

A Healthy Diet in Europe

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Part 1: Practical Guidance and Didactical Approach

Background and keywords:

In November 2006, the European Commission published a new Eurobarometer on nutrition and health (European Commission 2006). The findings indicate that the majority of Europeans consider that they are in good health, whereas 38% feel they are overweight. Nevertheless, all Europeans recognize the importance of a healthy diet and are aware of the health risks related to being overweight. One of the major changes in eating habits has been summed up as the consumption of less fat and more vegetables.

In order to further promote such positive developments, it is of utmost importance that pupils be provided with correct, scientifically validated information about healthy eating practices. This is all the more important, as there is a high risk of obesity among boys. The Eurobarometer makes a strong case for such a trend. In addition, eating disorders such as anorexia or bulimia are no longer strictly a female problem. In the meantime, during the teen years, such disorders are commonly referred to as the disease of modern society which, as emphasized, have also been observed amongst boys for some time now. Nevertheless, obesity is currently the most serious consequence of poor eating habits amongst boys. Therefore, a healthy diet constitutes an important subject for young persons. It should be clearly pointed out that this module is also applicable for classes with girls.

With this module, boys (and also girls), learn proper eating habits on the basis of country-specific nutrition models. This is a practical model recommending specific daily quantities and menu plans for easy implementation in a given country.

Keywords: Healthy eating habits; nutrition models in Europe; Body Mass Index (BMI); energy; nutrients and their function; Daily Intake; food tables.

Similar topics:

See above-referenced keywords

Materials:

- Information sheet on the "different food groups" (to copy);
- Tracking your daily food intake Diagram (to copy);
- Table (to copy);
- Background information on the Belgian nutrition model;
- "Active Food Pyramid" diagram (to copy);
- Advertising flyer with foodstuffs;
- Scissors, glue, pencil, felt-tipped pen;
- One A3 sheet of paper and scrap paper.

Duration:

- Personal assignment (prepared individually): write down all your meals for three days
- Teaching time: 2 times 2 class sessions

Number of participants:

Four or more pupils; ideal with classes of up to 20 pupils

Age:

From about 9 years of age onwards (fourth school year)

Aims:

- To enable children to track their eating habits;
- To make the connection between quality and quantity in terms of food and health;
- To increase their awareness that they can influence and determine their own eating habits.

(Short) Explanation:

The pupils write down what they eat and drink over a couple of days and bring this information to school. The teacher explains the typical country model for a healthy diet (see background section). The pupils categorize and analyze their daily meals, share nutrition tips and work together on preparing an ideal daily, meal plan (group work).

Variation(s):

The group work is a variation of the first individual task. In group work, the pupils learn how to prepare a healthy menu while working together. During the evaluation, the teacher must ensure that the menu plan put together is actually healthy.

Reflection:

- Compare the individually filled-out Food Pyramid with the nutrition model presented!
 - What similarities and differences can you find?
 - What do you eat too much of? What don't you eat enough of?
- Group work: hang all of the filled-out meal records on the wall. Take out an unfilled-out Food Pyramid. Note all of the meals in the Food Pyramid. Is your daily meal a healthy one?

Part 2: Theoretical Background and Further Information**The Eurobarometer: Health in Europe**

The European Commission surveys European Union citizens at regular intervals. This survey forms the basis of the Eurobarometer (EUROPEAN COMMISSION, 2006). The Eurobarometer of November 2006, clearly shows that about three-quarters of all Europeans consider that they are in good health. The most favourable results can be seen in Denmark and Ireland, where the corresponding percentage is around 85 percent. The citizens of the new EU Member States are the most dissatisfied about their state of health. Only 52% of Latvians and Lithuanians consider their health to be good. Good health appears to be strongly associated with weight. Respondents who are overweight, and are more often less satisfied with their health and explain, that they more often suffer from a chronic illness. Moreover, health problems are associated with age and their socio-economic background.

Healthy diet: a definition

What counts for a healthy diet is the combination of foods and quantity eaten. Therefore, a healthy diet involves that we neither eat too much, nor too little (energy intake in balance with the energy consumption) and in balance with the recommended intake volume measurement (National Institute of Public Health and the Environment, RIVM, 2004).

A healthy diet provides all of the nutrients that are necessary to help the body grow and for normal development. It helps us to maintain our bodies balance and contributes to prevent illnesses caused by modern society such as overweight like heart and circulatory diseases. In addition, the body needs nutrients as building materials. Bones develop thanks to calcium, muscles and organs thanks to protein. The saying is ever so true that, "We are what we eat"

Several points should not be overlooked to avoid any misunderstandings and the danger of encouraging a lack of interest in healthy foods. For example, each European should have a minimum knowledge about the basic principles for eating a healthy diet and nutrition principles. This also means that preventive health measures and nutrition education should be started at an early age. A European study (HEMPEN 2006), examined which elements concerning nutrition are included in the national curricula of eight European countries.

When we compare these findings, it is clear that:

The food canal and information about a healthy diet and nutrients is included in all curricula. Also countries are also in favour of concrete nutrition models. The advantage of a concrete nutrition model is it concentrates on food rather than nutrients and in this way everyone can see directly what the most important components of a healthy diet are.

Various models are used in Europe. In the eight countries that participated in this European study, eight different nutrition models are used. It was noteworthy that there are two current systems in use: the Food Pyramid and the "round model". The Food Pyramid is used in Austria, Belgium, Cyprus, Malta and Turkey. The Netherlands, Sweden and the United Kingdom work with the Round Model.

Eating habits

Eurobarometer findings show that the majority of Europeans (59%) eat a healthy diet; they described their diet as balanced and varied and find it very important to eat more fruits and vegetables. In response to the question about what a healthy diet means to them, most of the answers touched on topics such as low-fat food (45%), food with a low-sugar content (28%) and eating more fish (25%).

Above all, those who find that they are overweight are convinced of the importance of regularly consuming fruits and vegetables and less fats. Four out of five Europeans felt that they eat a healthy diet. Nationals of the new EU Member states are more critical in this regard. Only 55% to 60% find that they eat a healthy diet. Older persons consider that they eat a healthier diet than younger persons. Women and girls, who more often avoid fatty food, can better describe a healthier diet than boys and men.

Two-thirds of the respondents indicated that they do not find it difficult to eat a healthy diet. There are no significant differences from one Member State to another. Above all, nationals from the new EU Member States seem to eat a healthy diet (up to 54%). People who eat too much or too little, find it more difficult to eat a healthy diet than persons who fall in the normal weight range.

Two key reasons for eating an unhealthy diet are the lifestyle of Europeans and above all lack of time. The majority of those who complain about not having enough time are well-

educated persons with a good socio-economic status. Persons with a lower educational level find it often boring and less meaningful to eat a healthy diet.

A change in eating habits

One out of five EU citizens went on a diet last year on their own initiative for 11% and upon the recommendation of a doctor for 8%. Women/girls diet more often than men/boys and older persons more frequently than younger persons.

One out of five Europeans stated that they changed their eating habits last year. This mostly applies to women, older persons, persons with a high educational level, employed and living in urban areas. The most important changes include eating more fruit and vegetables (55%) and less fatty foods (53%).

The most important reason cited for a diet and for a change in eating habits was the desire to lose weight. The second reason was to remain healthy. The first reason was mainly given from persons who weigh too much. The second reason was encountered more often amongst those persons who fell in the normal weight range. Sick persons and seniors mostly cite health reasons for the change in their eating habits.

Height, weight and BMI

In comparison with 2002, Europeans have become bigger. The average size is currently 169.9 cm (almost 5'7"). On the average, men are 12.3 cm taller than women. The age group of between 15 to 24 years of age is on the average 5.3 cm taller than persons over 55 years of age. The tallest Europeans live in the Netherlands (174.5 cm or about 5' 9" on the average) and in the other countries of northwest Europe. Southern Europeans are shorter. The Maltese are the shortest (164.9 cm on the average).

Not only the height, but the average weight of Europeans has risen. Often the ideal weight has been determined on the basis of beauty criteria rather than from a health point of view. The so-called 'healthy weight' is no exact weight, but much more a range of –upper and lower limits in between which one's weight must be found. This range is known as the Body Mass Index (BMI).

The BMI is calculated as follows: the weight in kilogrammes or in pounds divided by the square height (in meters or feet and inches) (NUBEL 2004):

- BMI less than 20: underweight (represents a problem when the value is less than 18.5)
- BMI between 20 and 25: ideal weight
- BMI between 25 and 30: overweight
- BMI more than 30: obesity (obesity)

The Eurobarometer shows that the average Body Mass Index (BMI) for Europeans is 25.0. With the exception of the Maltese, the population of the new EU Member States as well as Northern European countries have the highest BMI (i.e. an average BMI of 26.6). Italians (an average BMI of 24.3) and the French (an average BMI of 24.5) have the lowest BMI values.

Europeans have a relatively good impression about their weight. About 55% are satisfied with their weight. In this regard, women are generally more critical than men. More women (44%) than men (32%) feel that they are too fat. Those who feel that they weigh too much, in generally also have a BMI that is too high of 28. On the other hand, those who are not satisfied with their weight, have an average BMI of 23. Persons with higher BMI often have more health disorders.

An important goal of the nutrition model is the intake of energy in the same amount as our daily needs. The following important rule applies here: what is consumed must also be used up.

In order to calculate the necessary amount of energy for an individual, first the basal metabolic rate (BMR) is determined (the necessary quantity of energy at rest). This is calculated according to a person's weight. Differences arise on the basis of gender and age. A woman has a daily energy requirement of 2,000 Cal (8360 kJ), while a man requires 2,500 Cal (10450 kJ).

According to advice from the HOGE GEZONDHEIDSRAAD: Eat according to your needs. Adapt your portions accordingly and give priority to low-calorie foods. Make sure that, every day, you have physical activity that is equivalent to 30 minutes of active walking. (HOGE GEZONDHEIDSRAAD, 2006).

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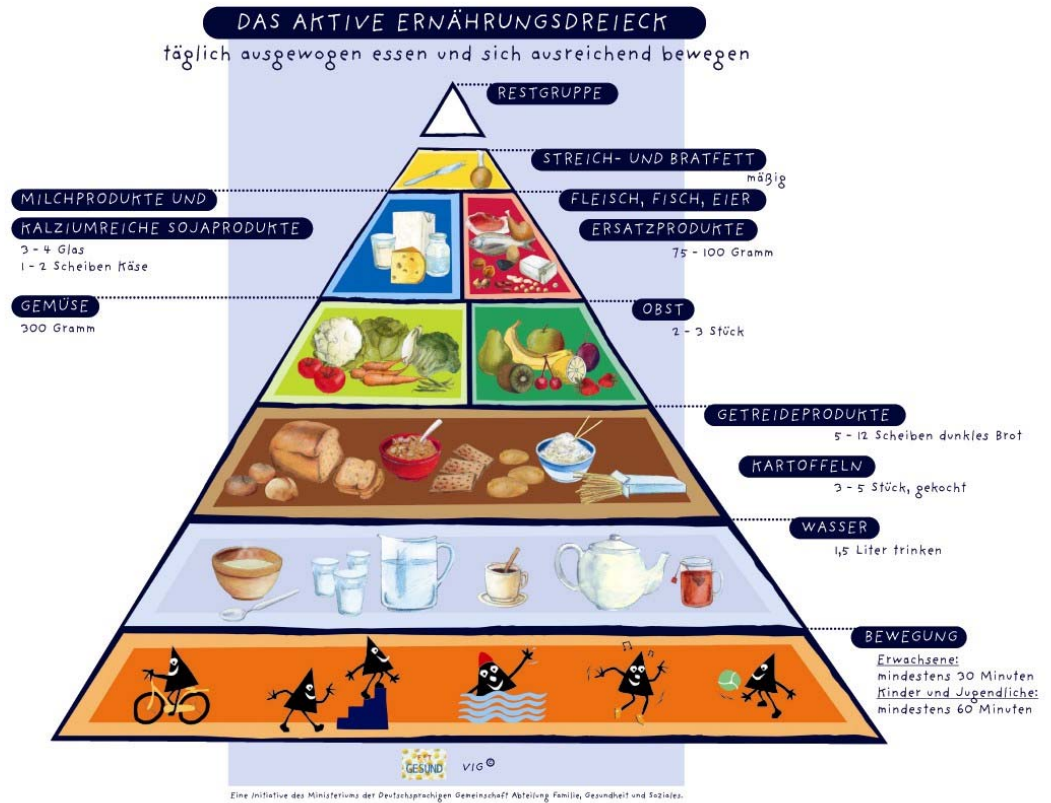
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Worksheets:

The Active Food Pyramid – The Belgian Nutrition Model



Information: Different food groups



a) Water

Water and liquids are essential for our body. Water is an essential component in a healthy diet.

This group includes: **water, coffee, tea, bouillon, soup**



b) Cereal products and potatoes

Cereal products and potatoes form our main food. This group includes **potatoes and all kinds of cereal products such as bread (wheat bread, rye bread, bread made from wheat and rye ...), rusk, breakfast cereal, rice, pasta, ...** whole meal products have priority.



c) Vegetables

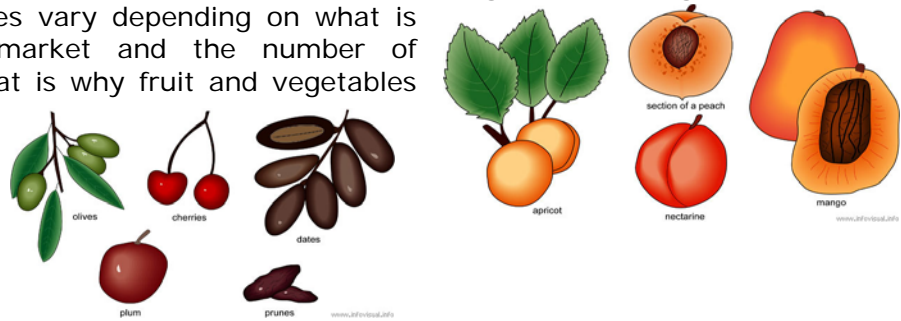
Vegetables are edible plant parts. This group includes: **tomatoes, lettuce, carrots, cauliflower, celery, fennel** and many others.



d) Fruit

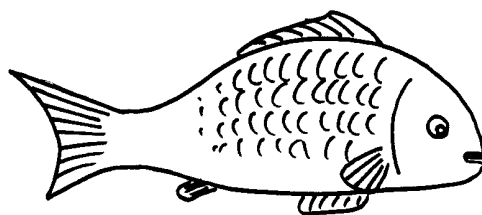
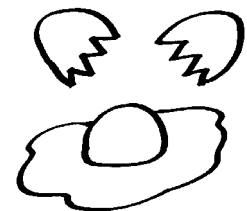
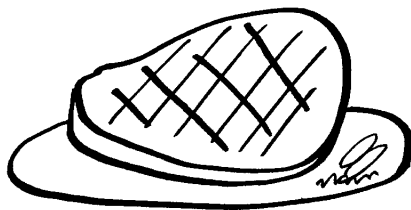
This food group includes: **apples, pears, bananas, tangerines, mangoes**

Fruits and vegetables vary depending on what is available on the market and the number of nutrients varies. That is why fruit and vegetables should be eaten every day.



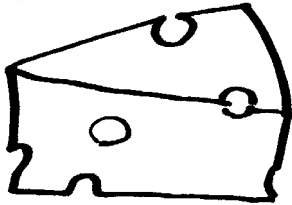
e) Meat, fish and eggs, (and substitutes)

Meat, fish, eggs and substitutes provide protein, vitamins and minerals. Our body needs meat, fish, eggs and substitutes to grow, to develop and regenerate our body. Substitute products for meat, fish and eggs include **soy bean products, fruit of a leguminous plant and nuts.**



f) Milk products

Milk products are very important. This product is responsible for the strength of our bones. Above all, this group includes: milk, yoghurt and milk products.



g) Grease and cooking fat

Grease and cooking fat provide energy. This group includes: **margarine, lipids with low fat contents, butter and oil**. Oil and margarine help heart and vascular diseases.

NB: Although this food group should only be consumed in moderation, it nevertheless belongs to one of the essential food groups to eat a balanced diet.








h) The discretionary group


The other food group is at the top of the active food pyramid. Here we find all food that is really not important for a balanced diet.

While these foods are not essential, they can't be ignored either. This group includes: **sweets, beverages with a high-sugar content, rich alcoholic beverages, mayonnaise, ...** The top of the food pyramid is an 'extra'.



Recommended Daily Allowances for Belgium.

What?	How much per day?
 <p>Physical activity (Soccer, tennis, walking, walking, walking upstairs...)</p>	<p>Under 18 years: 60 minutes Over 18 years: 30 minutes</p>
 <p>WATER</p> <p style="text-align: center;">Water</p>	<p>- 1.5 litre</p>
 <p>GRAANPRODUCTEN EN AARDAPPELEN</p> <p>Cereals and Potatoes</p> <p>Cooked potatoes</p> <p>Brown bread</p>	<p>- 6 to 12 years: 3 to 4 pieces - 12 to 59 years: 3.5 to 5 pieces - over 60 years: 3 to 4 pieces</p> <p>- 6 to 12 years: 5 to 9 slices - 12 to 59 years: 7 to 12 slices - over 60 years: 5 to 9 slices</p>
 <p>GROENTEN</p> <p>Vegetables</p>	<p>- 6 to 12 years: 250 g to 300 g - over 12 years: 300 g</p>
 <p>FRUIT</p> <p style="text-align: center;">FRUIT</p>	<p>- 6 to 12 years: 2 to 3 pieces - 12 to 18 years: 3 pieces - over 18 years: 2 to 3 pieces</p>



Milk products


Milk products, soya products rich in calcium

Cheese

- 6 to 12 years: 3 glasses
- 12 to 18 years: 3 to 4 glasses
- 18 to 59 years: 3 glasses
- over 60 years: 4 glasses

- 6 to 12 years: 1 to 2 slices
- 12 to 18 years: 2 slices
- over 18 years: 1 to 2 slices


Meat, fish and eggs (and substitutes)




Uncooked
(Egg: 1 x per week)

- 6 to 12 years: 75 to 100 g
- over 12 years: 100 g

Grease and cooking fat



- in general: thin grease, 10 g



Discretionary group

- in general: not necessary, in moderation

DAILY MENU PLAN: WHAT DO YOU EAT AND DRINK?

Date ... / ... /

Task: Track everything that you eat and drink today in the table!

Time	Eat/drink	Quantity
Breakfast		
Snacks		
Lunch		
Snacks		
Dinner		

FOOD GROUP TABLE

Learn to categorize the food you eat!

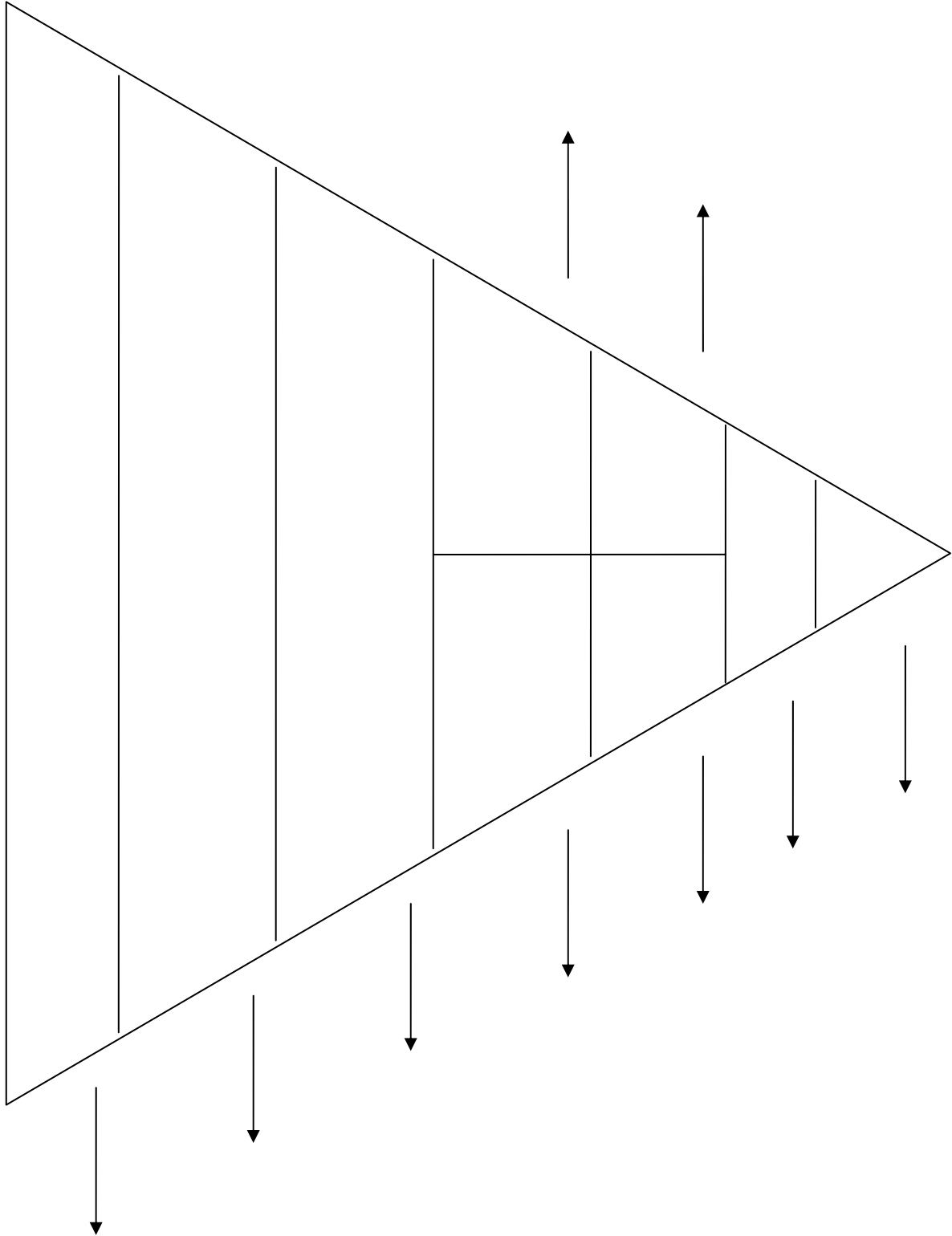
Task: Give examples for each of the food groups below!

<u>WATER</u>	<u>CEREAL PRODUCTS – POTATOES</u>
<u>VEGETABLES</u>	<u>FRUIT</u>
<u>MEAT – FISH - EGGS</u>	<u>MILK PRODUCTS</u>
<u>GREASE AND COOKING FAT</u>	<u>DISCRETIONARY FOODS</u>

THE ACTIVE FOOD PYRAMID

Become familiar with the various categories of the food pyramid!

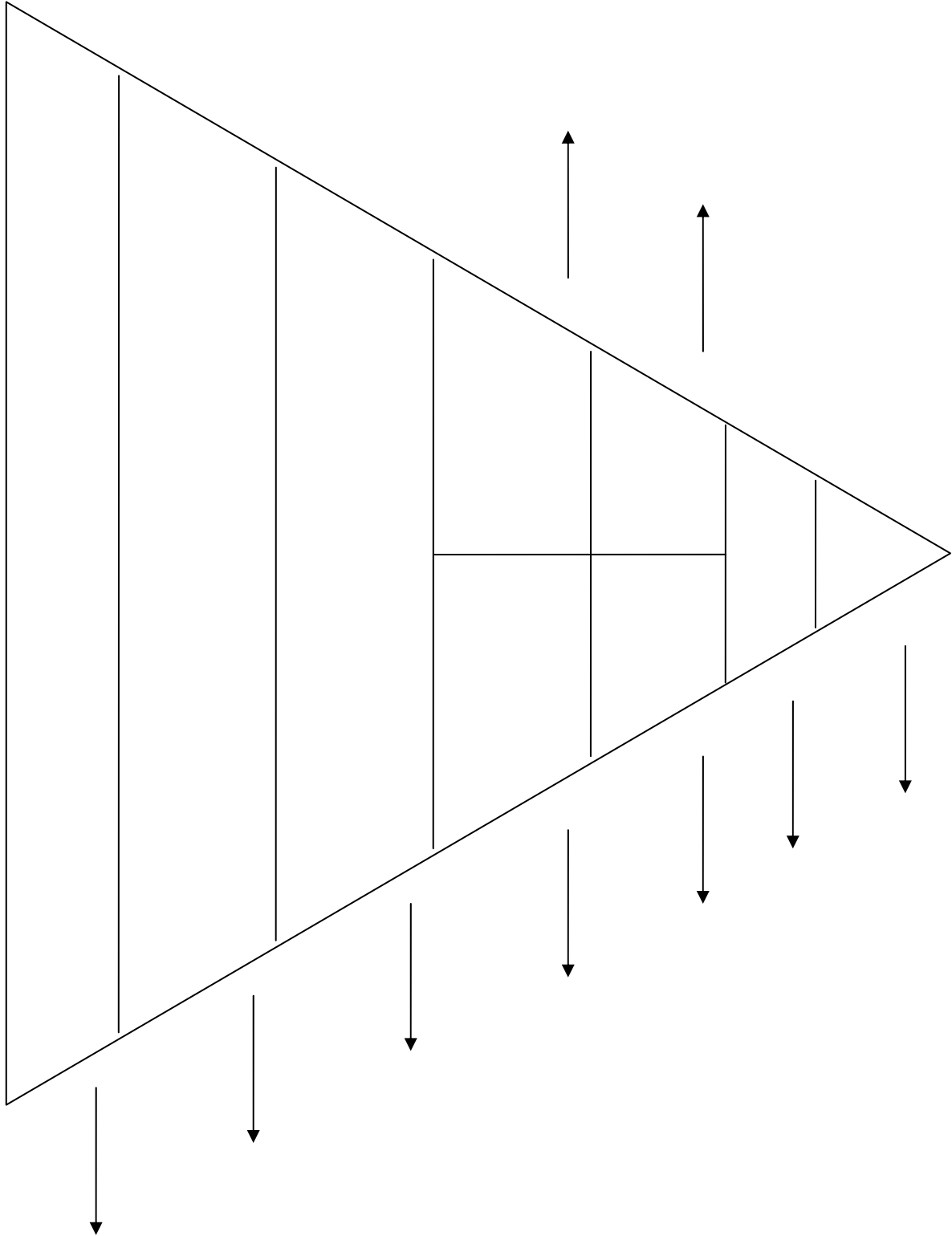
Please note: Write the following terms on the arrows of the pyramid: discretionary foods, water, vegetables, meat – fish – eggs, physical activity, fruit, cereal products – potatoes, milk products, grease and cooking fat.



THE ACTIVE FOOD PYRAMID

Become familiar with the various categories of the food pyramid!

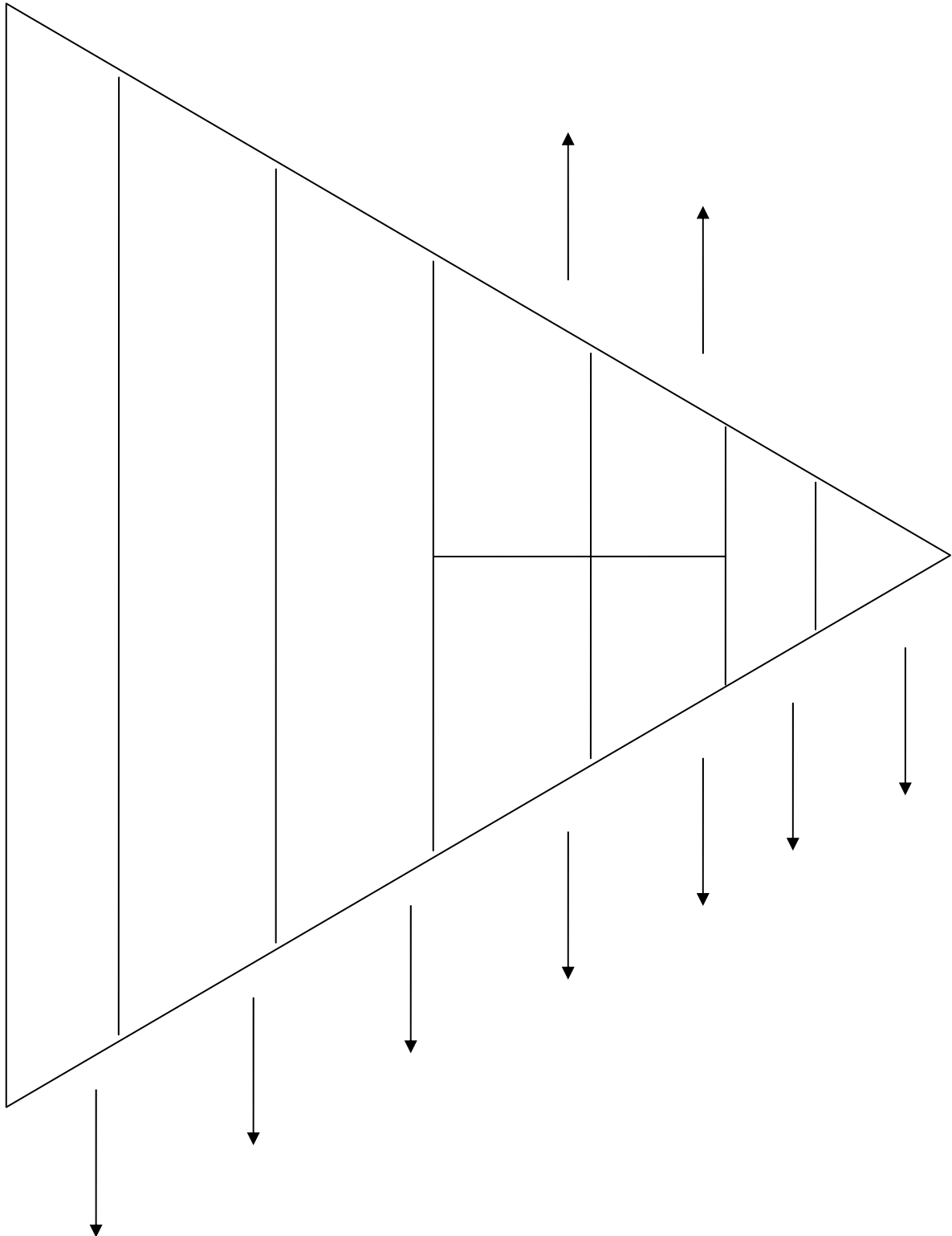
Exercise: Record two examples of your daily meals for each part of the Active Food Pyramid!



THE ACTIVE FOOD PYRAMID

Become familiar with the various categories of the food pyramid!

Exercise: Complete the Food Pyramid with the food that you have eaten each day. Do this for each day for which you have recorded your meals.



HOW HEALTHY ARE YOU? YOU AND YOUR FOOD PYRAMID

Give yourself nutrition tips on the basis of your Food Pyramid!

Exercise: Choose the best completed Food Pyramid amongst you. Answer the following questions:

1) Every day you should eat something from each food group, with the exception of the discretionary food group? Does this apply to you?

.....

2) Study your Food Pyramid carefully and rate it yourself based on a scale from 1 to 10.

A rating of 1 means your Food Pyramid is poorly filled in and a rating of 10 means it is perfectly filled in.

..... / 10

3) From which food group must you eat more of or less of per day?

More:	<p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p>
Less:	<p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p>

HEALTHY FOOD

Learn how to prepare a healthy meal!

Group work: You will be divided into 6 groups. Each group is to prepare a healthy menu together:



Group 1: a healthy breakfast.



Group 2: a healthy breakfast.



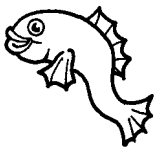
Group 3: a healthy warm meal.



Group 4: a healthy warm meal.



Group 5: a healthy cold meal.



Group 6: a healthy cold meal.

I am working in the..... Group with:

-
-
-
-

Material

- ✓ Flyer with food ads
- ✓ Scissors
- ✓ Glue
- ✓ An A3-sheet of paper
- ✓ Scrap paper
- ✓ Felt tipped pen

What should I do?

- ✓ Join your group.
- ✓ Think together about the meals that you want to plan together: *What foods do you need?* Write everything on scrap paper.
- ✓ Take the ad flyer and look for foods! Don't forget to add beverages!
- ✓ Make sure that the pictures are big enough.
- ✓ Cut out the food and glue it on the A3-sheet.
- ✓ When you think that you have everything, then ask your teacher to come over to check everything.
- ✓ Now you are ready to paste in everything.
- ✓ Write your names on the A3-sheet.
- ✓ Clean everything up.

Group ... : a healthy meal:

