

EATING AND FEEDING

“Animals feed themselves; men eat...” Jean Anthelme Brillat Savarin wrote that about two centuries ago. He was a French politician and person of letters who also wrote about food, which he was fond of. He was a greedy genius of the kitchen, but what did Brillat Savarin mean by this fairly enigmatic sentence? To understand it, just try to imagine those herds of zebras, gazelles or antelopes you see on TV: hundreds of animals moving together and... resembling one another. There is neither an overweight zebra struggling to run nor a skinny one unable to survive... **They are all fit, do you know why? It is simple: because they only eat what they need to feed themselves, neither more nor less.** Man, instead, is capable of eating even when not hungry, because food is not just food to him. It is PLEASURE! We are lucky, of course, but **the important thing is to learn how to combine taste and health.**

It is not difficult and it is really worth it...

ACTIVITY 1 - THE FUNCTIONS OF FOOD

First, a fundamental question:

which functions do foods serve in our body?

To answer it, begin an internet treasure hunt with your classmates.

Here are 6 really “difficult” questions: go on a race to find the answers and then discuss the information you found with your teacher.

Here are the questions

- 1) **What is basal metabolic rate?**
- 2) **How many calories does a football player in a match “burn” on average?**
- 3) **What is xerophthalmia?**
- 4) **How was vitamin C discovered?**
- 5) **How much calcium does an adult body have on average?**
- 6) **What is “myosin”?**

Can you then complete the pattern below?

Foods serve three basic functions in the body

Function:

Which means:

Function:

Which means:

Function:

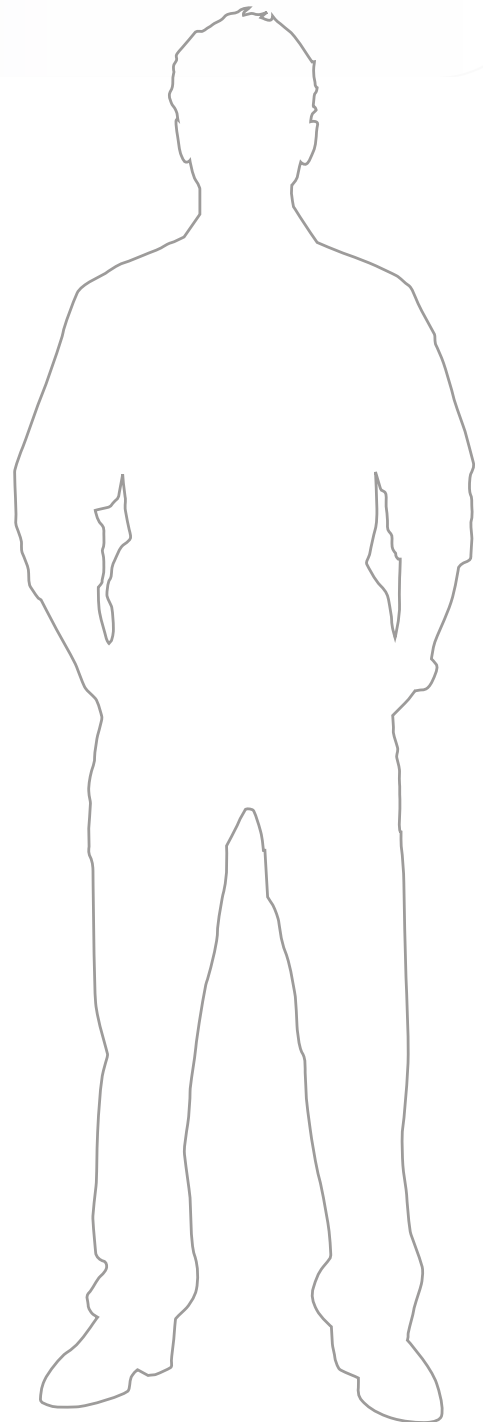
Which means:

ACTIVITY 2 - WHAT ARE WE MADE OF?

We are made of flesh, bones, skin, blood... but these are the names of the tissues and organs that compose our body. Each tissue, however, is made up of particular substances: protein, fat, water, and more... food contributes to providing us with each of these substances.

Here is the cutout of a human body. Create a pie chart: collect information, look for the major components of our body, choose a color for each one of them and paint an area of the cutout proportional to its actual amount.

(Percentages may be helpful...)



LEARNING WHILE ENJOYING

“Man is what he eats,” according to the philosopher Feuerbach, and he was right...

Paste two of your photos below, one when you were a baby and one of today.

How much did you weigh when you were born? And now?

Where did your body get the material to grow from?

WHY DO WE GAIN WEIGHT?

Because the calories we bring in with food are more than our body burns moving and living: the body converts this excess into fat storage.

Between 2,000 and 2,500 kcal (8.373 and 10.467 Kj) is a reasonable amount of calories per day at your age. But what does it concretely mean?

Choose 5 foods you especially like, write them down here and for each one state how many calories a portion gives...

1

2

3

4

5

What have I learnt?

Now take stock of the situation: after performing activities, searching, thinking, discussing... what have you learnt that you did not know before? Write it here.

LEARNING ABOUT FOODS

If you ask the fishmonger: “Could I have two hectograms (7 oz) of protein and 5 grams (0.17 oz) of omega 3, please?” ...

Or if you want the baker to give you: “70 grams (2.45 oz) of complex carbohydrates”... Or if you find yourself asking the greengrocer: “100 mg (0.003 oz) of vitamin C and 450 mg (0.015 oz) of beta-carotene”... probably some shopkeeper would think you are a little “bizarre”, or he would get angry believing you are mocking him. And he would be right: when we do the shopping, what we are buying is food, not nutrients!

Yet, without realizing it, we are choosing a food not only because we like it, but also because we think it can fully and moderately provide us with all we need to stay healthy. This happens because there was a time in his history when man learnt to recognize those foods that give him

energy, like bread and oil, those essential to growth (such as meat), those that help prevent many diseases (such as vegetables). When we go to the supermarket, we end up buying what we instinctively think makes up a healthy diet. Yet, this automatism has actually become more difficult and less reliable: in the last decades, the range of available food has extended significantly. New products continue to appear, some have a very complicated composition, we may get confused and when it comes to buy real genuine food we have to pay more attention.

In short: we must learn to keep our eyes wide open and be even more familiar with food.

ACTIVITY 1 - LABEL: A TOOL FOR UNDERSTANDING

Cookies, snacks, prepackaged meals, sauces... many of the foods we buy are usually made up of several ingredients combined together.

In accordance with the law, ingredients must be listed in descending order of predominance: the ingredient found in the greatest quantity is listed first, and it is followed by ingre-

dients present in gradually less quantities. Next to the composition label, another useful label is now mandatory: the nutrition facts label. It lists calories, carbohydrates, proteins and fats in 100 g (3.52 oz) of product or a portion.

The comparison between these two labels can be very helpful. Choose a packaged product you

like, a snack, an ice cream or whatever you prefer. Then cut the ingredient list out and paste it on the left side of the following table, while on the right you will paste the nutrition label.

Then choose three colors: green for carbohydrates, red for fats and blue for proteins.

Browsing the list of ingredients, can you paint each one of them according to the main nutrient it provides? Does it seem to you that there is a match between the ingredients and the nutritional composition? Did you expect anything different? Is there any ingredient you could not decipher and paint? If so, find out more on the internet... Discuss the results with your teacher and classmates.

THE FOOD I HAVE CHOSEN IS: _____

LIST OF INGREDIENTS

NUTRITION FACTS LABEL

ACTIVITY 2 - A HIGH QUALITY SHOPPING

You should always go to the supermarket with a shopping list in order to avoid being caught by unnecessary purchases.

But what we are suggesting now is that you write a quite different shopping list: pretend being that

strange person we talked about at the beginning of this card.

Here it is: nutrients to put in your shopping cart are reported on the left. For each nutrient, put into the right column at least 5 foods that contain it in large

quantities. You can also arrange a competition with your friends.

To check if your results are correct, you can look for the composition on this site: http://www.inran.it/646/tabelle_di_composizione_degli_alimenti.html

PROTEIN	
FAT	
COMPLEX CARBOHYDRATE	
CALCIUM	

LEARNING WHILE ENJOYING

Fruit of all colors

A good tip? Eat fruit and vegetables of all colors! Do you know why? Because the color of vegetables often turns out to be evidence of a high content of useful substances for our body.

Yellow-Orange, Red, Purple, Green, White:
these are the colors of health.

Search the internet at least three vegetable for each color and learn which useful substances are particularly rich in.



AS THE SAYING GOES...

“An apple a day keeps the doctor away”, “Life is just a bowl of cherries”, “Those who use garlic are never wrong”, “take it with a grain of salt”... These are just some of the idioms regarding food.

They are mostly linked to specific characteristics of foods, which folk culture discovered before science ever did.

With your classmates, find as many idioms about food as possible, then try to explain them “scientifically”. Perhaps some of them will not prove to be that “wise”, but many of them certainly will....



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NUTRITION: A TYPICAL DAY

“Between saying and doing...” as the old saying goes. And when it comes to healthy eating, this is particularly true.

The most recent records from the program named **OKkio alla Salute**, promoted by the Italian Ministry of Health together with the regions and the Italian Ministry for Education, University and Research show that in Italy about a child (8-9 years) on three weighs more than he should. Among the reasons, a series of wrong eating habits.

For example, 9% of children skip breakfast and 31% have an unbalanced and insufficient breakfast. Moreover, 22% of children do not consume fruit and/or vegetables daily. Not to mention that the number

of those who habitually drink sugary sodas is too high... **Yet: who does not know that breakfast is essential? And that fruit and vegetables are important foods? And that overdoing packaged beverages is definitely not good for your health? ...** Right: it is one thing to know something and another thing to actually put it into practice. Between saying and doing.. there is what we call “goodwill”. It is worth making some effort to eat better, because there is nothing more beautiful than feeling good, in shape, in high spirits. And a healthy diet is really the best way to get to feel ... SUPER!

Activity 1 - BREAKFAST OF CHAMPIONS

That beats everything: despite being the less abundant, the morning breakfast is considered the most important meal of the day, yet it is also the most overlooked. How many of you have breakfast every morning? And what kind of breakfast is the most popular? Don't worry, you are not being asked to write down in your notebook

what you eat for breakfast during the week... maybe this could be interesting too, but it is definitely more interesting to organize a “competition for the best breakfast” in your classroom.

You and your classmates can make an arrangement: in one week's time, each one of you prepares at least one “perfect” breakfast at home and takes a picture of it

(smartphone is fine and you can work on Instagram if you use it in your classroom), name the file of each breakfast with your name and then copy all the images in a folder so you can see them together at school.

You yourselves are the judges, together with your teacher: which is the most complete, tasty and balanced breakfast?

You can also collect recipes in a nice cookbook for breakfast: ideas should be spread, especially if they are healthy and tasty...



Activity 2 - YESTERDAY AND TODAY

Nutrition has been changing a lot for the last decades: our pace of life and habits, even the kitchens in our houses are different. Nowadays, there is a lot of foods that current elder people could not even imagine when they were your age... Their own experience, their memories and stories can provide valuable starting points to reflect on the eating habits of yesterday and today, on how they have changed for the better and for the worse, perhaps to realize that some good habit may still be recovered...

In your classroom, prepare a questionnaire to be submitted to your grandparents and elder people and draw a picture of how their diet was. Then analyze the answers and compare them with those you would give to the same questions. You could make two billboards, “yesterday” and “today”, then highlight and interpret the main differences. Photographs and images on the internet might be helpful.



WRITE HERE SOME QUESTIONS THAT COME TO MIND:



LEARNING WHILE ENJOYING

Scenes from everyday cafeteria

Is there a cafeteria in your school? Have you ever noticed how many different kinds of behavior? There is the one who devours his dish in the twinkling of an eye, to be the first to go out and play, and the one who always delivers his tray last; there is the one who never eats anything, next to the one, on the contrary, who would eat until he bursts; there is the little calm boy who eats as if he was at a gala dinner and the one who looks like a pig.

Not to mention the “special” occasions: the happiness when pizza and ice cream are served or, on the other hand, the sadness related to certain soups.

Those who experience it every day hardly realize the wealth of “color” at the cafeteria, unless someone else, an outside and detached observer, notices it for you. It is

like taking pictures of you while on holiday and then see them again after a long time, “Is it really me? How embarrassing!”



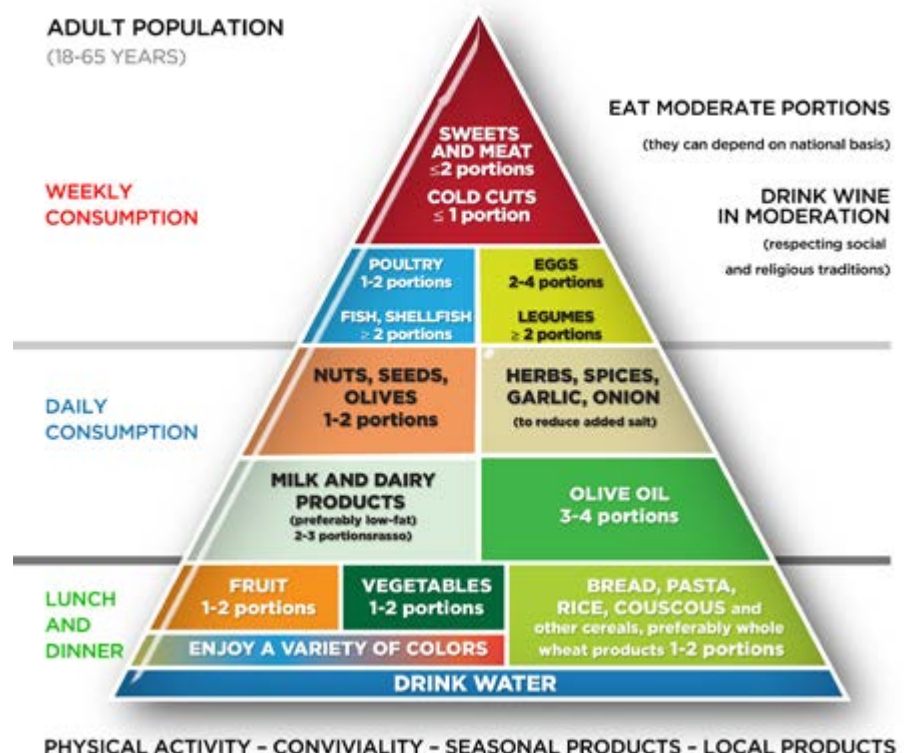
The proposal, to be discussed in your classroom with the teacher, is to make a **filmed documentation** of the lunch time at your cafeteria, to identify, with irony and humor, the characteristic aspects, the typical behaviors and the most personal ones.

A good selection of images and an accurate editing should be funny and, at the same time, provide viewers with many starting points for a self-critical analysis...

Discovering the pyramids...

The “healthy eating pyramid”. In the “encyclopedia” of this form there is one pyramid that shows pretty well the criteria of eating properly, but it is not the only one existing. Even in the world of nutrition, some people want to have their say in a somewhat too rough way. If you surf the internet there is plenty of “healthy eating pyramids”, which often differ significantly one from another.

Try to make a search, print the ones you find more appealing and discuss them in your classroom...



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