

### Science and cooking

Several decades ago, the Catalan chef Ferran Adrià and his restaurant El Bulli revolutionised the world of cooking. Considered the best chef in the world for many years, he closed the doors of his restaurant El Bulli forever. Three years later, he opened the restaurant as a centre of culinary research. Apart from more than a hundred of ingredients, science was cooked at El Bulli. The food was not cooked in a traditional way; new ways to handle and cook food were invented in order to get a creative cooking. Frozen dark chocolate air, bread with liquid tomato, cold-hot pea soup, and sweet papyrus with a truffle and caviar substitute are some of the popular meals that revolutionised the world of cooking. To be a good cook is not enough to follow the path of research; it is necessary be a person with an innate curiosity. The team was obviously composed of cooks, but there were also chemists and industrial designers, because they often had to invent new devices to implement new techniques.

This is the case of the cavierer, the syringes used to elaborate the famous caviar substitute, or the teppan nitro, a kind of pan to cook with liquid nitrogen.

But the most famous technique created at this restaurant is the spherification. This technique consists of immersing a liquid with alginate (substance extracted from seaweed) into a base of water and chloride, so that the drops will remain in suspension in the liquid thanks to a membrane. The content of the drops flows when the membrane breaks. The progresses of this cook at his restaurant and at Alicia Foundation have been applied to many fields; they have been useful to make more creative diets for people with allergies, such as coeliac, people with diabetes and even for astronauts!

**Reading comprehension and reflection**

1. Translate into Catalan the following words from the text. Use a dictionary if you need to.
  - a) Handle
  - b) Truffle
  - c) Chemist
  - d) Device
  - e) Caviarer
  - f) Syringe
  - g) Spherification
  - h) Chloride
  - i) Drop
  - j) Flow
2. What Name one of Ferran Adrià's best known cooking techniques and explain what it consists of.
3. What is molecular gastronomy?
4. Why do you think Ferran Adrià is so well regarded in his field? Do you know other cooks who use similar techniques?
5. Here you can find different items that Ferran Adrià uses. Relate the two columns:
  - a) Algae
  - b) Siphon
  - c) Emulsifiers
  - 1) Enabling the mixing of liquids that normally don't mix
  - 2) Capacity for making gelatines
  - 3) Possibility for getting foams
6. The food industry has always had scientists doing research to offer new products to consumers. In groups, analyse how scientific research has influenced the food industry and our nutritional eating habits.