

Transforming food

TRANSFORMATION INTO NUTRIENTS

Imagine an experiment with a tube perforated with several small holes. If we pour water into the tube, it easily comes out of the holes. The same thing can be done with sand.

Once again, the grains of sand pass through the holes easily. If we use pebbles instead, they will go from one end of the tube to the other, without passing through any of the lateral holes. These pebbles must be made smaller if they are to pass through the holes.

The digestive tract does the same with food, without us even realizing it. It transforms the food we eat into simple nutrients, so that these nutrients can pass through the intestinal wall. The body can absorb some nutrients directly. This means that they can pass through the wall of the digestive tract, just like water and sand passed through the perforated tube. Here we are obviously not talking about sand, but about **vitamins**, **minerals** and some **simple carbohydrates**.



Vitamins



Minerals



Simple carbohydrates



Other nutrients are more complex and must be transformed, just like our pebbles. For example, **lipids** must be transformed into **fatty acids**.



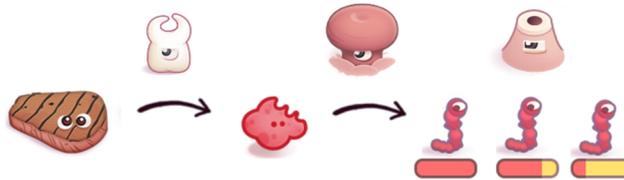
Proteins must be transformed into small **peptides** and **amino acids**.



Complex carbohydrates, such as starch, must be transformed into **simple carbohydrates** such as glucose.

THE TRANSFORMATION OF FOOD IN DIGESTIX

DIGESTIX illustrates this transformation of food, even though the game has been slightly simplified. Players position the digestive pieces so that food is first transformed into fragments and then into nutrients.



You need to manually collect simple nutrients, such as vitamins and minerals. This is especially true for water, which you need to collect to avoid dehydration.

The complex nutrients are absorbed automatically once their level bar is empty. So for example, if the level bar of a lipid moving along the digestive tract is empty, it means that it has been completely transformed into fatty acids. As a result, the level of lipids will automatically increase.
