

# “Sweeteners are a controversially debated topic with the public”

**Professor Maged Younes is Head of the Panel on Food Additives and Flavourings at the European Food Safety Authority (EFSA). The committee assesses the health risks of food additives for all EU countries. These include controversial substances like titanium dioxide or phosphates.**



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**Professor Maged Younes** is a chemist and toxicologist. In 2018, he was elected Chairman of the EFSA Panel on Food Additives and Flavourings. He is also a member of the EFSA's Scientific Committee.

**Mr Younes, a food additive requires authorisation if it is going to be used in the EU. 316 substances are currently authorised. How does the approval procedure work?**

First, the manufacturer must submit an application to the EU Commission, which then is forwarded to EFSA. Our panel assesses exposure and health risks using the scientific toxicity data provided. On the basis of our assessment, the EU Commission decides whether a substance is authorised and whether there are any restrictions on its use. For example, we can propose an acceptable daily intake – the ADI value – which should not be exceeded.

**The panel also deals with substances that have already been authorised and that need to be reassessed by 2020. Why is that?**

The authorisation for some food additives dates back decades. Therefore, the EU decided in 2008 that all additives approved before 20 January 2009 must be re-tested. Since then, the substances have been tested in accordance with the latest scientific findings. We examine whether there is still a scientific basis for using these substances or whether there may be a risk. We have reassessed around 60 percent of food additives. We must reassess the remaining 40 percent by 2020. I hope we succeed. The sweeteners group is important to me because these substances are a controversially debated topic with the public.

**Phosphates, which the panel reassessed recently, are also under discussion. An ADI value was determined for the first time. How did this come about?**

Evaluating phosphates was difficult. Phosphates are found in the human body. They are a natural component of foods such as cheese, sausage and fish. And they are also additives for technological applications in coke, milk powder or meat products, for example. The problem: a phosphate deficiency is detrimental to our health; an excess may be just as harmful. The committee finally managed to calculate an acceptable daily intake. This takes into account ingesting phosphate via additives and via food.

**Titanium dioxide – a white colour pigment for baked goods and chewing gum – is also the subject of controversial debate. In the EU it is authorised as E171. The substance is suspected of being carcinogenic. Is there anything to worry about?**

In our reassessment in 2016, we concluded that the toxicological data did not include any health concerns. However, there are slight uncertainties as to how the substance affects the reproductive system. We have therefore recommended further studies to close the data gaps. Titanium dioxide is an interesting substance for research because it also comes in the form of tiny nanoparticles. New data indicates that the number of nanoparticles is significantly higher than expected. ■