Bye-bye, plastic straws

From July 2021, straws will be a disposable plastic product that can no longer be sold in the EU. There are plenty of alternatives that can be used as food contact materials and, therefore, also for straws.

A picnic in the park without plastic utensils, cocktails at the bar without a plastic straw – this has been determined in the "EU Directive on the reduction of the impact of certain plastic products on the environment". Germany has already implemented this directive into national law, with effect from 1 July 2021. In doing so, frequently used everyday products, such as straws, which until now have been predominantly made of plastic, will have to be made from other materials.

Metal, paper, glass, etc. – what should consumers look out for? First things first: regardless of the material, straws used repeatedly must be thoroughly cleaned before initial use and also every time between uses. If possible, use a thin glass brush under warm, running water or wash in the dishwasher at 60 degrees Celsius. If thorough cleaning of the straws is not possible, the BfR recommends that multiple-use straws are not used for reasons of hygiene. Furthermore, straws should not have any sharp edges and should also be replaced if there are initial signs of material damage (signs of wear and tear).

BfR2GO presents the most important alternatives to plastic straws at home.

"Straw straws"

Straws made of straw as an alternative? An obvious option. However, the natural material may contain invisible germs, mycotoxins, such as deoxynivalenol (DON), or other undesirable substances, such as residues from plant protection products. These could enter the body when drinking and make you ill.

Paper straws

Paper straws can also be a suitable disposable alternative to plastic straws. To make sure that they remain robust and do not immediately become soft in the drink, epichlorohydrin-based resins are often added to them during the manufacturing process. These resins can release potentially harmful substances into the drink, such as chloropropanol. For this reason, companies should follow BfR recommendations for the manufacturing process – then there will be no health risks when enjoying your favourite drink with a paper straw.

Stainless steel straws

This material is a very suitable alternative to plastic. It can be reused as often as required, does not rust and can be used for both cold and hot drinks. Stainless-steel straws should be cleaned after each use, for example, with a brush or in the dishwasher. The Council of Europe's requirements for metals and alloys are important for manufacturers of this kind of straw. They determine maximum limits for the release of chemical elements, including 21 metals such as nickel, chromium and lead. The aim of the requirements is to release as few undesirable substances as possible.

Macaroni or similar pasta

If a straw is only used once, then there is no argument against the use of durum wheat (e.g. raw macaroni pasta) from a health perspective. Only industrially produced noodles that do not contain egg as an ingredient should be used. The extent to which this tastes good or whether the pasta becomes soft in hot drinks and then makes the drink taste a bit like pasta is something you have to decide for yourself.

Bamboo straws

Uncoated straws made of bamboo are a natural material just like straws made of straw. An advantage of bamboo is its stability. In comparison to straw, it is significantly more durable and can be used several times. However, special attention must be given to cleaning since bamboo drinking straws have a rougher surface than glass or stainless-steel straws, for example. Germs can stick to it and enter the body unseen when drinking.

Silicone straws

This soft material is a suitable for food contact. However, silicone straws should be thoroughly cleaned after each use. It is best to use a thin cleaning brush or similar. This is important so that no germs stick to the inside of the straw, which you would then drink the next time you use it. Manufacturers should follow BfR recommendations for silicone as a food contact material. Specifically: at the end of production in particular, heat the straws up to a high temperature once to remove volatile substances before the products are put on the market.

Glass straws

Watch the liquid go up the straw when drinking – this is possible with glass straws. The material has been used in the food sector for many centuries without any problems. Glass straws are reusable because they are easy to clean. You can see if they are clean on the inside. The disadvantage: glass is fragile and there can be sharp-edged fragments. This is why glass straws are not suitable, especially for small children. However, you can now get shatterproof glass. ◘

More information:
www.bfr.bund.de > Press > Mediathek (in German)