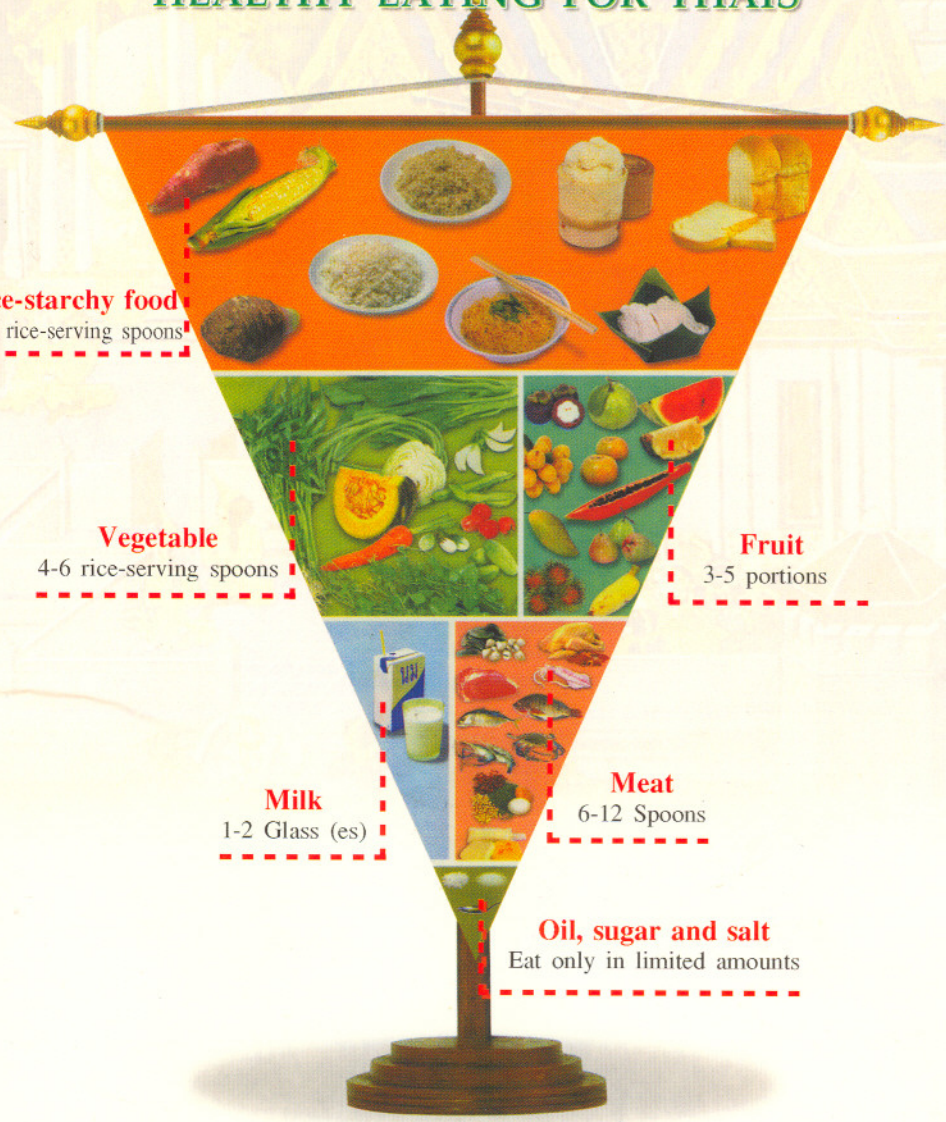
MANUAL

NUTRITION FLAG

HEALTHY EATING FOR THAIS



For good health,eat a variety of foods in appropriate amounts

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PREFACE

The "Nutrition Flag" was designed to promote greater understanding of the good health guidelines for Thai people that are based on the "Food-Based Dietary Guidelines for Good Health" or "Rules of Dietary Intake" which consist of the following:

1. Eat a variety of foods from each of the five food groups and maintain proper weight
2. Eat adequate amounts of rice or alternative carbohydrate sources
3. Eat plenty of vegetables and fruits regularly
4. Eat fish, lean meat, egg and legumes regularly
5. Drink sufficient amounts of milk everyday
6. Choose a diet that is moderate in total fat
7. Avoid an excessive intake of sweet and salty foods
8. Eat clean and safe food
9. Avoid or reduce the consumption of alcoholic beverages

We sincerely hope that this book will contribute to an understanding that leads to better health for Thai people.

INTRODUCTION

The "Nutrition Flag" was designed to suggest "portion", "quantity" and "variety" of food required daily for Thai people. It is presented in an easy to understand format in an effort to promote a proper diet for good health.

The recommended "portion", "quantity"and "variety" of food is based on research about the foods and amount of nutrients and energy required by Thai people, in addition to household units commonly used for measuring food.

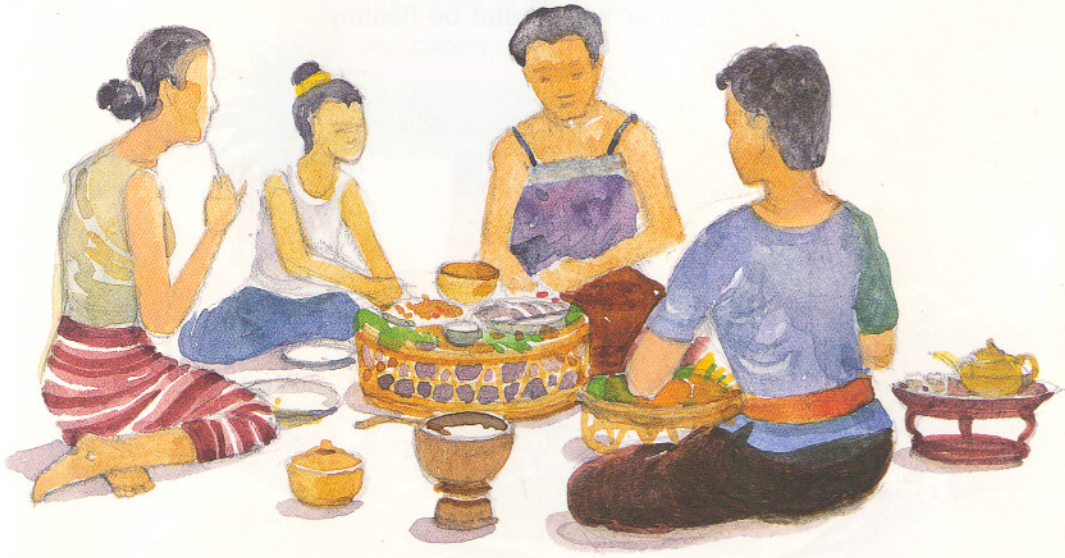
The "Nutrition Flag" represents a way to consume food that will enable Thai people to have adequate diets and "healthy eating" to promote good health among Thais which will serve the purpose of the nine recommendations of the Food-Based Dietary Guidelines (FBDGs).

What is the "Nutrition Flag"?

The Nutrition Flag is a food guide model elaborating the "Food-Based Dietary Guidelines for Good Health" . The flag is designed to be "wider at the top then narrower toward the bottom" to indicate foods required in various amounts.

The following five messages are interpreted from the nutrition flag:

1. Eat adequate foods from the five food groups
2. The amount of foods required are shown by the shape of flag
3. Eat a variety of foods from each of the five food groups
4. The amount of food is measured in a household unit such as rice-serving spoon, spoon (=tablespoon), cup/glass, and fruits are measured as portions
5. Oil, sugar and salt should be consumed in limited amounts



Eat a variety of foods in appropriate amounts and maintain proper weight

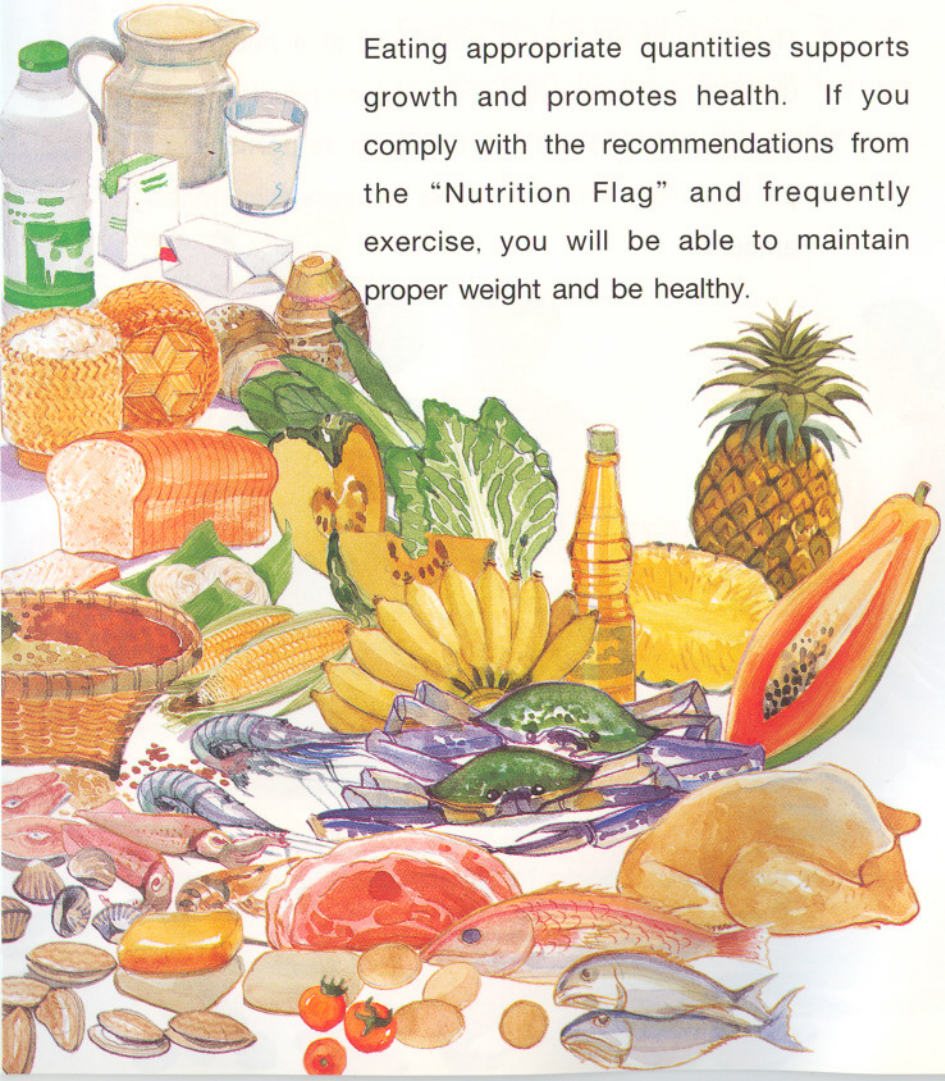
Healthy Eating

Adequate food makes all Thai people healthy

Eat enough food means eat foods from the five food groups in the amount that is appropriate for the body's requirement.

Eat good food means eat a wide variety of foods daily.

Eating appropriate quantities supports growth and promotes health. If you comply with the recommendations from the "Nutrition Flag" and frequently exercise, you will be able to maintain proper weight and be healthy.



What does "Portion"... in the Nutrition Flag mean ?

Layer 1: *Rice, rice products, other grains and starchy food group. One should eat from this food group the most. The major nutrient is carbohydrate, the main energy source. Unrefined foods such as brown rice and products are recommended.*

Layer 2: *Vegetable and fruit group. Eat plenty of these foods. The major nutrients are vitamins, minerals and dietary fiber.*

Layer 3: *Meat, legumes, egg and milk group. Eat appropriate quantities in order to receive good quality protein, iron and calcium.*

Layer 4: *Oil, sugar and salt. Eat in limited amounts.*

Why do we need to eat a wide variety from each food group?

Eating a variety of food and alternating food choices from the five food groups allows us to...

=> Receive adequate nutrients.

=> Avoid accumulation of toxic substances that may be contaminants in the foods frequently consumed.

Measuring Tools: Household Units

Rice-serving spoon, spoon, portion, and glass/cup

- ***Rice-Serving Spoon*** is used to measure the quantity of **rice, rice products, starchy foods** and **vegetables**

  Rice : 1 rice-serving spoon equals 60 grams or about 1/2 cup

  Cooked vegetable : 1 rice-serving spoon equals 40 grams or about 1/2 cup

- ***Spoon*** (=tablespoon) is used to measure the quantity of the **meat, egg, legume** and **products**

  Cooked meat : 1 spoon is about 15 grams

  1 spoon equals : 1/2 mackerel or 1/2 egg or 1/4 hard tofu

- ***Portion*** is used to measure **fruit**

  The examples of 1 portion of fruit are as follows:

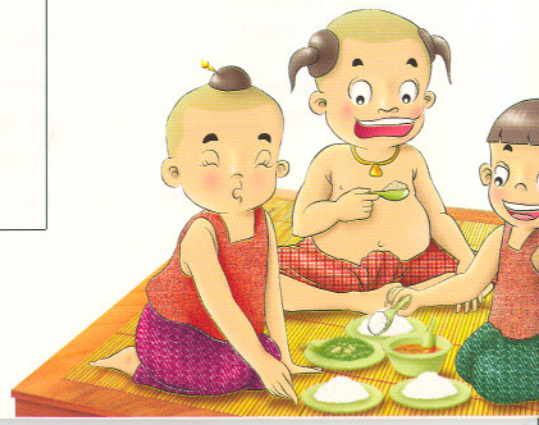
  1 banana

  1 orange or

  4 rambutans

Examples of 1 portion of a big fruit: 6-8 pieces of papaya or pineapple or watermelon

Rice- starchy foods 8-12 rice-serving spoons	1 plate of rice = **3 rice-serving spoons**	1 bowl of noodles = **2 rice-serving spoons**	1 slice of bread = **1 rice-serving spoon**	1 piece of fermented noodle = **1 rice-serving spoon**	1 ear of corn = **1 rice-serving spoon**
Vegetable 4-6 rice-serving spoons	kale = **1 rice-serving spoon**	pumpkin = **1 rice-serving spoon**	2 tomatoes = **1 rice-serving spoon**	Ivy gourd = **1 rice-serving spoon**	
Fruit 3-5 portions	1 banana = **1 portion**	1 orange = **1 portion**	6 pieces of papaya = **1 portion**		
Meat 6-12 spoons	1 chicken drumstick = **2 spoons**	1 egg = **2 spoons**	1 mackerel = **2 spoons**	1 tofu = **4 spoons**	
Milk 1- 2 glass(es)	milk = **1 glass**	yogurt = **1 cup**			



How much food from each food group do we need?

The nutrition flag suggests the kind of food and the amount of food that Thai people should have each day. However, the suggestions are for those who are over 6 years of age, adult and the elderly.

The recommended amount of food is divided into 3 groups according to the energy need: 1,600 Kcal, 2,000 Kcal and 2,400 Kcal as follows:

Food group	Household Unit	Energy used (Kcal)		
		1,600	2,000	2,400
Rice - starchy foods	rice-serving spoon (s)	8	10	12
Vegetable	rice-serving spoon (s)	4(6)	5	6
Fruit	portion (s)	3 (4)	4	5
Meat	spoon (s)	6	9	12
Milk	glass(es)	2 (1)	1	1
Oil, sugar and salt	teaspoon (s)	eat these items in limited amounts		

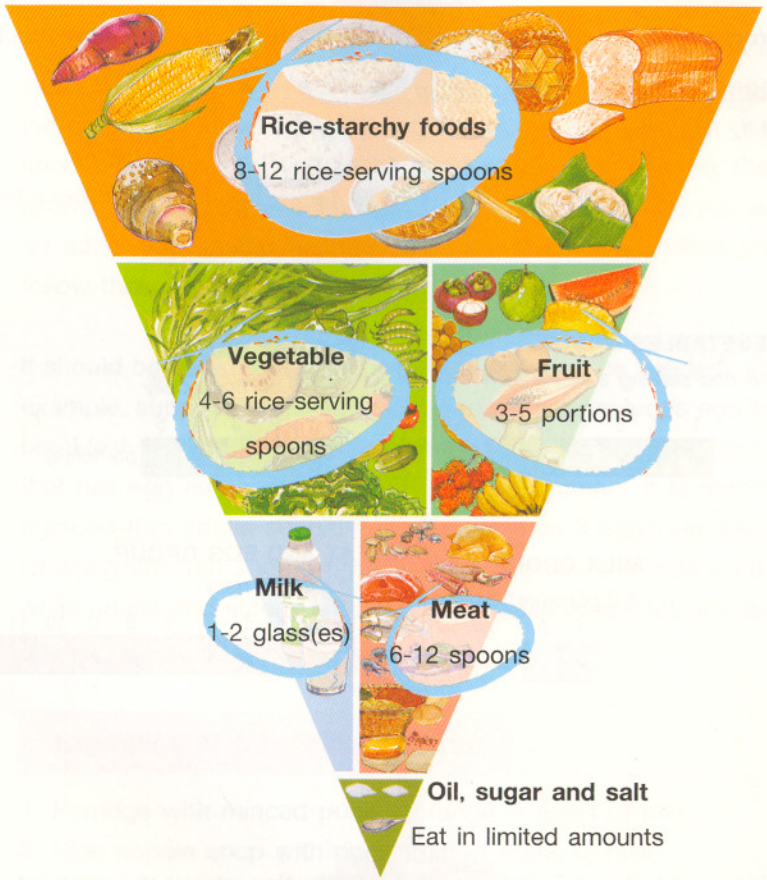
( ) = recommendation for adult

1,600 Kcal ➡ Children: 6-13 years old
Working women: 25-60 years old
Elderly: older than 60 years old

2,000 Kcal ➡ Teenagers and young adults: 14-25 years old
Working men 25-60 years old

2,400 Kcal ➡ Those who need more energy such as laborers, farmers, athletes etc.

According to the picture, the recommended amount from each food group are suggested in a range, such as:



Question: Do you know.....?

If you are a working man, how much rice you should have each day?

It should be noted that the food requirement varies upon **age, sex and daily activity** (which may depend on type of occupation)

Answer: A working man is advised to eat about 10 rice-serving spoons of rice a day together with the other food groups, as suggested in the 2,000 Kcal column

Self- Evaluation

From which food groups should you eat each day and how much?

RICE - STARCHY FOOD GROUP

8-12 rice-serving spoons daily

1	2	3	4	5	6	7	8	9	10	11	12	
✔	✔	✔	✔	✔	✔	✔	✔	✔	✔			rice-serving spoon (s)

VEGETABLES GROUP

4-6 rice-serving spoons daily

1	2	3	4	5	6	
✔	✔	✔	✔	✔		rice-serving spoon (s)

FRUIT GROUP

3-5 portions daily

1	2	3	4	5	
✔	✔	✔	✔		portion(s)

MILK GROUP

1-2 glass(es) daily

1	2	
✔		Glass(es)

MEAT AND EGG GROUP

6-12 spoons daily

1	2	3	4	5	6	7	8	9	10	11	12	
✔	✔	✔	✔	✔	✔	✔	✔	✔				spoon (s)

You could check in the ☐, the information about the amount of food taken in each day. This is to find out whether you receive adequate food or not. However, the amount of food from each food group is recommended in range such as rice 8-12 rice-serving spoons. Since the amount of food needed depends on age, sex and daily activity, adults need more food than children, and males need more food than females. Those who utilize more energy or those who regularly exercise need more food than those who do not.

Recommended menus

In order to eat a variety of foods, menus have been provided as examples. However, the amount of food eaten will vary depending on sex, age, everyday life activies and exercise habits. It is important to maintain a healthy body weight. For children, their growth rate can be checked against a growth chart. if you are an adult, you should neither loose nor gain weight when you follow these guidelines.

It should be noted that some modifications may be needed. For example, suppose that you follow a menu that includes egg for breakfast. If so, it is recommended that you not choose a menu that has egg as an ingredient for lunch or dinner. It is recommended that adults should eat no more than 3 eggs per week. Growing children should drink at least 2 glasses of milk a day, while adults and elderly should drink 1 glass of low fat milk per day.

Examples of a breakfast menu

1. Porridge with minced pork; 1 orange; 1 glass of milk
2. Rice noodle soup with pork; fruit; 1 glass of milk
3. Porridge; stir-fried swamp morning glory; omelet with ivy gourd; orange juice
4. Steamed rice; ivy gourd, cooked pork blood, minced pork in clear soup; fried chicken; pink apple
5. Steamed rice; mixed vegetables with pork spareribs soup; tuna salad with spicy lime dressing; guava
6. Macaroni soup; papaya
7. Steamed rice; steamed cabbage soup; fried fish with celery

8. Porridge with fish/chicken/ prawn soup; rambutan
9. Steamed rice; steamed bitter gourd with minced pork in clear soup; steamed egg
10. Fried egg, tomatoes, toast; orange juice

Examples of a lunch menu

1. Rice noodles served with broccoli in pork gravy; guava
2. Fermented noodle served with fish curry and assorted vegetables; pineapple
3. Wheat noodle with chicken drumstick and clear soup; papaya
4. Thai style fried noodle; fruit in syrup
5. Steamed rice in coconut milk, papaya salad served with sweet pork /beef; orange
6. Fried rice with pork, chilli, basil leaves served with fried egg; pineapple
7. Fermented noodle with duck curry; sugar apple
8. Rice noodles served with minced pork gravy; papaya
9. Fried rice with chicken and diced pineapple; melon in coconut milk
10. Baked rice with taro served with pickles; fruits in syrup

Examples of a dinner menu

1. Steamed rice; mixed vegetables in hot and sour curry soup; tofu with mixed vegetables and minced chicken; small bony fish; papaya; milk
2. Steamed rice; squid with minced pork clear soup; chilli paste with fried mackerel, served with assorted fresh vegetables; mangosteen
3. Steamed rice; fried kale in oyster sauce; fish in hot and spicy soup; steamed prawns in lemon juice; rambutan; milk
4. Steamed rice; Spicy lemonglass soup with prawns and mushrooms; stir-fried mixed vegetables; boiled and fried egg in sweet and sour sauce; rambutan; pomelo

5. Steamed rice; fermented fish chilli paste served with assorted fresh vegetables; pressure cooked ash pumpkin with chicken and mushroom; steamed seafood in curry paste with dark green leafy vegetables; pomelo
6. Steamed rice; stir-fried mixed vegetables; fish intestine curry served with fresh vegetables; fried sun-dried pork; grapes
7. Steamed rice; chicken in sour coconut milk soup; omelet; stir-fried cowpea with shrimp; cantaloupe
8. Steamed rice; chicken green pepper curry; stir-fried pork liver with chives; dried fish chilli paste served with fresh vegetables; pineapple
9. Steamed rice; hot and sour crispy fish soup; fried string beans with hot pepper curry and pork liver; deep-fried fish; banana
10. Steamed rice; beef in thick curry; tofu soup with sea weed; stir-fried asparagus; guava

Examples of snacks

1. Pumpkin in coconut milk
2. Steamed pumpkin
3. Soy milk and cookies
4. Steamed glutinous rice with banana
5. Bread with raisin; orange juice
6. Tofu-milk jelly topped with fruit salad
7. Brownie/ Sponge cake
8. Tuna sandwich; assorted fruit juice
9. Coconut milk jelly; guava juice
10. Sa-lim (cooked rice flour in coconut milk)
11. Boiled red bean in syrup
12. Boiled mung bean in syrup

Example of a 1,600 Kcal menu for 1 day

List of food	Rice-starchy food 8 rice-serving spoons	Vegetable 4 rice-serving spoons	Fruit 3 portions	Meat 6 spoons	Milk 2 glasses	Fat and Oil Not more than 5 tea-spoons
Breakfast:						
Porridge with minced pork; orange; milk						
Porridge with minced pork						
• Porridge	2					
• Minced pork				2		
• Fried garlic						1
Fruit:						
1 Orange			1			
1 glass of whole milk					1	
Lunch:						
Rice noodles served with broccoli in gravy of pork; guava						
Rice noodle served with broccoli in gravy of pork						
• Rice noodles	3					
• Pork				1		
• Kale		1				
• Vegetable oil						3
1/2 Guava			1			

Example of a 1,600 Kcal menu for 1 day *(Cont.)*

List of food	Rice-starchy food 8 rice-serving spoons	Vegetable 4 rice-serving spoons	Fruit 3 portions	Meat 6 spoons	Milk 2 glasses	Oil Not more than 5 tea-spoons
Dinner:						
Steamed rice; mixed vegetables in hot and sour curry soup, tofu with mixed vegetables and minced chicken; papaya; milk						
Steamed rice	*3*					
Mixed vegetables in hot and sour curry soup:						
• Chinese Cabbage		2				
String beans, cauliflower						
• Fish				1		
Tofu in mixed vegetables and minced chicken						
• 1/4 hard tofu				1		
• Minced pork				1		
• Young corn and carrot		1				
• Vegetable oil						1
6 pieces of papaya			*1*			
1 glass of whole milk					*1*	
Total	8 rice- serving spoons	4 rice-serving spoons	3 portions	6 spoons	2 glasses	5 tea-spoons

Note: Adults should have 6 rice-serving spoons of vegetable and 4 portions of fruit a day in order to get enough dietary fiber. Adults who drink only 1 glass of milk per day, should try to get more calcium from at least 2 spoons of small bony fish or eat 4 spoons of canned sardine fish twice a week.

Example of a 2,000 Kcal menu for 1 day

List of food	Rice-starchy food 10 rice-serving spoons	Vegetable 5 rice-serving spoons	Fruit 4 portions	Meat 9 spoons	Milk 1 glass	Oil Not more than 7 tea-spoons
Breakfast:						
Porridge; stirred-fried swamp morning glory; omelet with Ivy gourd; orange juice						
Porridge:						
brown rice	2					
Stirred-fried swamp morning glory						
• Swamp morning glory		2				
• Vegetable oil						1
Omelet with ivy gourd						
• 1 egg				2		
• 1 rice-serving spoon of ivy gourd		0.5				
• Vegetable oil						3
1 glass of orange juice			2			

Example of a 2,000 Kcal menu for 1 day *(Cont.)*

List of food	Rice-starchy food 10 rice-serving spoons	Vegetable 5 rice-serving spoons	Fruit 4 portions	Meat 9 spoons	Milk 1 glass	Oil Not more than 7 tea-spoons
Lunch:						
Wheat noodle with chicken drum stick; papaya						
Wheat noodle with chicken drum stick						
• Wheat noodle	3					
• 1 large chicken drumstick				3		
• bean sprout		1				
• oil- fried garlic						1
6 pieces of papaya			1			
Snack:						
Sweet potato in ginger syrup						
Sweet potato	2					
Dinner:						
Steamed rice; fried kale in oyster sauce; steamed prawns in lemon juice; fish in hot and spicy soup; rambutan						
Steamed rice:						
Brown rice	3					

Example of a 2,000 Kcal menu for 1 day *(Cont.)*

List of food	Rice-starchy food 10 rice-serving spoons	Vegetable 5 rice-serving spoons	Fruit 4 portions	Meat 9 spoons	Milk 1 glass	Oil Not more than 7 tea-spoons
Fried kale in oyster sauce:						
• Kale		1				
• Pork				1		
• Oyster sauce						1
Fish in hot and spicy soup						
• Fish				2		
• Bamboo shoot string beans		0.5				
Steamed prawns in lemon juice						
• Prawns				1		
4 rambutans			1			
Before bedtime: *1 glass of whole milk*					1	
Total:	**10 rice- serving spoons**	**5 rice-serving spoons**	**4 portions**	**9 spoons**	**1 glass**	**6 tea-spoons**

Note : In order to get enough calcium, 2 spoons of small bony fish or 4 spoons of canned sardine once a week or 2 out of rice-serving spoons of green vegetable 4 times a week is recommended when only 1 glass of milk is consumed.

Example of a 2,400 Kcal menu for 1 day

List of food	Rice-starchy food 12 rice-serving spoons	Vegetable 6 rice-serving spoons	Fruit 5 portions	Meat 12 spoons	Milk 1 glass	Oil Not more than 9 tea-spoons
Breakfast:						
Streamed rice; Ivy gourd with cooked pork blood and minced pork soup; fried chicken; pink apple						
Streamed rice						
• Brown rice	3					
Ivy gourd with cooked pork blood and minced pork soup						
• Minced pork				1		
• Pork blood				1		
• Pork liver				1		
• Ivy gourd		1				
• Fried garlic						1
Fried chicken						
• 1 piece of fillet				2		
2 pink apples			1			

Example of a 2,400 Kcal menu for 1 day *(Cont.)*

List of food	Rice-starchy food 12 rice-serving spoons	Vegetable 6 rice-serving spoons	Fruit 5 portions	Meat 12 spoons	Milk 1 glass	Oil Not more than 9 tea-spoons
Lunch:						
Thai fried noodle; fruit in syrup						
Thai fried noodle						
• Noodles	3					
• 1/4 hard tofu				1		
• Dried shrimp				1		
• Crunched peanut				1		
• Pickle turnip, chive leaf, banana flower, bean sprout		2				
• Vegetable oil						3
Fruit in syrup						
• 2 palm fruit			2			
Snack:						
Sa-lim						
• 1 cup of flour	2					
• 3 spoons of coconut milk						3

Example of a 2,400 Kcal menu for 1 day *(Cont.)*

List of food	Rice-starchy food 12 rice-serving spoons	Vegetable 6 rice-serving spoons	Fruit 5 portions	Meat 12 spoons	Milk 1 glass	Oil Not more than 9 tea-spoons
Dinner:						
Steamed rice; Spicy lemongrass soup with prawns and mushrooms; stir fried mixed vegetables; boiled and fried egg in a sweet and sour sauce; rambutan; pomelo						
Steamed rice						
• Brown rice	4					
Spicy lemongrass soup with prawns and mushrooms						
• Prawns			2			
• Mushroom		1				
Stir-fried mixed vegetable						
• Carrot, Chinese cabbage, asparagus, mushroom, broccoli		2				
• Vegetable Oil						2

Example of a 2,400 Kcal menu for 1 day

(Cont.)

List of food	Rice-starchy food 12 rice-serving spoons	Vegetable 6 rice-serving spoons	Fruit 5 portions	Meat 12 spoons	Milk 1 glass	Oil Not more than 9 tea-spoons
Boiled and fried egg in sweet and sour sauce						
• 1 egg				2		
4 rambutans			1			
2 pieces of pomelo			1			
Before bedtime:						
1 glass of whole milk					1	
Total	**12 rice-serving spoons**	**6 rice-serving spoons**	**5 portions**	**12 spoons**	**1 glass**	**9 tea-spoons**

Working group

on Food-Based Dietary Guidelines For Thai people

1. Consultant

1. Prof. Dr. Kraisid Tontisirin, M.D.
2. Mrs. Vina Viravaidhya

2. Working group on Food-Based Dietary Guidelines For Thai People: 9 Guidelines

1. Dr. Sangsom Sinawat, M.D.	Chairperson
2. Assoc. Prof. Dr. Montharop Chakkapsak	Committee
3. Assoc. Prof. Dr. Somchai Durongdej	Committee
4. Assoc. Prof. Paradee Temchareon	Committee
5. Dr. Chaisri Supornsiphachai, M.D.	Committee
6. Assoc. Prof. Dr. Vasina Chandrasiri	Committee
7. Mrs. Boonyuen Warasai	Committee
8. Miss Siriporn Chitplee	Committee
9. Mrs. Uruwan Yamborisut	Committee
10. Mr. Chailert Kingkaewcharoenchi	Committee
11. Mr. Sa-nga Damapong	Committee and Secretary
12. Asst. Prof. Dr. Vongsvat Kosulwat	Committee and Assistant Secretary
13. Mrs. Suchit Saleepun	Committee and Assistant Secretary

3. Working Group on Food-Based Dietary Guidelines: Quantitative Process

1. Assoc. Prof. Thara Viriyapanich	Chairperson
2. Assoc. Prof. Dr. Prapaisri Sirichakwal	Committee
3. Asst. Prof. Dr. Uraiporn Chittchang	Committee
4. Miss Rin Charoensiri	Committee
5. Mrs. Rujira Sammasut	Committee
6. Dr. Anchanee Utaipatanachepp	Committee
7. Asst. Prof. Ratanaporn Charoenpong	Committee
8. Mrs. Nalinee Makarasean	Committee
9. Mrs. Kobkeaw Suwanasorn	Committee
10. Miss Vilailuk Srisura	Committee
11. Assoc. Prof. Dr. Tasanee Limsuwan	Committee
12. Dr. Sunard Taechagnam	Committee and Secretary
13. Miss Natthira Thongbuasirilai	Committee and Assistant Secretary
14. Mrs. Kulaporn Sukumaltrakul	Committee and Assistant Secretary

DOCUMENT PREPARATION

Consultants

Dr. Vallop Thaineua, M.D.
Prof. Dr. Kraisid Tantisirin, M.D.
Assoc. Prof. Thara Viriyapanich
Dr. Sangsom Sinawat, M.D.
Mr. Sa-nga Damapong

Editor

Assoc. Prof. Dr. Prapaisri Sirichakwal

Editorial Board

Mr. Kitti Sranachareonpong
Assoc. Prof. Dr. Vasina Chandrasiri
Miss Natthira Thongbuasirilai
Mrs. Kulaporn Sukumaltrakul

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