EAT TO LIVE
OR
LIVE TO EAT???
OBJECTIVE

By the end of this lecture, student can:

- Explain the four principles of healthy diet planning
- Describe the techniques of healthy diet planning by using:
  - Food Pyramid
  - Malaysian Dietary Guidelines (MDG)
HEALTHY EATING

Meeting daily nutritional requirements, while avoiding the deficiencies and excesses that contribute to the risk of diet related diseases:

- Balance diet based on
  - Age
  - Sex
  - Physical condition
  - Specific needs
TYPE OF NUTRIENTS

- Six important nutrients
  - Carbohydrates
  - Lipid
  - Protein
  - Vitamin
  - Mineral
  - Water
PLANNING HEALTHY DIET BY USING FOOD PYRAMID
MALAYSIAN FOOD PYRAMID

Piramid Makanan Malaysia

Lemak, minyak, gula dan garam
Makan sedikit

Ikan, ayam, itik, daging & kekacang
1/2-2 hidangan ayam, itik, daging, telur sehari
1 hidangan ikan sehari
1/2-1 hidangan kekacang sehari
Makan secara sederhana

Susu & produk tenuhu
1-3 hidangan sehari
Makan secara sederhana

Sayur-sayuran
3 hidangan sehari
Makan banyak

Beras, mi, roti, bijirin, produk bijirin & ubian
4-8 hidangan sehari
Makan secukupnya

Buah-buahan
2 hidangan sehari
Makan banyak
PRINCIPLES OF FOOD PYRAMID

VARIETY

BALANCE

MODERATE

ENOUGH
PRINCIPLES OF FOOD PYRAMID

- **Variety**
  - Eating a diet that combines all the food groups contained in the Food Guide Pyramid

- **Balance**
  - Foods eaten daily should come most from the lowest level of the Pyramid and least from the top

- **Moderation**
  - The Food Guide Pyramid recommends the amount or serving of each food group that can be consumed by normal, healthy individuals daily.

- **Enough**
  - Meeting daily nutritional requirements
Example of one serving

- Nasi, roti dan produk bijirin
  - 2 keping roti
  - 1 cawan nasi
  - 11/2 mihun
  - 1 cawan bijirin sarapan
  - ½ keping lempeng
  - 6 biskut tawar

- Sayuran dan buahan
  - 1 cawan sayuran hijau (mentah)
  - ½ cawan sayuran lain (mentah atau masak)
  - 1 gelas jus sayur atau buah
  - 1 pisang, epal (sederhana)
  - ½ cawan buah (potong)
Example one serving

- **Susu dan hasilan tensusu**
  - 1 gelas susu

- **Daging/ telur/ ikan/ kekacang**
  - 2-3 oz daging, ayam, ikan (masak dan kurang lemak)
  - 2 oz daging =
    - 1 cawan kekacang kering (masak)
    - 2 telur
    - 1 cawan tauhu
    - 2/3 cawan kacang
PLANNING HEALTHY DIET BY MALAYSIAN DIETARY GUIDELINES (14 PRINCIPLES)
EAT A VARIETY OF FOODS

- Eat a variety of foods within your recommended intake
  - Variety
  - Balance
  - Moderate
MAINTAIN BODY WEIGHT IN A HEALTHY RANGE

- Balance between food intake and physical activity (positive energy balance, negative energy balance, balance)
  - Body Mass Index (BMI) to indicate normal body weight
    - $\text{BMI} = \frac{\text{weight}}{\text{height (m)} \times \text{height (m)}}$
  - Waist to hip ratio to indicate the risk of chronic diseases
    - $\text{Waist to hip ratio} = \frac{\text{waist circumference}}{\text{hip circumference}}$

Women: 0.67 (waists between 24in and 28in with 36in hips) to 0.8 (waists between 27in and 31in with 40in hips).
Men: < 0.9
OBESITY....
BE PHYSICALLY ACTIVE EVERYDAY

- Increase physical activity
- Do moderate physical at least 30 minutes 5-6 day per week
- Reduce passive physical activity
EAT ADEQUATE AMOUNT OF RICE, OTHER CEREAL PRODUCTS AND TUBES

- Eat at least 4 servings per day.
- Choose at least half cereal from whole grain.
- Choose food that high fiber, low fat, sugar and salt.
EAT PLENTY OF VEGETABLES AND FRUITS

- Eat variety of fruits and vegetables everyday
- Eat 5 servings fruits and vegetables per day
CONSUME MODERATE AMOUNTS OF FISH, MEAT, POULTRY, EGG, LEGUMES AND NUTS

- Eat fish frequently, if possible everyday
- Eat meat and egg moderately, 2-3 per week
- Practice how to cook with healthy techniques
CONSUME ADEQUATE AMOUNTS OF MILK AND MILK PRODUCTS

- Consume milk and milk products everyday
- Replace condensed milk with powder milk
LIMIT INTAKE OF FOODS HIGH IN FATS AND MINIMISE FATS AND OILS IN FOOD PREPARATION

- Fat can provide energy and increase flavor
- However, consume excess fat
  - effect health status and risk factors to chronic diseases
CHOOSE AND PREPARE FOODS WITH LESS SALT AND SAUCES

- Need in small amount
- Excess intake of salt associate with high blood pressure.
  - Normal high blood pressure: <120/80 mmHg
CONSUME FOODS AND BEVERAGES LOW IN SUGAR

- Excess sugar intake
  - Risk factors to various chronic diseases
    - Obesity
    - Diabetes mellitus
Main role of water
- Carries nutrients and waste products
- Maintains the structure of protein and glycogen
- Serves as the solvent for minerals, vitamins, amino acids,
- Acts as a lubricant around joints and inside the eyes
- Acts as cushion example in pregnancy, the amniotic sac surroundings the fetus in the womb.

Consume about 6 cups of water/day and 4 cups of water from foods.
PRACTISE EXCLUSIVE BREASFEEDING FROM BIRTH UNTIL SIX MONTHS CONTINUE TO BREASEFEED UNTIL TWO YEAR OF AGE

- Breastfeeding is a good practice
  - Provide energy
  - Contain colostrum
  - Protect from breast cancer
  - Not time consuming
  - Reduce body weight after deliver
  - Contraceptive technique
CONSUME SAFE AND CLEAN FOODS AND BEVERAGES

- Choose clean foods and save
- Keep food in right temperature
- Prepare food with clean and safe
- During eating out side, please choose clean and save stall or restaurant
MAKE EFFECTIVE USE OF NUTRITION INFORMATION ON FOOD LABELS

- Please food and nutrition labeling during buying food products.
- Teach children to use food and nutrition labeling during buying food product.
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