

XXIV

Compiling daily diet  
Principles of proper nutrition

Physiology II - practice

# Principles of proper nutrition

- **Intake and expenditure of energy should be in balance**
- Keep adequate body weight (defined by BMI and waist circumference)
- Eat 5 or more meals daily in regular intervals (every 3-4 hours) - number of recommended daily meals depends on the total energetic value of food which should be taken in:
  - 1 600 kcal in 6 meals
  - 2 200 kcal in 9 meals
  - 2 800 kcal in 11 meals
- Do regular physical activity - exercise at least 30 minutes 5-times a week

# Principles of proper nutrition

- **The food should vary and contain all the necessary nutritional components**
- Frequent intake of fresh vegetables and fruits (optimally 5 times a day)
- Prefer dark bread and wholemeal products
- Increase consumption of food rich in fibre, vitamins and minerals (fruit, vegetable, legume)

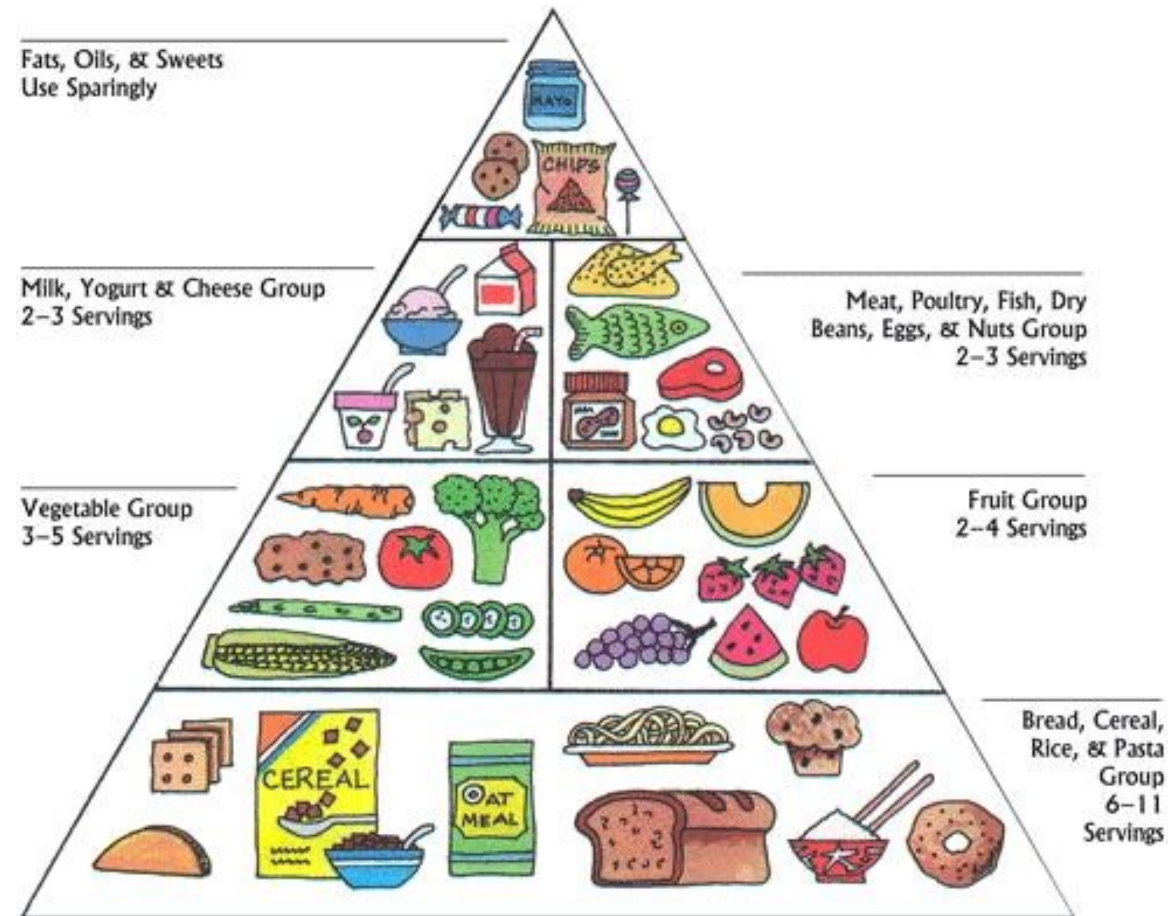
# Principles of proper nutrition

- **Proteins of animal origin are necessary especially for children and elderly people**
- Restrict consumption of red meat (pork, beef)
- Exchange red meat for poultry or deer or lamb
- Increase consumption of fish and seafood (at least twice a week)

# Principles of proper nutrition

- **Restrict consumption of fat, sugar, salt, and alcohol**
- Restrict food rich in cholesterol (egg, fat meat, entrails, certain milk products)
- Restrict consumption of sweet drinks, stewed fruit, sweets – consume them only exceptionally
- Drink sugarless water and fruit juice
- Restrict consumption of salted peanuts, chips
- Significantly restrict consumption of canned food, fried food, and sausages
- If alcohol is consumed, temperate intake is recommended - not drink more than 20 g of alcohol daily (approx. 200 ml of wine, 0.5 l of beer, 50 ml of spirits)

# Food pyramid



# Compiling of daily diet

- For **evaluation of food intake:**
  - determination of intake of energy, amount of macro- and micronutrients
- For **therapeutic intervention:**
  - recommendation of daily food intake according to individual needs of patient and principles of proper nutrition (obese patients, patients with food intake disorders, sportsmen)

# Compiling of daily diet

- Detailed summary of daily diet:
  - Meal/day time (breakfast, snack/elevenses, lunch, snack/tea, dinner)
  - Exact amount of food (in grams)
  - Energy content and composition of each individual food according to caloric tables
    - Energy content in **kJ** or **kcal** (1 kcal = 4,184 kJ)
    - Content of basic nutrients (saccharides, lipids, proteins)
    - Content of vitamins, minerals and trace elements
- Sum of accepted energy
- Recommended values



# Protocol:

## procedure, interpretation, conclusions

- Write down weight, height, age and gender of the person for whom you will compile the daily diet.
- Determine the daily energetic output
- Create a diet representing the food consumed yesterday. Write down:
  - the sum of accepted energy, nutrients, chosen minerals and vitamins
  - the recommended values of the parameters
- Compare energetic input and output, consumed and recommended daily doses of nutrients, minerals and vitamins. Comment whether the diet of examined person is appropriate. Write down the mistakes that were done and the way how to correct them.