



National Plan of Action for Nutrition of Malaysia III 2016-2025

National Coordinating Committee on Food and Nutrition (NCCFN)

MINISTRY OF HEALTH MALAYSIA

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FOREWORD BY MINISTER OF HEALTH MALAYSIA

The National Plan of Action for Nutrition of Malaysia (NPANM) III, 2016-2025 represents Malaysia's continued commitment to the Rome Declaration on Nutrition adopted by the International Conference on Nutrition (ICN) in 1992 and 2014. The NPANM III, 2016-2025 is the master plan to achieve optimal nutritional well-being of Malaysians. Covering the period of 2016 to 2025, the NPANM III addresses both nutritional deficiencies and diet-related non-communicable diseases (NCDs) in the country.

For several decades, key international agencies, especially the World Health Organization (WHO) and Food and Agriculture Organization (FAO) have highlighted the importance of promoting optimal nutrition of the community. In 2014, United Nations General Assembly and World Health Assembly made a political declaration on the importance of preventing and controlling NCDs. In line with these international commitments, the government of Malaysia has given due recognition to the importance of NPANM III, 2016-2025 in the Eleventh Malaysia Plan (2016-2020).

Prevention and control of nutrition challenges require the collaboration of multiple stakeholders. As such, the NPANM III, 2016-2025 calls for all stakeholders in the country to incorporate nutrition strategies into their respective programmes for improving the nutritional status of the population. Towards this end, it is imperative to further establish and strengthen the national coordinating mechanism on food and nutrition.

It is my fervent hope that the NPANM III, 2016-2025 will be implemented with the full support and collaboration from various stakeholders.

A handwritten signature in black ink, consisting of stylized, flowing letters that appear to be 'S. Subramaniam'.

YB Datuk Seri Dr. S. Subramaniam
Minister of Health Malaysia



FOREWORD BY SECRETARY GENERAL

I am pleased to note that the National Plan of Action for Nutrition of Malaysia (NPANM) III, 2016-2025 has been drafted with the consultation and collaboration of various ministries and government agencies, institutions, academia, professional bodies, non-government organisations (NGOs) and the private sector. To accomplish the overall goal of NPANM III, 2016-2025, it is vital for relevant ministries and agencies to incorporate nutrition strategies into their policies and programmes. This multi-stakeholder and multi-sectoral approach will ensure better coverage of strategies and activities to promote optimal nutritional well-being of Malaysians.

I would like to record my thanks to all stakeholders for their valuable input in developing NPANM III, 2016-2025. I believe the NPANM III, 2016-2025 is a crucial framework for the implementation of nutrition programmes and activities in the country. In this regard, I would like to urge all stakeholders to devote adequate resources so as to effectively implement the identified activities in the Plan.

A handwritten signature in black ink, appearing to read 'Chen Chaw Min'.

YBhg. Datuk Seri Dr. Chen Chaw Min
Secretary General
Ministry of Health Malaysia



FOREWORD BY DIRECTOR GENERAL OF HEALTH

The National Plan of Action for Nutrition of Malaysia (NPANM) III, 2016-2025 was drafted taking into cognisance the nutrition situation in the country as well as international and regional food and nutrition development. Under-nutrition continues to be a problem in certain segments of our population. At the same time over-nutrition has contributed to the high prevalence of diet-related non-communicable diseases. Recognising the existence of this double burden of malnutrition in the country, the NPANM III, 2016-2025 has formulated strategies to prevent and control these nutrition disorders.

In line with the objectives of the National Nutrition Policy of Malaysia, a multi-stakeholder and multi-sectoral approach have been adopted to formulate the NPANM III, 2016-2025. Embracing a “whole-of-government” approach, the NPANM III, 2016-2025 takes into consideration the plans of action of various ministries and agencies including agriculture, education, women, family and community development, consumer advocacy, youth and sports, welfare, housing and local government, rural

and urban development. Valuable input has been obtained from academia, professional bodies, and non-governmental organisations. Public-private partnership is also recognised to play an important role in achieving the objectives of the Plan.

I would like to express my utmost gratitude to the National Coordinating Committee on Food and Nutrition (NCCFN) and the NPANM III, 2016-2025 Working Groups for their active contributions. I would like to thank the Nutrition Division of the Ministry of Health Malaysia for providing the necessary secretariat and technical support for driving the successful preparation of this Plan.

Y.Bhg. Datuk Dr. Noor Hisham Abdullah
Director General of Health
Ministry of Health Malaysia



FOREWORD BY CHAIRMAN OF NATIONAL COORDINATING COMMITTEE ON FOOD AND NUTRITION (NCCFN)

The National Coordinating Committee on Food and Nutrition (NCCFN) is a high level coordinating committee on food and nutrition in the country to monitor and evaluate the implementation of the National Plan of Action for Nutrition of Malaysia (NPANM) III, 2016-2025. This Committee is a platform to discuss issues pertaining to nutrition which need commitment and collaboration from other health sectors. The members of NCCFN consist of representatives from various ministries and government agencies, NGOs, academia and private sector. It is important that the implementation of NPANM III, 2016-2025 be implemented with the guiding principle of close collaboration within the multi-sectoral framework.

NPANM III, 2016-2025 recognises that direct nutrition interventions need to be coordinated at all levels of government - Federal, State, and Local Government - with complementary actions to address the underlying determinants of good nutrition: food security, health services, a healthy environment, and adequate care for the nutritionally vulnerable. The strategies identified in NPANM III, 2016-2025 will be delivered through three

main delivery platforms to ensure that maximum coverage is attained for targeted population: health facility; community structure; and campaigns/ outreach activities.

The road ahead is likely to be more if not equally challenging. Undeniably there are still key issues to be resolved particularly implementation issues like convergence of interventions at the district levels, vertical and horizontal integration and coordination, and absorptive capacity of frontline nutrition, health and other development workers. Nevertheless, with all of us joining hands, I believe that we will be able to achieve the targeted indicators.

A handwritten signature in black ink, appearing to read 'Lokman Hakim bin Sulaiman'.

Datuk Dr. Lokman Hakim bin Sulaiman
Deputy Director General of Health (Public Health)
Ministry of Health Malaysia
Chairman of NCCFN



FOREWORD BY DIRECTOR OF NUTRITION DIVISION

First of all, I would like to thank all drafting committee members of the National Plan of Action for Nutrition of Malaysia (NPANM) III, 2016-2025 for their great effort in drafting the Plan.

The first coordinated nutrition programme in the country began with the establishment of the Applied Food and Nutrition Programme (AFNP) implemented in 1970s. In 1974, the first nutritionist was employed by the Ministry of Health (MOH), Malaysia. Since then, the nutrition programs and activities evolved in the country. The involvement also involves nutrition in the MOH from being a unit within the Family Health Development Section to being a Nutrition Section in 1990. It is now standing a division in the MOH since October 2009.

Towards making this plan a reality, Nutrition Division is resolved to spearhead and coordinate the implementation of the identified strategies and activities of NPANM III, 2016-2025. The Division will work with other stakeholders, including professional bodies and NGOs, academia and private sector in achieving the goals and objectives of the Plan.

In order to make the Plan a reality, the cooperation from all parties including governmental or non-governmental organisations is indispensable. Implementation of activities on the basis of not only the extent, but it should be realised from the grassroots level. Therefore, I would like to thank once again for the efforts and commitments given by all parties involved, starting from the formation of this document until it is implemented within the next decade.

A handwritten signature in black ink that reads 'Zalma'.

Zalma Abdul Razak
Director of Nutrition Division
Ministry of Health Malaysia



Executive Summary



Executive Summary

The National Plan of Action for Nutrition Malaysia (NPANM) is the framework for action to address food and nutrition challenges in the country. The NPANM series are Malaysian's commitment towards the Rome Declaration on Nutrition arising from the International Conference on Nutrition (ICN 2) held in 1992 and 2014. The NPANM III, 2016-2025 is the sequels of the NPANM I, 1996-2000 and NPANM II, 2006-2015. The development of the NPANM III, 2016-2025 is spearheaded by the Ministry of Health under the purview of the National Coordinating Committee of Food and Nutrition (NCCFN), with active participation and consensus from all stakeholders in food and nutrition in the country. These include relevant ministries and government agencies, research institutions, academia, professional bodies, non-government organisations including consumer groups and food industries.

The Plan was drafted taking into cognisance of the nutrition situation in the country as well as international and regional food and nutrition development. It underlines the importance of nutrition in enhancing population health, preventing diet-related diseases and strengthening food and nutrition security. The Plan has identified (46) nutrition indicators and set targets to be achieved by 2025 under following specific areas; Promoting Maternal, Infant and Young Child Nutrition (10); Promoting Healthy Eating and Active Living (11); Preventing and Controlling Nutritional Deficiencies (9) and Preventing and Controlling Obesity and Diet-related NCDs (16). To achieve the targets, the Plan has proposed 3 main strategies, namely Foundation Strategy; Enabling Strategies and Facilitating Strategies.

The Ministry of Health Malaysia is responsible for monitoring the implementation of all activities indicated in the Plan through the National Coordinating Committee for Food and Nutrition (NCCFN). Under this committee, there are 6 Technical Working Groups (TWGs) for Nutrition. They are TWG Policy, TWG Dietary Guidelines, TWG Training, TWG Research, TWG Promotion and TWG Food and Nutrition Security (newly established). These provide the platforms for different stakeholders to work together towards common aims and objectives and also to ensure coordinated and sustained actions. Hence, for sustainable impact, a concerted effort through multi-stakeholder engagements including public, private and civil society stakeholders in a systematic way to comprehensively promote healthy eating and active living is greatly warranted to effectively ensure the health of population. Advocacy of the NPANM III, 2016-2025 will be carried out to all relevant stakeholders to get better support and commitment in ensuring effective implementation of the identified activities. The overall achievements of the NPANM III, 2016-2025 will be reviewed during midterm (2020) and by the end of the Plan (2025).



Introduction

Introduction



2.0 INTRODUCTION

The National Plan of Action for Nutrition of Malaysia (NPANM) is the framework for action to address food and nutrition challenges in the country. It is the nation's blue print to promote optimal nutritional well-being of Malaysians through a series of strategies and activities. The Plan underscores the importance of nutrition in enhancing population health and preventing diet-related diseases. Decreasing the occurrence of nutritional deficiencies and diet-related chronic diseases, will lead to increased productivity of the population. Improving nutritional well-being of the population is also known to reduce the health care burden of the nation.

The NPANM series is Malaysia's commitment towards the Rome Declaration on Nutrition arising from the International Conference on Nutrition (ICN) held in 1992 and 2014. The NPANM III (2016-2025) is the follow-up of the NPANM I (1996 - 2000) and NPANM II (2006 - 2015). The targets and strategies of the NPANM III are in accordance with the international guidelines, especially those from WHO, UNICEF and FAO, as well as Malaysia

Development Plan, Ministry of Health Strategic Plan and other national policies and programmes in various ministries and agencies.

Based on a detailed analysis of the nutrition situation in the country, the NPANM III has been drafted to address the persistence of the double burden of malnutrition. While under-nutrition will continue to be addressed, emphasis is also accorded to the rising prevalence of obesity and the non-communicable diseases (NCDs).

The development of the NPANM III was spearheaded by the Ministry of Health under the purview of the National Coordinating Committee for Food and Nutrition (NCCFN). It has been carried out with active participation and consensus from stakeholders in food and nutrition in the country. These include relevant ministries and government agencies, research institutions, academia, professional bodies, non-government organisations and private sector such as food industries.



Nutritional Status,
Dietary Practices and
Physical Activity Status of the
Population



3.0 NUTRITIONAL STATUS, DIETARY PRACTICES AND PHYSICAL ACTIVITY STATUS OF THE POPULATION

3.1 Background

Malaysia has enjoyed one of the best economic growth records in Asia over the last five decades. The economy achieved a stable real GDP growth of 6.2% per annum since 1970, successfully transforming from a predominantly agriculture-based economy in the 1970s, to manufacturing in the mid-1980s, and to modern services in the 1990s. In addition, this country rose from the rank of a low-income economy in the 1970s to a high middle-income economy in 1992 and remains so today. Malaysia's national per capita income expanded more than 25-fold from US\$402 (1970) to US\$10,796 (2014) (11th MP) and is well on track to surpass the US\$15,000 threshold of a high-income economy by 2020. In recent decades, Malaysia has experienced a rapid phase of industrialisation and urbanisation.

The rapid demographic and nutrition transition towards achieving a developed economy status has inevitably generated marked changes in dietary habits and lifestyles of Malaysians. These changes are associated with changes in nutrition and health status, and increased prevalence of chronic diseases and non-communicable disease in the population.

This chapter summarises the current nutritional status, the main nutritional problems, the dietary practices as well as the physical activity status of the population. Based on a detailed analysis of this information, the strategies and action plans of NPANM III, 2016-2025 have been formulated.

3.2 Body Weight and Height Status

Below 5 Years Old

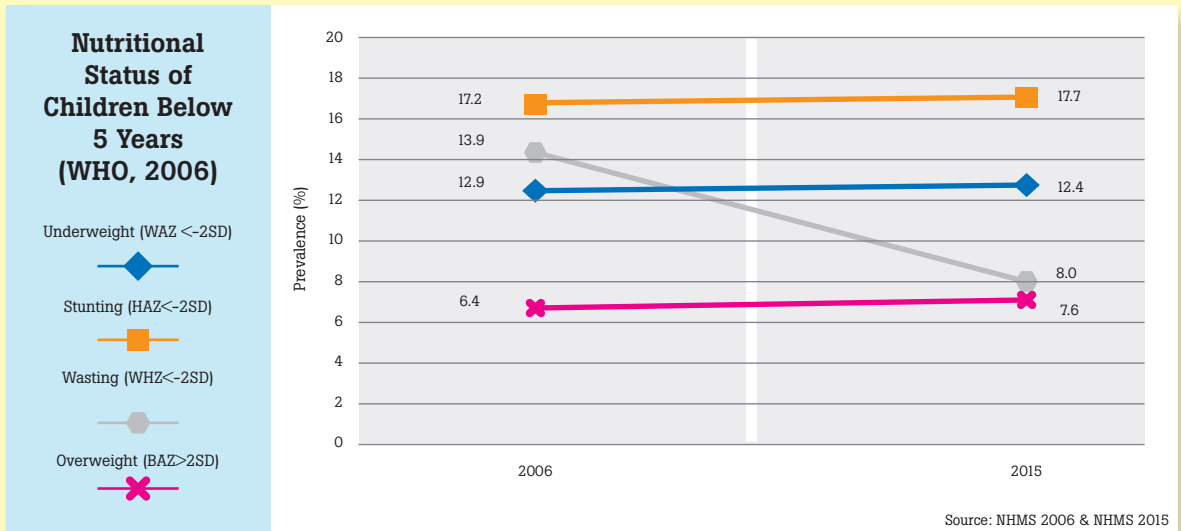


Figure 1 : Nutritional Status of Children Below 5 Years Old (WHO, 2006)

Based on the periodic National Health and Morbidity Survey, Malaysia still faces the double burden of malnutrition, with rising rates of childhood obesity as well as stunting among children. Malaysian children today are growing up in an obesogenic environment

that leads to sedentary lifestyle and unhealthy eating habits. Energy imbalance has resulted from this lifestyle, with more time being spent on screen-based activities. Undernutrition among children such as stunting, will lead to obesity and NCDs in later life.

School Aged Children

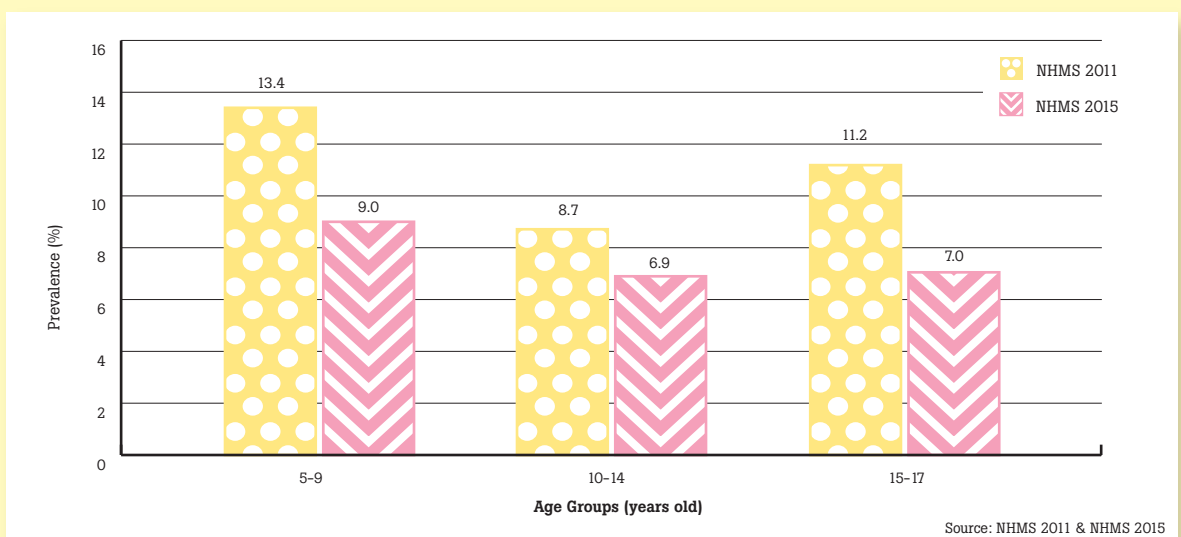


Figure 2 : Prevalence of Thinness (BMI for age < -2SD) by Age Groups

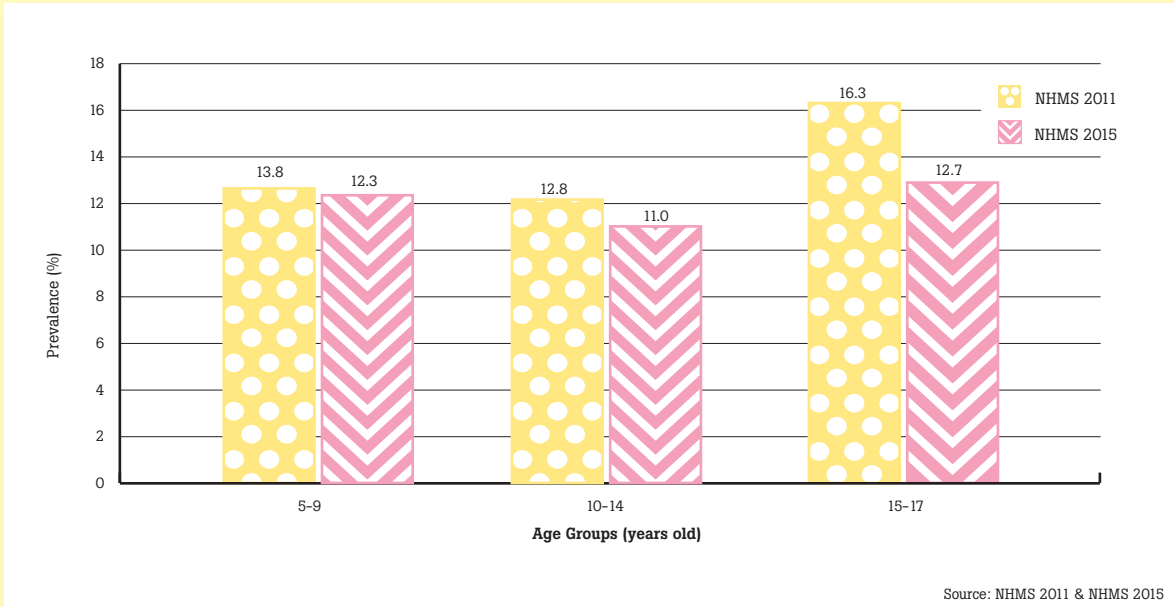


Figure 3 : Prevalence of Stunting (Height for age > 2SD) by Age Groups



Figure 4 : Prevalence of Obesity (BMI for age > 2SD) by Age Groups

Adults > 18 years old and Above

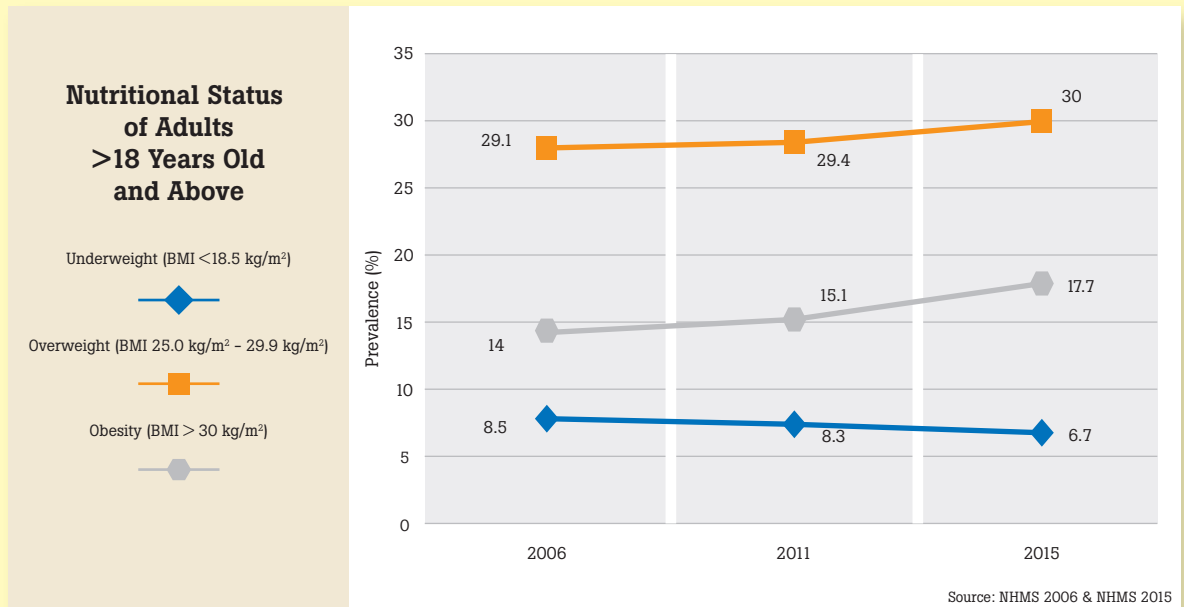


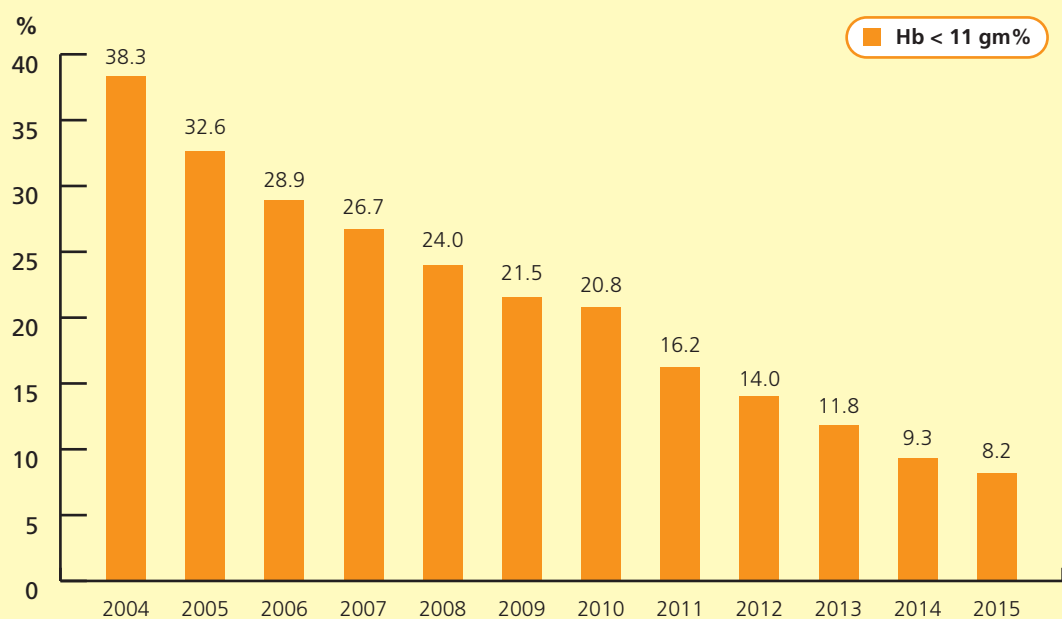
Figure 5 : Nutritional Status of Adults >18 Years Old and Above

The prevalence of obesity among adults had increased more than three folds from 1996 (4.5%) to 2006 (14%). However, Malaysians have taken considerable concerted measures to mitigate the increase in obesity prevalence. This is proven by the findings of the

NHMS 2011, where the increase of adult obesity prevalence was only 1.1% from 2006. However, the challenges to mitigate obesity prevalence continue in 2015 where the increase rate was 2.6% compared to 2011 data.

3.3 Status of Selected Vitamins and Mineral Intake

Pregnant women



Source: Health Informatics Centre, MOH

Figure 6 : Anaemia amongst pregnant women at 36 weeks of gestation

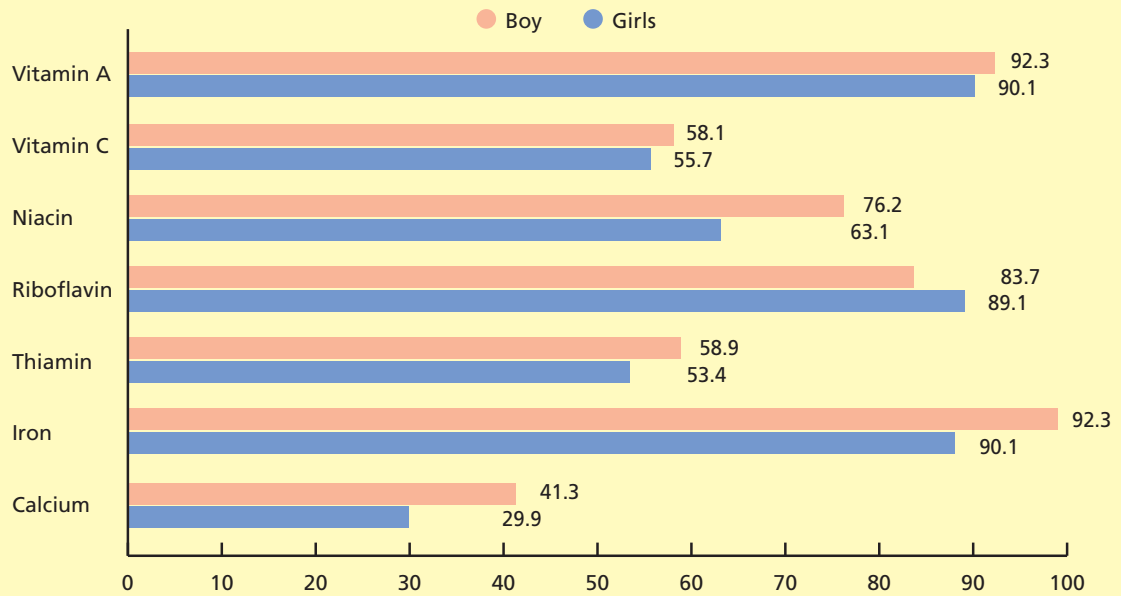
The status of anaemia among pregnant mothers is monitored based on the haemoglobin (Hb) level of pregnant women at 36 weeks gestation who attended the government health clinics. The percentage of pregnant women with anaemia

reduced from 38.3% (2004) to 8.2% (2015). Based on the WHO classification of public health significance, anaemia still poses a mild public health problem to the country.

Children

Based on the Nutrition Survey of Malaysian Children (SEANUTS) findings, only a small proportion of children had low levels of Hb (6.6 %), serum ferritin (4.4 %) and vitamin A (4.4 %), but almost half the children (47.5 %) had vitamin D insufficiency. The National IDD (Iodine Deficiency Disorder) Survey 2008 showed that about half (50.7%) of the school children aged 8-10 years old in Peninsular Malaysia had Iodine Deficiency Disorder.

In addition, MyBreakfast Study of School Children 2013 showed that more than 50% of the school-aged children achieved at least 80% of the Recommended Nutrient Intake (RNI) for vitamin A, vitamin C, niacin, riboflavin, thiamine and iron. However for calcium intake, only 29.9% girls and 41.3% boys achieved the recommended intake.



Source: MyBreakfast Study of School 2013

Figure 7 : RNI achievement of selected micronutrients among school children aged 6-17 years old

In addition, MyBreakfast Study of School Children, 2013 showed that more than 50% of the school-aged children achieved at least 80% of the Recommended Nutrient Intake (RNI) for vitamin A, vitamin C, niacin,

riboflavin, thiamine and iron. For calcium, only 29.9% girls and 41.3% boys achieved this recommended intake.

3.4 Risk Factors of Non-Communicable Diseases (NCDs)

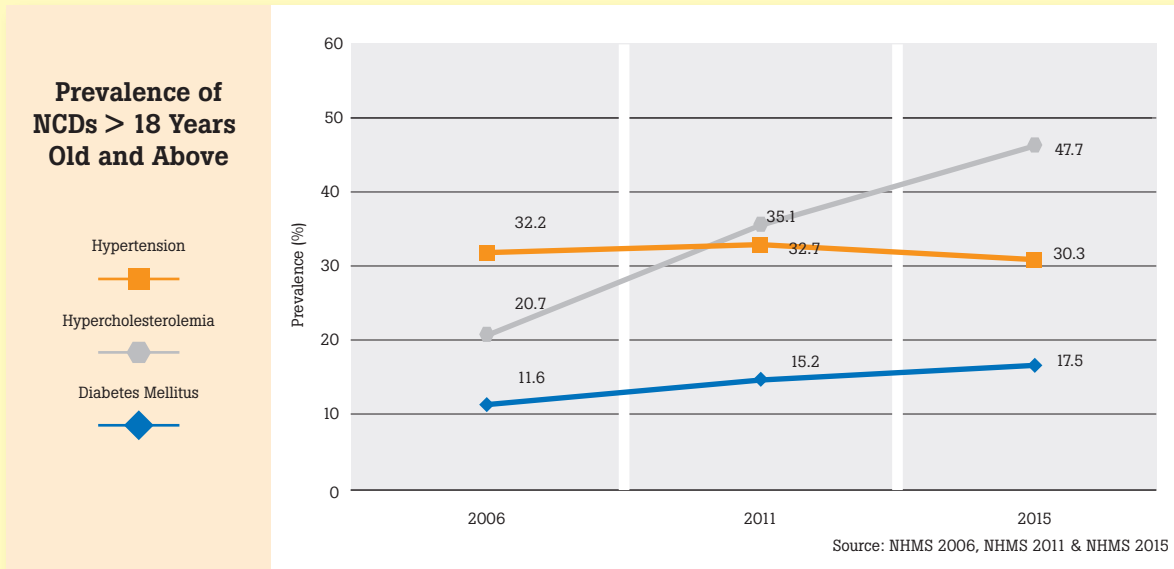


Figure 8 : Prevalence of NCD >18 Years Old and Above

As shown in Figure 8, the prevalence of hypertension had increased slightly from 32.2% in 2006 to 32.7% in 2011, but decreased to 30.3% in 2015. The prevalence of hypercholesterolemia had doubled from 20.7% in 2006 to 47.7% in 2015. The prevalence of diabetes mellitus has also increased in the space of 10 years from 11.6% in 2006, to 17.5% in 2015. This

has resulted in escalating social and economic costs and other problems arising from these diseases. It is therefore important that efforts to develop cost-effective nutrition programmes to prevent and combat nutrition-related diseases in Malaysia be identified as a priority.

3.5 Dietary Practices



Infants and Young Children

Infant feeding practices comprising breastfeeding and complementary feeding have major roles in determining the nutritional status of the child. The NHMS 2006 showed that 14.5% children were breastfed exclusively for 6 months. However, based on clinic data, this rate had increased from 14.4% in 2009 to 49.4% in 2015 (SHD, MOH 2015). The Malaysian Population and Family Survey (MPFS, LPPKN 2014) also reported that below 6 months exclusive breastfeeding rate was 43.5%. Whilst, percentage of early initiation was 63.7% (NHMS 2006)

and 94.7% mothers are reported ever breastfed their babies.

However, only 41.5% infants received timely complementary feeding and complementary food was given to infants as early as two months of age. Furthermore, only 55.9% children aged 9–23 months received at least 3 meals a day (NHMS 2006). However, data from clinics showed that timely introduction of complementary feeding was improved from 64.6% in 2009 to 92.2% in 2015 (SHD, MOH 2015).



Children and Adolescents

The Malaysia School-Based Nutrition Survey 2012 showed that about 93.7% of adolescents consumed vegetables below the recommendation of 3 servings/ day whilst 51.7% consumed fruits below recommendation of 2 servings/ day. For milk and dairy products consumption, 81.5% consumed below the recommended 1–3 servings/ day. MyBreakfast Study of School Children in 2013, showed that

24.6% of school children (aged 6–17 years old) skipped breakfast \geq three days per week. Only 25% of primary school and 19% of secondary school children consumed whole grains and almost all the children (97.7%) did not consume adequately. Therefore, there is a need to address healthy eating practices as early as possible.



Adults

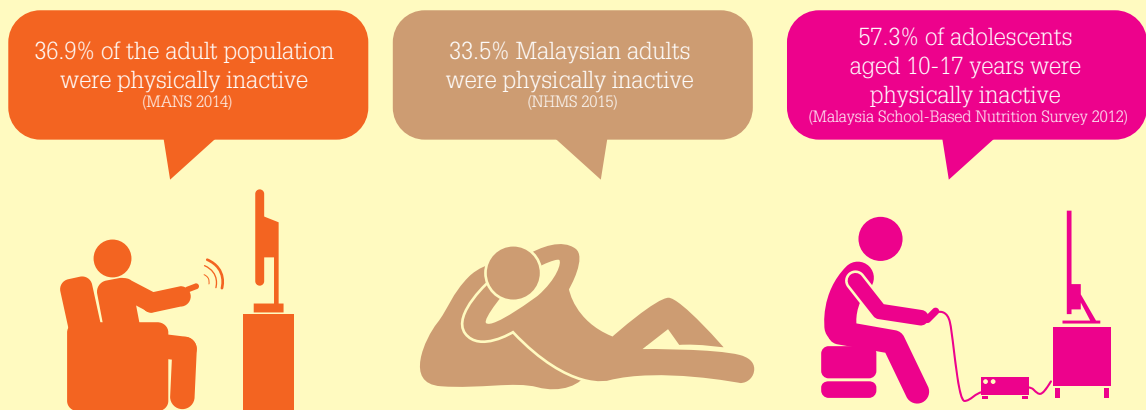
Malaysian Adult Nutrition Survey (MANS) 2014 showed that 59.1% consumed fruits below the recommended 2 servings/ day and 81.7% consumed vegetables below the recommended 3 servings/ day. For milk and dairy products consumption, 73.6% consumed below the recommendation of 1–3 servings/ day. A similar pattern can also be seen for the

intake of legumes and nuts whereby 81.9% consumed below the recommended $\frac{1}{2}$ servings /day. It is also reported that, almost half (45.6%) of adults exceed the recommended intake of fat and half (50.7%) exceed the recommended intake of protein. On the other hand, 53.5% consumed carbohydrates less than the recommended amount.

3.6 Physical Activity Status

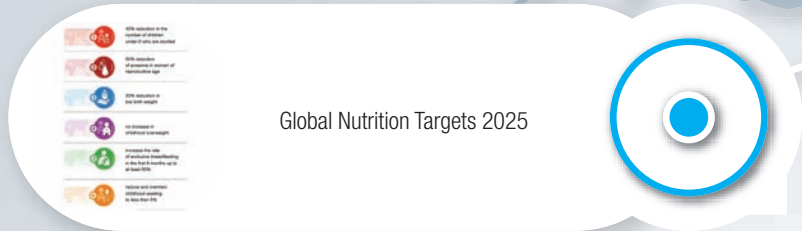
It is generally agreed that a healthy diet and an active lifestyle are important determinants of health status and nutritional well-being. Based on the NHMS 2011, almost one in two Malaysian adults (44.5%) were engaged in low physical activity levels. Findings of the MANS 2014 indicated approximately 7.1 million Malaysian adults were physically inactive, representing 36.9% of the adult population aged 18 to 59 years old. The prevalence of

physical inactivity was about the same in the NHMS 2011 (35.7%). Not much difference was observed in NHMS 2015 findings. There was only 2.2% reduction in the prevalence of physical inactivity (33.5%) compared to NHMS 2011 findings. According to Malaysia School-Based Nutrition Survey 2012, 57.3% of adolescents aged 10-17 years were physically inactive.





Food and Nutrition-Related Policies and Action Plan




Global Nutrition Targets 2025

- 10% reduction in the number of people who are undernourished
- 35% reduction in global hunger (prevalence of undernourishment)
- 35% reduction in the number of children who are stunted
- 35% reduction in the number of children who are wasted
- 35% reduction in the number of children who are overweight
- 25% reduction in the number of children who are obese
- 35% reduction in the number of children who are anaemic
- 35% reduction in the number of children who are malnourished



GLOBAL TARGETS
To improve maternal, infant and young child nutrition

Global Monitoring Framework for Maternal, Infant and Young Child Nutrition



ICN2
BETTER NUTRITION
better lives

The Rome Declaration on Nutrition and Framework for Action of the Second International Conference on Nutrition (ICN 2) 2014



SUSTAINABLE DEVELOPMENT GOALS

The Sustainable Development Goals (SDGs) 2030

GLOBAL



This section highlights the policy documents of several international agencies that have been used as references in the formulation of the NPANM III, 2016-2025. These documents have been used in setting target for each indicator.

Global Nutrition Targets 2025

Recognising that accelerated global action is needed to address the double burden of malnutrition, in 2012, the World Health Assembly Resolution 65.6 endorsed a Comprehensive Implementation Plan on Maternal, Infant and Young Child Nutrition which specified a set of six global nutrition targets by 2025. Since their adoption at

the 65th World Health Assembly, the global nutrition targets have helped the global community to focus on priority areas in improving the nutritional status of mothers, infants and young children. To reduce malnutrition in all its forms, these efforts must continue beyond 2025.

Achieve a 40% reduction in the number of children under-5 who are stunted



Achieve a 50% reduction of anaemia in women of reproductive age



Achieve a 30% reduction in low birth weight



Ensure that there is no increase in childhood overweight



Increase the rate of exclusive breastfeeding in the first 6 months up to at least 50%



Reduce and maintain childhood wasting to less than 5%



Global Monitoring Framework for Maternal, Infant and Young Child Nutrition

The Comprehensive Implementation Plan on Maternal, Infant and Young Child Nutrition (MIYCN) was endorsed by the Sixty-fifth World Health Assembly (WHA) in May 2012. The WHA resolution urges Member States to put the MIYCN Plan into practice by including proven nutrition interventions relevant to the country in maternal, child and adolescent health services and care. Interventions carried out should ensure universal access, and establish and engage policies in agriculture, trade, education, social support,

environment and other relevant sectors to improve nutrition. The MIYCN include six global nutrition targets to be achieved by 2025 and also proposes five actions to support the achievement of the global targets. At the 68th WHA in May 2015, another 14 additional core indicators for MIYCN had been endorsed which included five outcome indicators, six process indicators and three on policy environment and capacity indicators.



The Rome Declaration on Nutrition and Framework for Action arising from the Second International Conference on Nutrition (ICN2) 2014

The Second International Conference on Nutrition (ICN2) was a high level inter-governmental meeting focusing on addressing malnutrition in all its forms and identify opportunities to tackle them. The two main outcome documents endorsed by participating governments at the Conference are the Rome Declaration on Nutrition and the Framework for Action, committing world leaders to establish national policies aimed at eradicating malnutrition and transforming

food systems to make nutritious diets available to all. Improving nutrition, and ensuring everyone has access to healthy diet, is not the responsibility of an individual alone. Nutrition is a public issue that must be addressed primarily by governments in collaboration with other stakeholders, including civil society, the private sector and academia. Framework for action is established with 7 main nutrition commitments to improve nutrition worldwide.



Eradicate hunger and prevent all forms of malnutrition



Make food systems more sustainable



Protect, promote and support breastfeeding



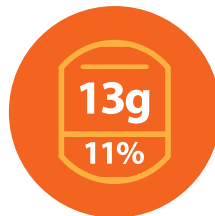
Increase investments in effective interventions and actions to improve people's diets and nutrition at all stages of life



Implement coherent public policies across relevant sectors, from production to consumption



Protect consumers, especially children, from inappropriate marketing and publicity of food



Provide consumers with clear nutrition information so they can make informed food choices

The Sustainable Development Goals (SDGs) 2030

The 2030 Agenda for Sustainable Development, also known as the SDGs, are an inter-governmentally agreed set of targets relating to international development following on from the Millennium Development Goals and build on the sustainable development agenda. The Open Working Group on SDGs developed a proposal consisting of 17 goals with 169 targets covering a broad range of sustainable development issues. This included ending

poverty and hunger, improving health and education, making cities more sustainable, combating climate change, and protecting oceans and forests. **The second of the seventeen proposed SDGs is “End hunger, achieve food security and improved nutrition, and promote sustainable agriculture” is linked directly with nutrition.**



Global Action Plan for the Prevention & Control of NCDs 2013–2020

The goal of this Plan is to reduce the preventable and avoidable burden of morbidity, mortality and disability due to NCDs by means of multisectoral collaboration and cooperation at global, regional and national levels so that population reach the highest attainable

standards of health and productivity at every age and those diseases are no longer a barrier to well-being or socioeconomic development. Nine (9) Voluntary Global Targets are established aiming at combating premature mortality from the four main NCDs.



Action Plan To Reduce Double Burden of Malnutrition in the Western Pacific Region 2015-2020

This Plan brings together nutrition-related actions from global and regional guidance documents to address diet-related diseases and reduce nutritional risk factors. The Plan aims to achieve eight nutrition targets: the six global nutrition targets and two of the nine voluntary NCD targets – to reduce salt intake and halt the increase in

obesity and diabetes. The plan highlights the achievements in reducing undernutrition and the need to halt the rise in overweight, obesity and diet-related NCDs. The action plan recommends 20 actions for both countries and WHO to achieve the following five objectives:



ASEAN Integrated Food Security (AIFS) Framework & Strategic Plan of ASEAN on Food Security in the ASEAN Region 2015-2020



LOCAL

These are the national blueprints and policies that are used as references in the preparation of NPANM III, 2016-2025. The National Nutrition Policies of Malaysia 2005 will be elaborated in this section.



National Nutrition Policy of Malaysia 2005



National Plan of Action for Nutrition of Malaysia II 2006-2015



National Breastfeeding Policy 2006



National Food Safety Policy 2007



Salt Reduction Strategy 2015-2020



Ministry of Health Malaysia Strategic Plan 2016-2020



Ministry of Health Malaysia Plan of Action 2016-2020



Government of Malaysia-UNICEF Country Programme Action Plan 2016-2020



11th Malaysia Plan 2016-2020



National Sustainable Consumption and Production Blueprint 2016-2030



National Agro Food Policy 2011-2020

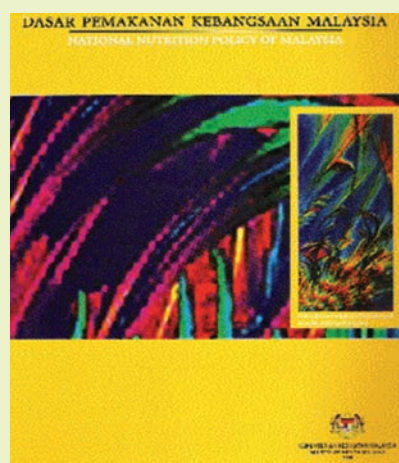


National Adolescent Health Plan of Action 2015-2020



National Health Policy for the Older Person 2008





National Nutrition Policy of Malaysia (NNPM)

The National Nutrition Policy of Malaysia (NNPM) was approved by the Cabinet in 2003. The National Nutrition Policy of Malaysia endeavours to achieve and maintain the nutritional well-being of the population. The policy aims at providing access to adequate, nutritious, safe and quality food for all. It promotes and supports strategies for the practice of healthy eating. The policy will integrate and synergise the efforts of relevant stakeholders in planning, implementing and evaluating food and nutrition programmes that are effective and sustainable. The goal of the Policy is to achieve and maintain the nutritional well-being of Malaysians to enable them to contribute effectively towards nation building, in line with Vision 2020. Good nutrition is the foundation for health. Adding up to good health depends on other agencies, which goes beyond its importance for the population to have access to sufficient, nutritious and safe and quality food, and the nutrition knowledge to make informed and healthy dietary choices. While under-nutrition persists, Malaysia is facing challenges related to over-nutrition and diet-related non-communicable diseases (NCDs). Increased prevalence of diet-related NCDs contributes to increase of morbidity, mortality and healthcare costs in the country. The nutritional well-being of the population is influenced by several determinants that cut across the areas of responsibilities of various agencies. The NNPM is aimed at consolidating efforts in combating the double burden of nutritional deficiencies and diet-related NCDs. A nutrition policy will therefore provide the platform for inter-sectoral coordination and synergy towards achieving optimum nutrition for all.

It is time to review NNPM to be in tandem with the new direction of NPANM III, 2016-2025. The goal of the policy also needs to be updated, since it will be ended by the year 2020. It is crucial to revise the NNPM strategies, in view of the new nutrition issues and challenges in the country. Effective strategies involving multi-sectoral and trans-sectoral need to be identified in strengthening the NNPM. More intensified activities adopting hard policies are urgently warranted to create supportive environments for promoting healthy eating and active living. In tandem with ICN2, commitment for action towards achieving sustainable food systems for a healthy diet, policy coherence amongst the stakeholders throughout the food supply chain will also be strengthened such as on the following areas:

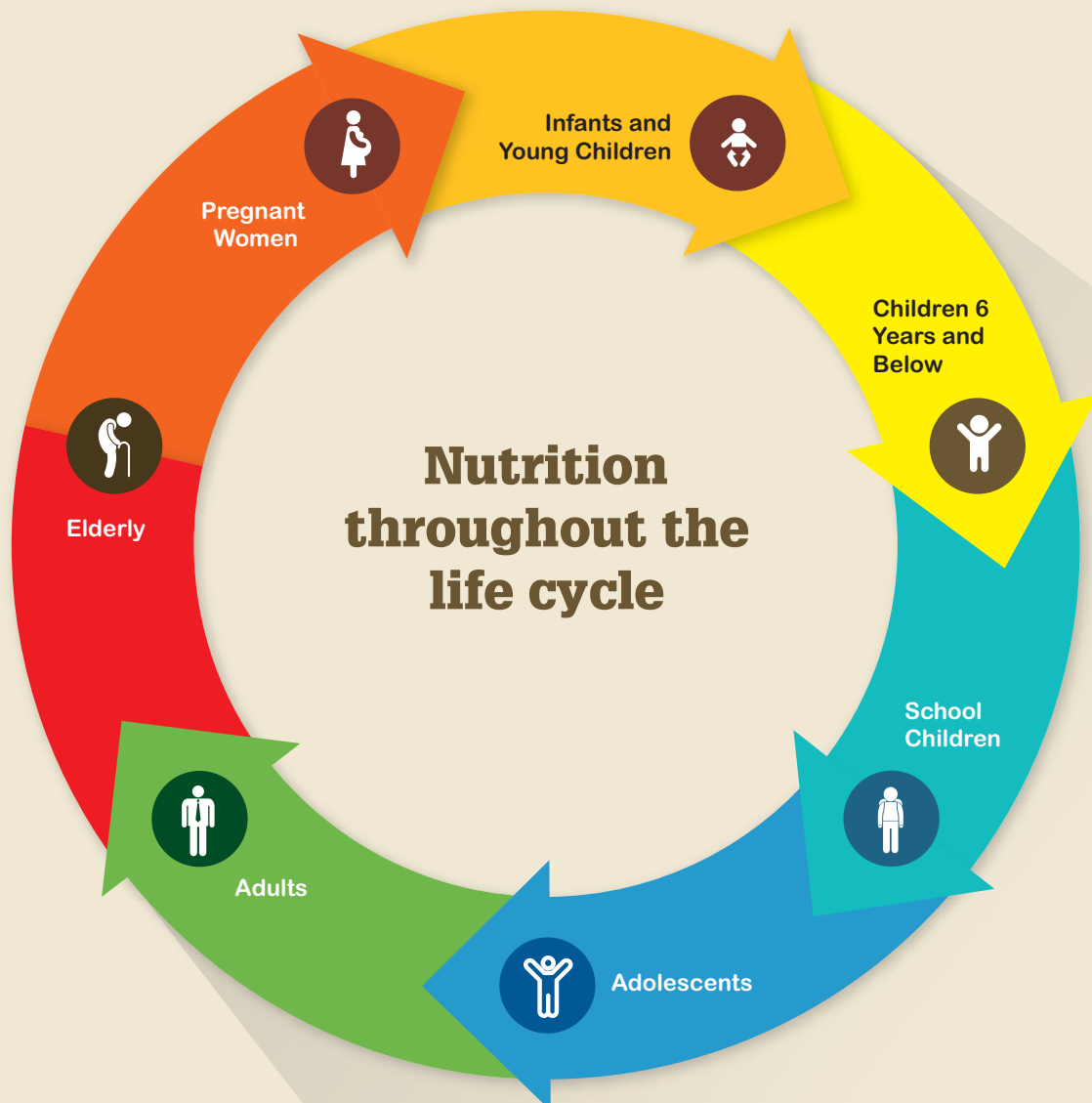
- Increase investments for effective interventions and actions to improve people's diets and nutrition, including in emergency situations.
- Enhance sustainable food systems by developing coherent public policies from production to consumption and across relevant sectors to provide year-round access to food that meets people's nutrition needs and promote safe and diversified healthy diets.

5.0 CURRENT NUTRITION PROGRAMMES AND ACTIVITIES

5.1 Background

Nutrition programmes have been implemented in this country since the 1950s. Since mid-1990s, the nutrition programme has expanded and has been strengthened with increasing number of nutritionists. In Ministry of Health Malaysia, the Nutrition Section has been upgraded to the Nutrition Division on 16 October 2009. Under this Division, nutrition programmes are divided into four main

components, namely Nutrition Planning, Nutrition Surveillance, Nutrition Rehabilitation and Nutrition Promotion. The nutrition programmes cover all age groups from pregnant women, infant and young children to the elderly. Nutrition programmes and activities carried out in the country is mainly to address both under and over nutrition among the population.





5.2 Nutrition Programmes and Activities Related to Pregnant Women and Infants

Good nutrition in the early stages of life is very important in ensuring optimal physical and mental development and long term health of the population. Nutritional issues related to this group include macro and micronutrient deficiencies such as anaemia, iodine deficiency and poor maternal weight gain. Malnutrition among pregnant and lactating mothers has impact on the children's development. Therefore, programmes and activities targeted to mothers are planned and executed to

address nutritional issues affecting this vulnerable group. The concept of the first 1,000 days is also integrated into activities related to maternal nutrition to promote action and improve nutrition for mothers and children. The first 1,000 days refer to the critical period between a woman's pregnancy and her child's second birthday. The right nutrition during this first 1,000 days can have a profound impact on a child's ability to grow, learn and rise out of poverty.

Nutrition Surveillance on Pregnant Women and Infants

The objective of nutrition surveillance on pregnant women and infants is to monitor their nutritional status. The indicators used in measuring the progress includes

anaemia among pregnant women, six months exclusive breastfeeding and timely introduction of complementary feeding.

Nutrition Education for Mothers

Nutrition education for pregnant and lactating mothers are carried out in clinics and hospitals. It emphasises the importance of nutrition during pregnancy and lactating, adequate food intake in terms of quantity and quality for pregnant and lactating mothers and infant and young children as well as breastfeeding management. Education on feeding practices of infant and young children has been integrated into

public health programmes in the clinics. This include dissemination and providing written materials, postnatal talks and seminar/ training courses for child care. It is well recognised that the period from birth to two years of age is critical for the promotion of optimal growth, brain development as well as health and behavioural development.



Nutrition Counselling for Pregnant and Lactating Women

Nutrition counselling is carried in health clinics and hospitals. The target groups are pregnant mothers who are anaemic, and/ or do not gain adequate weight, lactating mothers who are anaemic and/

or having problems related to breastfeeding as well as pregnant mothers with gestational diabetes mellitus (GDM) and hypertension.

Breastfeeding Promotion

Breastfeeding promotion is implemented to support the National Breastfeeding Policy which was formulated in 1993 and revised in 2005. The policy states that all mothers are encouraged to breastfeed their infants exclusively for the first six months and continued up to the age of two years. Complementary foods should be introduced at the age of 6 months.

A multi-pronged approach is utilised to promote breastfeeding that includes giving every mother, parent, family, friends and employer the right to information on breastfeeding through mass and social media, public forums and seminars. The thematic World Breastfeeding Week is celebrated every year since 1992.

Other than that, efforts are also made to promote and support breastfeeding in public places such as shopping complexes, community centres, business premises and workplaces.

Baby-Friendly Hospital Initiative (BFHI)

Baby-Friendly Hospital Initiative (BFHI) is a global initiative by the World Health Organization (WHO) and UNICEF that aims to give every baby the best start in life by creating a health care environment that supports breastfeeding as the norm. In 1998, Malaysia had been recognised by WHO as the third country in the world with 100% government

hospitals recognised as baby-friendly. Assessment and re-assessment of BFHI is an on-going activity. Whilst 100% government hospitals have been recognised as baby-friendly, more effort and commitment are needed from private hospitals to attain the baby-friendly status.

Baby-Friendly Clinic Initiative (*Klinik Rakan Bayi, KRB*)

Baby-Friendly Initiative Clinic is an initiative that complements the implementation of Baby-friendly Initiative in the hospitals. The objective of KRB is to provide services and environment that support the breastfeeding practices. One of the main reasons for the implementation is because more than 90% of the antenatal and postnatal services

are being carried out at maternal and child health clinics. The KRB applies the "Nine Steps to Successful Breastfeeding" at the clinic level. This initiative increases knowledge and skill among mothers, therefore they become equipped before delivery and better prepared to sustain exclusive breastfeeding for the first six months.

Breastfeeding Mother Support Groups

The establishment of breastfeeding mother support groups is one of the important component in breastfeeding promotion. Since the Baby-Friendly Hospital Initiative (BFHI) was launched in 1992, the "Ten Step to Successful Breastfeeding" requires the BFHI to establish support groups in the hospitals

and also extends these to the community. This activity perceives the demand from the public especially from the first time mother to be supported in breastfeeding their child. These groups have empowered women to start and continue with breastfeeding.

Code of Ethics for the Marketing of Infant Foods and Related Products

The overall aim of the Code is to uphold the supremacy of breast milk; to assist in safe and optimal nutrition of infants by the protection, promotion and support of breastfeeding. It also aims to ensure appropriate marketing, and proper use, when required, of designated products (infant formulas, follow-up formulas, special formulas, feeding bottles, teats and pacifiers) and complementary foods. The main

activities under this initiative are vetting of materials related to designated products and complementary food and monitoring the violations of the Code. The Code of Ethics is being reviewed to improve its content and strengthen its implementation in consistence with marketing strategies by infant formula industries.

Cooking Demonstration on Diet for Mothers and Infants

Cooking demonstrations are implemented in health clinics since the establishment of the maternal and child health services. The main objective of this activity is to educate mothers on ways to prepare balanced diet for pregnant and lactating mothers and

infants and young children. These include preparation of complementary food which should be introduced when the baby is six months old in addition to breast milk.

Supplementary Feeding Programme for Pregnant and Lactating Mothers

Supplementary Feeding Programme for Pregnant and Lactating Mothers (Full Cream Milk Programme) has been implemented since 1970s. The objective of the programme is to improve the nutritional intake of mothers. This helps to overcome nutritional problems such as poor weight gain and anaemia among pregnant

mothers. In addition, pregnant mothers are given haematinics to increase their iron level. Haematinics are also being given to lactating mothers who are anaemic. The Supplementary Feeding Programme Guideline developed in 2008 is being reviewed to strengthen its implementation.

Anaemia Prevention Programme

Anaemia Prevention Programme was started as early as 1980s to improve nutritional status among pregnant and postnatal mothers. All pregnant and postnatal mothers are given haematinic which consists of iron (ferrous fumarate), folic acid, vitamin C and B12 (cobalamin) for both preventive and curative measures. This helps to improve pregnancy outcome such as infant's birth

weight. Status of anaemia amongst antenatal mothers attending government health clinics are monitored based on their haemoglobin level at 36 weeks gestation period. Health education and nutrition counselling are also given to encourage the mothers to consume foods high in iron and to increase vitamin C intake in their daily diet.

Iodine Deficiency Disorders (IDD) Programme

This programme has been implemented since 1996 with the objective to virtually eradicate IDD in Malaysia. Activities include distribution of iodised salt to pregnant mothers in endemic areas and nutrition education on how to increase iodine intake. Universal

Salt Iodisation (USI) has been implemented in Sabah since 1999 and in Sarawak in 2008. The USI for the whole of Malaysia is expected to be gazetted in 2017 to ensure sufficient iodine intake amongst the population.



5.3 Nutrition Programmes and Activities for Children 6 Years and Below

Nutrition Surveillance

The objective of nutrition surveillance for children under 5 years is to monitor their nutritional status. The parameters that are monitored are weight-for-age, weight-for-

height, height-for-age and BMI-for-age. Data from this system provides information to be used in policy development and programme planning and implementation.

Rehabilitation Programme for Malnourished Children (*Program Pemulihan Kanak-Kanak Kekurangan Zat Makanan, PPKZM*)

The Rehabilitation Programme for Malnourished Children (PPKZM) has been implemented since 1989 as an effort to improve the nutritional status of children aged six months to six years from hard core poor families. Children who meet the criteria are given basic food supply to ensure food and nutrition security in order for them to achieve normal growth and physical development. The children are also given immunisation and treatment. Health education focusing on child nutrition and personal hygiene are emphasised to parents. As an extension to

the PPKZM, the Community Feeding Programme is implemented to specifically rehabilitate undernourished children from the marginalised groups which are the Orang Asli and the Pribumi of Sarawak. This programme was identified under the Government Transformation Programme (GTP 2.0) National Key Result Area-Low Income Household for the year 2013-2015. This programme has been implemented in the remote areas in Perak, Pahang, Kelantan and Sarawak. The target coverage of >95% was achieved in 2014.

Nutrition Activities at Childcare Centres (TASKA)

Healthy eating promotion activities are conducted in childcare centres nationwide. Nutritionists are involved in the development of menus and recipes for government childcare centres. Caregivers are trained to carry out the monitoring of nutritional status of the children and the preparation of healthy and safe meals in the childcare centres. Various nutrition inputs are

provided to support nutrition activities conducted by other agencies, such as Community Development Department (KEMAS), Institutes for National Integration Studies and Training (IKLIN) and the Association of Registered Childcare Providers (*Persatuan Pengasuh Berdaftar Malaysia, PPBM*).

5.4 Nutrition Programmes and Activities for Children with Special Needs

The nutrition programme for children with special needs is implemented in health clinics and Community Rehabilitation Centres (*Pusat Pemulihan Dalam Komuniti, PDK*). Nutrition components are incorporated into existing activities through the implementation of guidelines and manuals for the

implementation of My Healthy PDK (PKD Ku Sihat). Among the activities carried out are monitoring of nutritional status of children with special needs, nutrition education and training on healthy catering for caregivers.

5.5 Nutrition Programmes and Activities for School Children

Nutrition plays an important role in the growing and development of children and adolescents to sustain good health. In achieving and maintaining the nutritional well-being of these

groups, several activities are implemented targeted at preschoolers, school children and adolescents.





Preschoolers (5-6 years)

The Ministry of Health Malaysia works closely with the Social Welfare Department under the Ministry of Women, Family and Community Development, the Community Development Department (KEMAS) under the Ministry of Rural and Regional Development and the Ministry of Education in implementing nutrition programmes

targeted at child care centres and preschools. The activities include providing technical guidance on nutrition-related activities such as menu reviewing, healthy and safe meal preparation, nutrition education and nutritional status monitoring.

Primary/ Secondary (7 - 17 years)

Nutrition programmes and activities have been conducted in schools since the 1970s. The activities include the School Feeding Programme (*Rancangan Makanan Tambahan, RMT*), School Milk Programme (*Program Susu 1Malaysia*), nutrition integration into the school curriculum, monitoring foods sold in school canteens in consistence with the School Canteen Management Guidelines, menu development for boarding schools and nutrition education targeted at school children, teachers, school canteen operators and parents. In addition, healthy catering training is conducted for school canteen operators to improve their knowledge and skill in preparing healthy meals at school

canteens. The sale of unhealthy foods outside the school perimeters is prohibited as outlined in the Guidelines on the Prohibition of Sales of Foods Outside School Perimeters (*Garis Panduan Penguatkuasaan Larangan Penjualan Makanan dan Minuman di Luar Pagar Sekolah*) which is enforced by the Local Authorities. Furthermore, nutritional status of the school children are monitored routinely and the information are recorded in the Student Health Record (*Rekod Kesihatan Murid, RKM*). The nutritional status of the students are also monitored through the SEGAK (*Ujian Standard Kecergasan Fizikal Kebangsaan*) programme which is implemented to assess the student fitness level.



5.6 Nutrition Programmes and Activities for Adolescents

As an extension of nutrition activities in schools, nutrition activities such as monitoring of nutritional status and provision of healthy menus are conducted at the National Service Training Programme (*Program Latihan Khidmat Negara, PLKN*) targeted for school-leavers. Activities on

nutrition promotions are also conducted for youths at higher education institution through PROSIS (*Program Siswa Sihat*) programme. Recently, nutrition promotion activities are conducted annually during the National Youth Day (*Hari Belia Negara*).



5.7 Nutrition Programmes and Activities for Adults

Healthy Cafeteria

Healthy Cafeteria aims to provide nutritious and safe foods to consumers. It is implemented based on the Guidelines for the Assessment of Healthy Cafeteria Recognition. This initiative aims to provide

a supportive environment for healthy eating practices. Until 2015, there have been 104 cafeterias have been recognised as Healthy Cafeterias.



Healthy Catering Training

The objective of Healthy Catering Training is to increase knowledge and skill on the preparation of safe and healthy foods. This training is targeted at various sectors including schools, work places and institutions. The module includes introduction to healthy eating, how to prepare healthy foods, recipe

modifications and food safety. The training was first implemented in 2004. Every district conducts this training at least once a year. From 2004 to 2015, a total of 841 trainings have been conducted covering 49,479 food operators.

Healthy Meal Provision during Meetings (*Penyediaan Hidangan Sihat Semasa Mesyuarat, PHSSM*)

Healthy Meal Provision during Meetings focuses on the provision of health menu meal options, calorie tagging and instilling healthy eating practices such as provision of low fat milk, separation of sugar from hot

drinks, providing plain water and serving of fruits and vegetables. This activity was first implemented in the Ministry of Health in 2011 and was expanded to other ministries in 2012.

Healthy Eating Through Healthy Shopping

Healthy Eating through Healthy Shopping is another approach for nutrition education and promotion using interactive methods. The main activity in this initiative is the Supermarket Tour whereby customers are guided for a tour and taught how to read labels and select healthier food options for the various food

groups which are cereals; fruits and vegetables; fish, meat and poultry; milk and milk products and oil. From 2012 until 2015, a total of 914 activities have been carried out nationwide involving 30 hypermarkets throughout the country.

Healthy Community Kitchen (*Dapur Sihat Masyarakat, DSM*)

Healthy Community Kitchen is aimed to enhance the nutritional status of families and communities through active participation of the community. This includes smart partnership concept between intra and inter agencies to conduct various activities according to the needs and requests from the target groups. Cooking

demonstrations, development of healthy recipes, gardening and relevant talks and trainings are amongst the activities conducted to encourage the community to practise healthy eating. Until 2015, there are a total of 57 DSM throughout the country.



5.8 Nutrition Programmes and Activities for Elderly

Nutrition is one of the important factors in maintaining the well-being of the elderly. Therefore, educational materials targeted to this group such as leaflets on Nutrition Guide for the Elderly are developed and distributed. Malaysian Dietary Guidelines for the Elderly is currently

being developed to ensure standard messages on nutrition are disseminated to this target group. To increase the nutrition knowledge and skill of care takers of the elderly, nutrition training module for elderly in institutions have been developed. This module is used by health staff and social workers.



5.9 Other Nutrition Programmes and Activities

Nutrition Education

Other than nutrition education, activities to promote healthy eating are also being conducted in various forms such as dietary counselling, cooking demonstrations and exhibitions. These activities are carried out either individually or in

groups. Prime and supportive messages to promote good nutrition to the public have been developed and disseminated through publication of educational materials and articles. Messages are also disseminated through television and



cinema trailers and crawlers, talks on TV and radio to reach of both urban and rural population. Nutrition messages are also blasted through social media such as Facebook, Twitter and YouTube. In early 2015, smartphone application, namely

MyNutriApps II: MyNutriDiari, was introduced to the public to create a calorie conscious society and regular body weight monitoring especially among adults.

Nutrition Information Centre (NIC)

Nutrition Information Centre was established in 2007 to disseminate nutrition information to the

public. There are a total of 15 NICs throughout the country.

Nutrition Counselling Services

Counselling services are conducted in health clinics to assist individuals or small groups on dietary management, appropriate diets and healthy lifestyles. The main target groups are parents or carers of malnourished children,

anaemic pregnant women, overweight and obese adults and people with diabetes, hypertension and hyperlipidaemia. This service was first implemented in 2007 and expanded to cover 150,000 clients in 2015.

Inter-Sectoral Collaboration with Non-Government Organizations

Non-government organisations, professional bodies and the food industry play vital roles in promoting and supporting nutrition programmes and activities. Therefore, the Ministry of Health

Malaysia works very closely with them in disseminating nutrition information, development of nutritional guidelines and providing supporting environment that promotes healthy lifestyle.

Nutrition Month Malaysia (NMM)

Nutrition Month Malaysia observed annually in April, is an initiative of the Nutrition Society of Malaysia (NSM), Malaysian Dietitians Association (MDA) and Malaysian Association for the Study of

Obesity (MASO) supported by MOH to promote healthy eating and active living. Various nutrition related activities are conducted during NMM at both national and state levels.

Nutrition Information on Food Labels to Assist in Food Choice

Two main types of nutrition information on the label of pre-packaged foods have been made available by the enforcement of regulations on nutrition labelling and claims since 2005. Nutrition labelling or nutrient declaration enables the consumer to know the content of various nutrients in the pre-packaged foods. Nutrition

claims provide further information to the consumers regarding the nutrients in the products, including their functions. These nutrition information are useful in guiding consumers choose the appropriate pre-packaged foods.

Implementation of Front-of-Pack (FOP) Labelling

As an extension to nutrition labelling, Front-of-Pack Labelling is implemented to serve as a quick guide for consumers on calorie and nutritional content of food products and helps them choose healthier food options. One of the examples is FOP for energy which has been implemented in

Malaysia since 2013. FOP for energy assists consumers in planning their daily energy intake. Other initiatives of FOP for Healthier Choice Logo is being developed by the MOH, other related government bodies, industries, academicians and professional bodies.

Healthy Eating Initiative in Fast Food Restaurants

In view of the mushrooming of fast food restaurants in Malaysia, an initiative has been taken by the Ministry of Health Malaysia and the fast food restaurants to provide healthier food options to the public. This is implemented through the Guideline on the Advertising and Nutrition Information Labelling of Fast Foods. Through this guideline, fast food advertisements

and any sponsorship during children programmes on television are banned. Besides that, fast food outlets are required to provide nutrition information of their products. As outcomes of continuous dialogues with fast food industries, various efforts has been taken to reformulate fast food products including reducing content of salt, sugar and fat and increasing fibre content.

Nutrition Related Programmes of Other Agencies

Members of the Technical Working Group on Nutrition Promotion of the NCCFN have implemented numerous food and nutrition intervention programmes. The Nutrition Society of Malaysia (NSM) has conducted programmes targeted at specific groups, especially mothers, infants and children. Several recent programmes include the Mi-Care, Mother's Smart Choice, MyNutriBaby, Positive Parenting, Healthy Kids and UniChef. NSM has also published three series of healthy recipe books to guide the public in preparing healthier meals. Federal Agriculture Marketing Authority (FAMA) has been actively promoting fruits and vegetables through the

increasing number of Pasar Tani (Farmers Market) which sell local fruits and vegetables, KEMAS with *Kebun Dapur* Project at kindergartens. Other agencies include the Federation of Malaysian Manufacturers, Nutrition Society of Malaysia, Malaysian Health Promotion Board (MySihat), Consumer Association of Penang, Malaysian Association for the Study of Obesity, SME Corporation Malaysia, National Sport Council of Malaysia, Ministry of Communication and Multimedia, Ministry of Youth and Sport, Ministry of Domestic Trade, Co-operative and Consumerism.



Achievements and
Challenges of the NPANM II,
2006-2015



NPANM I, 1996-2000

National Nutrition Policy, 2005

6.1 Background

Since the 1970s, more intensified multi-sectoral efforts were undertaken to improve the nutritional status of the Malaysian population, especially through the implementation of the Applied Food and Nutrition Programme (AFNP). From the late 1990s, nutrition intervention programmes were more systematically planned and implemented

with the formulation of the first National Plan of Action for Nutrition of Malaysia (NPANM) I, 1996-2000. The first NPANM was prepared following the first International Conference on Nutrition (ICN), jointly organised by the Food and Agriculture Organization (FAO) and World Health Organization (WHO) in 1992. Formulated as a collaborative effort of various government



NPANM II, 2006-2015



NPANM III, 2016-2025

agencies, academia, professional bodies and the food industry, NPANM I, 1996-2000 described in detail strategies and activities to combat both under and over nutrition problems, to be undertaken by all relevant stakeholders. Recognising the importance for effective inter-governmental collaboration, a National Nutrition Policy was formulated in 2003 as recommended

in NPANM I, 1996-2000. Taking into account the current and emerging nutrition issues in the country, National Plan for Action for Nutrition was reviewed and NPANM II, 2006-2015 was developed in tandem with the objectives and strategies of the National Nutrition Policy of Malaysia.

6.2 Achievements of NPANM II, 2006-2015

To meet the objectives of NPANM II, 2006-2015, the following indicators and targets have been set to be achieved by the year of 2015. A number of interventions and activities were recommended for implementation to achieve the targets. During the mid-term review of NPANM II, 2006-2015 it was decided that the targets set for the indicators for preventing and controlling diet-related non-communicable diseases do not have to be measured because the targets set for the

three indicators, namely cardiovascular disease, cancer and osteoporosis are already covered under the indicators on food intake and dietary practices.

Towards the end of NPANM II, 2006-2015, the achievements for the targets for each indicator were measured, as presented in the following tables.

Table 1: Improving Breastfeeding and Complementary Feeding Practices

| Indicators | Target to be achieved by 2015 | Achievement |
|--|-------------------------------|---|
| 1. Percentage of new born babies initiate breastfeeding by placing babies on skin to skin contact with their mothers immediately following birth for at least one hour. | Increase from 63.9% to 75.0% | 86.4% (Source: BHFI Assessment, MOH 2013-2015-unpublished data) |
| 2. Prevalence of exclusive breastfeeding for 4 months. | Increase from 19.3% to 40.0% | 63.1% (Source: Health Informatics Centre, MOH 2015) |
| 3. Prevalence of exclusive breastfeeding for six months. | Increase from 14.5% to 35.0% | 49.4% (Source: Health Informatics Centre, MOH 2015) |
| 4. Prevalence of timely introduction to complementary foods. | 75.0% | 92.2% (Source: Health Informatics Centre, MOH 2015) |
| 5. Percentage of babies who received food from 4 or more food groups. | 75.0% | Data not available |
| 6. Percentage of babies who received solid, semi solid or soft foods according to minimum recommendation of Guidelines for the Feeding of Infants and Young Children 2008. | 75.0% | Note: This data will be available after 2016 through National Health and Morbidity Survey (NHMS) which will be conducted on four yearly basis. |

Table 2: Improving Food Intake and Dietary Practices

| Indicator | Target to be achieved by 2015 | Achievement |
|---|---|---|
| 1. Percent of adults meeting the RNI, 2005. <ul style="list-style-type: none"> Meeting 75-100% of RNI for energy. Meeting $\pm 25\%$ of RNI for other nutrients. | Increase of 10% of adults meeting the RNI compared to Malaysia Adults Nutrition Survey 2003 findings. | The intake of almost all nutrients did not achieve the targets except for iron. However, these data need to be treated with caution as studies have pointed out that there could be high percentage of under reporting during dietary recall, limitation in food composition database, human error during data management and analysis. |

| Nutrients | Categories | Baseline % (MANS 2003) | Target to be achieved in 2015 | Achievement % (MANS 2014) |
|-----------|---------------------------------------|------------------------|---|---------------------------|
| Calories | Meeting 75% to 100% of RNI for energy | 25.6 | At least 28.2% meeting the recommendation for calories | 23.0 |
| Protein | Meeting 75% to 125% of RNI for energy | 45.0 | At least 49.5% meeting the recommendation for protein | 42.3 |
| Vitamin C | Meeting 75% to 125% of RNI for energy | 16.5 | At least 18.2% meeting the recommendation for vitamin C | 17.8 |
| Calcium | Meeting 75% to 125% of RNI for energy | 13.9 | At least 15.3% meeting the recommendation for calcium | 13.2 |
| Iron | Meeting 75% to 125% of RNI for energy | 17.5 | At least 19.3% meeting the recommendation for iron | 26.1 |
| Vitamin A | Meeting 75% to 125% of RNI for energy | 23.8 | At least 26.2% meeting the recommendation for vitamin A | 22.7 |
| Thiamine | Meeting 75% to 125% of RNI for energy | 22.8 | At least 25.0% meeting the recommendation for thiamine | 19.2 |

MANS 2014 reported that more than half of the population are below the RNI for energy, calcium, thiamine and vitamin C. Slightly less than half of the population were below the RNI for iron and vitamin A. For energy contribution, percent of adults meeting macronutrient contribution to total energy intake according to

RNI are also below the target. About half of the adults were found to have exceeded the recommended protein contribution to total energy intake (50.7%) and fat contribution intake to total energy intake (45.6%) according to RNI.

Table 2: Improving Food Intake and Dietary Practices

| Indicator | Target to be achieved by 2015 | Achievement |
|-----------|-------------------------------|-------------|
|-----------|-------------------------------|-------------|

2. Percent of adults meeting macronutrient contribution to total energy intake according to RNI.
- Carbohydrate (55-70%)
 - Fat (20-30%)
 - Protein (10-15%)
- At least 75% of adults meeting macronutrient contribution to total energy intake according to RNI.
- For all three macronutrients, more than half of Malaysian adults not meeting the RNI recommendation for the contribution to total energy intake. Almost half (45.6%) were found to have exceeded the recommended fat contribution to total energy intake according to RNI. Whilst, half (50.7%) of the adults were found to have exceeded the protein contribution to total energy intake according to RNI.

| Macronutrient | Contribution to total energy intake | Achievement % (MANS 2014) |
|---------------|-------------------------------------|---------------------------|
| Carbohydrate | 55 to 70% | 40.2 |
| Fat | 20 to 30% | 40.8 |
| Protein | 10 to 15% | 40.4 |

Table 2: Improving Food Intake and Dietary Practices

| Indicator | Target to be achieved by 2015 | Achievement |
|--|--|--|
| 3. Percent of adults meeting recommended servings for different food groups in the Malaysian Food Pyramid. | Increase of 10% of adults meeting recommended servings for different food groups compared to Malaysia Adults Nutrition Survey 2003 findings. | Based on the comparison between reanalysed data from MANS 2003 and MANS 2014, it showed that some food groups such as "meat, poultry and egg", "fish & fish products", "legumes & nuts" and "milk and dairy products" achieved the target. However, the percentage not meeting the recommended servings for "legumes and nuts" (81.9%) and "milk and dairy products" (73.6%) in MANS 2014 were still high. Whereas, the other food groups were below the target including fruits and vegetables. |

| Food groups | Servings per day | Baseline % (MANS 2003) | Target to be achieved in 2015 | Achievement % (MANS 2014) |
|---------------------------------------|------------------|------------------------|---|---------------------------|
| Cereal and cereal products and tubers | 4 to 8* | 52.9 | At least 58.0% meeting the recommendation for cereal and cereal products and tubers | 41.3 |
| Fruits | 2* | 17.0 | At least 18.7% meeting the recommendation for fruits | 14.9 |
| Vegetables | 3* | 13.9 | At least 15.3% meeting the recommendation for vegetables | 7.9 |
| Meat, poultry & egg | 1/2 to 2* | 52.4 | At least 57.6% meeting the recommendation meat, poultry & egg | 66.8 |
| Fish & fish products | 1* | 20.6 | At least 22.6% meeting the recommendation for fish & fish products | 31.3 |
| Legumes & nuts | 1/2 to 1* | 12.3 | At least 13.5% meeting the recommendation for legumes & nuts | 17.1 |
| Milk & dairy products | 1 to 3* | 21.9 | At least 24.1% meeting the recommendation for milk & dairy products | 24.4 |

*Recommended servings in the Malaysian Food Pyramid.

Table 3: Reducing Protein-Energy Malnutrition

| Indicator | Target to be achieved by 2015 | Achievement |
|--|-------------------------------|-----------------------------|
| 1. Low birth weight (<2.5kg) | Reduce from 10.6% to 6.0% | 11.3% (Source: DOS 2013) |
| 2. Children below 5 years: | | |
| Underweight (Weight for age < 2SD) | Reduce from 12.9% to 6.5% | 12.4% |
| Stunting (Height for age < -2SD) | Reduce from 17.2% to 9.0% | 17.7% |
| Wasting (Weight for height < -2SD) | Reduce from 14.9% to 7.0% | 8.0% |
| | (Source: NHMS 2006)* | (Source: NHMS 2015)* |
| 3. Children aged 7 years: | Reduce from 11.2% to 6.0% | 9.4% |
| Thinness (BMI for age < -2SD) | (Source: NHMS 2006)** | (Source: NHMS 2015)** |
| 4. Children aged 12 years: | Reduce from 8.6% to 5.0% | 8.8% |
| Thinness (BMI for age < -2SD) | (Source: NHMS 2006)** | (Source: NHMS 2015)** |
| 5. Children aged 15 years: | Reduce from 10.1% to 5.0% | 6.4% |
| Underweight (BMI for age < -2SD) | (Source: NHMS 2006)** | (Source: NHMS 2015)** |
| 6. Adults aged 18-59 years: | Reduce from 8.1% to 4.0% | 6.9% |
| Underweight (BMI <18.5 kg/m ²) | (Source: NHMS 2006)*** | (Source: NHMS 2015)*** |
| 7. Elderly aged 60 years and above: | Reduce from 11.0% to 5.0% | 5.8% |
| Underweight (BMI <18.5 kg/m ²) | (Source: NHMS 2006)*** | (Source: NHMS 2015)*** |

*WHO 2006

**WHO 2007

***WHO 1998

All the targets identified for the 7 indicators to reduce protein-energy malnutrition were not achieved. These indicators covered almost the entire lifespan, from birth, below five years, school aged children, adult until elderly. Low birth weight prevalence was found to be almost double the target set. There could be several possible reasons for this, such as improvement in medical care and technology so that more premature babies survived and thereby contributing to the higher prevalence of low birth weight. To have a more accurate picture of the prevalence of low birth weight, it is suggested that the Statistics Department presents the prevalence of low birth weight for term babies separately from those who were born preterm. Nevertheless, the high prevalence of low birth weight should not be ignored and further emphasis need to be given to improve maternal nutrition.

All the three indicators for undernutrition for children below five years were found to have exceeded the targets set. The problem of stunting was particularly serious as the prevalence was found to have increased compared to the baseline. There was also no improvement in the prevalence of underweight. Serious attention needs to be given immediately to promoting children nutrition. Effective strategies need to be planned and implemented to reach the population in all parts of the countries to prevent and control undernutrition problem.

It was also found that the prevalence of undernutrition among school aged children (7, 12 and 15 years) did not meet the targets and remain at the same order of magnitude compared to a decade ago. Promoting healthy eating among school children should be given urgent attention. Activities on nutrition education and intervention should be rolled out to all schools in the countries. Greater emphasis should be given to the systematic and proper implementation of the monitoring of the BMI of school children. The identified malnourished children should be referred to the nutritionist for nutrition counselling.

For adults and elderly undernutrition indicators, the current prevalence were higher than the set target. This is probably because the targets were set too low and unrealistic during the mid-term review of NPANM II in 2010. Before the mid-term review, the original target set for adult was 15%, and that for the elderly was 20% by 2015. If these targets were retained, the current prevalence would have been below these values. It could be that the prevalence of undernutrition among adults and elderly at the current level has reached a plateau. It may be rather difficult to further reduce the prevalence lower to the set target of about 5%. Furthermore, it could be ambitious to attempt to lower the prevalence of under nutrition among adults by half within a short period of five years.

Table 4: Reducing Micronutrient Deficiencies

| Indicator | Target to be achieved by 2015 | Achievement |
|--|--|---|
| 1. Anaemia: Children below 5 years (Hb <11g%). | Reduce from 18.0% to 9.0% (Source: WHO/ UNICEF 2000) | SEANUTS 2013 study reported the prevalence of anaemia among 4 to 7 years were 11.3% for urban and 17.6% for rural. It would appear that the projected target may not be met. |
| 2. Anaemia: Female teenagers (Hb <12g%). | Not more than 20.0% | SEANUTS 2013 study reported the prevalence of anaemia among girls aged 7 to 12 years were 3.5% for urban and 1.9% for rural. It would appear that the projected target may not be met. |
| 3. Anaemia: Pregnant women (Hb <11g%). | Reduce from 22.0% to 16.0% (Source: Health Informatics Centre, MOH 2009) | 8.2% (Source: Health Informatic Centre, MOH 2015) |
| 4. Vitamin A deficiency: Children below 5 years (Serum retinol <20µg/dl). | Not more than 20.0% | SEANUTS 2013 study reported the prevalence of vitamin A deficiency (<0.7µmol/L or <20µg/dl) among 4 to 7 years were 6.6% for urban and 10.9% for rural. It would appear that the projected target may not be met. |
| 5. Iodine deficiency: Median urinary iodine excretion level among children aged 8 to 10 years. | Median urinary iodine excretion level between 100 µg/L and 200 µg/L | Surveillance report from Sabah (2015) indicated a median urinary iodine excretion level of 158 µg/L. |
| Percentage of school children aged 8 - 10 years with median urinary iodine < 100 µg/L. | Reduce from 48.0% to <40.0% (Source: National IDD Survey 2009) | Surveillance report from Sabah (2015) indicated that 29.1% of school children aged 8 -10 years had median urinary iodine < 100 µg/L. |
| 6. Iodine deficiency: Median urinary iodine excretion level among pregnant women in the first trimester. | Median urinary iodine excretion level between 150 µg/L and 249 µg/L | Surveillance report from selected areas from Sabah (Pitas, Kota Belud and Kinabatangan), 2010 indicated that the median urinary iodine excretion level of pregnant women in the first trimester was 265.3 µg/L. |

Currently, most identified indicators in reducing micronutrient deficiencies did not have a mechanism for data collection. However, routine monitoring of median urinary iodine excretion level will be carried out after gazzettment of USI

for Malaysia to be expected in 2018. It is noted that the prevalence of vitamin A deficiency still exists that among the rural children below 5 years.

Table 5: Reducing Overweight and Obesity

| Indicator | Target to be achieved by 2015 | Achievement |
|---|--|--------------------------------|
| 1. Prevalence of overweight among children aged 7 years. | Reduce from 8.0% to 6.0% (Source: NHMS 2006)* | 9.3% (Source: NHMS 2015)* |
| Prevalence of obesity among children aged 7 years. | Reduce from 8.3% to 6.0% (Source: NHMS 2006)* | 14.0% (Source: NHMS 2015)* |
| 2. Prevalence of overweight among children aged 12 years. | Reduce from 15.9% to 13.0% (Source: NHMS 2006)* | 17.8% (Source: NHMS 2015)* |
| Prevalence of obesity among children aged 12 years. | Reduce from 12.0% to 10.0% (Source: NHMS 2006)* | 16.8% (Source: NHMS 2015)* |
| 3. Prevalence of overweight among children aged 15 years. | Reduce from 12.4% to 10.0% (Source: NHMS 2006)* | 16.0% (Source: NHMS 2015)* |
| Prevalence of obesity among children aged 15 years. | Reduce from 7.7% to 5.0% (Source: NHMS 2006)* | 8.4% (Source: NHMS 2015)* |
| 4. Prevalence of overweight among adults aged >18 years. | Not more than 35.0% | 30.0% (Source: NHMS 2015)** |
| Overweight (BMI: 25.0-29.9 kg/m ²) | Baseline: 29.1% (Source: NHMS 2006)** | |
| Prevalence of obese among adults aged >18 years. | Not more than 20.8% | 17.7% (Source: NHMS 2015)** |
| Obese (BMI: ≥ 30 kg/m ²) | Baseline: 14.1% (Source: NHMS 2006)** | |

*WHO 2007

**WHO 1998

The severity of overweight and obesity among school-aged children has worsened as compared to a decade ago. The prevalence of overweight and obesity among school aged children aged 7, 12 and 15 years exceeded the set targets..

It is imperative that prevention of over-nutrition among school children should be given serious attention. Periodic monitoring of BMI should be properly conducted and the overweight and obese children referred to the nutritionist for nutrition counselling together with their parents. The only way for these activities to be effectively

implemented is to assign nutritionists to be in schools. In addition, school authorities should be informed and fully supportive and participatory in all these activities.

The prevalence of overweight and obesity amongst adults met the targets. For overweight, there was no increase compared to the baseline in 2006. However, the combined prevalence of overweight and obesity at 48% is considered high. There should be no let-up in the implementation of activities to further reduce the prevalence of over-nutrition in the country.





6.3 Challenges of NPANM II, 2006-2015

Some activities identified in the NPANM II (2006–2015) were not implemented. Below are some of these activities.

The establishment of the National Institute of Nutrition (NIN) was put on hold because the Ministry of Health was focusing on the establishment and development of Nutrition Division at the headquarters level. The Nutrition Division was established in October 2009 after 15 years being a section under the Family Health and Development Division. However, recognising the importance of National Institute of Nutrition (NIN) as a centre for nutrition research and training, this agenda will be carried forward for implementation in the NPANM III, 2016–2025.

The proposal to employ nutritionists at various ministries was not taken up. Providing sufficient number of nutritionist for population is a big challenge. In fact, there is still a shortage of nutritionist at government health sector. According to WHO, there must at least 10 allied health professionals for every 100,000 population. Currently, there is only about three nutritionists and dietitians for every 100,000 population. Therefore, it is crucial to ensure sufficient number of nutritionists at the community to intensify the nutrition promotion and interventions at all levels. More outreach activities need to be carried out especially targeting at the vulnerable groups such as infants and young children.

Greater attention needs to be given to nutrition promotion and intervention in schools considering the increasing trend of obesity amongst school children and the existence of under nutrition. An effective referral system from school to health clinic is needed to manage children who are underweight, obese and overweight. It is also

recommended that nutrition education to school children are given based on tested educational modules. As part of school-based activities, monitoring of school canteens needs to be further strengthened.

Currently, activities to prevent and control protein-energy malnutrition only focuses on children attending the government clinics and indigenous groups namely Orang Asli and Penan. Realising that the stunting and wasting prevalence among children under five years are increasing, more outreach activities to address these need to be identified.

In the NPANM II, the implementation of Baby Friendly Hospital Initiative (BFHI) was unfavourably taken up by the private hospitals. Until October 2016, there were only 15 private hospitals that had received the BFHI recognition. There is a need to carry out more intensive advocacy activities at state level to further increase the number of private hospitals with BFHI recognition. In addition to further promote exclusive breastfeeding practices in Malaysia, the proposal for the extension of maternity leave which is consistent with International Labour Organisation (ILO) Maternity Convention and recommendations will be further pursued in the NPANM III, 2016–2025.

Findings of national surveys showed that most of the Malaysians are still not able to fully understand and translate the concept of the Food Pyramid into practices. Massive promotion of the Malaysian Dietary Guidelines (MDG) and dissemination of the related educational materials need to be carried out. The use of social and mass media as a communication medium to promote healthy eating messages to the public must be optimised. It is important to reach out the food operators/ providers to encourage them to

provide healthier meals in support of the changing Malaysian food preference. Periodic engagement with food and beverage industries to reduce the level of calories, fat, salt/ sodium and sugar in processed/prepackaged foods as well as ready-to-eat meals need to be carried out. At the same time, it is crucial to further strengthen public awareness programmes on healthy eating.

Specific challenges

1. Lack of intersectoral and multi-stakeholder coordination

Intersectoral coordination is essential at all stages of the process, from the preparation of the NPANM framework, implementation and monitoring and evaluation of the activities and impact indicators. Despite periodic meetings of the National Coordinating Committee on Food and Nutrition (NCCFN), the multi-sectoral commitments in nutrition still need to be strengthened. Nevertheless, governmental coordination is also fundamental between national and subnational levels. Strong political commitment is required to ensure the collaboration from various sectors. This will facilitate the implementation of this plan.

The population is often not involved or aware on decision-making processes. Therefore, there is a need to develop a road map that allow adequate coordination between national and subnational levels, with involvement of other related stakeholders and community representatives to ensure commitment and active participation.

2. Financial shortfall and lack of sustainable financial commitment

To ensure the improvement of nutritional status of the population, improvement in budget allocation to tackle malnutrition is crucial. Insufficient political commitment to tackling malnutrition has led to a financial shortfall. Based on the Global Nutrition Report (GNR) 2015, it is estimated of the percentage of global government allocation to nutrition range from 0.06% of total government budget to 2.90%. An adequate, and predictable funding is key to ensure the effective delivery of nutrition programmes and activities in the the country.

3. Lack of capacity

Human resource capacity to deliver nutrition programmes and activities is crucial. Technical expertise should be in place at all levels, which not only depending with nutritionist in the health sectors. The employment of nutritionist in critical ministries dealing with food, children and community is a great strategies to ensure nutritional wellbeing of the Malaysian. This human resource capacity is needed to coordinate, implement, monitor and evaluate the programmes and activities related with nutrition at all level.

4. Lack of monitoring and evaluation

The data needs to be more effectively used to analyze bottlenecks and gaps, which can then be addressed to improve programme performance. Therefore, nutrition indicators need to be integrated in relevant frameworks at all levels. However, data is often not collected in a timely or in periodic, with large surveys such as the National Health and Morbidity Survey and the Malaysian Adults Nutrition Survey which carried out only every few years. Moreover, collected data can be of poor quality and often does not represent by state.



Moving Forward in the
NPANM III, 2016-2025

7.0 MOVING FORWARD IN THE NPANM III, 2016-2025

In line with the Declaration of International Conference in Nutrition 2014 and Framework of Action as well as global, regional and national level development and direction on nutrition, NPANM II, 2006-2015 has been reviewed and NPANM III, 2016-2025 for the next decade has been formulated. Food and nutrition security is the new focus area in the NPANM III for the next 10 years. Thus, four pillars of food and nutrition

security which are availability, accessibility, affordability and utilisation of food will be addressed in the Plan. To ensure effective implementation, monitoring and evaluation of the Plan, these strategies are outlined with the foundation, enabling and facilitating strategies based on the goal and objectives that have been set.





Key Elements In NPANM III, 2016-2025

Expansion and strengthening of the existing foundation strategy incorporating nutrition objectives, consideration and components not only into national development policies but also into action Plans

1

In ensuring the commitment and participation of key stakeholders in the implementation of NPANM III, 2016-2025, all participating agencies are encouraged to integrate nutrition policy and programmes in their development plan and action plans. Some of the major national development policies and action plans that can be incorporated are the National Agro-food Policy, National Women Policy, Malaysian Education Blueprint, National Consumer Policy and National Social Welfare Policy. The progress of the nutrition policy and programmes incorporated in their respective development and action plans will also be continuously monitored and disseminated through the National Food Safety and Nutrition Council and the National Coordinating Committee on Food and Nutrition.

Greater emphasis in ensuring food and nutrition security

2

The objective of NPANM III, 2016-2025 goes beyond improving household food security whereby the element of nutrition security is given greater emphasis in line with global directions and agenda, such as ICN2 Declaration & Framework for Action as well as Nutrition and the post-2015 Sustainable Development Goals (SDGs) in the next decade. Therefore, to effectively address the multiple challenges with regards to food and nutrition security to end all forms of malnutrition including eradicating hunger in the country particularly undernourishment, stunting, wasting, underweight and overweight in children under five years of age; and anaemia in women and children among other micronutrient deficiencies, a concerted effort through multi-sectoral approaches involving key agencies such as the Ministry of Agriculture and food industries is very crucial. Thus, to uplift households towards a middle class society, initiatives on the Rehabilitation Programme for Malnourished Children and Community Feeding Programmes will be continued and strengthened.

3

Incorporating two new enabling strategies which are to prevent and control obesity and other diet-related NCDs as well as to sustain food systems to promote healthy diets

In response to an alarming trend of diet-related non-communicable diseases (NCDs) in the past two decades, there is an urgent need to halt or reduce the rising trends in overweight and obesity as well as other diet-related NCDs among Malaysian. Therefore, two additional enabling strategies have been incorporated in NPANM III, 2016-2025 which are to reduce obesity and diet-related NCDs and sustaining food systems for a healthy diet. Individual and community empowerment for the prevention and control of diet-related chronic diseases are given greater emphasis. Some of the main focus areas for promoting sustainable food systems through healthy diet incorporated in the 11th Malaysia Plan (2016 – 2020) are as follows:-

- **Public – private partnership**
Collaboration with food and beverage industries to produce healthier food and beverage products.
- **Implementation of weight reduction programmes for school children.**
- **Creating a healthy ecosystem which will contribute towards healthy lifestyle and disease prevention.**
 - Promotion activities on prevention of food wastage.
- **Incorporate nutrition to sustain food systems through collaboration with all relevant ministries and non-government agencies, such as:-**
 - Establishment of 'Nutrition Enhancing Agriculture Food Supply Calculator'.
 - Engagement with food industries (food service operators and manufacturers) to come up with higher availability of healthier food options.
 - Strengthening *Kebun Dapur Projek* initiated by KEMAS to inculcate fruit and vegetable consumption amongst young children.

Inclusion of maternal nutrition to the enabling strategy of promoting infant and young child nutrition

4

Inclusion of promotion of maternal nutrition to the enabling strategies of infant and young child nutrition in line with Global Monitoring Framework for Maternal, Infant and Young Child Nutrition, especially in the following areas:

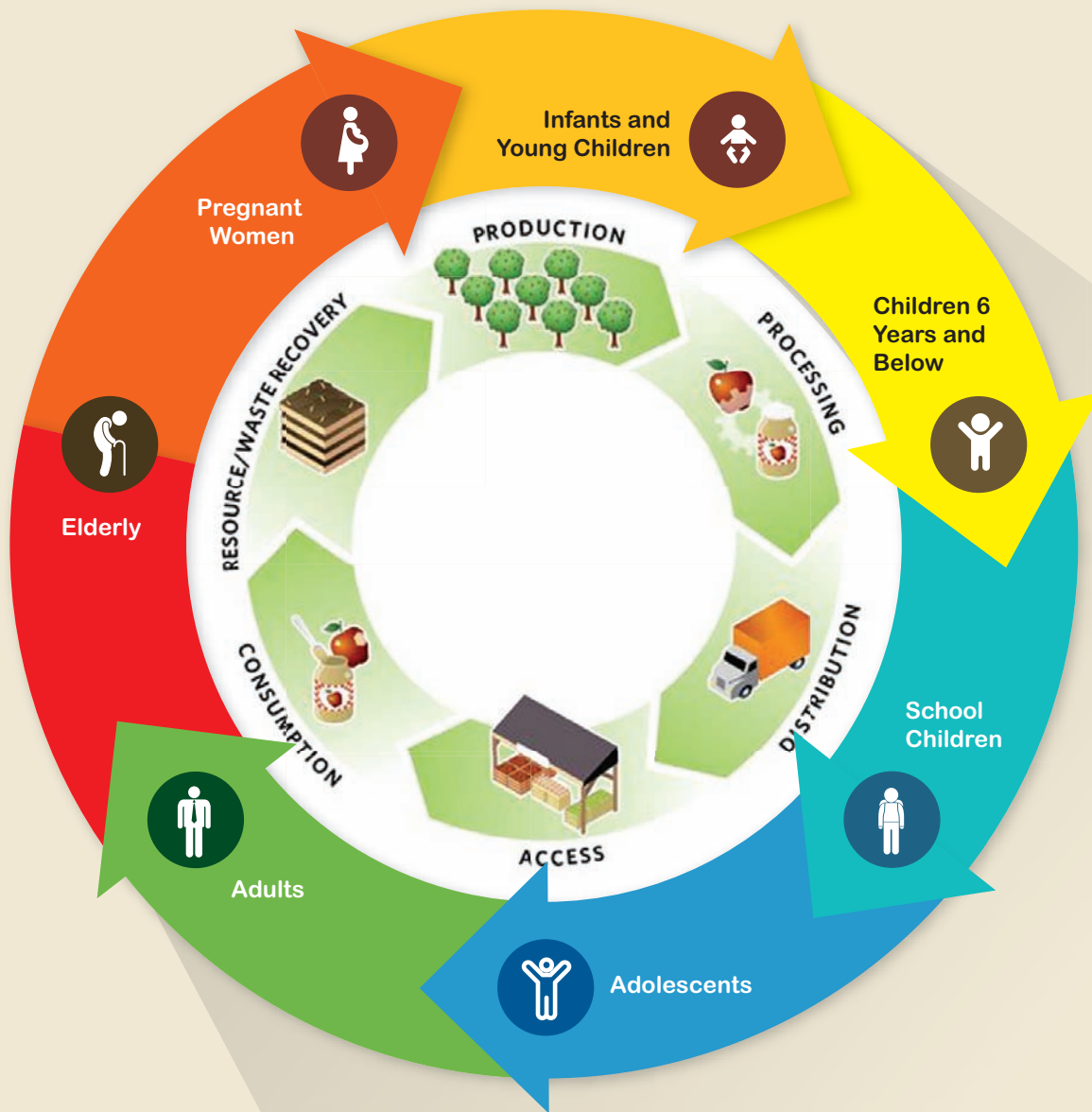
- Strengthening the maternal nutrition strategies (e.g: anaemia/ IDD/ GDM/ appropriate weight gain among pregnant mothers).
- Greater emphasis on nutrition during the first 1000 days of life (e.g: breastfeeding and complementary feeding).
- Strengthening the Code of Ethics for the Marketing of Infant Foods and Related Products.

Strengthening the facilitating strategies in providing standard nutrition guidelines for various age groups and community capacity for nutrition

5

The following facilitating strategies during NPANM II, 2006–2015 have also been reviewed and strengthened:

- Standard nutrition guidelines for various age groups.
 - To review the existing guidelines in line with global, regional and national targets and needs (RNI, MDG).
- Institutional and community capacity building for nutrition.
 - Accessibility of nutrition information and services by strengthening nutrition training and work force.
- Nutrition research and development.
 - Establishment of a National Institute of Nutrition (NIN) as a focal point for nutrition research and training.





Framework of the
NPANM III, 2016-2025



Framework of NPANM III, 2016-2025

Towards Achieving Optimal Nutritional Well-Being Of Malaysians

Goal

Objectives

**NPANM III
2016-2025**

**To strengthen
food and nutrition
security**

**To enhance
nutritional status**

**To reduce
diet-related
non-communicable
diseases (NCDs)**

Promoting maternal, infant and young child nutrition

Preventing and controlling obesity and other diet-related NCDs

**Enabling
Strategies**

Promoting healthy eating and active living

Sustaining food systems to promote healthy diets

Preventing and controlling nutritional deficiencies

Supporting efforts to promote food safety and quality

**Facilitating
Strategies**

Providing standard nutrition guidelines for targeted groups

Continuous assessment and monitoring of the nutrition situation

Strengthening food and nutrition research and development

Ensuring sufficient number of qualified nutritionists and dietitians

Strengthening institutional and community capacity for nutrition

**Foundation
Strategy**

Incorporating nutrition objectives, considerations and components into national development policies and action plans

Goal

Towards achieving optimal nutritional well-being of Malaysians

Objectives

- To enhance nutritional status
- To reduce diet-related non-communicable diseases (NCDs)
- To strengthen food and nutrition security

Strategies

Foundation Strategy

Incorporating nutrition objectives, considerations and components into national development policies and action plans forms the overarching strategy and is vital for the effective implementation of the Plan.

Enabling Strategies

Six (6) strategies, identified as having direct impact on achieving the specific objectives of the Plan, serve as the enabling strategies. These are:

- Promoting maternal, infant and young child nutrition
- Promoting healthy eating and active living
- Preventing and controlling nutritional deficiencies
- Preventing and controlling obesity and other diet-related NCDs
- Sustaining food systems to promote healthy diets
- Supporting efforts to promote food safety and quality

Facilitating Strategies

Five (5) other strategies, identified as providing the mechanism and support for the realisation of the enabling strategies, form the facilitating strategy of the Plan. These are:

- Providing standard nutrition guidelines for targeted groups
- Continuous assessment and monitoring of the nutrition situation
- Strengthening food and nutrition research and development
- Ensuring sufficient number of qualified nutritionists and dietitians
- Strengthening institutional and community capacity for nutrition

Foundation Strategy of NPANM III highlights the importance of incorporating nutrition objectives, considerations and components into national development policies and action plans in other relevant ministries and agencies. It forms the overarching strategy and vital for effective implementation.

Enabling Strategies are identified as having direct impact on achieving the specific objectives of the plan. There are 6 sub enabling strategies as follows:

Promoting Maternal, Infant and Young Child Nutrition

This strategy focuses on activities involving maternal, infant and young child feeding. It has been highlighted to improve nutrition for mothers and children through various promotional and intervention activities.

Promoting Healthy Eating and Active Living

This strategy focuses on promotion to further increase awareness and practice of healthy eating which spans from toddlers to elderly. Various activities will be carried out in different settings and programmes such as child care centres, preschools, primary and secondary schools, National Service Training Programme (PLKN) camps, institute of higher learning and other institutions, as well as community.

Preventing and Controlling Nutritional Deficiencies

The activities under this strategy include an overall landscape analysis on malnutrition status among children to support in modifying existing nutrition strategies and programmes.

Preventing and Controlling Obesity and Other Diet-related Non-Communicable Diseases (NCDs)

The activities under this strategy emphasises on development of soft and hard policies that support and facilitate healthier behavioral change among population. It is to improve the prevalence of obesity and other diet-related NCDs.

Sustaining Food Systems to Promote Healthy Diets

This strategy supports the objectives of this Plan in strengthening food and nutrition security of the population. All activities outlined under this strategy contribute to sustainable food systems encompassing from farm to table.

Supporting Efforts to Promote Food Safety and Quality

Activities under this strategy include the education to create the awareness among population on food labelling, food safety and consumer rights. Mandatory declaration of total sugar, sodium and main fatty acids are proposed in this strategy as well.

Facilitating Strategies are identified as providing the mechanism and support for the realisation of the enabling strategies. There are 5 sub facilitating strategies as follows:

Providing Standard Nutrition Guidelines for Various Targeted Groups

Activities under this strategy focuses on the development of nutrition guidelines suited with the dietary needs of the various age groups among Malaysian. It provides information on healthy eating to reduce risk of over nutrition and non-communicable diseases.

Continuous Assessment and Monitoring of the Nutrition Situation

The need for strengthening the national nutrition surveillance system for specific groups are highlighted in this strategy. The data from the surveillance system is important for the planning and implementation of intervention programmes.

Strengthening Food and Nutrition Research and Development

Research and development are important to provide evidence for development of policies and programmes. The establishment of Nutrition Research Priorities (NRP), update of Food Composition Database (FCD) and establishment of National Institute of Nutrition (NIN) are activities highlighted under this strategy.

Ensuring Sufficient Number of Qualified Nutritionists and Dietitians

This strategy focuses on activities that aim to ensure sufficient number of qualified professionals as well as their competencies.

Strengthening Institutional and Community Capacity for Nutrition

To ensure the effective implementation of intervention programmes, a mandatory nutritionist placement in relevant ministries and agencies as well as industries are given attention in this strategy. For further improvement in institutional and community capacity, nutrition-based training needs to be conducted to health care providers and professionals.



Indicators of the NPANM III,
2016-2025

INDICATORS OF NPANM III, 2016-2025

**Promoting
Maternal, Infant and
Young Child Nutrition**

1



**Promoting
Healthy Eating and
Active Living**

2



**Preventing and
Controlling
Nutritional
Deficiencies**

3



**Preventing and
Controlling Obesity and
Other Diet-related
Non-Communicable
Diseases (NCDs)**

4





| No. | Indicator | Definition | Baseline data | Target for improvement by the year 2025 | | | | | | | | | | |
|---------------------------|--|---|---------------------------|---|-----|--------|-----------|----------|----------|------|------|--------|--|--|
| 1.1 Pregnant Women | | | | | | | | | | | | | | |
| 1.1 (a) | Percentage of pregnant women with anaemia ¹ | Percentage of pregnant women with hemoglobin level less than 11g/dl | 8.2% (HIC, MOH 2015) | Not more than 5% | | | | | | | | | | |
| | | <table border="1"> <thead> <tr> <th>Prevalence of anaemia (%)</th> <th>Classification</th> </tr> </thead> <tbody> <tr> <td>≥40</td> <td>Severe</td> </tr> <tr> <td>20.0-39.9</td> <td>Moderate</td> </tr> <tr> <td>5.0-19.9</td> <td>Mild</td> </tr> <tr> <td>≤4.9</td> <td>Normal</td> </tr> </tbody> </table> | Prevalence of anaemia (%) | Classification | ≥40 | Severe | 20.0-39.9 | Moderate | 5.0-19.9 | Mild | ≤4.9 | Normal | | |
| Prevalence of anaemia (%) | Classification | | | | | | | | | | | | | |
| ≥40 | Severe | | | | | | | | | | | | | |
| 20.0-39.9 | Moderate | | | | | | | | | | | | | |
| 5.0-19.9 | Mild | | | | | | | | | | | | | |
| ≤4.9 | Normal | | | | | | | | | | | | | |
| | | (WHO 2006) | | | | | | | | | | | | |

¹ Core indicators for the Global Nutrition Targets 2025

| No. | Indicator | Definition | Baseline data | Target for improvement by the year 2025 | | | | | | | | | | | |
|-------------------------------------|---|---|-------------------------------------|---|----------------------|-----------|---------------------------|-----------|--------------------------|------------|-----------------------|-------|--|---|---------------------------|
| 1.1 (b) | Percentage of pregnant women with recommended gestational weight gain at ≥ 37 weeks of pregnancy | <p>Range of gestational weight gain according to pre-pregnancy BMI</p> <table border="1"> <thead> <tr> <th>Pre-pregnancy BMI kg/m²</th> <th>Recommended weight gain (kg)</th> </tr> </thead> <tbody> <tr> <td>Underweight (< 18.5)</td> <td>12.5 - 18</td> </tr> <tr> <td>Normal weight (18.5-24.9)</td> <td>11.5 - 16</td> </tr> <tr> <td>Overweight (25.0 - 29.9)</td> <td>7 - 11.5</td> </tr> <tr> <td>Obese (≥ 30.0)</td> <td>5 - 9</td> </tr> </tbody> </table> <p>(IOM 2009)</p> | Pre-pregnancy BMI kg/m ² | Recommended weight gain (kg) | Underweight (< 18.5) | 12.5 - 18 | Normal weight (18.5-24.9) | 11.5 - 16 | Overweight (25.0 - 29.9) | 7 - 11.5 | Obese (≥ 30.0) | 5 - 9 | 38% (Audit Antenatal Card, MOH 2016-unpublished data) | At least 50% of pregnant women with recommended gestational weight gain | |
| Pre-pregnancy BMI kg/m ² | Recommended weight gain (kg) | | | | | | | | | | | | | | |
| Underweight (< 18.5) | 12.5 - 18 | | | | | | | | | | | | | | |
| Normal weight (18.5-24.9) | 11.5 - 16 | | | | | | | | | | | | | | |
| Overweight (25.0 - 29.9) | 7 - 11.5 | | | | | | | | | | | | | | |
| Obese (≥ 30.0) | 5 - 9 | | | | | | | | | | | | | | |
| 1.1 (c) | Percentage of pregnant women with Gestational Diabetes Mellitus (GDM) | <p>Percentage of pregnant women aged ≥ 25 years with fasting plasma glucose ≥ 5.6 mmol/l or 2HPP* ≥ 7.8 mmol/l</p> <table border="1"> <thead> <tr> <th rowspan="2">Time</th> <th colspan="2">Venous Plasma Glucose Level</th> </tr> <tr> <th>Normal</th> <th>GDM</th> </tr> </thead> <tbody> <tr> <td>Fasting</td> <td><5.6</td> <td>≥ 5.6</td> </tr> <tr> <td>2HPP</td> <td><7.8</td> <td>≥ 7.8</td> </tr> </tbody> </table> <p>(ADA, 2008) 2HPP*: 2 hour postprandial</p> | Time | Venous Plasma Glucose Level | | Normal | GDM | Fasting | <5.6 | ≥ 5.6 | 2HPP | <7.8 | ≥ 7.8 | 8.7% (National Obstetric Registry Second Report 2010) | No increase from baseline |
| Time | Venous Plasma Glucose Level | | | | | | | | | | | | | | |
| | Normal | GDM | | | | | | | | | | | | | |
| Fasting | <5.6 | ≥ 5.6 | | | | | | | | | | | | | |
| 2HPP | <7.8 | ≥ 7.8 | | | | | | | | | | | | | |



| No. | Indicator | Definition | Baseline data | Target for improvement by the year 2025 |
|---------------------|---|-------------------------------------|---------------------|---|
| 1.2 Neonates | | | | |
| | Prevalence of low birth weight ¹ . | Weight of less than 2500g at birth. | 11.3% (DOS 2013) | Not more than 8% |



| No. | Indicator | Definition | Baseline data | Target for improvement by the year 2025 |
|--|---|---|--------------------------|---|
| 1.3 Infants and Young Children | | | | |
| 1.3 (a) | Prevalence of early initiation of breastfeeding | Children born who were put to the breast within one hour of birth | 65.3% (NHMS 2016) | 100% |
| 1.3 (b) | Exclusive breastfeeding below 6 months of age ¹ | Proportion of infants 0-5.99 months of age who are fed exclusively with breast milk | 47.1% (NHMS 2016) | At least 70% |
| | | Percentage of infants 6 months + 1 week of age who are fed exclusively with breast milk | 49.4% (SHD, MOH 2015) | At least 70% |
| 1.3 (c) | *Introduction to solids, semi-solids or soft foods ² | Proportion of infants 6-23 months of age who receive solids, semi-solids or soft foods | - | To be determined based on NHMS |
| | | Percentage of infants at 6 months of age who receive solid, semi-solid or soft foods | 92.2% (SHD, MOH 2015) | At least 95% |
| <i>*Note: Initially this indicator is known as "Timely introduction to complementary food"</i> | | | | |

¹ Core indicators for the Global Nutrition Targets 2025

² Additional indicators for the Global Monitoring Framework on Maternal, Infant and Young Child (IO5)

| No. | Indicator | Definition | Baseline data | Target for improvement by the year 2025 |
|---------|---|---|-------------------|---|
| 1.3 (d) | Prevalence of children receiving minimum dietary diversity ² | Proportion of children 6-23 months of age receiving foods from 4 or more food groups | 66.4% (NHMS 2016) | Not less than 90% |
| 1.3 (e) | Prevalence of children receiving minimum meal frequency ² | Proportion of breastfed and non-breastfed children 6-23 months of age receiving solids, semi-solids, or soft foods (but also including milk feeds for non-breastfed children) Minimum is defined as: Breastfed children 2 times : 6-8 months 3 times : 9-23 months Non-breastfed children: 4 times: 6-23 months | 80.8% (NHMS 2016) | Not less than 90% |
| 1.3 (f) | Prevalence of children receiving minimum acceptable diet ² | Proportion of children 6-23 months of age receiving a minimum acceptable diet: Minimum is defined as: Breast-fed children: At least minimum dietary diversity and minimum meal frequency Non Breast-fed children: At least 2 milk feedings and at least minimum dietary diversity (not including milk feeds) and minimum meal frequency | 53.1% (NHMS 2016) | Not less than 90% |

² Additional indicators for the Global Monitoring Framework on Maternal, Infant and Young Child (IO5)

Promoting
Healthy Eating and
Active Living

2



2.1 Malaysian Dietary Guidelines

| No. | Indicator | Definition | Baseline data | Target for improvement by the year 2025 | | | | | | | | | | |
|---|---|---|--|---|------------------|--------------------------------|---------------------------------------|-----|------|--------|------|-----|-----|---|
| 2.1 Malaysian Dietary Guidelines | | | | | | | | | | | | | | |
| 2.1 (a) | Percentage of adults meeting recommended servings for cereal and cereal products and tubers | Adults aged 18-59 years old Recommended serving: 4-8 servings/ day | <table border="1"> <thead> <tr> <th>Food group</th> <th>Servings per day</th> <th>% Meeting recommended servings</th> </tr> </thead> <tbody> <tr> <td rowspan="3">Cereal and cereal products and tubers</td> <td>< 4</td> <td>53.5</td> </tr> <tr> <td>4 to 8</td> <td>41.3</td> </tr> <tr> <td>> 8</td> <td>5.2</td> </tr> </tbody> </table> <p>(MANS 2014)</p> | Food group | Servings per day | % Meeting recommended servings | Cereal and cereal products and tubers | < 4 | 53.5 | 4 to 8 | 41.3 | > 8 | 5.2 | At least 60% of adults meeting recommended servings for cereal and cereal products and tubers |
| Food group | Servings per day | % Meeting recommended servings | | | | | | | | | | | | |
| Cereal and cereal products and tubers | < 4 | 53.5 | | | | | | | | | | | | |
| | 4 to 8 | 41.3 | | | | | | | | | | | | |
| | > 8 | 5.2 | | | | | | | | | | | | |
| 2.1 (b) | Percentage of adults meeting recommended serving for fruits | Adults aged 18-59 years old Recommended serving: 2 servings/ day | <table border="1"> <thead> <tr> <th>Food group</th> <th>Servings per day</th> <th>% Meeting recommended servings</th> </tr> </thead> <tbody> <tr> <td rowspan="3">Fruits</td> <td>< 2</td> <td>59.1</td> </tr> <tr> <td>2</td> <td>14.9</td> </tr> <tr> <td>>2</td> <td>26</td> </tr> </tbody> </table> <p>(MANS 2014)</p> | Food group | Servings per day | % Meeting recommended servings | Fruits | < 2 | 59.1 | 2 | 14.9 | >2 | 26 | At least 25% of adults meeting recommended servings for fruits |
| Food group | Servings per day | % Meeting recommended servings | | | | | | | | | | | | |
| Fruits | < 2 | 59.1 | | | | | | | | | | | | |
| | 2 | 14.9 | | | | | | | | | | | | |
| | >2 | 26 | | | | | | | | | | | | |
| 2.1 (c) | Percentage of adults meeting recommended serving for vegetables | Adults aged 18-59 years old Recommended serving: 3 servings/ day | <table border="1"> <thead> <tr> <th>Food group</th> <th>Servings per day</th> <th>% Meeting recommended servings</th> </tr> </thead> <tbody> <tr> <td rowspan="3">Vegetables</td> <td>< 3</td> <td>81.7</td> </tr> <tr> <td>3</td> <td>7.9</td> </tr> <tr> <td>> 3</td> <td>11</td> </tr> </tbody> </table> <p>(MANS 2014)</p> | Food group | Servings per day | % Meeting recommended servings | Vegetables | < 3 | 81.7 | 3 | 7.9 | > 3 | 11 | At least 15% of adults meeting recommended servings for vegetables |
| Food group | Servings per day | % Meeting recommended servings | | | | | | | | | | | | |
| Vegetables | < 3 | 81.7 | | | | | | | | | | | | |
| | 3 | 7.9 | | | | | | | | | | | | |
| | > 3 | 11 | | | | | | | | | | | | |

| No. | Indicator | Definition | Baseline data | Target for improvement by the year 2025 | | | | | | | | | | |
|-------------------------|---|---|---|---|------------------|--------------------------------|-------------------------|-------|-------|----------|------|--|------|--|
| 2.1 (d) | Percentage of adults meeting recommended serving for fruits and vegetables | Adults aged 18-59 years old Recommended serving: > 5 servings/ day | <table border="1"> <thead> <tr> <th>Food group</th> <th>Servings per day</th> <th>% Meeting recommended servings</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Fruits and Vegetables</td> <td>< 5</td> <td>94.0%</td> </tr> <tr> <td>>5</td> <td>6%</td> </tr> </tbody> </table> <p>(NHMS 2015)</p> | Food group | Servings per day | % Meeting recommended servings | Fruits and Vegetables | < 5 | 94.0% | >5 | 6% | At least 15% of adults meeting recommended serving for fruits and vegetables | | |
| Food group | Servings per day | % Meeting recommended servings | | | | | | | | | | | | |
| Fruits and Vegetables | < 5 | 94.0% | | | | | | | | | | | | |
| | >5 | 6% | | | | | | | | | | | | |
| 2.1 (e) | Percentage of adults meeting recommended serving for meat, poultry and egg | Adults aged 18-59 years old Recommended serving: 1/2-2 servings/ day | <table border="1"> <thead> <tr> <th>Food group</th> <th>Servings per day</th> <th>% Meeting recommended servings</th> </tr> </thead> <tbody> <tr> <td rowspan="3">Meat, poultry and egg</td> <td>< 1/2</td> <td>20.1</td> </tr> <tr> <td>1/2 to 2</td> <td>66.8</td> </tr> <tr> <td>> 2</td> <td>13.1</td> </tr> </tbody> </table> <p>(MANS 2014)</p> | Food group | Servings per day | % Meeting recommended servings | Meat, poultry and egg | < 1/2 | 20.1 | 1/2 to 2 | 66.8 | > 2 | 13.1 | At least 75% of adults meeting recommended serving for meat, poultry and egg |
| Food group | Servings per day | % Meeting recommended servings | | | | | | | | | | | | |
| Meat, poultry and egg | < 1/2 | 20.1 | | | | | | | | | | | | |
| | 1/2 to 2 | 66.8 | | | | | | | | | | | | |
| | > 2 | 13.1 | | | | | | | | | | | | |
| 2.1 (f) | Percentage of adults meeting recommended serving for fish and fish products | Adults aged 18-59 years old Recommended serving: 1 serving/ day | <table border="1"> <thead> <tr> <th>Food group</th> <th>Servings per day</th> <th>% Meeting recommended servings</th> </tr> </thead> <tbody> <tr> <td rowspan="3">Fish and fish products</td> <td>< 1</td> <td>30.1</td> </tr> <tr> <td>1</td> <td>31.3</td> </tr> <tr> <td>> 1</td> <td>38.6</td> </tr> </tbody> </table> <p>(MANS 2014)</p> | Food group | Servings per day | % Meeting recommended servings | Fish and fish products | < 1 | 30.1 | 1 | 31.3 | > 1 | 38.6 | At least 50% of adults meeting recommended serving for fish and fish products |
| Food group | Servings per day | % Meeting recommended servings | | | | | | | | | | | | |
| Fish and fish products | < 1 | 30.1 | | | | | | | | | | | | |
| | 1 | 31.3 | | | | | | | | | | | | |
| | > 1 | 38.6 | | | | | | | | | | | | |
| 2.1 (g) | Percentage of adults meeting recommended serving for legumes and nuts | Adults aged 18-59 years old Recommended serving: 1/2 -1 serving/ day | <table border="1"> <thead> <tr> <th>Food group</th> <th>Servings per day</th> <th>% Meeting recommended servings</th> </tr> </thead> <tbody> <tr> <td rowspan="3">Legumes and nuts</td> <td>< 1/2</td> <td>81.9</td> </tr> <tr> <td>1/2 to 1</td> <td>17.1</td> </tr> <tr> <td>> 1</td> <td>1</td> </tr> </tbody> </table> <p>(MANS 2014)</p> | Food group | Servings per day | % Meeting recommended servings | Legumes and nuts | < 1/2 | 81.9 | 1/2 to 1 | 17.1 | > 1 | 1 | At least 50% of adults meeting recommended serving for legumes and nuts |
| Food group | Servings per day | % Meeting recommended servings | | | | | | | | | | | | |
| Legumes and nuts | < 1/2 | 81.9 | | | | | | | | | | | | |
| | 1/2 to 1 | 17.1 | | | | | | | | | | | | |
| | > 1 | 1 | | | | | | | | | | | | |
| 2.1 (h) | Percentage meeting recommended serving for milk and dairy products | Adults aged 18-59 years old Recommended serving: 1-3 servings/ day | <table border="1"> <thead> <tr> <th>Food group</th> <th>Servings per day</th> <th>% Meeting recommended servings</th> </tr> </thead> <tbody> <tr> <td rowspan="3">Milk and dairy products</td> <td>< 1</td> <td>73.6</td> </tr> <tr> <td>1 to 3</td> <td>24.4</td> </tr> <tr> <td>> 3</td> <td>2</td> </tr> </tbody> </table> <p>(MANS 2014)</p> | Food group | Servings per day | % Meeting recommended servings | Milk and dairy products | < 1 | 73.6 | 1 to 3 | 24.4 | > 3 | 2 | At least 60% of adults meeting recommended serving for milk and dairy products |
| Food group | Servings per day | % Meeting recommended servings | | | | | | | | | | | | |
| Milk and dairy products | < 1 | 73.6 | | | | | | | | | | | | |
| | 1 to 3 | 24.4 | | | | | | | | | | | | |
| | > 3 | 2 | | | | | | | | | | | | |
| 2.1 (i) | Percentage of adults consume sodium <2000mg/ day ³ | - | 52.5% (MANS 2014) | At least 70% adults consume sodium <2000mg/ day | | | | | | | | | | |

⁴ Indicators for the Comprehensive Global Monitoring Framework for the Prevention and Control of Non-Communicable Diseases 2014-2020

| No. | Indicator | Definition | Baseline data | Target for improvement by the year 2025 | | | | | | | | | | | | | | | | |
|----------------------------------|--|---|--|---|------------|------------------------|-------|---------------------------|------|--|------|----------------------------------|------------|------------------|------|--------------------|------|------------------|------|---|
| 2.1 (j) | Percentage of adults meeting recommended water intake | Recommended intake: 6-8 glasses per day | <table border="1"> <thead> <tr> <th>Plain water intake (>18 years)</th> <th>Prevalence</th> </tr> </thead> <tbody> <tr> <td>< 6 glasses/ day</td> <td>27.1</td> </tr> <tr> <td>6 – 8 glasses/ day</td> <td>44.3</td> </tr> <tr> <td>> 8 glasses/ day</td> <td>28.6</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>Plain water intake (18-59 years)</th> <th>Prevalence</th> </tr> </thead> <tbody> <tr> <td>< 6 glasses/ day</td> <td>26.0</td> </tr> <tr> <td>6 – 8 glasses/ day</td> <td>44.2</td> </tr> <tr> <td>> 8 glasses/ day</td> <td>29.8</td> </tr> </tbody> </table> <p>(NHMS 2015)</p> | Plain water intake (>18 years) | Prevalence | < 6 glasses/ day | 27.1 | 6 – 8 glasses/ day | 44.3 | > 8 glasses/ day | 28.6 | Plain water intake (18-59 years) | Prevalence | < 6 glasses/ day | 26.0 | 6 – 8 glasses/ day | 44.2 | > 8 glasses/ day | 29.8 | At least 65% meeting recommended water intake |
| Plain water intake (>18 years) | Prevalence | | | | | | | | | | | | | | | | | | | |
| < 6 glasses/ day | 27.1 | | | | | | | | | | | | | | | | | | | |
| 6 – 8 glasses/ day | 44.3 | | | | | | | | | | | | | | | | | | | |
| > 8 glasses/ day | 28.6 | | | | | | | | | | | | | | | | | | | |
| Plain water intake (18-59 years) | Prevalence | | | | | | | | | | | | | | | | | | | |
| < 6 glasses/ day | 26.0 | | | | | | | | | | | | | | | | | | | |
| 6 – 8 glasses/ day | 44.2 | | | | | | | | | | | | | | | | | | | |
| > 8 glasses/ day | 29.8 | | | | | | | | | | | | | | | | | | | |
| 2.1 (k) | Percentage of adults reading the Nutrition Information Panel (NIP) | Reading NIP at least 4 out of 7 nutrients (Including energy, excluding food additives) <ul style="list-style-type: none"> • Energy • Carbohydrate • Fat • Sodium • Vitamin • Mineral • Fibre | <table border="1"> <thead> <tr> <th>Prevalence Reading NIP</th> <th>% of total</th> </tr> </thead> <tbody> <tr> <td>Read below 4 nutrients</td> <td>94.3%</td> </tr> <tr> <td>Read at least 4 nutrients</td> <td>5.7%</td> </tr> </tbody> </table> <p>(MANS 2014)</p> | Prevalence Reading NIP | % of total | Read below 4 nutrients | 94.3% | Read at least 4 nutrients | 5.7% | At least 12% read at least 4 nutrients | | | | | | | | | | |
| Prevalence Reading NIP | % of total | | | | | | | | | | | | | | | | | | | |
| Read below 4 nutrients | 94.3% | | | | | | | | | | | | | | | | | | | |
| Read at least 4 nutrients | 5.7% | | | | | | | | | | | | | | | | | | | |

³ Core indicators for the Global Action Plan for the Prevention and Control of Non-Communicable Diseases 2013-2020

Preventing and Controlling Nutritional Deficiencies

3



3.1 Non-pregnant Women

3.2 Children below 5 years

3.3 School Children

3.4 Food and Nutrition Security



| No. | Indicator | Definition | Baseline data | Target for improvement by the year 2025 |
|-------------------------------|---|--|-------------------|---|
| 3.1 Non-pregnant Women | | | | |
| 3.1 (a) | Percentage of anaemia among women in reproductive aged 15-49 years old ¹ | Anaemia: hemoglobin level <12g/dl (WHO 2006) | 22.8% (NHMS 2015) | Not more than 11% |
| 3.1 (b) | Percentage of women aged 15-49 years old with low BMI ² | Low BMI: BMI <18.5kg/m ² (WHO 1998) | 8.2% (NHMS 2015) | Not more than 6% |

¹ Core indicators for the Global Nutrition Targets 2025

² Additional indicators for the Global Monitoring Framework on Maternal, Infant and Young Child (IO5)



| No. | Indicator | Definition | Baseline data | Target for improvement by the year 2025 | | | | |
|---|--|--|-------------------------------|---|-----|------------|-------|----------|
| 3.2 Children (Age Below 5 Years Old) | | | | | | | | |
| 3.2 (a) | Underweight among children below 5 years old | Weight-for-age <-2SD | 12.4% (NHMS 2015) | Not more than 5% | | | | |
| | | <table border="1"> <thead> <tr> <th>Prevalence of underweight (%)</th> <th>Public Health Significant</th> </tr> </thead> <tbody> <tr> <td><10</td> <td>Low</td> </tr> <tr> <td>10-19</td> <td>Moderate</td> </tr> </tbody> </table> (WHO 2006) | Prevalence of underweight (%) | Public Health Significant | <10 | Low | 10-19 | Moderate |
| Prevalence of underweight (%) | Public Health Significant | | | | | | | |
| <10 | Low | | | | | | | |
| 10-19 | Moderate | | | | | | | |
| 3.2 (b) | Stunting among children below 5 years old ¹ | Height-for-age <-2SD | 392,973 (17.7%) (NHMS 2015) | Not more than 250,000 (11%) | | | | |
| | | <table border="1"> <thead> <tr> <th>Prevalence of stunting (%)</th> <th>Public Health Significant</th> </tr> </thead> <tbody> <tr> <td><20</td> <td>Low</td> </tr> <tr> <td>20-29</td> <td>Moderate</td> </tr> </tbody> </table> (WHO 2006) | Prevalence of stunting (%) | Public Health Significant | <20 | Low | 20-29 | Moderate |
| Prevalence of stunting (%) | Public Health Significant | | | | | | | |
| <20 | Low | | | | | | | |
| 20-29 | Moderate | | | | | | | |
| 3.2 (c) | Wasting among children below 5 years old ¹ | Weight-for-height <-2SD | 8.0% (NHMS 2015) | Not more than 5% | | | | |
| | | BMI-for-age- <-2SD <table border="1"> <thead> <tr> <th>Prevalence of wasting (%)</th> <th>Public Health Significant</th> </tr> </thead> <tbody> <tr> <td><5</td> <td>Acceptable</td> </tr> <tr> <td>5-9</td> <td>Poor</td> </tr> </tbody> </table> (WHO 2006) | Prevalence of wasting (%) | Public Health Significant | <5 | Acceptable | 5-9 | Poor |
| Prevalence of wasting (%) | Public Health Significant | | | | | | | |
| <5 | Acceptable | | | | | | | |
| 5-9 | Poor | | | | | | | |

¹ Core indicators for the Global Nutrition Targets 2025



| No. | Indicator | Definition | Baseline data | Target for improvement by the year 2025 |
|--|--|------------------------------|------------------|---|
| 3.3 School Children (Age 5 -17 years old) | | | | |
| 3.3 (a) | Prevalence of thinness among children 5-9 years old | BMI for age <-2SD (WHO 2007) | 9.0% (NHMS 2015) | Not more than 6% |
| 3.3 (b) | Prevalence of thinness among children 10-14 years old | BMI for age <-2SD (WHO 2007) | 6.9% (NHMS 2015) | Not more than 5% |
| 3.3 (c) | Prevalence of thinness among children 15 -17 years old | BMI for age <-2SD (WHO 2007) | 7.0% (NHMS 2015) | Not more than 5% |



| No. | Indicator | Definition | Baseline data | Target for improvement by the year 2025 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|----------------|---------------|----|--------------|----|---------------------|----|------------|----|--------------------|----|---|----|---|-------------------|--------------------------|---------------|------------------|--------------|------------------|---------------------|------------------|------------|-----------------|--------------------|------------------|---|------------------|
| 3.4 Food and Nutrition Security | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Percentage of household food insecurity | Food insecurity status based on identified parameters as below: 1. Food quantity 2. Food variety 3. Meal size reduction 4. Skip meals 5. Affordable buy food 6. Could not afford to feed children with variety food | <table border="1"> <thead> <tr> <th>No. of parameters</th> <th>Prevalence (%)</th> </tr> </thead> <tbody> <tr> <td>Food Quantity</td> <td>25</td> </tr> <tr> <td>Food Variety</td> <td>26</td> </tr> <tr> <td>Meal size reduction</td> <td>22</td> </tr> <tr> <td>Skip meals</td> <td>15</td> </tr> <tr> <td>Affordable by food</td> <td>24</td> </tr> <tr> <td>Could not afford to feed children with variety food</td> <td>21</td> </tr> </tbody> </table> <p>(MANS 2014)</p> | No. of parameters | Prevalence (%) | Food Quantity | 25 | Food Variety | 26 | Meal size reduction | 22 | Skip meals | 15 | Affordable by food | 24 | Could not afford to feed children with variety food | 21 | <table border="1"> <thead> <tr> <th>No. of parameters</th> <th>Target of prevalence (%)</th> </tr> </thead> <tbody> <tr> <td>Food Quantity</td> <td>Not more than 15</td> </tr> <tr> <td>Food Variety</td> <td>Not more than 15</td> </tr> <tr> <td>Meal size reduction</td> <td>Not more than 13</td> </tr> <tr> <td>Skip meals</td> <td>Not more than 9</td> </tr> <tr> <td>Affordable by food</td> <td>Not more than 14</td> </tr> <tr> <td>Could not afford to feed children with variety food</td> <td>Not more than 12</td> </tr> </tbody> </table> | No. of parameters | Target of prevalence (%) | Food Quantity | Not more than 15 | Food Variety | Not more than 15 | Meal size reduction | Not more than 13 | Skip meals | Not more than 9 | Affordable by food | Not more than 14 | Could not afford to feed children with variety food | Not more than 12 |
| No. of parameters | Prevalence (%) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Food Quantity | 25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Food Variety | 26 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Meal size reduction | 22 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Skip meals | 15 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Affordable by food | 24 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Could not afford to feed children with variety food | 21 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| No. of parameters | Target of prevalence (%) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Food Quantity | Not more than 15 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Food Variety | Not more than 15 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Meal size reduction | Not more than 13 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Skip meals | Not more than 9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Affordable by food | Not more than 14 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Could not afford to feed children with variety food | Not more than 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Preventing and Controlling Obesity and Other Diet-Related Non-Communicable Diseases (NCDs)

4



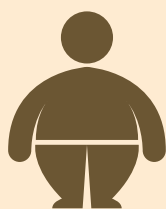
4.1 Childhood Obesity

4.2 School Children Obesity

4.3 Adult Obesity

4.4 Elderly Obesity

4.5 Diet-Related Non-Communicable Diseases (NCDs)

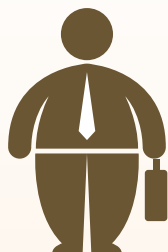


| No. | Indicator | Definition | Baseline data | Target for improvement by the year 2025 |
|------------|--|-----------------------------|------------------|---|
| 4.1 | Childhood Obesity | | | |
| 4.1 (a) | Prevalence of overweight among children below 5 years old ¹ | BMI for age >2SD (WHO 2006) | 7.6% (NHMS 2015) | No increase from baseline data |
| 4.1 (b) | Prevalence of obesity among children below 5 years old ¹ | BMI for age >3SD (WHO 2006) | 3.7% (NHMS 2015) | No increase from baseline data |

¹ Core indicators for the Global Nutrition Targets 2025



| No. | Indicator | Definition | Baseline data | Target for improvement by the year 2025 |
|--|--|-----------------------------|-------------------|---|
| 4.2 School Children Obesity (aged 5 - 17 years old) | | | | |
| 4.2 (a) | Prevalence of overweight among children aged 5-9 years old | BMI for age >1SD (WHO 2007) | 26.8% (NHMS 2015) | No increase from baseline data |
| 4.2 (b) | Prevalence of obesity among children aged 5-9 years old | BMI for age >2SD (WHO 2007) | 14.8% (NHMS 2015) | No increase from baseline data |
| 4.2 (c) | Prevalence of overweight among children aged 10-14 years old | BMI for age >1SD (WHO 2007) | 30.4% (NHMS 2015) | No increase from baseline data |
| 4.2 (d) | Prevalence of obesity among children aged 10-14 years old | BMI for age >2SD (WHO 2007) | 14.4% (NHMS 2015) | No increase from baseline data |
| 4.2 (e) | Prevalence of overweight among aged children 15-17 years old | BMI for age >1SD (WHO 2007) | 24.0% (NHMS 2015) | No increase from baseline data |
| 4.2 (f) | Prevalence of obesity among children aged 15-17 years old | BMI for age >2SD (WHO 2007) | 9.6% (NHMS 2015) | No increase from baseline data |



| No. | Indicator | Definition | Baseline data | Target for improvement by the year 2025 |
|--------------------------|--|--|---|---|
| 4.3 Adult Obesity | | | | |
| 4.3 (a) | Prevalence of overweight among adults: i. >18 years old and above | BMI: 25.0-29.9 kg/m ² (WHO 1998) | Male: 31.6% Female: 28.3% Overall: 30.0% (NHMS 2015) | No increase from baseline data |
| | ii. 18-59 years old | | Male: 31.1% Female: 27.7% Overall: 29.5% (NHMS 2015) | No increase from baseline data |
| 4.3 (b) | Prevalence of obesity among adults: i. >18 years old and above ⁴ | BMI: ≥ 30 kg/m ² (WHO 1998) | Male: 15.0% Female: 20.6% Overall: 17.7% (NHMS 2015) | No increase from baseline data |
| | ii. 18-59 years old | | Male: 15.4% Female: 20.7% Overall: 17.9% (NHMS 2015) | No increase from baseline data |
| 4.3 (c) | Prevalence of abdominal obesity among adults: i. >18 years old and above | Waist circumference: Male ≥ 90cm, Female ≥ 80cm (WHO/ IOTF, 2000) | Male: 38.2% Female: 60.2% Overall: 48.6% (NHMS 2015) | No increase from baseline data |
| | ii. 18-59 years old | | Male: 25.0% Female: 57.7% Overall: 40.0% (NHMS 2015) | No increase from baseline data |

⁴ Indicators for the Comprehensive Global Monitoring Framework for the Prevention and Control of Non-Communicable Diseases 2014-2020

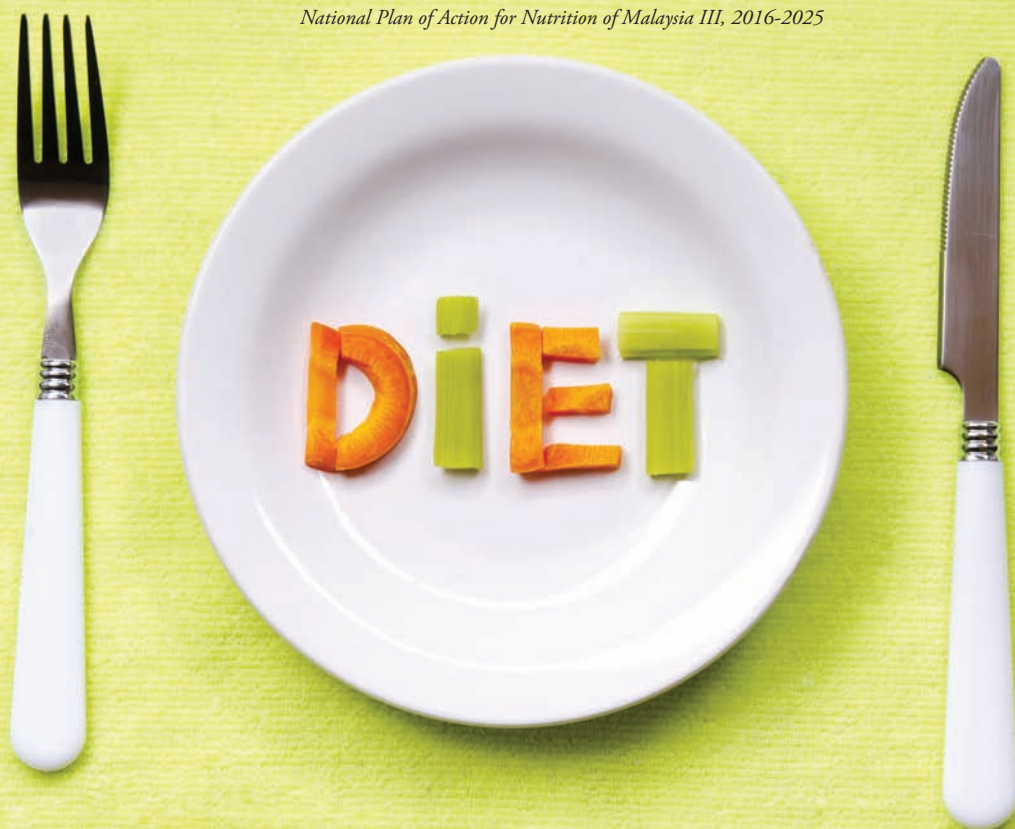


| No. | Indicator | Definition | Baseline data | Target for improvement by the year 2025 |
|----------------------------|---|--|-------------------|---|
| 4.4 Elderly Obesity | | | | |
| 4.4 (a) | Prevalence of overweight among elderly aged ≥ 60 years old | BMI: 25.0-29.9 kg/m ² (WHO 1998) | 33.6% (NHMS 2015) | No increase from baseline data |
| 4.4 (b) | Prevalence of obesity among elderly aged ≥ 60 years old | (BMI: ≥ 30 kg/m ²) (WHO 1998) | 15.7% (NHMS 2015) | No increase from baseline data |



| No | Indicators | Definition | Baseline data | Target for improvement by the year 2025 |
|--|--|---|-------------------|---|
| 4.5 Diet-Related Non-Communicable Diseases (NCDs) | | | | |
| 4.5 (a) | Prevalence of hypercholesterolemia among adults aged 18 years old and above ⁴ | Total cholesterol: ≥ 5.2 mmol/ L or 200 mg/ dl | 47.7% (NHMS 2015) | No increase from baseline data |

⁴ Indicators for the Comprehensive Global Monitoring Framework for the Prevention and Control of Non-communicable 2014-2020



| No. | Indicator | Definition | Baseline data | Target for improvement by the year 2025 |
|---------|---|---|-------------------|---|
| 4.5 (b) | Prevalence of diabetes mellitus among adults aged 18 years old and above ⁴ | Fasting plasma glucose concentration: ≥ 6.1 mmol/L or 110 mg/ dl) or on medication for raised blood glucose | 17.5% (NHMS 2015) | Not more than 15% |
| 4.5 (c) | Prevalence of hypertension among adults aged 18 years old and above ⁴ | As an average systolic blood pressure equal to or more than 140 mmHg and/ or diastolic blood pressure equal to or more than 90 mmHg or on medication for hypertension | 30.3% (NHMS 2015) | Not more than 24.0% |

⁴ Indicators for the Comprehensive Global Monitoring Framework for the Prevention and Control of Non-communicable 2014-2020



Activities by Strategies of NPANM III, 2016-2025

- Foundation Strategy
- Enabling Strategies
- Facilitating Strategies

FOUNDATION STRATEGY

An illustration featuring a hand holding a coin. The hand is light-skinned and is holding a black coin with a yellow center. Inside the yellow center is a black icon of two hands shaking. The background is a large blue shape with a white outline, resembling a stylized person or a cloud. The text 'FOUNDATION STRATEGY' is written in white and yellow on the blue shape.

Incorporating Nutrition Objectives, Considerations and Components into National Development Policies and Action Plans

Nutrition is not the sole responsibility of MOH and intervention programmes should also be implemented by other agencies. The foundation strategy of NPANM III highlights the importance of incorporating nutrition objectives, considerations and components into national development policies and action plans in other relevant agencies. This strategy also emphasises the

need in ensuring the commitment and support of all the relevant agencies through National Food Safety and Nutrition Council (NFSNC), as well as and effective coordination and monitoring of the NPANM III, 2016-2025 by the National Coordinating Committee on Food and Nutrition (NCCFN).

| No. | Activity | Output Indicator | Target/ Time Frame (midterm, by year, by 2025) | Implementation level | Implementing agency |
|-----|--|---|---|----------------------|---|
| 1. | Incorporate nutrition and related agenda in higher level meetings | Number of higher level meetings with nutrition and related agenda <ul style="list-style-type: none"> Chief Minister's Meeting Post Cabinet Meeting KSU's meeting | At least five meetings with nutrition and related agenda by MOH every year At least one meeting per year with nutrition agenda by related ministries/ agencies | National State | Lead agency: MOH Other agencies: All NCCFN and members |
| 2. | To review and examine nutrition policy statements and programmes in the development plans of relevant ministries and agencies for the 12 th and 13 th Malaysia Plans | Percentage of ministries and agencies having nutrition policy statements and programmes in their development plans | At least 50% out of 10 relevant ministries and agencies by 2025 | National | Lead agency: MOH Other agencies: <ul style="list-style-type: none"> MOF JPM EPU ICU MOE MOA MOYS MWFCD MUWHLG MCMM MRRD MDTCC MITI |
| 3. | Incorporate nutrition as one of the National Agro-food Policy objectives | Incorporation of nutrition objective in the National Agro-food Policy | Nutrition included as one of the National Agro-food Policy objectives by mid-term review in 2015 and/ or National Agro-food Policy II in 2020 | National | Lead agency: MOH Other agency: MOA |
| 4. | Incorporate nutrition component/ consideration into other related programmes including social protection programmes in various ministries or agencies | Number of programmes including social protection programmes in other ministries or agencies incorporated with nutrition component/ consideration | At least one programme in other ministries or agencies incorporated with nutrition component/ consideration yearly | National State | Lead agency: <ul style="list-style-type: none"> MOH ICU Other agencies: <ul style="list-style-type: none"> MOE MWFCD MRRD NGOs Other related ministries or agencies |

| No. | Activity | Output Indicator | Target/ Time Frame (midterm, by year, by 2025) | Implementation level | Implementing agency |
|-----|---|--|--|-------------------------|--|
| 5. | <p>Strengthen advocacy of the NPANM III, 2016-2025 to all relevant ministries, agencies and NGOs;</p> <ul style="list-style-type: none"> Conduct policy dialogue/ advocacy Develop Nutrition Policy Briefs related to NPANM III, 2016-2025 for targeted sectors, emphasising on collaborative efforts | Number of advocacy activities | All relevant agencies and NGOs advocated by 2018 | National State District | Lead agency: MOH |
| | | Number of dialogues/ workshops/ conferences or awareness programme | At least three dialogues/ workshops/ conferences or awareness programme at national & state level for the first three years of NPANM, 2016-2025 implementation | National State | Other agencies: All ministries and agencies involved in implementation of NPANM III, 2016-2025 |
| | | Number of Nutrition Policy Briefs published | At least three Policy Briefs published by 2020 | National | |
| 6. | Ensure commitment and support of all relevant agencies for nutrition through the National Food Safety and Nutrition Council (NFSNC) | Number of nutrition related policies or papers presented | At least one nutrition related policies or papers presented by other ministries or agencies yearly | National | Lead agency: All NFSNC members |
| 7. | Ensure effective coordination and monitoring of NPANM III, 2016-2025 through the National Coordinating Committee on Food and Nutrition (NCCFN) | Number of presentations related with implementation of NPANM III, 2016-2025 activities by other ministries or agencies | At least one presentations by other ministries or agencies yearly in NCCFN meeting | National | Lead agency: All NCCFN members |
| 8. | Revise the National Nutrition Policy of Malaysia 2005 | The National Nutrition Policy of Malaysia 2005 revised | The National Nutrition Policy of Malaysia 2005 revised by 2020 | National | Lead agency: MOH Other agency: Other related agencies |
| 9. | Establish the Technical Working Group (TWG) for Food and Nutrition Security | The TWG for Food and Nutrition Security established | The TWG for Food and Nutrition Security established by 2017 | National | Lead agency: MOH Other agency: MOA |

| No. | Activity | Output Indicator | Target/ Time Frame (midterm, by year, by 2025) | Implementation level | Implementing agency |
|-----|---|--|---|---------------------------|---|
| 10. | Strengthen collaboration with United Nations agencies and ASEAN countries in implementing nutrition strategies and programmes | Number of nutrition strategies and programmes collaborated with United Nation agencies | All programmes identified are implemented. (e.g: Country Programme Action Plan, WHO Programme Budget) | International National | Lead agency: <ul style="list-style-type: none"> • United Nations agencies (WHO, UNICEF) • ASEAN Sect. • MOH Other agency: <ul style="list-style-type: none"> • EPU • Other related ministries & agencies |



**ENABLING
STRATEGIES**

ENABLING STRATEGY



Promoting Maternal, Infant and Young Child Nutrition

Recognising the importance of good nutrition during the first 1000 days of life, this strategy focuses on activities involving maternal, infant and young child feeding. The importance of the first 1000 days has always been highlighted to improve nutrition for mothers from pregnancy through the child's 2nd birthday, when better nutrition can have a life-changing

impact on a child's future. The explicit target for each indicator has been set and can be achieved through promotional and intervention activities such as dietary advice, haematinic intake, strengthening breastfeeding promotion, cooking demonstration; rehabilitative activities such as distribution of full cream milk to mothers with inadequate weight gain.

| No. | Activity | Output Indicator | Target/ Time Frame (midterm, by year, by 2025) | Implementation level | Implementing agency |
|-----|--|---|--|----------------------|---|
| 1. | Supplement iron and folic acid to pregnant mothers | Proportion of women receiving iron and folic acid supplements | 100% of women attending government health clinics received iron and folic acid supplementation | State District | Lead agency: MOH |
| 2. | Set up SMS reminder/ WhatsApp etc. on haematinic intake to all antenatal mothers | SMS reminder/ WhatsApp etc. implemented | SMS reminder/ WhatsApp etc. implemented by 2020 | State District | Lead agency: MOH Other agencies: • MCMM • Tele-Communication company |
| 3. | Monitor median urinary iodine level among pregnant women in gazetted areas. Based on the National Iodine Deficiency Disorder (IDD) Implementation Guidelines | Median urinary iodine level among pregnant women in gazetted areas monitored | Biennial monitoring starting 2018 | National State | Lead agency: MOH |
| 4. | Distribute full cream milk to poor mothers (total household income of below RM2000/ month) with inadequate weight gain | Percentage of poor mother with inadequate weight gain receiving full cream milk | 30% increment from baseline data by 2020 50% increment from baseline data by 2025 | State District | Lead agency: MOH |
| 5. | Establish surveillance mechanism on maternal weight gain | Surveillance database available | Surveillance mechanism for maternal weight gain developed by 2017 | National State | Lead agency: MOH |
| 6. | Develop Training Module on Therapeutic Diet for pregnant women comprising: 1. Gestational Diabetes Mellitus 2. Under and over-nutrition 3. Anaemia 4. Hypertension | Module developed | Module develop by 2018 | National | Lead agency: MOH Other agencies: • Universities • Professional Bodies |
| 7. | Provide training to healthcare professional using Training Module on Therapeutic Diet | Number of trainings | At least one training per state per year starting 2018 (Once the training module developed) | State | Lead agency: MOH |

| No. | Activity | Output Indicator | Target/ Time Frame (midterm, by year, by 2025) | Implementation level | Implementing agency |
|-----|--|---|--|----------------------|---|
| 8. | Conduct promotional activities on exclusive breastfeeding consistent with the Code of Ethics for the Marketing of Infant Foods and Related Products: <ul style="list-style-type: none"> • Dialogue/ forum • Convention/ Seminar • Advertisement through mass and social media • Exhibition | Number of activities conducted by related agencies | At least once per year for each activity | National State | Lead agency: MOH Other agencies: <ul style="list-style-type: none"> • MWFCD • Breastfeeding support groups • FMM • PUSPANITA • Professional Bodies • Related NGOs |
| 9. | Conduct counselling/ support on optimal breastfeeding to mothers of children aged 0-23 months | Percentage of mother of children aged 0-23 months received counselling/ support at least once in the last year | At least 80% of mothers of children aged 0-23 months received counselling/ support every year starting 2018 | State District | Lead agency: MOH |
| 10. | Strengthen Baby Friendly Hospital Initiative (BFHI) in hospitals using UNICEF/ WHO Global criteria | Percentage of government hospitals implementing BFHI Percentage of private hospitals implementing BFHI Percentage of births in baby-friendly facilities | 100% government hospitals implementing BFHI Increase from 12% (2015) of BFHI implementation to 30% in 2020 and 50% in 2025 Percentage of births in baby-friendly facilities reported | National State | Lead agency: MOH Other agencies: <ul style="list-style-type: none"> • APHM • Private hospitals |
| 11. | Strengthen Baby Friendly Clinic (KRB) in government health clinic | Percentage of government health clinics implementing KRB | 50% by 2020 70% by 2025 | State District | Lead agency: MOH |
| 12. | Implement mother-friendly workplace guidelines prepared by the Companies Commission of Malaysia (<i>Suruhanjaya Syarikat Malaysia</i>) or other agencies | Percentage of workplaces implementing the guidelines | 30% of workplace adopting the Guideline on Mother-friendly workplace by 2020 50% of workplace adopting the Guideline on Mother-friendly Workplace by 2025 | National | Lead agency: <ul style="list-style-type: none"> • MWFCD • MOH Other agencies: <ul style="list-style-type: none"> • All ministries and agencies |

| No. | Activity | Output Indicator | Target/ Time Frame (midterm, by year, by 2025) | Implementation level | Implementing agency |
|-----|---|--|--|----------------------|--|
| 13. | Provide breastfeeding rooms in public facilities | Percentage of breastfeeding rooms at shopping complexes | 20% increment of shopping complexes from baseline data by 2020 30% increment of shopping complexes from mid-term data by 2025 | National State | Lead agencies: <ul style="list-style-type: none"> • MUWHLG • Local Authorities Other agencies: <ul style="list-style-type: none"> • MDTCC • MWFC • PPPIM • MOH • PPKM |
| | | Percentage of breastfeeding space or rooms at public transport stations | 20% of public transport station providing breastfeeding space or room by 2020 30% of public transport station providing breastfeeding space or room by 2025 | | Lead agency: MOT Other agencies: <ul style="list-style-type: none"> • MOH • MUWHLG • Local Authorities |
| 14. | Establish Breastfeeding Support Group (BFSG) Coordinating Committee at national level | Breastfeeding Support Group Coordinating Committee at national level established | Established by 2017 | National | Lead agency: MOH Other agencies: <ul style="list-style-type: none"> • MBfPCA • PPPIM • PPPLM • Other related breastfeeding support groups |
| 15. | Adopt the International Labour Organisation (ILO) for recommended maternity leave for at least 98 days (16 weeks) | Duration of maternity leave | Maternity leave for at least 98 days by 2020 | National | Lead agencies: <ul style="list-style-type: none"> • MWFC Other agencies: <ul style="list-style-type: none"> • MOHR • MDTCC • MOH |

| No. | Activity | Output Indicator | Target/ Time Frame (midterm, by year, by 2025) | Implementation level | Implementing agency |
|-----|--|--|--|-------------------------|--|
| 16. | Advocate private employer to support female workers to breastfeed by having: <ul style="list-style-type: none"> • 3 months paid maternity leave OR extended leave period (combining paid/ unpaid or flexible paid leave) • One or more breastfeeding breaks or daily reduction of working hours • Flexible working hours (part-time work schedule/ job sharing/ one-off task) | Number of private employers been advocated | At least one private employer per year starting 2017 | National | Lead agency: MWFCD Other agencies: <ul style="list-style-type: none"> • MOHR • MDTCC • MOH • FMM • Bank association • MTUC • FFC • MCMC |
| 17. | Strengthen the Code of Ethics for the Marketing of Infant Foods and Related Products through legal measure/ legislation | Draft regulation developed | By 2025 | National State District | Lead agency: MOH Other agencies: <ul style="list-style-type: none"> • MITI • MDTCC • AGC • IBFAN |
| 18. | Promote complementary feeding through social & mass media | Number of promotion complementary feeding on social & mass media | At least once per year at each level | National State District | Lead agency: MOH Other agencies: <ul style="list-style-type: none"> • Related NGO • Breastfeeding support group • FMM • Professional bodies • KEMAS • MCMM |

| No. | Activity | Output Indicator | Target/ Time Frame (midterm, by year, by 2025) | Implementation level | Implementing agency |
|-----|--|--|---|-------------------------|------------------------------|
| 19. | Conduct nutrition education sessions to mothers and care givers based on Infant and Young Child Feeding Module | Nutrition education sessions on infant and young child nutrition conducted at clinic level | <p>50% of clinics conducted education session on infants and young child nutrition once a month by 2020</p> <p>90% of clinics conducted education session on infants and young child nutrition once a month by 2025</p> | State District | Lead agencies: MOH |

ENABLING STRATEGY



Promoting Healthy Eating and Active Living

Recognising that inappropriate dietary practices are an important cause of nutritional problems. This strategy focuses on promotion to further increase awareness and practice of healthy eating which spans from toddlers to elderly. The activities are to be carried out in different settings and programmes such as child care centres, preschools, primary/ secondary schools, National Service Training Programme (PLKN), institutes of higher learning, welfare institutions and other institutions as well as community. Various activities have been identified under this strategy such as reviewing curriculum, develop teaching modules and guidelines, enforcement on banning sale of unhealthy food & beverages to children, strengthening existing nutrition programmes namely

Healthy Community Kitchen, Healthy Eating through Healthy Shopping, Healthy Catering and Healthy Cafeteria. Whilst, "Back to Nature Programme" is a new initiative to inculcate fruit and vegetable intake especially to young children. This initiative uses NBOS approach by integrating nutrition components into other ministries' programmes. All these activities are envisioned to improve nutritional status of population through healthy eating practices based on Malaysian Dietary Guidelines. This strategy also supports the implementation of National Children Health Plan of Action, National Adolescent Plan of Action, Salt Reduction Strategies for Malaysia and National Strategic Plan for Active Living.

| No. | Activity | Output Indicator | Target/ Time Frame (midterm, by year, by 2025) | Implementation level | Implementing agency |
|-----------------------------|--|---|--|----------------------|--|
| 1. Childcare Centres | | | | | |
| 1.1 | Involve parents in promoting healthy eating such as during Meet The Parents Day, Parenting workshop etc | Number of childcare centres conducting nutrition activities involving parents | 10% for government childcare centres by 2020 50% for government and 10% private childcare centres by 2025 | State District | Lead agencies: <ul style="list-style-type: none"> • KEMAS • MOH • JPNIN • PERMATA Other agencies: <ul style="list-style-type: none"> • PPBM |
| 1.2 | Review <i>Modul Kursus Asuhan & Didikan Awal Permata</i> | <i>Modul Kursus Asuhan & Didikan Awal Permata</i> reviewed | Nutrition component in <i>Modul Kursus Asuhan & Didikan Awal Permata</i> reviewed and updated by 2018 | National | Lead agencies: <ul style="list-style-type: none"> • JPM/ UPM • MOH Other agencies: <ul style="list-style-type: none"> • JKM |
| 1.3 | Develop SOP for menu preparation at childcare centre | SOP developed | By 2018 | National | Lead agency: MOH Other agencies: <ul style="list-style-type: none"> • JKM • All related agencies |
| 1.4 | Establish monitoring system on provision of healthy menus at Taska | Monitoring system established | Established by 2020 | National | Lead agency: MOH Other agencies: <ul style="list-style-type: none"> • JKM • KEMAS • PPBM • PERMATA • JPNIN |
| 1.5 | Develop Training Module for Food Handlers in Childcare Centre and Preschool on healthy eating and healthy meal preparation | Training module developed | Training module developed by 2018 | National | Lead agency: MOH Other agencies: <ul style="list-style-type: none"> • KEMAS • Chef Association |

| No. | Activity | Output Indicator | Target/ Time Frame (midterm, by year, by 2025) | Implementation level | Implementing agency |
|------------------------|--|---|--|----------------------|---|
| 1.6 | Train food handlers in childcare centre on healthy eating and healthy meal preparation | Number of sessions conducted | Training started by 2020. At least one training per state | National State | Lead agency: MOH Other agencies: <ul style="list-style-type: none"> • KEMAS • MOE • JKM • PPBM • Malaysia Association of Kindergarten |
| 1.7 | Make mandatory provision of healthy menu as a prerequisite for certification of childcare centre (<i>Perakuan Pendaftaran Taska</i>) | Healthy menu as a prerequisite for certification | Healthy menu as a prerequisite for certification by 2020 | National | Lead agency: <ul style="list-style-type: none"> • MOH • JKM |
| 2. Preschoolers | | | | | |
| 2.1 | Review healthy eating component in preschool curriculum in line with MOE planning | Review of nutrition component in preschool curriculum completed | Review completed by 2018 In line with MOE's planning | National | Lead agencies <ul style="list-style-type: none"> • MOE • MOH Other agencies <ul style="list-style-type: none"> • Malaysia Association of Kindergarten • KEMAS • JPNIN |
| 2.2 | Train food handlers in preschools on healthy eating and healthy meal preparation | Number of sessions conducted | Training started by 2020. At least one training per zone (2020-2021) followed by at least one training per state (2022-2025) | National State | Lead agency: <ul style="list-style-type: none"> • MOH • KEMAS Other agencies: <ul style="list-style-type: none"> • MOE • JKM • JPNIN • PPBM • Malaysia Association of Kindergarten |

| No. | Activity | Output Indicator | Target/ Time Frame (midterm, by year, by 2025) | Implementation level | Implementing agency |
|---------------------------|---|--|---|----------------------|--|
| 2.3 | Develop educational package on healthy eating (e.g. interactive, educational games) in line with MDG's key messages for preschool | Number of educational package | At least one package per year (at least 2 items per package) | National | Lead agency: MOH Other agencies: • MOE • KEMAS • JPNIN • Malaysia Association of Kindergarten • NSM |
| 2.4 | Involve parents in promoting healthy eating such as during Meet The Parents Day, Parenting workshop etc | Number of preschools conducting nutrition activities involving parents | 10% for government preschool by 2020 50% for government and 10% private preschool by 2025 | State District | Lead agencies: • MOE • KEMAS • MOH Other agencies: • JPNIN • Malaysia Association of Kindergarten |
| 2.5 | Conduct conference/ convention on healthy eating and active living for children | Number of conferences/ conventions/ symposia/ seminars conducted | At least once in five years | National | Lead agency: MOH Other agencies: • MOE • NGOs • NSM • Malaysia Association of Kindergarten • KEMAS • PTA |
| 2.6 | Integrate nutrition component into "Kebun Dapur Project" initiated by KEMAS | Programme guideline/ module developed and piloted | Programme guideline/ module developed by 2017 Pilot implementation carried out by zone in 2018 | National State | Lead agencies: • MOH • KEMAS Others agency: • DOA |
| 3. School Children | | | | | |
| 3.1 | Revise Healthy School Canteen Guidelines | Revision of Healthy School Canteen Guidelines completed | Revision completed by 2017-2018 | National | Lead agencies: • MOH • MOE |

| No. | Activity | Output Indicator | Target/ Time Frame (midterm, by year, by 2025) | Implementation level | Implementing agency |
|-----|---|---|---|----------------------|--|
| 3.2 | Monitor the implementation of School Canteen Guidelines (nutrition component) | Percentage of primary and secondary schools comply with the School Canteen Guidelines (nutrition component) | At least 50% compliance by 2025 | State District | Lead agency: MOH Other agency: • MOE |
| 3.3 | Implement School Meal Programme | Number of primary/secondary schools implementing school meal programme | At least three schools in every state by 2020 At least six schools in every state by 2025 | State District | Lead agency: MOH Other agencies: • MOE • PTA |
| 3.4 | Strengthen enforcement on ban of sale of unhealthy foods/ beverages to children within 40 metres from school perimeter | Coverage of enforcement | Cumulative coverage: 25% schools by 2016 50% schools by 2018 80% schools by 2025 | State District | Lead agency: • MUWHLG • Local authorities Other agency: • MOE |
| 3.5 | Initiatives to provide sign board or banner banning sale of unhealthy foods/ beverages to children within 40 metres of school perimeter | Number of schools | Cumulative coverage: 25% schools by 2017 75% schools by 2020 85% schools by 2025 | State District | Lead agencies: • MUWHLG • Local authorities Other agencies: • MOE • PTA |
| 3.6 | Enforce banning of marketing of unhealthy food/ beverages to children in print and fixed outdoor advertising within 50 metres of school perimeter (media, bus stops, billboards and other similar promotions) | Number of monitoring on enforcement | Enforced by 2017. Cumulative coverage: 25% schools by 2020 50% schools by 2025 | State District | Lead agencies: • MUWHLG • Local authorities Other agencies: • MOH • MOE |
| 3.7 | Integrate nutrition component into “ <i>Projek Pertanian Bandar</i> ” initiated by Department of Agriculture | Nutrition guideline to be developed and piloted | Nutrition guideline to be developed by 2018 Pilot implementation carried out by zone in 2019 | State District | Lead agencies: • DOA Other agencies: • MOE • MOH |

| No. | Activity | Output Indicator | Target/ Time Frame (midterm, by year, by 2025) | Implementation level | Implementing agency |
|------|---|---|--|-------------------------------|---|
| 3.8 | Train parents of Parent Teacher Association (PTA) members to promote healthy eating towards healthy lifestyle | Number of schools with trained PTA's members Number of trained PTA members | 10,000 schools by 2018 At least 20,000 by 2018 | National State District | Lead agencies: • MOH • MOE Other agency: • PTAs |
| 3.9 | Implement healthy eating activities through PTA | Number of healthy eating activities in school by PTA | Starting 2019, at least one nutrition or health related activity per district per year | National State District | Lead agencies: • MOH • MOE Other agency: • PTA |
| 3.10 | Enhance nutrition promotion in schools including boarding schools | Number of nutrition promotion conducted in schools | At least one nutrition promotion or health related activity per school per year | National State District | Lead agencies: • MOH • MOE Other agencies: • Universities • Professional bodies • PTA |
| 3.11 | Develop educational package on healthy eating (e.g. interactive, educational games) in line with MDG key messages for school children | Number of educational packages | At least one package per year (at least two items per package) | National | Lead agency: MOH Other agencies: • MOE • PTA • Universities • NSM • MASO • MDA |
| 3.12 | Review nutrition component in school curriculum | Curriculum reviewed | In line with MOE's planning | National | Lead agency: MOE Other agencies: • MOH • Universities • NSM • MASO • MDA |

| No. | Activity | Output Indicator | Target/ Time Frame (midterm, by year, by 2025) | Implementation level | Implementing agency |
|---|--|--|--|----------------------|--|
| 4. Boarding Schools | | | | | |
| 4.1 | Revise standard menu for boarding schools | Standard menu for boarding schools under government agencies revised | Revision completed by 2018 | National | <p>Lead agency:</p> <ul style="list-style-type: none"> • MOH • MOE <p>Other agencies:</p> <ul style="list-style-type: none"> • State Department of Education • State Department of Health • MJSC • MOD (Royal Military College) • JAKIM (SMAR & SMAN) |
| 4.2 | Monitor the compliance of standard menu in boarding schools | Number of self-monitoring food preparation (nutrition) in boarding school | At least 5% of boarding schools under MOE's management monitored by 2020 | State District | <p>Lead agency:</p> <ul style="list-style-type: none"> • MOH • MOE <p>Other agencies:</p> <ul style="list-style-type: none"> • State Department of Education • State Department of Health • MJSC • MOD (Royal Military College) • JAKIM (SMAR & SMAN) |
| 5. Institutes of Higher Learning | | | | | |
| 5.1 | Carry out nutrition promotion in institutes of higher learning | Number of nutrition promotion conducted in public institute of higher learning | At least one nutrition promotion activities conducted per year in 50% of public institute of higher learning in 2025 starting 2018 | National State | <p>Lead agency:</p> <p>MOH</p> <p>Other agencies:</p> <ul style="list-style-type: none"> • MDTCC • MOHE • MOYS • Professional bodies: NSM/ NGOs |

| No. | Activity | Output Indicator | Target/ Time Frame (midterm, by year, by 2025) | Implementation level | Implementing agency |
|-----|---|---|---|-------------------------|--|
| 5.2 | Revise/ establish the nutrition component in PROSIS module and related club/ programme | Revision completed | Revision completed by 2020 | National | Lead agency: MOH Other agencies: • MDTCC • MOHE • MOE • MOYS |
| 5.3 | Train of trainers (TOT) on healthy eating in PROSIS module and related club/ programme | Number of TOTs conducted | At least one TOT session per institute of higher learning by 2020 | National State | Lead agency: MOH Other agencies: • MDTCC • MOYS • MOHE • MOE • Student Council |
| 5.4 | Implement Healthy Cafeteria in institutes of higher learning | Number of healthy cafeterias in institutes of higher learning | At least one healthy cafeteria in every public university by 2020 | National State District | Lead agency: MOHE Other agencies: • MOH • Student Council |
| 5.5 | Develop educational materials on healthy eating targeted to students in institute of higher learning | Number of educational material developed | At least five new materials (electronic/ softcopy/ video) developed by 2025 | National | Lead agency: MOH Other agencies: • MOHE • Student Council |
| 5.6 | Conduct healthy meal preparation activity (i.e: seminar, chef competition) for culinary student in institute of higher learning | Number of activities conducted | At least one activity conducted per year in institute of higher learning offering culinary or related courses | National | Lead agencies: • NSM • MASO • MDA • CAM Other agencies: • MOH • MOHR • MOHE • Institut Kemahiran Belia Negara |

| No. | Activity | Output Indicator | Target/ Time Frame (midterm, by year, by 2025) | Implementation level | Implementing agency |
|---|--|---|--|----------------------|--|
| 6. National Service Training Programmes (PLKN) | | | | | |
| 6.1 | Adopt nutrition consideration as one of the mandatory criteria in National Service Training Programme (PLKN) management contract procurement | Adoption of nutrition consideration into contract procurement | Adopted by 2018 | National | Lead agencies: <ul style="list-style-type: none"> JLKN MOH Other agency: <ul style="list-style-type: none"> <i>Persatuan Pengusaha Kem PLKN</i> |
| 6.2 | Monitor compliance of menu in PLKN | Percentage of camps achieving excellent status | 90% by 2018 95% by 2020 | State District | Lead agency: <ul style="list-style-type: none"> JLKN MOH Other agencies: <ul style="list-style-type: none"> <i>Persatuan Pengusaha Kem PLKN</i> |
| 6.3 | Conduct nutrition talk during orientation week in PLKN camp | Number of nutrition talks during orientation week | At least one talk per session per camp | State District | Lead agencies: <ul style="list-style-type: none"> MOH JLKN |
| 7. Other Institutions | | | | | |
| 7.1 | Review menu in selected institutions (i.e: prisons, <i>Pusat Pemulihan Dalam Komuniti (PDK)</i> , elderly homes, orphanage homes) | Number of menu reviewed | At least one menu reviewed every year | National | Lead agency: MOH Other agencies: <ul style="list-style-type: none"> MOHA JKM MWFCD Other private institutions |
| 7.2 | Monitor compliance of menu in selected institutions (i.e: prisons, <i>Pusat Pemulihan Dalam Komuniti (PDK)</i> , elderly homes, orphanage homes) | Number of monitoring activities | At least once per year per institution per state starting 2018 | National State | Lead agency: MOH Other agencies: <ul style="list-style-type: none"> MOHA JKM MWFCD Other private institutions |

| No. | Activity | Output Indicator | Target/ Time Frame (midterm, by year, by 2025) | Implementation level | Implementing agency |
|---------------------|--|--|---|-------------------------------|---|
| 8. Community | | | | | |
| 8.1 | Mandatory implementation of healthy cafeteria at work places <ul style="list-style-type: none"> Government health facilities Private hospitals & other government facilities | Percentage of healthy cafeteria Number of new private sectors or other government agencies implementing healthy cafeteria | 100% in government health facilities by 2018 At least two new private sectors or other government agencies per year | National State District | Lead agency: MOH Other agencies: <ul style="list-style-type: none"> APHM JPA Other government agencies and private sectors. |
| 8.2 | Mandatory implementation of Healthy Meal Provision during Meetings (PHSSM) in all ministries | PHSSM implemented in all ministries | All Division in MOH Headquarters implemented <i>PHSSM</i> by 2020 50% other ministries at national level (at least one Division) implemented PHSSM by 2020 | National | Lead agency: MOH Other agencies: <ul style="list-style-type: none"> JPA All ministries |
| 8.3 | Promote nutrition activities via mass media and social media based on the Malaysian Dietary Guidelines (including Malaysian Healthy Plate) | Number of nutrition promotion activities via mass media and social media | At least seven nutrition messages by category (age group, specific topic) promoted per year | National State | Lead agency: MOH Other agencies: <ul style="list-style-type: none"> State Health Department MCMM <i>Persatuan Penerbit</i> Universities Professional Bodies/ NGO |
| 8.4 | Conduct advocacy and awareness on Malaysian Healthy Plate concept through various nutrition-related activities such as Healthy Shopping Tour/ Healthy Cafeteria/ Healthy Catering/ PHSSM/ nutrition counselling/ talks/ exhibitions/ nutrition intervention in KOSPEN/ nutrition promotion in school | Number of advocacy and awareness activities | At least six different activities advocating Malaysian Healthy Plate concept per state per year | National State District | Lead agency: MOH Other agencies: Professional bodies |

| No. | Activity | Output Indicator | Target/ Time Frame (midterm, by year, by 2025) | Implementation level | Implementing agency |
|------|--|---|---|-------------------------|---|
| 8.5 | Expand existing Healthy Eating Through Healthy Shopping Programme to more shopping outlet chains | Number of shopping outlets involved in Healthy Eating Through Healthy Shopping Programme | At least 60 outlets by 2018 | State | Lead agency: <ul style="list-style-type: none"> • MOH • MDTCC Other agencies: <ul style="list-style-type: none"> • FOMCA • Related supermarkets |
| 8.6 | Empower consumers through digital technology (i.e. MyNutriDiari apps) | Number of downloaders | 40,000 downloaders (mobile) by 2020 (5000 downloaders annually) | National State | Lead agencies: MOH Other agencies: <ul style="list-style-type: none"> • JPA • MAMPU |
| 8.7 | Strengthen Nutrition Information Centres (NIC) | Number of NICs established | 28 NICs by 2020 | National State | Lead agency: MOH Other agencies: <ul style="list-style-type: none"> • Other ministries • Universities |
| 8.8 | Strengthen Healthy Community Kitchen (DSM) | Number of Healthy Community Kitchens Number of activities conducted in healthy community kitchen | 51 Healthy Community Kitchens by 2020 At least 24 activities conducted per DSM per year | State District | Lead agency: MOH Other agencies: <ul style="list-style-type: none"> • KEMAS • DOA |
| 8.9 | Carry out nutrition promotion to the community focusing on:- <ul style="list-style-type: none"> • Creating a calorie conscious society (i.e.: R&R and hotels) • Increase fruit & vegetable intake • Reduce salt & sugar | Number of nutrition promotion activities conducted | 10 activities per year at all level | National State | Lead agency: MOH Other agencies: <ul style="list-style-type: none"> • NSM • MASO • MDA • All nutrition related professional bodies/ NGO |
| 8.10 | Review Healthy Catering Training Module Conduct training on Healthy Catering Module | Module reviewed Number of training | Healthy Catering Training Module reviewed by 2018 At least one training per year at district level | National State District | Lead agency: MOH |

| No. | Activity | Output Indicator | Target/ Time Frame (midterm, by year, by 2025) | Implementation level | Implementing agency |
|------|--|---|---|----------------------|--|
| 8.11 | Integrate nutrition component in sport events such as Fit Malaysia, <i>Hari Sukan Negara</i> | Number of national sport events integrated with nutrition component | At least two national sport events integrated with nutrition component every year starting 2017 | National | Lead agencies: <ul style="list-style-type: none"> • MOH • MOYS • MOE |
| 8.12 | Integrate nutrition consideration in procurement of supply for cooked food in government institution as an approval criteria for new Government Cafeteria Tender application | Nutrition consideration included as one of the approval criteria in procurement of supply for cooked food in government institution | Nutrition consideration included as an approval criteria for new Government Cafeteria Tender application in: <ul style="list-style-type: none"> • MOH by 2017 • INTAN by 2018 • PLKN by 2019 • MOHE by 2020 | National | Lead agency: MOH Other agencies: <ul style="list-style-type: none"> • JLKN • MOHE • INTAN |

ENABLING STRATEGY



Preventing and Controlling Nutritional Deficiencies

Nutritional deficiencies among the vulnerable groups (women, children and elderly) will be addressed in this strategy. Emphasis will be given to anaemia among women of reproductive age, iodine deficiency, protein energy malnutrition (PEM) among Malaysian as well as stunting and wasting in children. Activities under this strategy will include an overall landscape analysis on malnutrition status among children to support in modifying existing nutrition strategies and programmes. Apart from that, this strategy

includes activities on development of food fortification policy such as implementation of Universal Salt Iodisation (USI) and fortification of wheat flour with iron and folic acid. Continuous collaboration with MOE for the National Supplementary Feeding Programmes such as School Supplementary Feeding and School Milk Programme is still vital. There will be continued training among health care providers and care givers to increase nutrition management skills of children below 5 years.

| No. | Activity | Output Indicator | Target/ Time Frame (midterm, by year, by 2025) | Implementation level | Implementing agency |
|--|---|--|---|----------------------|--|
| 1. Women | | | | | |
| 1.1 | Develop a Guideline on Anaemia Prevention & Control Programme among Women of Reproductive Age | Guideline developed | Guideline developed by 2017 | National | Lead agency: MOH |
| 1.2. | Carry out nutrition education specifically on the importance of micronutrients for women of reproductive age (15-49 years old) | Number of nutrition education activities conducted | One nutrition education in at least one KOSPEN's locality per district per year | District | Lead agency: MOH Other agencies: • KEMAS • NGOs • Professional bodies • Universities |
| 1.3 | Implement mandatory iron and folic acid fortification of wheat flour | Iron and folic acid fortification of wheat flour implemented | Implemented by 2020 | National | Lead agency: MOH Other agencies: • MDTCC • Millers • FFM |
| 1.4 | Provide supplementation of iron and folic acid to secondary school aged (>15 years old) adolescent girls in prioritised areas | Percentage coverage of iron and folic acid supplementation to secondary school aged (>15 years old) adolescent girl in prioritised areas | At least 50% of prioritised areas covered by 2025 | State | Lead agency: MOH Other agencies: • MOE • JAKOA • State government |
| | | Percentage of identified school aged adolescent girl given supplement | All identified school aged adolescent girls given supplement by 2025 | | |
| 2. Children 6 Years Old and Below | | | | | |
| 2.1 | Report analysis on malnutrition landscape among children under 5 years old to support in modifying existing nutrition strategies and programmes | Landscape analysis of malnutrition among children reported | Report developed by 2018 | National | Lead agency: • UNICEF • MOH |

| No. | Activity | Output Indicator | Target/ Time Frame (midterm, by year, by 2025) | Implementation level | Implementing agency |
|---------------------------|---|--|---|----------------------|---|
| 2.2 | Identify effective strategies to address stunting and wasting among under 5 years old children | Strategies identified | Strategies to address stunting and wasting among children under 5 years old children identified by 2019 | National | Lead agency: <ul style="list-style-type: none"> UNICEF MOH Other agencies: <ul style="list-style-type: none"> MOE KEMAS Professional bodies Other related ministries & NGOs |
| 2.3 | Strengthen Nutrition Rehabilitation of Malnourished Children Programme (PPKZM) | Evaluation of PPKZM | Evaluation on effectiveness of PPKZM conducted and reported by 2017 | National | Lead agency: <ul style="list-style-type: none"> UPM MOH |
| | | Recommendation proposed | Recommendation to improve PPKZM proposed based on evaluation findings | | |
| 2.4 | Strengthen management of referral system for System for Severe Acute Malnutrition (SAM) and Moderate Acute Malnutrition (MAM) | National Referral System established | National Referral System established by 2020 | National | Lead agency: MOH |
| 3. School Children | | | | | |
| 3.1 | Strengthen the implementation of the School Supplementary Feeding Programme (RMT) for targeted school children | Percentage of school with the School Supplementary Feeding Programme (RMT) monitored | 50% of school with the School Supplementary Feeding Programme (RMT) monitored by 2020 | State District | Lead agency: MOE Other agency: MOH |
| 3.2 | Carry out evaluation of the School Milk Program (PS1M) | Evaluation of the PS1M | The PS1M evaluated by 2020 | National | Lead agency: MOE Other agency: MOH |
| 3.3 | Monitor median urinary iodine excretion level among school children aged 8 to 10 years old | Median urinary iodine excretion: 100-199 µg/L | Biennial monitoring by 2018 (After gazettment of USI for the whole Malaysia, expected 2018) | National State | Lead agency: MOH Other agency: MOE |

| No. | Activity | Output Indicator | Target/ Time Frame (midterm, by year, by 2025) | Implementation level | Implementing agency |
|--------------------------|---|---|--|----------------------|--|
| 4. All Age Groups | | | | | |
| 4.1 | Implement Universal Salt Iodisation (USI) for the whole country | USI is implemented | Implemented by 2018 | National State | Lead agency: MOH |
| 4.2 | Carry out awareness campaign on consumption of iodized salt in Peninsular Malaysia and Labuan | Number of awareness campaigns carried out | Awareness campaign on consumption of iodized salt carried out within one year of gazettelement in Peninsular Malaysia and Labuan | National State | Lead agency: MOH |
| 4.3 | Provide cash/ food transfers to vulnerable groups to improve nutritional status (i.e.: school children from poor family) | Number of cash/ food transfer programmes | Number of cash/ food transfer programmes increased yearly | National | Lead agency: JPM Other agencies: <ul style="list-style-type: none"> • MOA • NGOs • MOE • MWFC • MRRD |
| 4.4 | Strengthen community based treatment through expansion of Community Feeding Programme (PCF) | Number of new Community Feeding Centres | Three new Community Feeding Centres established per year | State | Lead agency: MOH Other agency: JAKOA |
| 4.5. | Develop SOP related to nutritional management for supplementary feeding for all age groups during disasters and emergencies | SOP developed | SOP developed by 2018 | National | Lead agency: MKN Other agencies: <ul style="list-style-type: none"> • MOH • JKM • State Government • APM • NGO's |

ENABLING STRATEGY



Preventing and Controlling Obesity and Other Diet-Related Non-Communicable Diseases (NCDs)

Diet-related non-communicable diseases (NCDs) have contributed to the overall disease burden in the country for several decades. Although public awareness has been improving, unfortunately, readiness to change unhealthy eating habits and sedentary lifestyle and be responsible for their own health is still seriously lacking. Therefore, there is a need for stronger soft and hard policies that will support and facilitate healthier behavioural change among the population. Some of the suggested hard policies to be implemented in this Plan are policies on healthy BMI as part of performance appraisal, ban television advertisement on

unhealthy food to children, impose tax to sugar sweetened beverages, mandatory restriction of food outlet operating hours. Besides that, Guidelines on Weight Management Programme for Overweight and Obese Person will be established as a community intervention programme. The community will be empowered through KOSPEN in combating these emerging problems. Compliance to the Malaysia Pledge (Malaysian Food and Beverages Industry's "Responsible Advertising to Children" Initiative) will be monitored and guideline to regulate marketing of food and non-alcoholic beverages will be established.

| No. | Activity | Output Indicator | Target/ Time Frame (midterm, by year, by 2025) | Implementation level | Implementing agency |
|-----|--|---|--|----------------------|---|
| 1. | Make available self-screening equipment for NCD risk factors (weighing machines, stadiometer, BP set, glucometer) through KOSPEN activity at workplace | Number of government agencies with self-screening equipment | 100% in all ministries by 2020 | National | Lead agency: MOH Other agencies: • All ministries • JPA |
| 2. | Develop policy on healthy BMI as part of performance appraisal at workplace for government and private sector | One policy developed | Policy developed by 2018 | National | Lead agency: MOH Other agencies: • JPA • MOHR |
| 3. | Develop standard Guideline on Weight Management Programme for Overweight & Obese Individual at Workplace | Standard guideline developed | Standard guideline developed by 2017 | National | Lead agency: MOH |
| 4. | Implement Weight Management Programme for Overweight & Obese Individuals at Workplace | Number of government and private agencies implement weight management programme | At least three of government and private agencies implemented the programme per year | National State | Other agencies: MOH Lead agency: All government ministries and agencies. |
| 5. | Promote healthy eating through social media (Facebook, Twitter, Blog, Instagram etc.) for the prevention & control of obesity | Number of healthy eating messages covered in social media | Healthy eating messages for the prevention & control of obesity covered in at least 10 posts per month | National State | Lead agency: MOH Other agencies: • MCMC • Professional bodies |
| 6. | Ban television advertising of foods/ beverages high in fat and/or high in sugar and salt for children | Review and upgrade current guideline into regulation | Regulation established by 2020 | National | Lead agencies: • MOH • MCMC Other agency: • FMM • Fast food industries |

| No. | Activity | Output Indicator | Target/ Time Frame (midterm, by year, by 2025) | Implementation level | Implementing agency |
|-----|--|---|--|----------------------|---|
| 7. | Reduce cooking oil subsidy | Percentage of subsidy reduction | 20% subsidy reduction by 2025 | National | Lead agency: MOF Other agencies: • MOH • MPIC • MDTCC |
| 8. | Impose healthy catering training as a prerequisite for business license application (food & beverage) | Healthy catering training adopted as a prerequisite for business license application (food & beverage) | Healthy catering training adopted as a prerequisite for business license application (food & beverage) by 2025 | National | Lead agency: Local authority Other agency: MOH |
| 9. | Impose tax on unhealthy foods and beverages (i.e: sweetened creamer, condensed milk, sugar sweetened beverages (SSBs) including carbonated drinks and processed foods) | Tax on unhealthy foods and beverages (SSBs) implemented | Tax on unhealthy foods and beverages (SSBs) by 2020 | National | Lead agency: MOF Other agencies: • Custom Department • MOH • Food industries |
| 10. | Establish guideline and implement mandatory display prominently of nutrition information on menu at food outlets (e.g: franchise fast food restaurants) | Guideline established. Mandatory nutrition information on menu at food outlets gazzetted | Guideline established by 2017 Gazzetted by 2025 | Nationwide | Lead agency: MOH Other agencies: Fast food industries |
| 11. | Voluntary commitment to reduce serving size/ value meals or restrict size/refilling/value meal by fast food companies | Number of fast food companies committed | At least two fast food companies committed per year | National | Lead agency: MOH Other agencies: Fast food industries |
| 12. | Impose mandatory requirement for vending machine to sell healthier beverage options in public places | Guidelines established Mandatory healthy vending machine to sell healthier beverage options in public places gazzetted | Guidelines established by 2020 Gazzetted by 2025 | National | Lead agencies: • MUWHLG • Local Authorities Other agency: MOH |

| No. | Activity | Output Indicator | Target/ Time Frame (midterm, by year, by 2025) | Implementation level | Implementing agency |
|-----|---|---|--|----------------------|---|
| 13. | Impose mandatory restriction of operating hours up to 12 midnight for all food outlets | Gazettment on restriction of operating hours up to 12 midnight for all food outlets | Gazetted by 2020 Enforced by 2021 | National | Lead agency: <ul style="list-style-type: none"> JPM MOH Other agencies: <ul style="list-style-type: none"> MOHA MUWHLG Local authorities Fast food industries |
| 14. | Empower KOSPEN volunteers to conduct Weight Management Programme in community to combat obesity and other diet related NCDs | Number of KOSPEN volunteers trained in the Weight Management Programme Number of Weight Management Programmes conducted by KOSPEN volunteers | 100% KOSPEN volunteers trained in identified locality per district At least one programme conducted in one KOSPEN locality per district per year | State District | Lead agency: MOH Other Agencies <ul style="list-style-type: none"> MRRD MOYS Professional bodies Panel Penasihat (MOH) |
| 15. | Develop specific nutrition criteria for monitoring of the Malaysia Pledge (Malaysian Food and Beverage Industry's "Responsible Advertising to Children" Initiative) | Specific nutrition criteria developed Monitoring system established Number of new companies signing the Pledge | Developed specific nutrition criteria by 2017 100% adherent to the pledge per year starting 2018 At least two new companies per year starting 2018 | National | Lead agency: FMM Other agency: <ul style="list-style-type: none"> MOH Food industries including fast food |
| 16. | Regulate the marketing of food and non-alcoholic beverages to children | Guideline to regulate marketing of food and non-alcoholic beverages to children Gazettment of the regulation | Guideline established by 2020 Regulation gazetted by 2025 | National | Lead agency: <ul style="list-style-type: none"> MOH Other agencies: <ul style="list-style-type: none"> MDTCC MCMC FMM Food industries including fast food |

ENABLING STRATEGY



Sustaining Food Systems to Promote Healthy Diets

An important objective of NPANM III is to strengthen food and nutrition security of the population, which has become a global agenda. All activities outlined under this strategy contribute to the sustainable food system encompassing from farm to table. One of the major key activities for sustaining food systems to promote healthy diet is to incorporate nutrition consideration into planning of food supply for the country. Under this strategy, collaboration with the Ministry of Agriculture and Agro-Based Industry will be strengthened in making agriculture system more nutrition enhancing. There is also a need to revisit the

national food system policies including food production, distribution, marketing and purchasing to provide more effective and supportive food system. Food industries also play a major role in implementing this strategy to produce more and healthier food and beverage products at affordable prices through reformulation and innovation. A sustainable food system to promote healthy diets contributes significantly in achieving the optimal nutritional well-being of Malaysians. This strategy supports the implementation of National Agrofood Policy and National Sustainable Consumption Blueprint (2015–2030).

| No. | Activity | Output Indicator | Target/ Time Frame (midterm, by year, by 2025) | Implementation level | Implementing agency |
|-----|---|--|--|----------------------|--|
| 1. | Integrate nutrition component in the planning of food supply for the population | Nutrition component considered in the planning of food supply for the population | Incorporated in the Second National Agro Food Policy (NAP), 2021-2030 | National | Lead agency: MOA Other agencies: • MOH • EPU • Universities |
| 2. | Adopt Nutrition Enhancing Agriculture-Food Supply Calculator | Nutrition Enhancing Agriculture-Food Supply Calculator developed and adopted | Adopted by MOA by 2021 | National | Lead agency: MOH Other agencies: • MOA • EPU • Universities |
| 3. | Advocate the establishment on community gardening | Number of advocacy activities on community gardening carried out | At least 15 advocacy activities on community gardening carried out yearly at national/ state level | National State | Lead agency: DOA Other agencies: • MOE • MOH • MDTCC • NGOs • MRRD • MUWHLG • MWFC |
| 4. | Advocate to increase local production of fruits and vegetables | Locally produced fruits and vegetables increased | Annual increase in the quantity of locally produced fruits and vegetables | National | Lead agency: MOA Other agencies: • FAMA • MARDI • MOH • SMEs • Universities • MUWHLG • MRRD |
| 5. | Promote the consumption of underutilised crops (i.e.: <i>pulasan, kuini, binjai, ceri Terengganu, asam gelugor, terung asam, bambangan, sagu, sukun</i>) | Number of promotions on the consumption of underutilised crops carried out | Annual increase in the number of promotions on the consumption of underutilised crops | National | Lead agency: MOA Other agencies: • FAMA • MARDI • MOH • SMEs • Universities • MRRD |

| No. | Activity | Output Indicator | Target/ Time Frame (midterm, by year, by 2025) | Implementation level | Implementing agency |
|-----|---|--|---|----------------------|---|
| 6. | Establish a guideline on food supply and distribution according to nutrition requirement during crisis/ emergency | Guideline established | Guideline established by 2018 | National | Lead agencies: <ul style="list-style-type: none"> • MOH • MKN Other agencies: <ul style="list-style-type: none"> • JPAM • JKM • MOH • MOA • Universities |
| 7. | Increase the production and promotion of healthier foods and beverages | Number of foods and beverages with reduced/ low sugar/ sodium/ fat or increased/ higher in fibre | At least 15 products formulated/ reformulated per year | National | Lead agency: FMM Other agencies: <ul style="list-style-type: none"> • MOH • SMEs |
| 8. | Increase consumption of the following healthier foods and beverages by consumers: <ul style="list-style-type: none"> • Wholemeal bread • Low sugar beverages • Whole grains cereals • Whole grains biscuits • Low fat milk | Database of production of healthier foods and beverages by industry | Increase yearly production for the following healthier food/ beverages: <ul style="list-style-type: none"> • Wholemeal bread • Low sugar beverages • Whole grains cereals • Whole grains biscuits • Low fat milk | National | Lead agencies: <ul style="list-style-type: none"> • FMM • F&B Other agencies: <ul style="list-style-type: none"> • MDTCC • MOH • Hypermarket chains. |
| 9. | Implement zero GST for whole grains products with Healthier Choice Logo (HCL) | Zero GST for whole grains products with Healthier Choice Logo (HCL) implemented | Zero GST for whole grains products with Healthier Choice Logo (HCL) implemented by 2020 | National | Lead agency: MOF Other agency: <ul style="list-style-type: none"> • MOH • FMM • MDTCC • Custom Department |
| 10. | Implement Healthier Choice Logo (HCL) | Number of products with Healthier Choice Logo (HCL) | At least 10% for each food product category in 2017-2020 At least 20% for each product category in 2021-2025 | National | Lead agency: MOH Other agency: <ul style="list-style-type: none"> • F&B • FMM • SMEs |

| No. | Activity | Output Indicator | Target/ Time Frame (midterm, by year, by 2025) | Implementation level | Implementing agency |
|-----|--|--|---|----------------------|---|
| 11. | Provide incentives (i.e. tax discount for producer for local production, processing and distribution or importation and marketing of healthier food options) | Incentive (fiscal/ non-fiscal) to manufacturers with healthier food products provided | Incentive (fiscal/ non-fiscal) to manufacturers with healthier food products provided by 2020 | National | Lead agency: MOF Other agency: <ul style="list-style-type: none"> • EPU • MDTCC • Custom Department • MIDA • MOH • FMM • MOSTI • MOA • MITI • Fast food industries |
| 12. | Implement tax incentive for manufacturers with R&D facilities in Malaysia for healthier food products | Tax incentive for manufacturers with R&D facilities in Malaysia for healthier food products implemented | Additional tax incentive for manufacturers with R&D facilities in Malaysia for healthier food products implemented by 2021 | National | Lead agency: MIDA Other agency: <ul style="list-style-type: none"> • MOF • EPU • MDTCC • Custom Department • MOH • FMM • MOSTI • Fast food industries |
| 13. | Increase the number of Fair Price Shop (<i>Kedai Harga Patut</i>) premises selling food item | Number of food premises with Fair Price Shop increased | Annual increase in the number of food premises with Fair Price Shop | National | Lead agency: MDTCC |
| 14. | Increase accessibility to affordable fruits and vegetables | Number of <i>Pasar Tani/ Pasar Tamu/ Pasar Malam</i> or equivalent outlets selling fruits and vegetables | Annual increase in the number of <i>Pasar Tani/ Pasar Tamu/ Pasar Malam</i> or equivalent outlets selling fruits and vegetables | National | Lead agency: MOA Other agencies: <ul style="list-style-type: none"> • FAMA • <i>Persatuan Penjaja</i> |

| No. | Activity | Output Indicator | Target/ Time Frame (midterm, by year, by 2025) | Implementation level | Implementing agency |
|-----|---|---|---|----------------------|--|
| 15. | Formulate policy to reduce food wastage | Food wastage policy formulated | Food wastage policy formulated by 2018 | National | Lead agencies: <ul style="list-style-type: none"> • MUWHLG • MARDI Other agencies: <ul style="list-style-type: none"> • MCMM • MOH • MOE • Tourism • NGOs |
| 16. | Carry out media campaign on reduction of food wastage | Number of media campaign on reduction of food wastage carried out | At least one annual media campaign on reduction of food wastage carried out | National State | Lead agencies: <ul style="list-style-type: none"> • MUWHLG • MARDI • MCMM Other agencies: <ul style="list-style-type: none"> • MOE • MOH • MOTAC • NGOs |

ENABLING STRATEGY



Supporting Efforts to Promote Food Safety and Quality

Supporting efforts to promote food safety and quality is an essential component to support NPANM III. Activities under this strategy include educating and improving awareness of the population on food labelling, food safety and consumer rights.

Mandatory declaration of total sugar, sodium and main fatty acids are proposed in this strategy as well. The expansion of nutrition labelling is to empower consumers in making informed choices about food products for healthy dietary practices.

| No. | Activity | Output Indicator | Target/ Time Frame (midterm, by year, by 2025) | Implementation level | Implementing agency |
|-----|---|---|--|----------------------|--|
| 1. | Educate consumers on nutrition labelling | Percentage of adults read nutrition label | Increase percentage of adults read nutrition label compared to baseline data (MANS, 2014: 5.7% read at least 4 nutrients) | National State | Lead agency: MOH Other agencies: <ul style="list-style-type: none"> • MCMM • MDTCC • Food industry • Professional bodies • FOMCA • Mass media • Private company. |
| 2. | Impose mandatory declaration of total sugars in all food products (in stages) | Mandatory declaration of total sugars in all food product implemented in stages | All food categories that require mandatory nutrition labelling (refer to Guide to Nutrition Labelling and Claims, 2010) by 2020 Other selected food categories by 2025 | National | Lead agency: MOH Other agencies: <ul style="list-style-type: none"> • FMM • SMEs |
| 3. | Impose mandatory declaration of sodium in all food products (in stages) | Mandatory declaration implemented | All food categories that require mandatory nutrition labelling (refer to Guide to Nutrition Labelling and Claims, 2010) by 2020 Other selected food categories by 2025 | National | Lead agency: MOH Other agencies: <ul style="list-style-type: none"> • FMM • SMEs |
| 4. | Impose mandatory declaration of four main types of fatty acids (saturated, monounsaturated, polyunsaturated & trans fatty acid) in selected food products | Mandatory declaration implemented | Mandatory declaration of four main types of fatty acids for four food categories by 2020: <ul style="list-style-type: none"> • Salad dressing • Flour Confectionery • Milk • Cereal (Based on Guide to Nutrition Labelling and Claims, 2010) | National | Lead agency: MOH Other agencies: <ul style="list-style-type: none"> • FMM • SMEs |

| No. | Activity | Output Indicator | Target/ Time Frame (midterm, by year, by 2025) | Implementation level | Implementing agency |
|-----|---|--|---|----------------------|---|
| 5. | Expansion of mandatory nutrition labelling for processed food and beverages (sauces, fat spread products, ice confection and etc.) as sold in retail outlet | Mandatory nutrition labelling for processed food implemented | Mandatory nutrition labelling for processed food by 2020 | National | <p>Lead agency: MOH</p> <p>Other agencies:</p> <ul style="list-style-type: none"> • FMM • SMEs |
| 6. | Strengthen the voluntary implementation of voluntary of Front-of-Pack (FOP) for Energy | Number of SKU with FOP for Energy | <p>More than 50 Stock Keeping Units (SKUs) per year in 2016-2025</p> <p>Baseline: 2012 – 186 SKUs 2013 & 2014 – 380 SKUs</p> | National | <p>Lead agency:</p> <ul style="list-style-type: none"> • FMM • F&B <p>Other agencies:</p> <ul style="list-style-type: none"> • MOH • SMEs |



**FACILITATING
STRATEGIES**

FACILITATING STRATEGY



Providing Standard Nutrition Guidelines for Various Targeted Groups

Standard dietary guidelines are important to ensure consistent and accurate nutrition messages to the public. These have been developed through general consensus of expertise from related sectors and disseminated to the population by health care professionals. The guidelines provide dietary advice suited with the dietary needs of the various age groups and culturally sensitive for Malaysian communities. These guidelines not only address issues of nutrient insufficiency in diet but also provide information on healthy

eating to reduce risk of over-nutrition and non-communicable diseases. The dietary guidelines will be reviewed every 10th year to ensure the relevance of the technical information and the prevailing nutrition situation in the country. The revision of Recommended Nutrient Intake (RNI), 2005 will provide latest advice on dietary intake for the maintenance of good health. The RNI covers all age groups from infancy to elderly including pregnant and lactating women as well.

| No. | Activity | Output Indicator | Target/ Time Frame (midterm, by year, by 2025) | Implementation level | Implementing agency |
|-----|--|---------------------|---|----------------------|--|
| 1. | Develop comprehensive nutritional guideline for children with special needs for healthcare providers | Guideline developed | Guideline developed by 2018 | National | Lead agency: MOH Other agency: JKM |
| 2 | Develop Dietary Guideline for Pregnant & Lactating Women | Guideline developed | Guideline developed by 2018 | National | Lead agency: MOH Other agencies: <ul style="list-style-type: none"> • MWFCD • LPPKN • JKM • Universities • Professional bodies |
| 3. | Develop Dietary Guideline for Elderly | Guideline developed | Guideline developed by 2018 | National | Lead agency: MOH Other agencies: <ul style="list-style-type: none"> • MWFCD • JKM • Universities • NGOs • Professional bodies |
| 4. | Develop Dietary Guideline for Vegetarian | Guideline developed | Guideline developed by 2018 | National | Lead agency: MOH Other agencies: <ul style="list-style-type: none"> • Universities • NGOs • Professional bodies |
| 5. | Review all guidelines and recommendations at least once every ten years e.g. RNI, MDG | Guideline reviewed | RNI 2005 reviewed by 2018 MDG 2010 reviewed by 2020 MDG for Children & Adolescents 2013 (include Guidelines for the feeding of infants & young children) reviewed by 2023 | National | Lead agency: MOH Other agencies: <ul style="list-style-type: none"> • Universities • Research Institutes • Professional bodies |

| No. | Activity | Output Indicator | Target/ Time Frame (midterm, by year, by 2025) | Implementation level | Implementing agency |
|-----|---|-------------------------------|---|----------------------|--|
| 6. | Review all nutrition training modules in tandem with revision of nutritional guidelines and recommendations | All training modules reviewed | All training modules reviewed in tandem with revision of nutritional guidelines and recommendations by 2025 | National | Lead agency: MOH Other agencies: <ul style="list-style-type: none"> • Universities • Research Institutes |

FACILITATING STRATEGY



Continuous Assessment and Monitoring of the Nutrition Situation

Continuous assessment and monitoring of the country's nutrition situation enable the characterisation of the nutritional problems faced by the population and detecting changes in the nutrition situation. Such information is vital for the planning and implementation of more targeted intervention programmes. The need for

strengthening the national nutrition surveillance systems for specific groups are given attention in this strategy. Whilst, for the purpose of country accountability, commitments to the global and regional nutrition parameters and frameworks, this information will be periodically reported to the related UN agencies.

| No. | Activity | Output Indicator | Target/ Time Frame (midterm, by year, by 2025) | Implementation level | Implementing agency |
|-----|--|---|--|------------------------|---|
| 1. | Monitor prevalence of diarrhoea in children under 5 years old | Prevalence of diarrhoea in children under 5 years old | Prevalence of diarrhoea monitored and reported yearly | National State | Lead agency: MOH |
| 2. | Continue nutrition surveillance for children aged 4 to 6 years old in government preschools | Nutrition surveillance regularly conducted and reported | Nutrition surveillance reported by: KEMAS • three times/ year MOE • At least once a year | National | Lead agencies: • KEMAS • MOE • MOH |
| 3. | Strengthen monitoring of BMI among school children through <i>SEGAK</i> / Student Health Record (RKM) | Nutritional status (BMI) monitored and reported | Nutritional status (BMI) monitored yearly and reported | National State | Lead agency: MOE Other agency: MOH |
| 4. | Strengthen monitoring of BMI among National Service Training Programme (PLKN) trainees | Nutritional status (BMI) monitored and reported | At entry and before exit the programme | National State | Lead agency: MOH Other agency: JLKN |
| 5. | Make periodic reporting of national progress to UN/ WHO/ WPRO/ ASEAN on the following global and regional nutrition parameters/ framework for action including: • Global Nutrition Targets 2025 • Monitoring Framework for Maternal, Infant and Young Child • Framework for Action for ICN2 • Sustainable Development Goals (SDGs) 2030 • Global Action Plan for the Prevention and Control of NCD 2013-2020 • ASEAN Integrated Food Security (AIFS) Framework and Strategic Plan • Action Plan to Reduce the Double Burden of Malnutrition in the Western Pacific Region 2015-2020 | Number of reportings | All national progress to UN/ WHO/ WPRO/ ASEAN on the global and regional nutrition parameters/ framework for action reported | International National | Lead agency: MOH Other agencies: • MOA • EPU • WHO • UN agencies • Asean Countries |

FACILITATING STRATEGY



Strengthening Food and Nutrition Research and Development

Research and development are important to provide evidence for the development of policies and programmes. The importance of conducting periodic and comprehensive national nutrition surveys for all age groups is given emphasis. The establishment of Nutrition Research Priorities (NRP) for the 11th and 12th Malaysia Plans will give a clear direction of nutrition research in the country and fund allocation. It is crucial to update the Malaysian Food Composition Database (FCD), 1997. The updated

Malaysian FCD will provide better quality nutrient data especially for health professionals, food scientists, food industries and etc. In the way forward to support nutrition research development in the country, the establishment of the National Institute of Nutrition (NIN) is identified as one of the strategies to strengthen capacity building in nutrition research and establish smart partnership with relevant key stakeholders involved in research.

| No. | Activity | Output Indicator | Target/ Time Frame (midterm, by year, by 2025) | Implementation level | Implementing agency |
|-----|---|---|--|----------------------|---|
| 1. | Establish Nutrition Research Priorities (NRP) for 11 th and 12 th Malaysia Plan (MP) | Nutrition Research Priorities established | Nutrition Research Priorities for 11 th & 12 th MP established | National | <p>Lead agency: MOH</p> <p>Other agencies:</p> <ul style="list-style-type: none"> • Universities • ASM • Research Institutes • MOSTI • Other related agencies |
| 2. | Conduct periodic and comprehensive national nutrition surveys for all age groups as stipulated in Nutrition Research Priorities for Malaysia (NRP) | Number of national survey as stipulated in NRP | At least once in five years | National | <p>Lead agencies:</p> <ul style="list-style-type: none"> • MOH • Other identified research institute/ agencies |
| 3. | Conduct national survey for micronutrient status for iron, vitamin A and vitamin D using biochemical parameters among children under 5 years old | National survey conducted | National survey conducted by 2025 | National | <p>Lead agencies:</p> <ul style="list-style-type: none"> • MOH • Other identified research institute/ agencies |
| 4. | Strengthen capacity building in postgraduate nutrition research | Percentage of nutritionists trained in postgraduate nutrition research | At least 30% nutritionists trained in postgraduate nutrition research by 2025 | National | <p>Lead agency: MOH</p> <p>Other agencies:</p> <ul style="list-style-type: none"> • Universities • Research Institutes |
| 5. | Incorporate nutrition components into national surveys/ research by other agencies, i.e. Malaysian Family Life Survey (LPPKN), Household Expenditure Survey (DOS) | Number of national surveys/ research incorporating with nutrition component | At least three national surveys/ research incorporating with nutrition component by other agencies by 2025 | National | <p>Lead agencies:</p> <ul style="list-style-type: none"> • DOS • MWFC • MOA • MOH <p>Other agencies:</p> <ul style="list-style-type: none"> • MOSTI • MOA • MRRD • MDTCC • MOYS • Universities • Professional Bodies • NGOs |

| No. | Activity | Output Indicator | Target/ Time Frame (midterm, by year, by 2025) | Implementation level | Implementing agency |
|-----|--|---|---|----------------------|---|
| 6. | Establish smart partnership in research with key stakeholders or research institutions | Number of collaborative research projects carried out | At least five research projects by 2025 | National | <p>Lead agency: Universities (Research Management Centre)</p> <p>Other agencies:</p> <ul style="list-style-type: none"> • MOH • MOSTI • MOE • Professional Bodies |
| 7. | Establish the National Institute of Nutrition (NIN) | The NIN established | Institute established by 2025 | National | <p>Lead agency: MOH</p> <p>Other agencies:</p> <ul style="list-style-type: none"> • EPU • Universities |
| 8. | Update the Malaysian Food Composition Database | The Malaysian Food Composition Database updated | New Food Composition Database to be available by 2020 | National | <p>Lead agency: MOH</p> <p>Other agencies:</p> <ul style="list-style-type: none"> • Universities • Research institutes • Relevant agencies |

FACILITATING STRATEGY



Ensuring Sufficient Number of Qualified Nutritionists and Dietitians

To enable the identified activities in NPNAM III to be effectively implemented, qualified and competent nutritionists and dietitians are crucial. The Allied Health Professions (AHP) Act will ensure that nutrition and dietetics are practised by appropriately trained professionals. This facilitating strategy focuses on activities that aim to ensure sufficient

number of qualified professionals as well as their competencies. Some of these activities identified include registration of nutritionists and dietitians, periodic review of curriculum in universities, development of guideline to recognise subject matter experts (SME) and to provide more opportunities for post-graduate and sub-specialty training.

| No. | Activity | Output Indicator | Target/ Time Frame (midterm, by year, by 2025) | Implementation level | Implementing agency |
|-----|--|---|--|----------------------|---|
| 1. | Periodic review of nutrition & dietetic curriculum in universities | Number of curriculum reviewed Number of universities set by MQA | Curriculum reviewed every five years All universities with nutrition & dietetic programmes by 2025 | National | Lead agency: MQA Other agencies: • MOH • Universities • Professional Bodies |
| 2. | Carry out registration of nutrition and dietetics practitioners | Number of registered nutritionists and dietitians Number of registered nutritionists and dietitians per 100 000 population | All nutritionists and dietitians in government sectors registered by 2017 At least 200 nutritionists and dietitians in private sectors registered by 2020 10 of trained nutrition professionals per 100 000 population by 2025 | All levels | Lead agency: MOH Other agencies: • Universities • Related ministries and agencies • Industries |
| 3. | Implement Code of Ethics and Professional Conduct for nutritionists and dietitians | Use of Code of Ethics and Professional Conduct for nutritionists and dietitians | All registered nutritionists and dietitians comply with the Code of Ethics by 2025 | All levels | Lead agency: MOH Other agencies: • Universities • Related ministries and agencies • Industries |
| 4. | Implement Continuing Professional Development (CPD) as a requirement to renew practising certificate | CPD achievement monitored | 100% of registered nutritionists and dietitians achieved minimum CPD points of 30 every two years | All levels | Lead agency: MOH Other agencies: • Universities • Related ministries and agencies • Industries |
| 5. | Develop Subject Matter Expert (SME) Guidelines for Nutritionist and Dietitian | Guidelines developed | SME Guidelines developed for nutritionist and dietitian in government sector by 2020 | National | Lead agency: MOH Other agencies: • JPA • Universities |

| No. | Activity | Output Indicator | Target/ Time Frame (midterm, by year, by 2025) | Implementation level | Implementing agency |
|-----|--|--|---|----------------------|--|
| 6. | Provide more opportunities for post graduate, sub-speciality training and cross-disciplinary training for nutritionist and dietitian | <p>Number of training needs by specialised area identified</p> <hr/> <p>Number of trained nutritionists and dietitians in specialised area</p> | <p>Training needs identified by 2018</p> <hr/> <p>At least 10% of nutritionists and dietitians in government sector trained in specialised area by 2025</p> | National | <p>Lead agency: MOH</p> <p>Other agencies:</p> <ul style="list-style-type: none"> • JPA • Universities |

FACILITATING STRATEGY



Strengthening Institutional and Community Capacity for Nutrition

To increase accessibility of nutrition information and services, a mandatory nutritionist placement in relevant ministries and agencies as well as industries is important. To further strengthen

institutional and community capacity for nutrition, training on healthy eating, food safety and healthy meal preparation will need to be conducted to more trainers from other agencies.

| No. | Activity | Output Indicator | Target/ Time Frame (midterm, by year, by 2025) | Implementation level | Implementing agency |
|-----|---|--|---|----------------------|--|
| 1. | Educate institutional child caregivers/ operators on infant feeding based on: <ul style="list-style-type: none"> • Modul Latihan Pemakanan Bayi dan Kanak-Kanak • Modul Latihan Penilaian Taraf Pemakanan | Number of training sessions | At least one training session per year | National State | Lead agencies: <ul style="list-style-type: none"> • MOH • JKM • JPM Other agencies: <ul style="list-style-type: none"> • PPBM • All agencies appointed by JKM |
| 2. | Train staff in registered Childcare Centre based on: <ul style="list-style-type: none"> • Modul Latihan Pemakanan Bayi dan Kanak-Kanak • Modul Latihan Penilaian Taraf Pemakanan | Number of trainings conducted | At least one training per state per year | National State | Lead agency: MOH <ul style="list-style-type: none"> • JPNIN • JKM • PPBM • NGOs |
| 3. | Conduct training on 4 in 1 Module: Child Growth Assessment and Infant Young Child Feeding Counselling Module | Number of TOT sessions Number of echo-training sessions | At least one training per year at national level At least one training per year at state level | National State | Lead agencies: MOH |
| 4. | Train health care providers on nutrition for children with special needs | Training conducted | One training conducted per year | National | Lead agency: MOH |
| 5. | Review nutrition component in Early Childhood Education Courses (Diploma/ Degree) | Nutrition component reviewed | Completed by 2020 | National | Lead agency: MOH <ul style="list-style-type: none"> • MOE • Universities |
| 6. | Train health staff and institutional care providers on nutritional management based on Modul Latihan Pemakanan Warga Emas di Institusi | Number of training conducted | At least one training a year | National State | Lead agency: MOH <ul style="list-style-type: none"> • JKM • Other related agencies |

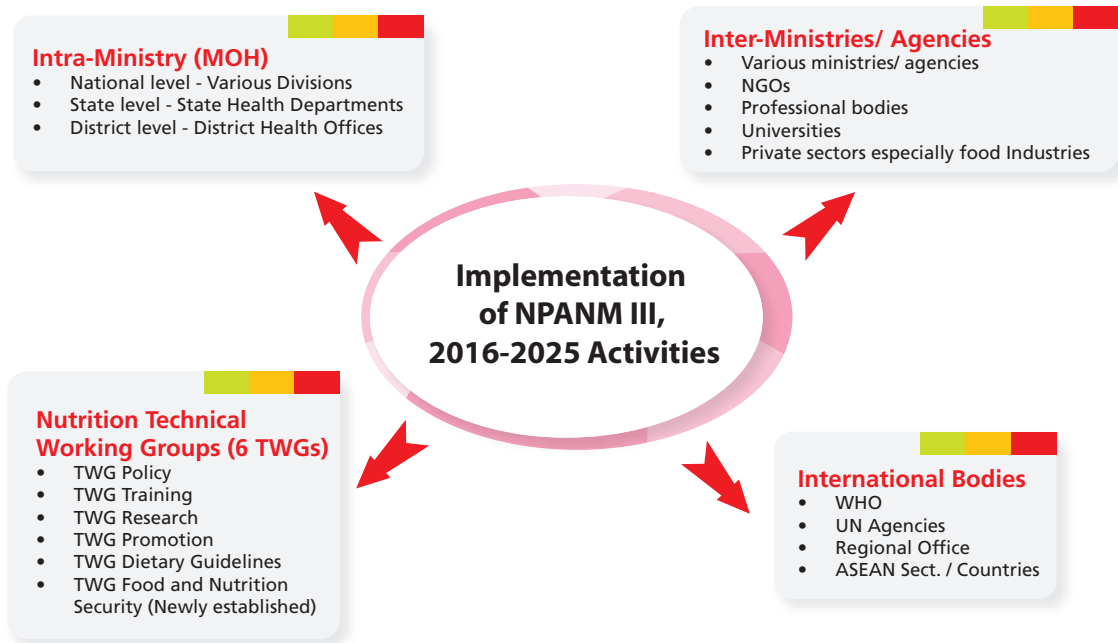
| No. | Activity | Output Indicator | Target/ Time Frame (midterm, by year, by 2025) | Implementation level | Implementing agency |
|-----|---|--|---|----------------------|---|
| 7. | Expand the implementation of nutrition training modules developed by Ministry of Health (MOH) | Number of new agencies involved | At least one new agency per year | National | Lead agency: MOH Other agencies: • MWFC • MRRD • MOA • MDTCC • MOYS • Other related ministries and agencies |
| 8. | Advocate more employment of nutritionists in health and related facilities | Number of nutritionists in health and related facilities | <ul style="list-style-type: none"> • At least one in each District Health Office by 2020 • One in each Health Clinic by 2025 | National | Lead agency: MOH Other agency: JPA |
| 9. | Advocate employment of nutritionists in ministries and industries dealing with food, nutrition and fitness: <ul style="list-style-type: none"> • MOE • MOA • MWFC • MOYS • MDTCC • MRRD | Number of nutritionists in relevant ministries | At least one nutritionist in selected ministries by 2025: <ul style="list-style-type: none"> • MOE • MOA • MWFC • MOYS • MDTCC • MRRD One nutritionist at Education District Office by 2025 | National | Lead agency: • JPA • MOA • MOE • MWFC • MOYS • MDTCC • MRRD |
| 10. | Advocate more dietitians in hospitals | Number of dietitians in each hospital | At least one dietitian per hospital by 2025 | National | Lead agency: MOH Other agency: JPA |
| 11. | Strengthen nutrition component in the training of other professions in institutions; <ul style="list-style-type: none"> • Medical Officers & Paramedics • Nurses • Teachers (ERT & Physical Education) | Number of curriculum reviewed | Review of nutrition content every five years | National | Lead agencies: • MOH • MOE Other agency: MQA |

| No. | Activity | Output Indicator | Target/ Time Frame (midterm, by year, by 2025) | Implementation level | Implementing agency |
|-----|---|--|--|----------------------|---|
| 12. | Implement nutrition education in the <i>E-Pembelajaran Sektor Awam</i> (EPSA) | Nutrition education modules integrated in the <i>E-Pembelajaran Sektor Awam</i> (EPSA) | Course on infant and young child feeding integrated into EPSA by 2017 Course on Balanced Diet module integrated into EPSA by 2018 | National | Lead agencies: • MOH • INTAN |
| 13. | Carry out training on the effective use of Medical Nutrition Therapy (MNT) for all healthcare professionals | Number of training sessions conducted | At least 2 training sessions per year (one hospital setting, one clinic setting) | National State | Lead agency: MOH Other agency: Professional Bodies |
| 14. | Healthy Eating course in the Ministry of Education (MOE) Training Portal | Healthy Eating course listed in the MOE portal | Healthy Eating course listed as one of the options in seven days training for teachers by 2018 | National | Lead agency: MOE Other agency: MOH |



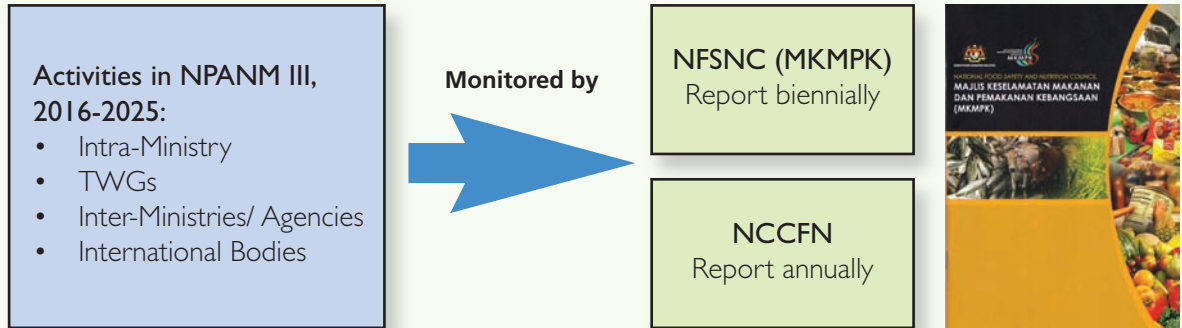
Mechanism of Implementation,
Monitoring and Evaluation of the
NPANM III, 2016-2025

11.1 Implementation



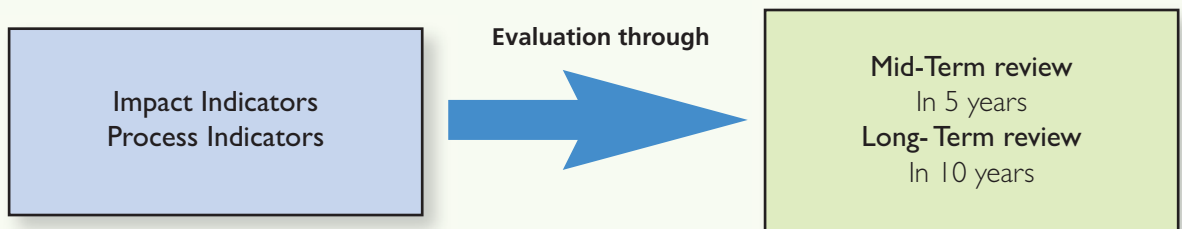
- The implementation of NPANM III, 2016-2025 activities at national level is through:
 - Nutrition Division – This Division plays a leading role in implementing NPANM III, 2016-2025.
 - Other Division in the Ministry of Health - Diseases Control Division (NCD), Health Education Division (HECC), Family Health Development Division (BPKK), Allied Health Sciences Division (BSKB), Development Division, Food Safety and Quality Division, Oral Health Development Division, Health Informatics Center, Nursing Division, Institute for Public Health, Institute of Medical Research, Malaysian Health Promotion Board (MySihat), to support the implementation of NPANM III, 2016-2025 activities.
- The implementation of NPANM III activities at state/ district/ clinic level is coordinated by State Health Department.
- Technical working groups are established to implement activities accordingly. There are 6 TWGs to support the implementation of NPANM; TWG Policy, TWG Training, TWG Research, TWG Promotion, TWG Dietary Guidelines, TWG Food & Nutrition Security (newly established).
- Engagement with local government and communities in designing nutrition promotion/ intervention programmes.
- Collaboration with private companies/ industries to address nutritional issues through Corporate Social Responsibility (CSR) activities.

11.2 Monitoring



- The National Food Safety and Nutrition Council (NFSNC) chaired by the Honourable Minister of Health Malaysia is the highest advisory Council to the government on issues related to food and nutrition.
- Under the Council, there is a National Coordinating Committee for Food and Nutrition (NCCFN) chaired by Deputy Director General of Health (Public Health). Members of this committee consist of senior officers from various ministries and agencies, universities, professional bodies and NGOs. This committee has an overall purview to monitor and evaluate the implementation of the Plan.
- Currently, there are five (5) Technical Working Groups (TWGs) for Nutrition under the NCCFN which are TWG Policy, TWG Guidelines, TWG Training, TWG Research and TWG Promotion. In addition, TWG for Food and Nutrition Security co-chaired by Ministry of Health and Ministry of Agriculture and Agro-based Industry will be established to look at the issues on Food and Nutrition Security.
- Annual monitoring will be carried out to monitor the progress and achievements in the identified activities. The NPANM III progress report will be presented to the NCCFN annually and NSFNC biennially.

11.3 Evaluation



- The status of achievement for both impact indicators and process indicators will be measured based on targets that have been set. The overall achievement of the NPANM III, 2016-2025 will be evaluated every 5 years. Mid-term review will be conducted in 2020.

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ABBREVIATIONS

| | |
|---------|---|
| ADA | American Diabetes Association |
| APHM | Association of Private Hospitals of Malaysia (<i>Persatuan Hospital-Hospital Swasta Malaysia</i>) |
| APM | <i>Angkatan Pertahanan Awam</i> (Malaysian Civil Defence Force) |
| ASM | <i>Akademi Sains Malaysia</i> (Academy of Sciences Malaysia) |
| CAM | Chefs Association of Malaysia (<i>Persatuan Jurumasak Malaysia</i>) |
| CUEPACS | Congress of Union of Employees in the Public and Civil Services (<i>Kongres Kesatuan Pekerja-Pekerja di Dalam Perkhidmatan Awam</i>) |
| DOA | Department of Agriculture (<i>Jabatan Pertanian</i>) |
| DOS | Department of Statistics (<i>Jabatan Statistik</i>) |
| EPU | Economic Planning Unit (<i>Unit Perancang Ekonomi</i>) |
| F&B | Food & Beverages Industries (<i>Industri Makanan & Minuman</i>) |
| FAMA | Federal Agriculture Marketing Authority (<i>Lembaga Pemasaran Pertanian Persekutuan</i>) |
| FMM | Federation of Malaysia Manufacturers (<i>Persekutuan Pekilang-Pekilang Malaysia</i>) |
| FOMCA | Federation of Malaysia Consumer Association (<i>Gabungan Persatuan-Persatuan Pengguna Malaysia</i>) |

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| IBFAN | International Baby Food Action Network |
| IKU | <i>Institut Kesihatan Umum</i> (Institute for Public Health) |
| IMR | Institute of Medical Research (<i>Institut Penyelidikan Perubatan</i>) |
| INTAN | <i>Institut Tadbiran Awam Negara</i> (National Institute of Public Administration) |
| IOM | Institute of Medicine |
| IPGM | <i>Institut Perguruan Malaysia</i> (Institute of Teacher Education) |
| JAKIM | <i>Jabatan Kemajuan Islam Malaysia</i> (Department of Islamic Development) |
| JAKOA | <i>Jabatan Kemajuan Orang Asli</i> (Department of Orang Asli Development) |
| JKM | <i>Jabatan Kebajikan Masyarakat</i> (Department of Social Welfare) |
| JLKN | <i>Jabatan Latihan Khidmat Negara</i> (National Service Training Programme Department) |
| JPA | <i>Jabatan Perkhidmatan Awam</i> (Public Service Department) |
| JPM | <i>Jabatan Perdana Menteri</i> (Prime Minister's Department) |
| JPNIN | <i>Jabatan Perpaduan Negara dan Integrasi Nasional</i> (Department of National Unity and Integration) |
| KEMAS | <i>Jabatan Kemajuan Masyarakat</i> (Community Development Department) |
| LPPKN | <i>Lembaga Penduduk dan Pembangunan Keluarga Negara Malaysia</i> (National Population and Family Development Board) |
| MAMPU | Malaysian Administrative Modernisation and Management Planning Unit (<i>Unit Pemodenan Tadbiran dan Perancangan Pengurusan Malaysia</i>) |
| MARDI | Malaysian Agricultural Research and Development Institute (<i>Institut Penyelidikan dan Kemajuan Pertanian Malaysia</i>) |
| MASO | Malaysian Association for the Study Obesity (<i>Persatuan Kajian Obesiti Malaysia</i>) |

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| MBfPCA | Malaysian Breastfeeding Peer Counsellor Association (<i>Persatuan Kaunselor Penyusuan Susu Ibu Malaysia</i>) |
| MCMM | Ministry of Communications and Multimedia (<i>Kementerian Komunikasi and Multimedia</i>) |
| MCMC | Malaysian Communications and Multimedia Commission (<i>Suruhanjaya Komunikasi dan Multimedia Malaysia</i>) |
| MDA | Malaysian Dietitians' Association (<i>Persatuan Dietitian Malaysia</i>) |
| MDTCC | Ministry of Domestic Trade, Co-operatives and Consumerism (<i>Kementerian Perdagangan Dalam Negeri, Koperasi dan Kepenggunaan</i>) |
| MJSC | MARA Junior Science College (<i>Maktab Rendah Sains MARA</i>) |
| MUWHLG | Ministry of Urban Wellbeing, Housing and Local Government (<i>Kementerian Kesejahteraan Bandar, Perumahan dan Kerajaan Tempatan</i>) |
| MIDA | Malaysian Investment Development Authority (<i>Lembaga Pembangunan Pelaburan Malaysia</i>) |
| MINDEF | Ministry of Defence (<i>Kementerian Pertahanan</i>) |
| MKN | <i>Majlis Keselamatan Negara</i> (National Security Council) |
| AGC | Attorney General's Chambers (<i>Jabatan Peguam Negara</i>) |
| MOA | Ministry of Agriculture and Agro-based Industry (<i>Kementerian Pertanian dan Industri Asas Tani</i>) |
| MOE | Ministry of Education (<i>Kementerian Pendidikan Malaysia</i>) |
| MOF | Ministry of Finance (<i>Kementerian Kewangan Malaysia</i>) |
| MOH | Ministry of Health (<i>Kementerian Kesihatan Malaysia</i>) |
| MOHA | Ministry of Home Affairs (<i>Kementerian Dalam Negeri</i>) |
| MOHR | Ministry of Human Resources (<i>Kementerian Sumber Manusia</i>) |

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| MOSTI | Ministry of Science, Technology and Innovation <i>(Kementerian Sains, Teknologi dan Inovasi)</i> |
| MOT | Ministry of Transport <i>(Kementerian Pengangkutan)</i> |
| MOTAC | Ministry of Tourism and Culture <i>(Kementerian Pelancongan dan Kebudayaan)</i> |
| MOYS | Ministry of Youth and Sport <i>(Kementerian Belia dan Sukan)</i> |
| MOHE | Ministry of Higher Education <i>(Kementerian Pengajian Tinggi)</i> |
| MPIC | Ministry of Plantation Industries and Commodities <i>(Kementerian Perusahaan Perladangan dan Komoditi)</i> |
| MQA | Malaysian Qualifications Agencies <i>(Agensi Kelayakan Malaysia)</i> |
| MRRD | Ministry of Rural and Regional Development <i>(Kementerian Kemajuan Luar Bandar dan Wilayah)</i> |
| MTUC | Malaysian Trades Union Congress <i>(Kongres Kesatuan Sekerja Malaysia)</i> |
| MWFCD | Ministry of Women, Family and Community Development <i>(Kementerian Pembangunan Wanita, Keluarga dan Masyarakat)</i> |
| NCCFN | National Coordinating Committee on Food and Nutrition <i>(Jawatankuasa Penyelaras Kebangsaan untuk Makanan dan Pemakanan)</i> |
| NGO | Non-Government Organizations <i>(Pertubuhan Bukan Kerajaan)</i> |
| NDPC | National Development Planning Commission <i>(Jawatankuasa Perancang Pembangunan Negara)</i> |
| NIH | National Institute of Health Secretariat <i>(Sekretariat Institut Kesihatan Kebangsaan)</i> |
| NSFNC | National Food Safety and Nutrition Council <i>(Majlis Keselamatan Makanan dan Pemakanan Kebangsaan (MKMPK))</i> |
| NSM | Nutrition Society of Malaysia <i>(Persatuan Pemakanan Malaysia)</i> |
| NUTP | National Union of the Teaching Profession Malaysia <i>(Kesatuan Perkhidmatan Perguruan Kebangsaan Malaysia)</i> |

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| PPBM | <i>Persatuan Pengasuh Berdaftar Malaysia</i> (Associated of Registered Childcare Providers of Malaysia) |
| PPPIIM | <i>Persatuan Penggalak Penyusuan Susu Ibu Malaysia</i> |
| PPPLM | Malaysian Lactation Advises and Consultant Association (<i>Persatuan Penasihat dan Pakar Laktasi Malaysia</i>) |
| PTA | Parent Teacher Association (<i>Persatuan Iubapa dan Guru</i>) |
| PUSPANITA | <i>Persatuan Suri dan Anggota Perkhidmatan Awam Malaysia</i> |
| SHD | State Health Department (<i>Jabatan Kesihatan Negeri</i>) |
| SMAN | <i>Sekolah Menengah Agama Negeri</i> |
| SMAR | <i>Sekolah Menengah Agama Rakyat</i> |
| SME | Small Medium Enterprises (<i>Perusahaan Kecil dan Sederhana</i>) |
| SSM | <i>Suruhanjaya Syarikat Malaysia</i> (Companies Commission of Malaysia) |
| PPKM | <i>Persatuan Pengurusan Kompleks Malaysia</i> (Malaysia Shopping Malls Association) |
| PKD | <i>Pusat Pemulihan Dalam Komuniti</i> (Community-based Rehabilitation Center) |
| UN | United Nations (<i>Bangsa-Bangsa Bersatu</i>) |
| UNICEF | United Nations Children's Funds |
| UPM | Universiti Putra Malaysia |
| WHO | World Health Organizations (<i>Pertubuhan Kesihatan Sedunia</i>) |

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