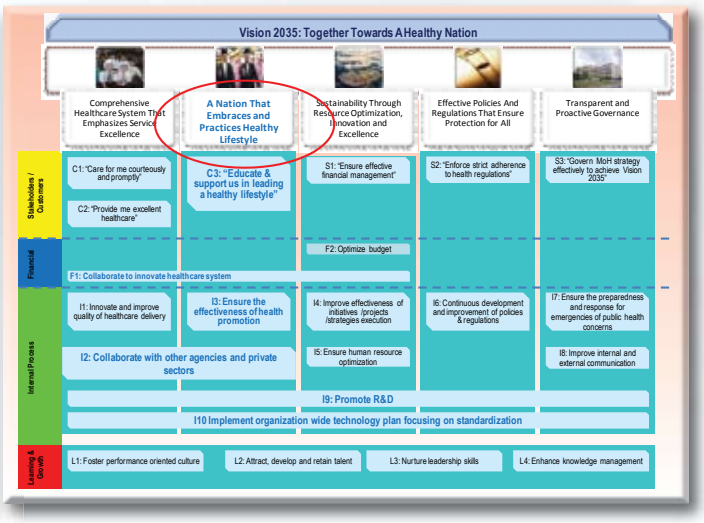


Strategic Objective, Initiatives & Time Frame

Strategic Objective 1:
Establish & Strengthen Health in All Policies (HiAP)

Initiative	Time-Frame	Leading Agency
Review terms of reference, roles & membership of National Committee on Health Promotion so as to be more effective	2011-2012	Health Promotion Centre (HPC)
Compile & review current policies that directly & indirectly impact on healthy living (Ministry of Health & other ministries)	2011-2012	Dept of Policy & Planning (DPP) & HPC
Formulate health-related policies in all ministries	2011-2015	DPP & HPC
Review feasibility of legislation related to healthy living, e.g. healthy diet, compulsory periodic screening for all workers	2014	HPC & MOH





Ministry of Health Strategic Plan Vision 2035 document.

Strategic Objective 2:
Develop Effective, Quality & Innovative Health Promotion Programmes
i) To Reduce Obesity

Initiative	Time-Frame	Leading Agency
Develop Obesity Action Plan with relevant stakeholders (based on WHO's Diet & Physical Activity Strategy - DPAS) a. Review/strengthen weight management programmes in Ministry of Health & in partnership with private sector b. Establish adolescent weight management programme with relevant stakeholders	2011-2013	HPC, Obesity Clinic RIPAS Hospital & School Health Services (SHS)

His Majesty The Sultan and Yang Di-Pertuan of Brunei Darussalam visiting the Healthy Lifestyle Clinic during the opening of the Health Promotion Centre

Strategic Objective 2:
Develop Effective, Quality & Innovative Health Promotion Programmes
ii) To Promote Healthy Diet

Initiative	Time-Frame	Leading Agency
Review & revise National Dietary Guidelines (NDG) and develop Brunei Darussalam's Recommended Dietary Allowances (RDA)	2011-2012	HPC, Community Nutrition Department (CND) & Dietetics Services (DS)
Revise and review National Infant & Young Child Feeding Programme	2011	HPC; Obstetrics & Gynaecology Services (O&G); Paediatric Services (Paed); Maternal & Child Health Services (MCH); Department of Dental Services (DDS)
Advocate and facilitate reduction of consumption of salt, sugar and fat in the population	2011-2012	HPC, CND & DS
Develop Food Standards	2011-2013	CND, DS & Food Quality & Safety Division (FQSD)
Enforce nutrition labelling, including legislation	2011-2013	CND, DS & FQSD

Local healthy food, the kind that those in health promotion want to encourage the general population to choose more regularly over unhealthy options

Strategic Objective 2:
Develop Effective, Quality & Innovative Health Promotion Programmes
iii) To Promote Physical Activity

Initiative	Time-Frame	Leading Agency
Develop evidence–based National Physical Activity Guidelines with relevant stakeholders	2011	HPC, MOH, Ministry of Defence, Ministry of Culture, Youth & Sports (MCYS), Ministry of Education (MOE) & Fitness Centres
Facilitate the implementation of National Physical Activity Programme	2011-2013	HPC & Dept of Youth and Sports (MCYS)

Strategic Objective 2:
Develop Effective, Quality & Innovative Health Promotion Programmes
iv) To Reduce Tobacco Use

Initiative	Time-Frame	Leading Agency
Review & assess Tobacco Control Programme with Tobacco Control Division (TCD)	2011	HPC & Tobacco Control Division (TCD)
Develop action plan on education communication aspect of Tobacco Control Programme	2011-2012	HPC & TCD
Conduct Global Youth Tobacco Survey (GYTS)	2012	HPC & TCD

Strategic Objective 3:
Enhance Intersectoral Collaboration & Partnership
i) To Promote Healthy Settings

Initiative	Time-Frame	Leading Agency
Advocate for 'Healthy Cities' approach to be used in BSB Masterplan (Municipal Board) & Urban Planning (Ministry of Development) together with DEHS	2011-2012	HPC, DPP & DEHS
Develop Healthy Workplace Programme for civil service & other stakeholders	2011-2015	HPC
Enhance community participation through the "Mukim Consultative Councils" Programme	2011-2015	MOH, District Office (Ministry of Home Affairs - MOHA), Mukim Consultative Council
Evaluate and strengthen Health Promoting Schools (HPS) Initiative	2013	HPC, School Health Services, DDS, Dept of Schools, Ministry Of Education
Establish 'Healthy Lifestyle Clubs' in all secondary schools and organize National Convention of Healthy Lifestyle Clubs	2011-2014	HPC, Dept of Schools, MOE
Conduct final phase of current Integrated Health Screening and Health Promotion Programme for Civil Servants	2011	HPC

On the occasion of His Royal Highness Prince Haji Abdul 'Azim's visit to the Healthy Lifesyle Club in Sayyidina Hasan Secondary School

Strategic Objective 3:
Enhance Intersectoral Collaboration & Partnership
ii) To Promote Networking

Initiative	Time-Frame	Leading Agency
Enhance collaboration & partnerships on healthy lifestyle programmes with NGOs, community groups & private sector e.g. Women's Council, Mukim Consultative Councils & financial institutions	2011-2015	HPC
Enhance collaboration & partnership on healthy lifestyle programmes with media & IT institutions	2011-2015	HPC
Develop collaborative programmes on Research & Training related to health promotion with institutions of higher learning e.g. UBD	2011-2015	HPC & MOH
Develop and collaborate with hawkers, restaurants, supermarkets & grocery stores on Healthy Food Choice Programme	2012-2013	HPC & CND

World Cancer day celebrations held in Jerudong Park on 13th February 2011, organised by the Ministry of Health in collaboration with the National Cancer Centre, Jerudong Park Medical Centre, JPMC

Strategic Objective 4:
Develop Health Promotion Skills & Competencies

Initiative	Time-Frame	Leading Agency
Strengthening HPC infrastructure and resources	2012-2015	HPC
Develop generic guidelines for proposal of any health promotion programmes	2011	HPC
Develop competencies & professional standards for Nurses, HEO & Allied Health Professionals in health promotion	2011-2013	HPC & MOH
Review & update primary school science & extra curricular activity (ECA) curriculum on health lifestyle topics	2011-2013	HPC, Curriculum Deptartment, Department of Co-Curriculum, MOE
Develop prepackaged weight management programmes for other agencies & groups	2011-2012	HPC & Obesity Clinic (RIPAS Hospital)
Develop STI Prevention Programme Training for school counselors & teachers	2011-2013	HPC, MOE & Brunei Darussalam AIDS Council (BDAC)

HPC staff training at a Health Communications Workshop

Goals for Strategic Objectives

STRATEGIC OBJECTIVES	INDICATORS	IMPACT/OUTCOME GOALS
1. Establishment and strengthening of Health in All Policies (HiAP) of Government	Total number of Ministries with health–related policies implemented	5% increments in the number of Ministries with health-related policies per year
2. Strengthening community and public/ private sector collaboration and partnership	Total number of collaboration and partnerships	5% increase in the number of collaboration and partnerships with other agencies in strengthening HP program implementation by 2015
3. Prevention and Control of NCDs	Percentage reduction of premature NCD-related mortality	5% reduction of premature NCD-related mortality by 2015

A discussion group during the Health Promotion Strategic workshop held in April 2010

Expected Outcomes and Benefits

It is expected that with the effective implementation of the strategies and initiatives laid out in the Blueprint, this will inevitably lead to positive health outcomes and other benefits. These anticipated outcomes and benefits are:

1. An increased awareness amongst the population of Brunei Darussalam on the importance of practising a healthy lifestyle, i.e., healthy diet, regular physical activity and not smoking, in order to prevent obesity and other NCDs particularly cancer, diabetes and cardiovascular diseases.

2. With this increased level of awareness, it is hoped that there would be a corresponding increase in the uptake of healthy behavior amongst the population, which in turn should lead to a reduction in the prevalence of chronic NCDs over time. As a consequence more people would be able to live longer and healthier as well as lead more productive lives while also enjoying a better quality of life.

3. With fewer NCDs cases, the costs of delivering healthcare should be reduced substantially and the resulting savings can be channeled to strengthening other preventive measures or other areas within the health care system or be used for further socio-economic development in the country.

4. A best practice model of promoting health to achieve optimal results and maximum health gains for the population could be developed and be used as an example to others.

5. A diverse and skilled workforce competent in health promotion and related work would be established. This core group of human capital, together with dynamic teamwork and spirit, could lead the way in ensuring the adoption of best practices in health promotion in the future and lay the foundation for more innovative strategies.

6. A more comprehensive surveillance system could be established to monitor and evaluate the progress and effectiveness of all the health promotion programmes and initiatives based on scientific evidence. This would better ensure the accountability and transparency of the processes and leads to better performance. Such a surveillance system would motivate the establishment of a Quality Assurance System which will address pitfalls and shortcomings to improve overall quality of work.

7. A research culture would be encouraged so that more effective and innovative ways of doing things can be developed to achieve performance excellence.

8. There would be better management of budgetary and other resources related to health promotion that would ensure a more efficient way of delivering results at optimal costs.

Challenges and Constraints

Based on current evidence, the burden of NCDs, especially cancer, cardiovascular diseases and diabetes, in Brunei Darussalam is increasing. Without definitive action to address this problem, it will continue to grow resulting in more people having poorer quality of life and dying prematurely. This will have a negative socio-economic impact on families, communities and the country as a whole.

Evidence has shown that appropriate health promotion strategies are effective to combat the increasing rise of NCDs. To manage this challenge effectively and efficiently, all stakeholders and partners must be convinced that only a comprehensive, integrated multi-sectoral approach has the best chance of success in the prevention and control of NCDs. This requires combining population-wide approaches that seek to reduce the risks of the general population with strategies that target individuals at high risk or with established disease together with addressing the socio-economic determinants that affect health directly or indirectly.

Many factors have been identified which potentially may affect the outcome of this approach, some of which are:

1. The needs of the target population and individuals as well as the requirements of the stakeholders and partners;

2. The resources, including human capital, financial, technical, physical and other infrastructure, and their management, that are needed for all stakeholders in health promotion to carry out their tasks effectively;

3. The process of planning, implementing, monitoring and evaluating the initiatives and programmes.

It is expected that many challenges and constraints will be encountered and therefore, strategies need to be developed to overcome or reduce barriers such as:

1) Misconception on health promotion
2) Integrating health promotion in the management of NCDs
3) Other factors affecting health promotion
4) Insufficient human capital and competencies in health promotion
5) Funding

1) Misconception about health promotion.

Health promotion is also defined as "any combination of educational and environmental supports for actions and conditions of living conducive to health" as defined in the Ottawa Charter for Health Promotion (WHO 1986). As such, health promotion is not just 'education and the provision of information'; it is a continuing process that involves action at every level of society and not just a series of 'ad hoc' educational activities.

Therefore, it will be a huge challenge to change the mindset of all stakeholders and to convince them that everyone has an important role to play in promoting health, from policy-makers and leaders in Government, organised medical and health services, non-government and private organisations to communities and individuals. Communities and individuals need to be empowered to practise healthy living. This task cannot be accomplished by any one single organisation but need the active participation of all stakeholders who should have a shared responsibility for health.

2) Integrating health promotion in the management of NCDs

Traditionally organised medical and health services have implemented a range of services to tackle NCDs including hospital or clinic-based nutritional programmes and tobacco control programmes. However due to diverse priorities, most resources for interventions are directed towards attending to acute and urgent needs of patients with NCDs with less emphasis given to the incorporation of preventive aspects into the overall management of these patients.

A collaborative management approach, with preventive components in the care of the patients with NCDs that involves the patients, their families and health care partners, is more cost-effective than the traditional approach and achieves better health outcomes. Efforts must therefore, be made to re-orientate health care services to include preventive care as part and parcel of the overall management of NCDs. This holistic approach will be better at improving and sustaining the health of the individuals and will be mutually beneficial to all parties concerned.

3) Other factors affecting health promotion

There are other factors beyond the control of the health sector which can impede the performance of the health authorities including:

i) the presence of other supporting policies as well as environments to promote health; and
ii) the expected health outcomes and other benefits which will not be apparent immediately as behavioural change usually takes time to occur.

4) Insufficient human capital and competencies in health promotion

Sufficient numbers of human resources needs to be trained in various fields and equipped with appropriate health promotion competencies in order to carry out health promotion effectively.

5) Funding

Sustainable funding must be identified and allocated for the various health promotion programmes and initiatives. Besides the conventional method of allocating a fixed annual budget dedicated for health promotion, other innovative and practical funding approaches for health promotion must be explored.

Conclusion

Brunei Darussalam is currently facing an increase in the burden of NCDs similar to other countries in the region and in the world. To address this issue and overcome the many challenges that it poses, a comprehensive, holistic, multi-sectoral approach is required to enable effective preventive measures and strategies to be undertaken. The Health Promotion Blueprint 2011 – 2015 provides guidance and a framework of interventions and actions that need to be implemented in order to reduce the risk factors for NCDs particularly. This includes collaborating with other agencies to develop and strengthen policies and interventions affecting health and also to create enabling and supportive environments to practice healthy lifestyle.

Intervention at the level of the family and community is particularly essential for prevention because the causal risk factors are deeply entrenched in the social and cultural framework of the society. Continuing surveillance of levels and patterns of risk factors is also crucial to the effective planning and evaluation of these preventive actions. All of these have been addressed in this Blueprint.

Other health issues such as mental health, oral health, sexual health and other communicable diseases are equally important and are also being addressed by the relevant departments in the Ministry of Health. As the Blueprint will be reviewed periodically, these issues may be re-considered and addressed as and when necessary.

Finally, the Health Promotion Centre as the coordinator for the Blueprint, has been entrusted to lead, advocate, support, facilitate and empower the many initiatives laid out by convincing, coordinating and collaborating with the many stakeholders concerned. To enable the implementation of the initiatives as outlined in this document, HPC has to play a leading role in advocating for a number of organisational and system changes and enhancements. These include the following key areas:

1. Integration and coordination of health promotion programmes and interventions especially in influencing the development of policies, legislations, environments and infrastructure to support healthy living, with particular emphasis on the prevention and control of NCDs;

2. Collaborations and partnerships with various stakeholders and partners to address the social determinants of health and risk factors of NCDs, including involvement in planning and implementation of various initiatives in the communities;

3. Strengthening the healthcare system through workforce capacity building to undertake and support health promotion activities at national, organisational, community and individual level;

4. Enhancing surveillance, monitoring and evaluation as well as research capacity especially in establishing and developing a better evidence base to inform policies appropriately and implement effective interventions particularly in the prevention and control of NCDs;

Implementing the initiatives in the Health Promotion Blueprint 2011 – 2015 will require long-term commitment and the involvement of all stakeholders within and outside of the health sector. A key factor for the successful implementation of the Blueprint is the strengthening of the national coordinating and monitoring mechanism namely, the Health Promotion Centre. It is hoped that with the realisation of the strategic objectives in the Blueprint, we would be closer to achieving the Ministry of Health's **'Vision 2035 : Together Towards a Healthy Nation'**

Future Directions

The National Committee on Health Promotion remains a vital mechanism to rally and leverage on inter-sectoral actions to drive policies and programmes that promote healthy lifestyle. The Committee will continue to give direction, advice and guidance in planning for and developing strategic health promotion initiatives at the national level, including those outlined in the Health Promotion Blueprint.

The Health Promotion Centre, as the secretariat for the National Committee on Health Promotion and also as the lead agency for health promotion in Brunei Darussalam, in collaboration with the relevant stakeholders, will continuously review and revise the initiatives and actions listed in the document and based on the achievements and progress made, will focus on areas such as:

1) Enhancing and scaling-up current health promotion programmes;

2) Strengthening multi-sectoral actions and continuously advocating for 'Health in All Policies', particularly in relation to the promotion of healthy diets and physical activity;

3) Advocating for and supporting preventive strategies for other chronic conditions and injuries;

4) Advocating for appropriate laws and legislation related to health promotion;

5) Increasing workforce capacity and competencies;

6) Developing and enhancing health promotion-related surveillance and research capacity; and

7) Working towards achieving international and regional collaboration, recognition and accreditation.

A bicyclethon held during 'Mukim Sihat Batu Apoi' in Temburong. It is hoped that events like this will be more commonplace after implementation of the Blueprint in the period 2011-2015

Glossary

AKC	Anugerah Kampung Cemerlang
BDAC	Brunei Darussalam AIDS Council
BMI	Body Mass Index
BP	Blood Pressure
BSB	Bandar Seri Begawan
CND	Community Nutrition Division
COPD	Chronic Obstructive Pulmonary Disease
CRD	Chronic Respiratory Disease
CVDs	Cardiovascular Diseases
DALYs	Disability-Adjusted Life Years
DEHS	Department of Environmental Health Services
DM	Diabetes Mellitus
DPAS	Diet and Physical Activity Strategy
DPP	Department of Policy and Planning
DS	Dietetics Services
DDS	Department of Dental Services
DYS	Department of Youth and Sports
ECA	Extra Curricular Activity
FBS	Fasting Blood Sugar
FQSD	Food Quality and Safety Division
GATS	Global Adult Tobacco Survey
GYTS	Global Youth Tobacco Survey
HDL	High Density Lipoprotein
HiAP	Health in All Policies
HL	Healthy LIfestyle
HP	Health Promotion
HPC	Health Promotion Center
IHS	Integrated Health Screening and Health Promotion for Civil Servants
IT	Information Technology
KAP	Knowledge, Attitude and Practice
KAS	Knowledge, Attitude and Skills
M and E	Monitoring and Evaluation
MCH	Maternal and Child Health Services
MCYS	Ministry of Culture, Youth and Sports
MIPR	Ministry of Industry and Primary Resources
MOE	Ministry Of Education
MOH	Ministry of Health
MOHA	Ministry of Home Affairs
MPK	Majlis Perundingan Kampung
MPM	Majlis Perundingan Mukim
NDG	National Dietary Guideline
NCDs	Non-Communicable Diseases
NGOs	Non-Government Organisations
NHANSS	National Health and Nutritional Status Survey
O&G	Obstetrics and Gynaecology Services
PA	Physical Activity
Paed	Paediatric Services
PMO	Prime Minister Office
RDA	Recommended Dietary Allowance
SHS	School Health Services
STD	Sexually Transmitted Diseases
TOR	Terms of Reference
UBD	University of Brunei Darussalam
UNISSA	Universiti Sultan Sharif Ali
WHA	World Health Assembly
WHO	World Health Organization

Definition of Terms

Cancer	Refers to the growth of abnormal cells in specific parts of the body much faster than normal cells do, thus outliving them and continue to compete for blood supply and nutrients that normal cells need.
Chronic Obstructive	Characterised by airflow limitation that is not fully reversible. It is usually both progressive
Pulmonary Diseases	and associated with abnormal inflammatory response of the lungs to noxious particles or gases. These are adverse results of one or combination of the following: (i) infections, (ii) genetic susceptibility, (iii) occupational hazard, or (iv) environmental pollutants like smoke.
Chronic Respiratory Diseases	Vary from gradually increasing respiratory distress to sudden or acute respira tory distress with feelings of suffocation, inability to speak, chest tightness, wheezing and cough with thick, clear or yellow sputum. This also include asthma and the chronic obstructive pulmonary diseases.
Diabetes Mellitus	This is a condition where there is excessive glucose in the blood. A genetically and clinically heterogenous group of metabolic disorders characterised by glucose intolerance with hyperglycemia present at time of diagnosis elevated amount of sugar in the blood
- Type I Diabetes	Usually called juvenile diabetes because it occurs most frequently in children, characterised by absolute lack of insulin due to damaged pancreas and dependent on insulin injections. It may result from genetic, environment or may be acquired due to viruses (e.g. mumps, congenital rubella, and chemical toxins - Nitrosamines).
- Type II Diabetes	It is generally seen in older people although in recent years more and more young individuals are getting it. It is characterised by high fasting blood sugar despite availability of insulin. Possible causes include impaired insulin secretion, peripheral insulin resistance and increased hepatic glucose production. Usually occurs in older and overweight individuals.
Elevated Cholesterol	It is defined by having cholesterol level higher than normal levels which is either classified as elevated may be at risk (200-239 mg/100 ml) and elevated at risk (> 240 mg/100 ml)
Health Policy	An organised set of values, principles and objectives for improving health.
Hypertension or High Blood Pressure	It is a sustained elevation of mean arterial pressure which results from changes in the arterial wall such as loss of elasticity and narrowing of blood vessels, leading to obstruction, leading to obstruction in blood flow that can damage the heart, kidney, eyes and brain.
Insulin	A hormone which finely control the level of glucose in the body. It works like a key to open the inside of the cell so that glucose can enter.

Monitoring	Tracks changes in program outcomes over time.Oversees the progress toward achieving the goals, demonstrate effectiveness of program or activity, determine if program components are producing the desired effects, will justify for funding and support, and will guide how to improve the program.
Physical Activity	Refers to activity that one does at home (e.g. washing dishes,sweeping the floor, etc..) and things that are done outside the house (e.g. gardening, washing car, etc..) that involve physical movement.
Physical Exercise	It is a planned, structured and repetitive movement (e.g. jogging or walking daily for 2 hours, basketball once a week, etc.) done to improve or maintain one or more components of physical fitness, namely: cardiorespiratory endurance, muscle strength and toning or weight loss.
Planning	It is the process of coming up with a unified and comprehensive response to the identified needs to prevent and control NCDs.
Risk Factor	Refers to any attribute, characteristic or exposure of an individual which increases the likelihood of developing NCDs.

Stakeholders

PUBLIC SECTOR	• Prime Minister's Office • Ministry of Foreign Affairs and Trade • Ministry of Education • Ministry of Health • Ministry of Development • Ministry of Industry and Primary Resources • Ministry of Religious Affairs • Ministry of Home Affairs • Ministry of Culture, Youth and Sports
PRIVATE SECTOR	• Leisure/Recreation Service Providers • Health and Fitness Clubs • Equipment Suppliers – Sports, Bicycles, Footwear • Sports Associations • Media Entities • Financial Institutions • Schools and Worksites
Non-Governmental Organisations/Civil Society	• Health-Based Organizations (Cancer, Diabetes, HIV-Aids) • Health Professionals' Groups (Doctors, Nurses, Allied Health Professionals) • Patient Groups • Consumer Groups • Sport Groups/Associations • Faith-Based Organisations

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KEMENTERIAN KESIHATAN
CARA HIDUP SIHAT, SEJAHTERA RAKYAT