

STATEMENT



The BfR (the German Federal Institute for Risk Assessment) has issued a [press release](#) and a [position paper](#) (full version in [German](#) only) on the release of aluminium into acidic foods from uncoated aluminium foil containers when using the “Cook & Chill” procedure for catering applications mainly in Germany. This involves hot filling of the cooked food into the containers, cooling and refrigerated storage for three days, reheating and storage at more than 65 °C for 2 hours.

The three foods tested were sauerkraut juice, apple puree and tomato passata. At the end of the process, the measured levels of aluminium exceeded the Council of Europe (CoE) Specific Release Limit of 5 mg aluminium /kg food in all three foods. The majority of the release occurred during the final storage at elevated temperature.

From these results, they concluded that an adult with a daily consumption of 200g of such acidic foods would receive about 0.5 mg aluminium/ kg body weight/ week. In their opinion, this would significantly increase the likelihood of the individual exceeding the Tolerable Weekly Intake (TWI) of 1 mg aluminium/ kg body weight/ week set by the European Food Safety Authority (EFSA). They point out that this does not mean that there will be an adverse effect on health but that margins of safety used when setting the TWI will have been reduced. Therefore, such additional aluminium intake should be minimised.

The European Aluminium Foil Association e.V. (EAFA) comments on this release as follows:

1. For these tests, BfR implies a “misuse” of uncoated aluminium foil containers by professional and institutional catering companies (in contradiction to the labelling) by testing the aluminium release into acidic foods with the Cook & Chill procedure. In general, catering companies are professional operators, who follow very strictly in all their operations the European and national food contact legislation. That includes the choice of appropriate and correct packaging. Suppliers of foil products support this choice with their recommendations and labelling. A proper use of the products is only when these instructions are followed.
2. BfR states that the uncoated aluminium foil containers used in the experiments were correctly labelled as follows: “not to be used for acidic or salty foods”, ... Therefore, it's clear that the BfR made a misuse of the aluminium foil container, which is not recommended. The results from testing of any material improperly used and not following the manufacturer's instructions are misleading.

3. The foods tested (sauerkraut juice, apple puree and tomato passata) are highly acidic with pH in the range 3 – 4.5
4. The experiments were conducted under the cooking and chill procedures followed mainly by canteens, which represent a very specific and limited application for uncoated aluminium foil container.

In none of the typical uses of aluminium foil container, e.g. catering, take-away, domestic or industrial use in ready-to-eat meals, will aluminium foil containers be normally used under conditions like those simulated in tests. Therefore, test results cannot be applied generally to aluminium foil containers. Furthermore, the food selected are never or very seldom used purely for catering. Sauerkraut juice and tomato passata are only part of the sauerkraut or a pasta dish. It is irrational to prepare and keep apple puree warm with the Cook & Chill procedure.

5. BfR recommends only for canteens for cooking and chill procedures using coated aluminium foil container or alternative materials to reduce the aluminium intake without evaluating other potential health risks from those to the consumer groups in question.
6. Even a higher release of metal into the food does not necessary mean that the TWI of 1mg/kg body established by EFSA is exceeded, too. There are available many scientific studies about release of aluminium into the food.
7. BfR highlights in the [position paper](#) (p2) with regards to the risk profile as follows: Important data are contradictory or missing (mainly the total exposure of the population to aluminium and scientifically proven relevant effects on consumer's health).
8. There are scientific studies already available on the release of aluminium in foods made on the basis of the real weekly average diet of the population divided by age group, as provided by EFSA and ANSES (???), which show in all cases that the amount of aluminium released in foods is well below the limit of 1mg/kg of bodyweight established by EFSA.
9. Further information about aluminium and health can be found at [link](#).

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