

Our daily mix of aluminium

Food, water and cooking utensils can contain aluminium. Also certain cosmetics. Are we taking in too much aluminium?

Our body does not need aluminium. If too much enters the body it eventually can have damaging effects on the nervous system, kidneys and bones. This is why the BfR has carried out a risk assessment, estimating for the first time the total aluminium intake of the German population. Among other things, intake from food, cosmetics, cooking utensils and packaging was taken into account.

The current BfR study shows that, depending on dietary habits, teenagers and adults already consume up to 50% of the acceptable healthy amount through food and beverages. Adding on contributions from packaging, cooking utensils and cosmetics, the health-based guidance value can be exceeded.

Mindfulness with aluminium products

Aluminium is soluble in acids, bases or saline solutions. Beverage cans or yoghurt pot lids, for example, are coated on the inside to block aluminium from migrating into especially acidic or salty foods. Otherwise as with some aluminium pans, cooking spoons, grill trays or for take-away meals, aluminium can easily migrate into food, such as tomato sauce, onions, fruit, salted herring or marinades. Certain cosmetics, such as toothpastes claiming a “whitening effect” or antiperspirants, can also contain aluminium compounds and contribute to the overall intake.

Tips for minimisation

Giving up certain food is impractical since aluminium occurs in similar quantities in many foods. The general recommendation here is for diversity and variety. Those wanting to reduce their aluminium intake should use coated aluminium trays, reusable BBQ trays made of stainless steel, for example, and they should avoid aluminium baking trays and aluminium foil for acidic or salty food. The sparing use of Al-based whitening toothpastes can also significantly reduce aluminium intake, as the BfR’s study showed. Aluminium espresso makers are not a problem because a protective layer forms when the coffee is prepared. However, one should not put it into the dishwasher as this destroys the protective layer.



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Health risks from using antiperspirants containing aluminium chlorohydrate everyday are unlikely based on current information.

Antiperspirants containing aluminium: health risks are unlikely

But what about when aluminium is absorbed through the skin? New clinical data has prompted the BfR to re-assess the aluminium uptake from antiperspirants via the skin. Based on these data, the uptake is much lower than previously estimated. According to the current state of scientific knowledge, adverse health effects are unlikely if antiperspirants containing aluminium chlorohydrate are used on a daily basis. Their contribution to the total aluminium intake is after evaluating new data significantly less than previously calculated. ■

More information:
www.bfr.bund.de/en > A-Z-Index: aluminium