



### Only enjoy well cooked beans

In modern kitchens, gentle steaming or simmering is often preferred – this keeps vegetables crunchy and fewer vitamins are lost. However, caution is advised with some vegetables. French beans, for example, should not be eaten raw. When preparing them, it's essential to ensure sufficient heating and cooking time, the BfR advises. The seeds and pods of the green French bean contain phasin, which is a lectin protein. The protein is harmful to human health. It can cause symptoms even in small doses and is only destroyed by high temperatures. Typical symptoms after eating raw or insufficiently cooked beans include abdominal pain and nausea; in severe cases, bloody diarrhoea, fever and a drop in blood pressure are possible. Children are particularly at risk due to their low body weight. Such lectins are also found in other types of beans. Anyone who grows beans in their own garden should educate children about the danger or make sure that they do not have unsupervised access to the plants.

**More information:**  
BfR Press Release No. 32/2021 of 09 July 2021

### Titanium dioxide: no longer a food additive

Chewing gums and fine bakery wares used to have one thing in common: they could contain the white colour titanium dioxide, labelled E171. The white pigment makes food look more appetising. However, the use of titanium dioxide as food additive E171 will no longer be permitted. The EU Commission revoked the authorisation in January 2022 because its use can no longer be considered safe. The Commission based its decision on an opinion of the European Food Safety Authority (EFSA). It came to the conclusion that genotoxic effects cannot be excluded with sufficient certainty. The BfR mainly agrees with the expert opinion, but also points out gaps in knowledge. It's still unclear to what extent and how titanium dioxide can damage genetic material. What role do the size, shape and crystalline composition of the particles play? Answers to these questions still need to be found.

**More information:**  
[www.bfr.bund.de/en](http://www.bfr.bund.de/en) > A-Z Index > Titanium dioxide



### Coronaviruses on glasses: just wash them away?

Whether you're at home, in the canteen or in a restaurant – during the coronavirus pandemic, many have wondered whether coronaviruses such as SARS-CoV-2 could also be transmitted via drinking glasses. How stable are coronaviruses on glass? And how can they be removed? Researchers at the BfR have investigated this in a study. The results show: coronaviruses can remain infectious for days to weeks after drying on glass, depending on the exposure to light. While they were detected for up to seven days in daylight, they were stable for up to 21 days in the dark. It's therefore important that drinking glasses are cleaned sufficiently. The good news: most commercially available dishwashing detergents could sufficiently inactivate coronaviruses after only 15 seconds at room temperature (23 °C). No infectious coronavirus could be detected after cleaning with a manual glass washer as well. Generally, care should be taken when cleaning drinking glasses to change the rinsing water, to use the concentration of rinsing agent recommended by the manufacturer, and to sufficiently remove dirt from the glass.

**More information:**  
Schilling-Loeffler, K. et al. 2022. Coronaviruses are stable on glass, but are eliminated by manual dishwashing procedures, Food Microbiology, doi: 10.1016/j.fm.2022.104036