

# THE NUTRITION PUZZLE

*Developed for elementary schools in America*

## PIECES OF HEALTHY FOOD

Every day we need a quantity of "fuel", the fuel is your food that makes sure your body is doing all the processes that is necessary to move, play etc. Your intake of food is like a puzzle, if there is a missing piece, the puzzle is not complete.. That is the same with your food, if you miss something in a from a nutrition group your intake is not complete.

Linda van Dijk

# The General Guidelines

## **1. Follow a healthy eating pattern during your lifetime.**

Everything you put into your mouth every day has an influence on your health. Choose a healthy eating pattern to help achieve and maintain a healthy body weight and reduce the risk of chronic disease.

## **2. Focus on variety and amount.**

To meet a healthy eating pattern, choose a variety within all food groups in recommended amounts.

## **3. Limit calories from added sugars and saturated fats and reduce sodium intake.**

Consume an eating pattern low in added sugars, saturated fats, and sodium. Cut back on foods and beverages higher in these components to amounts that fit within healthy eating patterns.

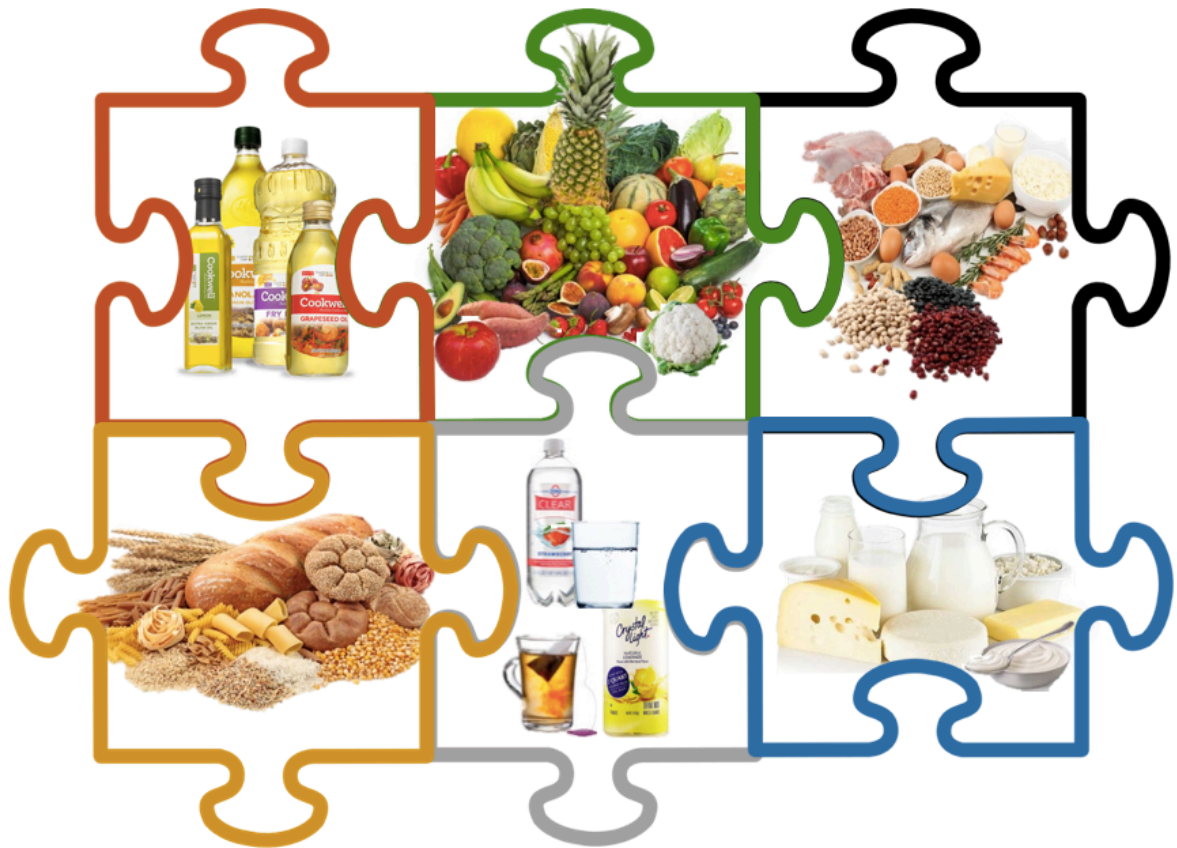
## **4. Be aware of your choices of food and beverage.**

Choose foods and beverages across and within all food groups instead of less healthy choices. Consider cultural and personal preferences to make these choices easier to accomplish and maintain.

## **5. Support healthy eating patterns for all.**

Everyone has a role in helping to create and support healthy eating patterns in multiple settings nationwide, from home to school to work to communities.

# Introduction



Every day we need a quantity of “fuel”, the fuel is your food that makes sure your body is doing all the processes that is necessary to move, play etc. Your intake of food is like a puzzle, if there is a missing piece, the puzzle is not complete.. That is the same with your food if you miss something in a group your nutrition is not complete.

Your body goes with you all your life. If you eat according to the six-pieced puzzle, you will stay healthy and fit. That way you can learn, play sports, play and have fun. Very important!

## *So, what is in the puzzle?*

- Eat a lot of vegetables and fruits.
- Vary with color.
- You need fat. At least, the good fats from, for example, olive oil or soft margarine.
- Eating meat every day is not necessary.
- Alternate with sustainable fish, unsalted nuts, kidney beans, lentils, chickpeas or eggs.
- Choose especially whole wheat. Think of whole grain bread, wholegrain pasta or brown rice.
- Drink enough! No limos and juices full of sugar but tap water or tea without sugar.

### *And what is not in the puzzle?*

You will not find candy, cake and soft drinks in the puzzle. All these sweets are not healthy. Something to snack or snack may, but rather not too much and not too often.

So, if you fancy something to eat in between, treat yourself especially with all those tasty things that are in the puzzle: snack tomatoes, strips of pepper, a handful of unsalted nuts (yes, one hand every day! So not 2 or more), a whole wheat sandwich well invested with all kinds of fruit, a sandwich or a cup of semi-skimmed yoghurt. All great choices.

### *What does this all mean?*

Food is very important to us. Through food we can keep ourselves alive and continue to do what we do. How much you eat depends on a number of things:

- your age: if you are young, you still have to eat a lot to be able to grow well. This becomes less when you become older.
- your sport: if you do a sport a lot or are a top athlete, for example, it is very important that you eat well. This keeps your muscles fit.
- your physique and height: people who are tall will need more nutrition than people who are smaller. Their body needs less to function properly.

There are many different substances in food that are good for us. These substances help us to grow, to stay healthy and to get energy.

The different good substance is:

- Building materials: these are substances such as proteins and water. They help your body to grow.
- Protective substances: these are substances such as vitamins and minerals. They help your body protect itself against diseases.
- Fuels: these are substances such as carbohydrates, proteins and fats. These substances help your body to get energy again and to be able to do what you always do.

So, what exactly are these substances?

- Proteins: proteins help you grow up. Every hair or muscle in body is built with proteins. You have animal fats and vegetable fats. Vegetable fats are found in bread, potatoes, nuts and beans. Animal fats are found in meat, fish, eggs and pure products.
- Vitamins: an explanation can be found here.
- Minerals: minerals are chemicals. You do not need much of it, which is why they are also called trace elements. Examples of minerals are iron, calcium and iodine.
- Carbohydrates: carbohydrates are a collective name for all kinds of sugars. You have healthy sugar, but also unhealthy sugars. Healthy sugars are found in fruit and vegetables, for example. The sugars in fruit and vegetables are usually already included by nature. Unhealthy sugars (also called added sugars) are mostly in candies and cookies. These are put in through the factory.

- Fats: fats provide energy. Also, in fats there are animal fats (from animals) and vegetable fats (from plants). examples of animal fats can be found in butter, meat and cheese. You can find vegetable fats in nuts or plants. If you eat too few fats, you become weak. When you eat too much, you can become fat.

Therefore, it is important to keep fit and to exercise. It is recommended that you should exercise at least 60 minutes a day!

## Kilocalories

These substances are measured in kilocalories. There is a quantity that everyone must receive daily. If you are growing, you have to get a lot of these kilocalories and eat more. Your body has to become bigger. If you want to lose weight, you have to get in less and move more, because by moving the kilocalories burn again.

<b>Female</b>	1200 kcal/d	1600 kcal/d	1800 kcal/d
<b>Male</b>	1400 kcal/d	1800 kcal/d	2200 kcal/d



## Vegetables & fruits

Vegetables and fruits contain a lot of vitamins and minerals which are good for your immune system to keep all the viruses and flu's out. But they also contain carbohydrates and fibers which is good for your bowel movement. The recommendation per day is for females aged 4 - 8 years old 1 cup, aged 9 - 13 years old 2 cups of vegetables. For males aged 4 - 8 years old 1,5 cups, aged 9 - 13 years old 2,5 cups of vegetables. The recommendation for fruit is 1,5 cups a day, like banana, kiwi, apple, mango, strawberry and orange.

There are different kind of subgroups for the vegetables, this is a guideline to eat variable.

The subgroups are:

- Dark green: spinach, kale
- Red & orange: carrots, beetroot
- Legumes: beans and peas
- Starchy: potatoes, sweet potatoes



## Grains

A healthy eating patterns include whole grains and limit the intake of refined grains, such as cookies, cakes, and some snack foods. The grains food group includes grains as single foods like rice, oatmeal, and popcorn.

As well as products that include grains as an ingredient like breads, cereals, crackers, and pasta. Grains are either whole or refined. Whole grains - like brown rice, quinoa, and oats- contain the entire kernel, including the endosperm, bran, and germ. Refined grains differ from whole grains in that the grains have been processed to remove the bran and germ, which removes dietary fiber, iron, and other nutrients. The recommendation per day is for females aged 4 - 8 years old 4 ounces, aged 9 - 13 years old 5 ounces of grains. For males aged 4 - 8 years old 5 ounces, aged 9 - 13 years old 6 ounces of grains.



## Dairy

Dairy including milk, yogurt, cheese, or fortified soy beverages. It is important to choose the low-fat variant.

Other products sold as "milks" but made from plants (e.g., almond, rice, coconut, and hemp "milks") may contain calcium and be consumed as a source of calcium, but they are not included as part of the dairy group because their overall nutritional content is not similar to dairy milk and fortified soy beverages (soymilk). Calcium is important for your bones and for your grow. The recommendation for females is 2 portions a day and for males it is 3 portions a day.



## Protein foods

Healthy eating patterns include a variety of protein foods. The protein foods group comprises a broad group of foods from both animal and plant sources and includes several subgroups: seafood; meats, poultry, and eggs; and nuts, seeds, and soy products. Legumes (beans and peas). Protein also is found in some foods from other food groups like dairy. The recommendation per day is for females aged 4 - 8 years old 3 ounces, aged 9 - 13 years old 4 ounces. For males aged 4 - 8 years old 4 ounces, aged 9 - 13 years old 5 ounces.



## Oils

Oils are fats that contain a high percentage of monounsaturated and polyunsaturated fats that are liquid at room temperature. Although they are not a food group, oils are emphasized as part of healthy eating patterns because they are the major source of essential fatty acids and vitamin E. Commonly consumed oils extracted from plants include canola, corn, olive, peanut, safflower, soybean, and sunflower oils. Oils also are naturally present in nuts, seeds, seafood, olives, and avocados.



## Beverages

Your body exists for 70% of water, that why it is important to be hydrated. Every day you need 1,5-2 liters of water. However, be aware of your choices, cola contains a lot of sugar.

## Exercise

The Heart Association have investigated that it is important for children to move 60 minutes each day. That can be exercising, biking, walking but also playing outside. Movement is important for your condition and healthiness of your body.