

Research Priority Area 3

Food Intake and Healthy Dietary Practices Across the Lifespan



4 FOOD INTAKE AND HEALTHY DIETARY PRACTICES ACROSS THE LIFESPAN

4.1 Introduction

Malaysia is proud to have achieved a dramatic child mortality decline in the past three decades, which was concurrent with decreased poverty rate and improved maternal health care. The role of nutrition has been one of the underlying driving force for the improvement in overall health of the population, particularly the decline in incidence of malnutrition in children. If we look at the role of nutrition and health across lifespan, we will witness many shortcomings that we have to grapple with in the coming decades. The age groups such as children, adolescents, adults and the elderly still require vast overall improvement in relation to nutritional status vis-à-vis non-communicable diseases or its antecedents. It is tragic that after having targeted healthy lifestyle campaigns for 12 years (1991- 2002), the results was very disappointing. The results of the NHMS II showed that overweight and obesity among adults were 17% and 4%, respectively (IPH, 1997). However, one year after the completion of the campaign, the Malaysian Adult Nutrition Survey (MANS) 2003, revealed that the prevalence of overweight has increased to 27% and obesity prevalence has risen to 12%. In addition, the recent NHMS III findings reported that the prevalence of overweight and obesity were 29% and 14%, respectively (IPH, 2008).

Another official report from the Malaysian Ministry of Health was the NCD Risk Factors in Malaysia, which showed an alarming prevalence on the state of non-communicable diseases in the country. The general prevalence of raised blood pressure, hypercholesterolemia, central obesity, physical inactivity and unhealthy diet among adults were, 25.7%, 53.3%, 48.6%, 60.1% and 72.8%, respectively (MOH, 2006). All the above findings were directly related to the food intake and dietary practices among our population. Despite our success in meeting some of the Millennium Development Goals (MDGs) targets, we failed in meeting our lifestyle campaigns objectives and the National Plan of Action for Nutrition of Malaysia (NPANM).

In order to have a more effective plan of action in combating the growing nutrition and health challenges in the near future, research is one of the primary area that needs to be nurtured. Policy and programme rooted in evidence based research will shed new light into our future plan of action.

Areas of studies or topics which are relevant to this research priority area are proposed for priority funding and support as listed in the respective sections.

FOOD INTAKE AND HEALTHY DIETARY PRACTICES ACROSS THE LIFESPAN

4.2 Conceptual Framework on the Purpose and Scope of the Research Priority Area

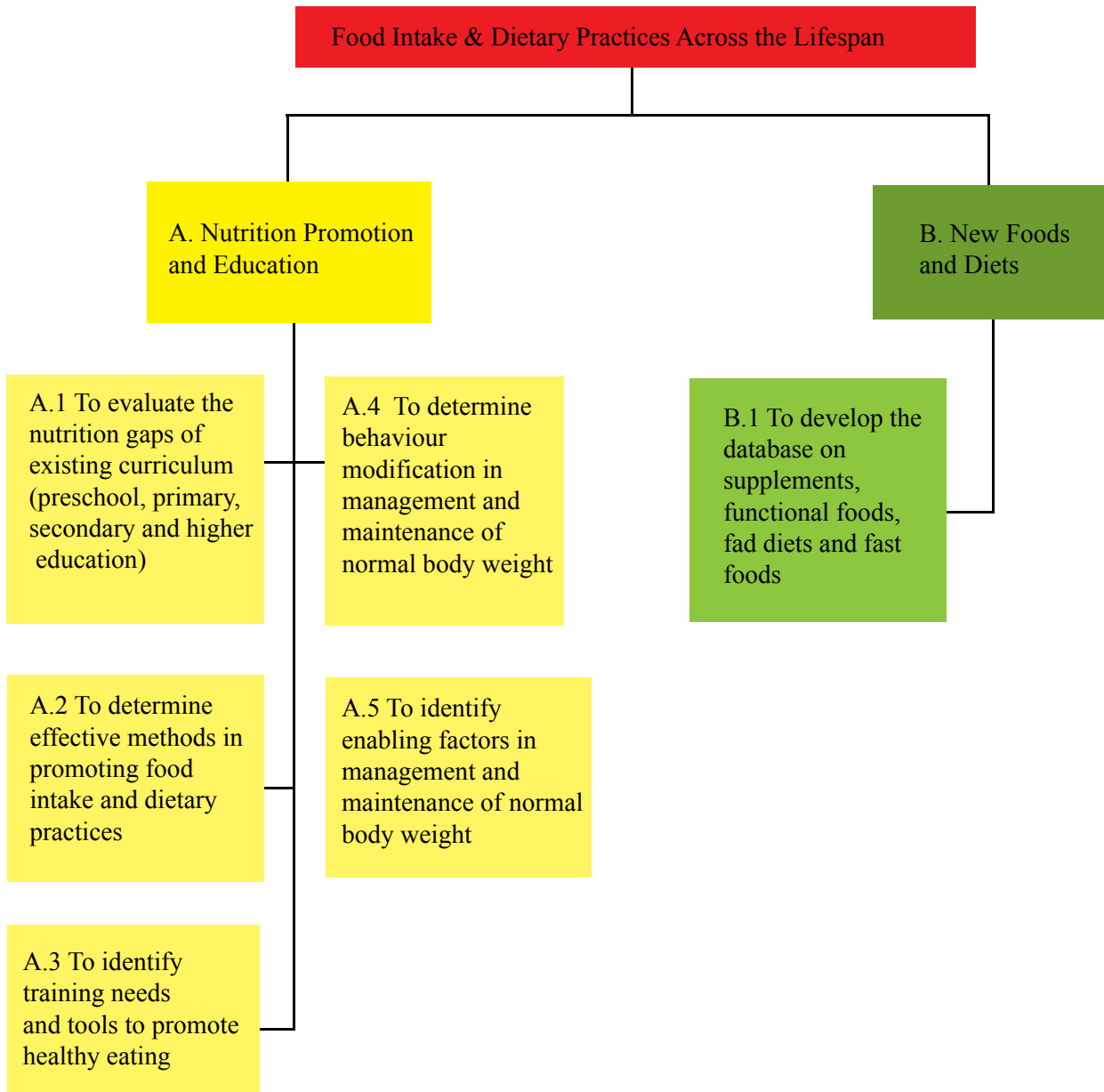


Figure 4.1: Purpose and scope of food intake and dietary practices across the lifespan

FOOD INTAKE AND HEALTHY DIETARY PRACTICES
ACROSS THE LIFESPAN

4.3 Table of Nutrition Research Priority Area

The research priorities are presented in three tables. Table 4.1 presents the research purpose, scope, gaps and needs, rationale for priority ranking and the relative ranks of the research purpose. Table 4.2 presents the ranking criteria for suggested topics of each research purpose. Table 4.3 presents the relative ranks for suggested topics in each research purpose.

Table 4.1: Purpose and scope of food intake and dietary practices across the lifespan

Purpose	Research Scope	Research Gaps and Needs	Rationale for Priority Ranking	Suggested Topic and/or Explanatory Notes	Relative Rank (Purpose)
A. Nutrition promotion and education	A.1 To evaluate the gaps of nutrition on existing curriculum (preschool, primary, secondary, higher education)	No database	Ensuring proper planning, implementing, coordinating, monitoring and evaluation of the programmes and projects The baseline data important for needs assessment and decision making process (policies and programmes)	A.1.1 Gap analysis of nutrition curriculum in the current education system	1
	A.2 To determine effective methods in promoting food intake and dietary practices			A.2.1 Determination of effective method in promoting dietary practices by age groups	
	A.3 To identify training needs and tools to promote healthy eating			A.2.2 Identifying effective strategies in promoting healthy dietary practices	
	A.4 To determine the roles of behaviour modification in management and maintenance of normal body weight			A.3.1 Identification of training needs among health staffs on healthy eating	
	A.5 To identify enabling factors in management and maintenance of normal body weight			A.3.2 Evaluation on the understanding of Dietary Guidelines and Food Pyramid	
				A.4.1 Assessing behavioural changes in relation with dietary practices	
				A.4.2 Evaluation of knowledge, attitudes and practice on the management and maintenance of normal body weight	
		A.5.1 Determination of dietary practices by ethnic groups and zones			



FOOD INTAKE AND HEALTHY DIETARY PRACTICES ACROSS THE LIFESPAN

Purpose	Research Scope	Research Gaps and Needs	Rationale for Priority Ranking	Suggested Topic and/or Explanatory Notes	Relative Rank (Purpose)
				A.5.2 Risk behaviour factors in management and maintenance of normal body weight A.5.3 Determination of dietary practices in relation to non-communicable Diseases A.5.4 Barriers in the management and maintenance of normal body weight A.5.5 Relationship of household food security and body mass index A.5.6 Development of body weight and physical activity policies	
B. New foods and diets	B.1 To develop the database on supplements, functional foods, fad diets and fast foods	No baseline data on functional food, fad diet and fast food consumption No existing policy or regulation for fad diets and fast foods	The baseline data important for needs assessment and decision making process (policies and programmes)	B.1.1 Functional foods use among various age groups B.1.2 Fad diet practices among adolescents and adults B.1.3 Fast food practices among various age groups B.1.4 Convenient foods practices among various age groups (fast foods, hawker's) B.1.5 Development of new food and diet policies	2

**FOOD INTAKE AND HEALTHY DIETARY PRACTICES
ACROSS THE LIFESPAN**

Table 4.2: Ranking criteria for suggested topics in each research purpose

Research Scope	Suggested Topic and/or Explanatory Notes	Ranking Criteria (Score 1-10)*		Ranking Criteria (Score 1-7) - Choose Max. 2 Criteria *				Total Score	Relative Rank
		Big Impact On Health Status and/or Delivery of Services	Great Public Health Significance	Capacity Strengthening	Gap In Knowledge/ Evidence that Necessitates Research	Feasibility, Practicality, Cost and Time	Importance or Client Satisfaction		
A. Nutrition promotion and education	A.2.2 Identifying effective strategies in promoting healthy dietary practices	7	7		6		6	26	6
	A.3.1 Identification of training needs among health staffs on healthy eating	7	7		5		6	25	7
	A.3.2 Evaluation of the understanding of Dietary Guidelines and Food Pyramid	8	7		7		6	28	4
	A.4.1 Assessing behavioural changes in relation to dietary practices	9	8	7		7		31	1
	A.4.2 Evaluation of knowledge, attitudes and practices on management & maintenance of normal body weight	7	7			5	5	24	8
	A.5.1 Determination of dietary practices by ethnic groups and zones	6	6		6	6		24	8



FOOD INTAKE AND HEALTHY DIETARY PRACTICES ACROSS THE LIFESPAN

Research Scope	Suggested Topic and/or Explanatory Notes	Ranking Criteria (Score 1-10)*		Ranking Criteria (Score 1-7) - Choose Max. 2 Criteria *				Total Score	Relative Rank
		Big Impact On Health Status and/or Delivery of Services	Great Public Health Significance	Capacity Strengthening	Gap In Knowledge/ Evidence that Necessitates Research	Feasibility, Practicality, Cost and Time	Importance for Client Satisfaction		
	A.5.2 Risk behavioural factors in management and maintenance of normal body weight	8	8			6	7	29	3
	A.5.3 Determination of dietary practices and in relation to non-communicable diseases	8	8	7		7		30	2
	A.5.5 Relationship between household food security and body mass index	6	5		6		6	23	9
	A.5.6 Development of body weight and physical activity policies	7	7		5		6	25	7

**FOOD INTAKE AND HEALTHY DIETARY PRACTICES
 ACROSS THE LIFESPAN**

Research Scope	Suggested Topic and/or Explanatory Notes	Ranking Criteria (Score 1-10)*		Ranking Criteria (Score 1-7) - Choose Max. 2 Criteria *				Total Score	Relative Rank
		Big Impact On Health Status and/or Delivery of Services	Great Public Health Significance	Capacity Strengthening	Gap In Knowledge/ Evidence that Necessitates Research	Feasibility, Practicality, Cost and Time	Importance for Client Satisfaction		
A.5.2 Risk behavioural factors in management and maintenance of normal body weight	A.5.2 Risk behavioural factors in management and maintenance of normal body weight	8	8			6	7	29	3
	A.5.3 Determination of dietary practices in relation to non-communicable diseases	8	8	7		7		30	2
	A.5.5 Relationship between household food security and body mass index	6	5		6		6	23	9
	A.5.6 Development of body weight and physical activity policies	7	7		5		6	25	7



FOOD INTAKE AND HEALTHY DIETARY PRACTICES ACROSS THE LIFESPAN

Research Scope	Suggested Topic and/or Explanatory Notes	Ranking Criteria (Score 1-10)*		Ranking Criteria (Score 1-7) - Choose Max. 2 Criteria *				Total Score	Relative Rank
		Big Impact On Health Status and/or Delivery of Services	Great Public Health Significance	Capacity Strengthening	Gap In Knowledge/ Evidence that Necessitates Research	Feasibility, Practicality, Cost and Time	Importance for Client Satisfaction		
B. New foods and diets	B.1.1 Functional foods use among various age groups	7	7		6	6		26	6
	B.1.2 Fad diet practices among adolescents and adults	7	7		7		6	27	5
	B.1.4 Convenient food practices among various age groups (fast foods, hawker's)	8	8		7		6	29	3
	B.1.5 Development of new food and diet policies	5	6	6		6		23	9

*1 = the lowest/ worst

**FOOD INTAKE AND HEALTHY DIETARY PRACTICES
ACROSS THE LIFESPAN**

Table 4.3: Relative ranks for suggested topics for each research purpose

Research Scope	Suggested Topic and/or Explanatory Notes	Ranking Criteria (Score 1-10)*		Ranking Criteria (Score 1-7) - Choose Max. 2 Criteria *				Total Score	Relative Rank
		Big Impact On Health Status and/or Delivery of Services	Great Public Health Significance	Capacity Strengthening	Gap In Knowledge/ Evidence that Necessitates Research	Feasibility, Practicality, Cost and Time	Importance for Client Satisfaction		
A. Nutrition promotion and education	A.4.1 Assessing behavioural changes in relation with dietary practices	9	8	7		7		31	1
	A.5.3 Determination of dietary practices in relation to non-communicable diseases	8	8	7		7		30	2
	A.5.2 Risk behavioural factors in management and maintenance of normal body weight	8	8			6	7	29	3
B. New foods and diets	B.1.4 Convenient food practices among various age groups (Fast foods, hawker's)	8	8		7		6	29	3
A. Nutrition promotion and education	A.3.2 Evaluation on the understanding of Dietary Guidelines and Food Pyramid	8	7		7		6	28	4
B. New foods and diets	B.1.2 Fad diet practices among adolescents and adults	7	7		7		6	27	5



FOOD INTAKE AND HEALTHY DIETARY PRACTICES ACROSS THE LIFESPAN

Research Scope	Suggested Topic and/or Explanatory Notes	Ranking Criteria (Score 1-10)*		Ranking Criteria (Score 1-7) - Choose Max. 2 Criteria *				Total Score	Relative Rank
		Big Impact On Health Status and/or Delivery of Services	Great Public Health Significance	Capacity Strengthening	Gap In Knowledge/ Evidence that Necessitates Research	Feasibility, Practicality, Cost and Time	Importance for Client Satisfaction		
A. Nutrition promotion and education	A.2.2 Identifying effective strategies in promoting healthy dietary practices	7	7		6		6	26	6
B. New foods and diets	B.1.1 Functional food use among various age groups	7	7		6	6		26	6
A. Nutrition promotion and education	A.3.1 Identification of training needs among health staffs on healthy eating	7	7		5		6	25	7
	A.5.6 Development of body weight and physical activity policies	7	7		5		6	25	7
	A.4.2 Evaluation of knowledge, attitudes and practices on management & maintenance of normal body weight	7	7			5	5	24	8
	A.5.1 Determination of dietary practices by ethnic groups and zones	6	6		6	6		24	8

**FOOD INTAKE AND HEALTHY DIETARY PRACTICES
 ACROSS THE LIFESPAN**

Research Scope	Suggested Topic and/or Explanatory Notes	Ranking Criteria (Score 1-10)*		Ranking Criteria (Score 1-7) - Choose Max. 2 Criteria *				Total Score	Relative Rank
		Big Impact On Health Status and/or Delivery of Services	Great Public Health Significance	Capacity Strengthening	Gap In Knowledge/ Evidence that Necessitates Research	Feasibility, Practicality, Cost and Time	Importance for Client Satisfaction		
	A.5.5 Relationship between household food security and body mass index	6	5		6		6	23	9
B. New foods and diets	B.1.5 Development of new food and diet policies	5	6	6		6		23	9

*1 = the lowest/ worst

FOOD INTAKE AND HEALTHY DIETARY PRACTICES ACROSS THE LIFESPAN



References

- Institute for Public Health (IPH) (1998): The Second National Health and Morbidity Survey (NHMS II) 1997, Nutritional Status. Ministry of Health, Malaysia.
- Institute for Public Health (IPH) (2008). The Third National Health and Morbidity Survey 2006: Nutritional Status (NHMS III), Ministry of Health, Malaysia. 112pp.
- Malaysia NCD surveillance 2005/2006 (2006). NCD Risk factors in Malaysia. NCD Section, Disease Control Division, Ministry of Health, Malaysia.
- Ministry of Health (MOH) (2008). Seminar on Findings of the Malaysian Adult Nutrition Survey (MANS) 2003. Kuala Lumpur.
- National Coordinating Committee on Food and Nutrition (NCCFN) (2006). National Plan of Action for Nutrition of Malaysia, Ministry of Health, Malaysia