

WHEN SUBSTANCES MIGRATE

We use food and kitchen utensils when handling food, confident that they do not pose any health risks. However, if used incorrectly, there are materials that can leave traces in our food that are harmful to our health.

Hot, cold, sour, sweet, salty, greasy, moist – our food is diverse and must be packaged and handled in different ways. Which materials are suitable for this is a science in itself because they should not transfer any harmful substances to our food.

Manufacturers of everyday utensils are given guidelines and recommendations on how to meet this general requirement, for example, in the EU Plastics Regulation and the “BfR Recommendations on food contact materials”. These ensure chemical substances passing onto food do not pose a health risk.

However, there is not one substance from which all food contact materials can be made, just as there is not one intended application, temperature or food. Material diversity is technically necessary depending on the product. Therefore, instructions and restrictions are required so that consumers know how to use the items safely. Important: consumers must pay attention to the “intended use” and use the items correctly to protect their health.



BEESWAX CLOTHS

Beeswax clothes are popular packaging alternatives to aluminium foil and cling film. However, there are a few things to consider when making them. The cloth must be suitable for food contact, otherwise it can release components e.g. from the dye. Unsuitable dyes may contain carcinogenic primary aromatic amines. The beeswax must meet the EU purity criteria as a food additive. Otherwise, it may contain mineral oil residues or pesticides, which then transfer to the food. Greasy foods dissolve out wax and the jojoba oil sometimes contained in the cloths. The data on the latter is currently insufficient for a comprehensive risk assessment. It is therefore better to pack only fruit, vegetables or bread. Beeswax cloths cannot be cleaned at high temperatures. Do not pack raw, animal-based foods in them to avoid transferring germs that are hazardous to health.

More information



BfR FAQ
“Beeswax cloths: what should you look out for?”

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More information



BfR FAQ
"Aluminium in food and products intended for consumers"

ALUMINIUM FOIL

Aluminium has been used in the food industry in various forms for decades, but using it correctly is very important. Aluminium foil is not suitable for contact with salty and acidic foods, such as sliced apples, tomatoes, rhubarb, pickled herring, marinated meat or cheese. These can dissolve aluminium ions from the material, which are then eaten with the food. It is important that grill or menu trays made of aluminium are coated; otherwise, the same applies to them.

BEER CAN CHICKEN

The trend of roasting chicken using a beverage can and putting it on a barbecue or in the oven is concerning from a health perspective. The exterior of commercially available beverage cans is usually printed with inks. Tin plate or aluminium, from which the can is made, serves as a barrier between the beverage inside and the external ink and paint coating. It is not intended for these kinds of cans to be used as a "platform" for grilling meat. Heat destroys the can and may cause substances from the ink and paint to transfer to the chicken.



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More information



BfR communication
"BfR advises against beer can chicken" (pdf)

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BfR communication
"BfR advises against preparing food in pop-it fidget toys" (pdf)

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POP-IT FIDGET TOYS

"Pop-it fidget toys" are colourful, differently shaped silicone toys to squeeze and "pop", passing the time and training dexterity. But can they be used to bake cakes or shape ice cubes and pralines? Preferably not. What may seem like a clever trick at first may actually be a risk to your health – if undesirable substances from the silicone pass into the food. If a manufacturer does not explicitly label its fidget toy with the note "For food contact" or with the cup-fork symbol, it should not be used for food preparation. The reason: toys may be made of substances that are not suitable for contact with food. "Foreseeable use" must also be accounted for, but baking and other contact with food is usually a step too far.

More information



BfR communication
"BfR advises against preparing food in pop-it fidget toys" (pdf)

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BAMBOO TABLEWARE

Mugs, bowls and children's cups: ecologically trendy reusable crockery includes materials such as stainless steel, glass or plastic and also "bamboo tableware". Bamboo tableware is made of the plastic melamine-formaldehyde resin to which bamboo fibres have been added as a filler. Bamboo tableware is now de facto banned in the EU but can still be found in many households. At temperatures above 70 °C, formaldehyde and melamine can be released and transferred to food – and in quantities that can be

harmful to health if ingested over a longer period of time. Formaldehyde damages the stomach, among other things; melamine damages the urinary tract and kidneys. Therefore: do not heat crockery and bamboo tableware made of melamine-formaldehyde resin in the microwave and keep the beverage temperature in cups below 70 °C.

More information



BfR FAQ
"Tableware and kitchen utensils made of melamine-formaldehyde resin"