

## Elements of Healthy Eating – Food Pyramid

Is it the one from Egypt, or can it be found in Poland as well, or maybe it's something entirely different?

### General Objective:

- The student will learn what the food pyramid for children and adolescents is.
- The student will determine the role of following the principles outlined in the food pyramid.

### Operational Objectives:

- The student will learn the concepts: pyramid, food pyramid.
- The student will describe the role of the principles outlined in the food pyramid.
- The student will understand why without the base of the pyramid, there is no healthy life.

**Method:** Concept map, lecture

**Form:** Individual

**Teaching Aids:** Film, coloring book, puzzle

## LESSON PLAN

### I. INTRODUCTORY PART

**Lecturer:** Explanation of terms:

**Pyramid:** A triangular-shaped structure with a broad base, narrowing towards the top. The broad base ensures the stability of the structure, making it strong and unlikely to collapse.

**Food Pyramid:** A leading set of dietary guidelines prepared by nutrition specialists and experts. It can be described as dietary recommendations in a nutshell, accessible to everyone. Graphically, it resembles the pyramids of ancient Egypt but represents different groups of essential food products in daily diet, shown in appropriate proportions. The higher the pyramid, the smaller the quantity and frequency of consuming products from a given food group.

### Main Recommendations from the Food Pyramid:

#### PRINCIPLES:

"Strengthening the health awareness of primary school students with the use of modern forms of education" benefits from funding worth EUR 240,000.00 received from Iceland, Liechtenstein and Norway under the EEA Funds. The aim of the project is to increase knowledge and develop habits regarding proper patterns of a healthy lifestyle among students of grades IV-VI.

1. Eat 5 meals regularly and remember to drink water frequently and brush your teeth after eating.
2. Eat a variety of vegetables and fruits as often and in as large amounts as possible.
3. Eat grain products, especially whole grains.
4. Drink at least 3-4 glasses of milk daily (you can replace it with natural yogurt, kefir, and – partially – cheese).
5. Eat lean meat, fish, eggs, legumes, and choose plant-based fats, e.g., olive oil, instead of animal fats, e.g., lard.
6. Do not consume sugary drinks or sweets (replace them with fruits and nuts).
7. Do not add extra salt to meals, avoid salty snacks and fast food.
8. Be physically active every day for at least an hour (limit watching TV, using the computer, and other electronic devices to 2 hours).
9. Get enough sleep to allow your brain to rest.
10. Regularly check your height and body weight.

**Lecturer:** We will now discuss the general principles of healthy eating:

- 1. Eat 5 meals regularly and remember to drink water frequently and brush your teeth after eating.**

Meals should be eaten regularly at fixed times during the day. The healthiest way is to have 5 meals at intervals of 3-4 hours. This ensures better metabolism and optimal utilization of nutrients, and supports proper mental and physical fitness. It is also important to brush your teeth thoroughly after each meal to prevent cavities and many future diseases, such as atherosclerosis and digestive system diseases.

Especially important is not to forget to have breakfast, which, when properly composed nutritionally, is essential for proper body development. A nutritious breakfast provides necessary energy and nutrients for the start of the day at home and school. Daily consumption of breakfast positively influences concentration during lessons and learning ability at school.

Water is a universal thirst-quenching drink. It is also one of the essential nutrients that need to be supplied to the body regularly and in appropriate amounts. Its deficiency quickly leads to dehydration, resulting in poor well-being, weakness, decreased concentration, and learning ability. Later, more serious ailments (e.g., from the circulatory, urinary, and digestive systems) that can be dangerous to health may appear.

It is worth remembering to drink at least 6 glasses of water daily – with meals and between meals. Water is also present in consumed products and dishes (e.g., in vegetables, fruits, soups). More water is needed during physical exertion and in places with high or low temperatures and low humidity.

- 2. Eat a variety of vegetables and fruits as often and in as large amounts as possible.**

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Vegetables and fruits should be an important part of the daily diet. These products are the main source of vitamins (primarily vitamin C,  $\beta$ -carotene, folates), minerals, fiber, and natural antioxidants, so-called antioxidants, which remove harmful free oxygen radicals from the body. Regular consumption of vegetables and fruits reduces the risk of developing many diseases, obesity, hypertension, coronary heart disease, and some cancers. It is most beneficial to eat them raw, e.g., freshly squeezed juices or minimally processed, as in this form they retain the highest nutritional value. Vegetables and fruits should be consumed several times a day as part of meals and snacks. The color of vegetables and fruits is related to the content of specific substances that affect their health properties. Therefore, to supply the body with all the nutrients, you should eat colorful vegetables and fruits. Remember to consume more vegetables than fruits.

Juices without added sugar can be a beneficial element of the daily diet for children and adolescents, provided that the diet is properly balanced. According to the latest recommendations, children aged 4-6 can consume up to 170 ml of fruit juice daily, and from the age of 7 – a glass of fruit juice a day (up to 230 ml).

### **3. Eat grain products, especially whole grains.**

Grain products should be a component of most meals. Among grain products, choose whole grains as often as possible, such as wholemeal flour and bread, graham, and so-called coarse groats (e.g., buckwheat, barley), brown rice, whole-grain pasta. Natural cereals, such as oats, barley, and rye, are also valuable elements of the daily diet. Grain products provide complex carbohydrates, making them an excellent source of energy needed by the growing and developing body. They also contain B vitamins (essential for the proper functioning of the nervous system, helping with concentration and learning), various minerals (e.g., magnesium, zinc, iron), which support physical development, positively affect well-being and learning ability; they are also a source of dietary fiber that supports the digestive system, helps maintain a healthy weight, and prevents diet-related diseases.

When choosing grain products, pay attention to their composition – dark bread is not always wholemeal bread, and some of these products (e.g., breakfast cereals) often contain added sugar, which should be limited in the daily diet.

### **4. Drink at least 3-4 glasses of milk daily (you can replace it with natural yogurt, kefir, and – partially – cheese).**

Dairy products are the best source of easily absorbable calcium, essential for building healthy bones and teeth. These products also contain high-quality protein, vitamins, and minerals. The recommended amount of dairy products is at least 3-4 glasses of milk, which can be partially replaced with other valuable products such as natural yogurt, kefir, buttermilk, cheese.

**5. Eat lean meat, fish, eggs, legumes, and choose plant-based fats instead of animal fats.**

During the growth and development of a young body, consuming high-quality protein is particularly important, which is abundantly found in meat, fish, and eggs. Remember that meat is also a source of the most easily absorbed iron, which plays an important role in forming blood components. Choose lean meat and limit processed meat products, as excessive consumption is detrimental to health.

It is worth eating fish, especially marine, at least twice a week. They contain valuable omega-3 polyunsaturated fatty acids, which are crucial for the development and proper functioning of the brain, nervous system, and eyesight. Fish are also an excellent source of protein and minerals, including iodine.

Eggs can be eaten several times a week – they are a concentrated source of nutrients, including protein, vitamins, minerals, and lecithin.

Legumes, such as beans, green peas, lentils, and broad beans, are a good source of protein in the diet and an excellent alternative to meat.

Plant oils are the richest source of mono- and polyunsaturated fatty acids, which protect against diseases. Therefore, replace animal fats with plant oils, except for coconut and palm oil. Choose rapeseed oil with the most beneficial fatty acid composition. However, limit fried foods as boiled, especially steamed, dishes are much healthier.

Fats in confectionery (wafers, bars, biscuits) or fast food often contain harmful trans fats, which promote cardiovascular diseases.

**6. Do not consume sugary drinks or sweets (replace them with fruits and nuts).**

Sugar and sweets, as well as sugary drinks, do not provide essential nutrients, and their consumption contributes to excessive body weight and the development of cavities. Replace sweets with fruits or unsalted nuts and seeds. Nuts, especially walnuts, almonds, sunflower seeds, and pumpkin seeds, are sources of many minerals such as magnesium, calcium, iron, zinc, and many vitamins. They also contain plant fats with beneficial health properties.

It is best to eliminate or significantly reduce the consumption of sugary drinks and instead drink water, vegetable juices, fruit juices, dairy drinks, or tea.

**7. Do not add extra salt to meals, avoid salty snacks, and fast food.**

Excessive salt intake (NaCl) – due to sodium content – has adverse health effects (hypertension, strokes, cancers) and promotes obesity. Therefore, avoid salt, salty products, and dishes, especially snacks and fast food. Removing the salt shaker from the table and

replacing salt with herbal spices (fresh and dried) and choosing raw products instead of processed ones can help reduce salt intake.

**8. Be physically active every day for at least an hour (limit watching TV, using the computer, and other electronic devices to 2 hours).**

Daily physical activity, at least 60 minutes a day – in school and outside – ensures healthy body development, positively affects well-being, helps maintain a healthy weight, and prevents diet-related diseases. Physical activity can be increased by choosing active transportation (walking, cycling) instead of motorized means and by doing exercises during breaks at school.

Reduce sedentary activities to no more than 2 hours a day, including TV watching and using computers and other electronic devices.

**9. Get enough sleep to allow your brain to rest.**

Sufficient sleep, tailored to individual needs, is crucial for regenerating the brain and body, which ensures better well-being, learning, and concentration.

**10. Regularly check your height and body weight.**

Regularly monitoring height and weight allows assessing whether growth and development are occurring correctly, and can help detect potential issues early.

**Lecturer:** Based on the information you have received, tell why the base of the pyramid, i.e. the widest part of the pyramid, is the most important part of a healthy diet.

**II. BASIC PART (main)**

**Lecturer:** colour in the colouring book: food pyramid: [dietetycy.org.pl](http://dietetycy.org.pl)

**III. FINAL PART**

**Lecturer:** indicate why the elements of the food pyramid at the bottom (at the base) are so important for our health and why should we avoid what is at the top of the pyramid?

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