HOW TO EAT FOR YOUR HEALTH

Martin Guy <martinwguy@gmail.com>
January 2024 – March 2025

Food is the first medicine.
— Hippocrates

When I was small, I ate almost everything they put in front of me. When I was twenty-five I found myself in the kitchen, thinking about making something to eat, and surprised myself when I realized that I just wanted to please my mouth, not satisfy my stomach (to be specific, I was thinking of spaghetti with lemon curd!) and it was then that I started studying diet or, more precisely, nutrition.

In the 50's, some experiments were carried out in which they poked a tube down some poor volunteers' throats and into their stomachs, gave them different things to eat and drew out the gastric juices every now and then to follow the various chemical reactions that the stomach performs to see how it works. Here's what they found:

FRUIT

Fruit doesn't need much work doing on it in the stomach. It's mostly made up of clean water, simple sugars (glucose and fructose) and a solution of vitamins and minerals. If you eat it on an empty stomach, within an hour it goes down into your intestine where the nutrients are absorbed and go into your blood. There are three families of fruit, and each family has a slightly different digestion:

- Acid fruit: lemons, oranges, grapefruit, kiwi, pineapple, grapes...
- Semi-acid fruit: Apples, pears, peaches...
- Sweet fruit: figs, prunes, dates...

The best breakfast would be fruit of a single type or a mixture of fruit from the same family, giving you a quick recharge of energy that's ready to use. For their nutritional value, the best are red grapes or a freshly squeezed lemon with water which wakes you up better than a coffee does!

PROTEIN

Protein, which is necessary to grow muscle, to repair damage and to reconstruct existing tissues, needs a longer digestion of about four hours and it's an acid digestion that splits the long protein molecules into amino acids, which are the building blocks we use to make human proteins. They too come in several different families, each of which needs a different type of digestion:

- Red and white meat. For your health, white meat is better (chicken, turkey...) as it's less toxic and easier to digest. However, if you do eat meat, it must have died recently because, as time goes by, it develops more and more of a substance that goes by the marvelous name of "cadaverine" which is toxic and smells of rotting corpses.
- Fish. As cold-blooded animals, the oils they contain, which are fabulously nutritious, stay liquid at room temperature unlike those in meat which go solid when they cool down.
- Eggs are a nutrient bomb but are a bit heavy going, full of saturated fats including cholesterol. At most, a little every now and then.
- Dairy products – milk, cheese (better fresh ones like mozzarella or cottage cheese, not the hard mature ones), yogurt – are the perfect food for cows under six months old. For human beings rather less so. The Chinese call breast cancer “the rich women's disease” probably because, in a poor country, only the rich can afford to drink milk while the poor eat mostly rice and vegetables.
- Oily fruit: walnuts, hazelnuts, peanuts, almonds... Seeds (sesame seeds, sunflower seeds, as well as olives and avocado pears) share the same digestion as nuts and they go together well.
- Legumes: beans, peas, lentils, chick peas...
- Mushrooms, which contain more protein per gram than a beef steak.

Each of these protein families requires a different digestive chemistry and, when there are more than one kind of them together in a single meal, the stomach has a hard time of it. Either it tries to do several types of digestion at the same time or it digests some and ignores others, which then go down to rot in your intestines in the following 48 hours. Whoever wrote in the Bible that you shouldn't eat milk and meat at the same time was right!

CARBOHYDRATES

Carbohydrates provide the body's energy, both to move the muscles and to drive the other chemical reactions that the body performs, but first we have to split the long carbohydrate molecules and make simple sugars out of them, of which glucose is the shortest one and is the body's petrol. They too need four hours in the stomach and there are two families of them:

- Grain: wheat, oats, rice, millet...
- The starchy ones: potatoes, sweet potatoes...

Their digestion starts in the mouth thanks to the ptyalin that saliva contains, which is an enzyme that starts splitting the carbohydrate molecules to make simple sugars out of them. In fact, when you chew on a cracker, at first it tastes dry but after 30 seconds it become sweet. However, to be able to work, ptyalin needs an alkaline environment. If it finds an acid one, first of all it stops working and if its gets more acid it is destroyed, and that brings us to

DIETARY COMBINATIONS

The acids of the protein digestions and the alkali of the carbohydrate ones are chemical opposites: they cancel each other out. Either a solution is acid or it is alkaline, and if you want to know what happens when they meet, put a teaspoon of bicarbonate of soda into half a glass of vinegar. A meal that is easily and fully digestible and nutritious, therefore, contains EITHER one kind of protein OR one of the two types of carbohydrate, with all the salad and vegetables you want, not both at the same time. After four hours you're ready to eat again.

Now, let's see what happens in your stomach when you eat a traditional Italian meal. Let's start with the first course: pasta with a vegetable sauce. "Carbohydrates!" your stomach says and starts doing an alkaline digestion. Then the second course arrives: meat or fish. "Protein!" the stomach exclaims and starts making acids, first to cancel out the alkali it's already made for the carbs, then working towards the level of acidity that's necessary to split proteins. All this is hard work and results in a strange mixture of chemical compounds while the half-digested pasta starts fermenting. Now let's pour the pudding on top of all that, which is mostly refined sugar that only increases the fermentation and let's finish with a coffee that shocks the nervous system and sends your blood to the brain, not to the stomach where it's needed, and then a cigarette (I know you

don't smoke) which causes the release of adrenaline that makes your blood to top the muscles, ready for action. Let's put a shot of brandy of to of all that, which has nothing to do with any of it, or a liter or two of beer od wine, jus to dilute the mixture and make the digestion less effective, if not completely impossible, and we've made an incredibly strange brew in our stomachs. No wonder Italians call indigestion "confusion of the stomach", because it's exactly that. It doesn't know *what* to do. In the end, six or eight hours later, when it's finished digesting the protein and had a go at finishing the interrupted digestion of the barbs, the stomach gives up and passes the mess on to the intestine where it carries on fermenting and causes, as the years go on, the usual bloated pear-shaped belly.

A reasoned diet instead – fruit of one kind for breakfast followed, after at least an hour, by two meals, one of protein and one of carbo, at least four hours apart – stresses your stomach less and nourishes you more. If you're going to have an busy afternoon, have a carbohydrate meal for lunch and a protein one for dinner. If instead you have a tranquil afternoon ahead but will need energy in the evening, have a protein one at midday and a carbo one in the evening.

CONCLUSION

These aren't iron rules. You can eat whatever you want and still survive but, when you have a better idea of how digestion works, you can choose more wisely from whatever is on offer and select the ingredients of each meal. As a one-liner: fruit on an empty stomach and, in each meal, just one kind of strong food with all the salad and vegetables you please.

The long road is the one that takes you to knowing about all the things your body needs (vitamins and minerals) and where you can find them, not to mention the range of strange microelements in herbs and spices. You never stop learning about these but, for the moment, knowing that I don't know, I add a daily pill of vitamin/mineral supplement, the most complete one I can find in the supermarkets, to be on the safe side and to avoid malnutrition.

And with all that, long life and good health!