

## **Beeswax cloths: what should you look out for?**

BfR FAQ of 06 April 2021

Beeswax cloths have been available on the market for a while as an alternative to aluminium foil or cling film. For example, packed lunches or food that is stored in the refrigerator can be wrapped in it or covered with it. When the food is covered with the beeswax cloth, warm pressure from the hands on the wax creates a type of solid packaging. Substances may then pass unintentionally from this packaging to the packaged food.

### **What are beeswax cloths made of?**

The usual constituents of beeswax cloths are cloth, beeswax, oil and possibly resin. Substances from these constituents can inadvertently transfer to the food packaged with the cloths.

### **What should be considered when making beeswax cloths?**

The cloths used should be textiles that are suitable for food contact. Otherwise, in the case of dyed textiles, such as curtains or other fabric remnants, constituents from the dyes could transfer to the food, for example. The transfer of primary aromatic amines, for example, some of which are classified as carcinogenic, would be critical here. Attention should also be paid to ensuring that the beeswax used meets the requirements as a food additive, since beeswax can otherwise be contaminated with mineral oil constituents or pesticides. The latter can be ingested by the bees when collecting nectar if the plants are treated with plant protection products.

### **Are beeswax cloths suitable for packaging all foods?**

Textiles used are usually coated with beeswax to impregnate the cloths. However, the beeswax-coated cloths should not come into contact with fatty foods such as pastries, cakes or sausage and cheese since this can cause wax elements to transfer to the food. However, they are suitable for use with fruit and vegetables.

### **Why should beeswax cloths not contain jojoba oil?**

Jojoba oil is often used as an oil constituent in beeswax cloths. This is used to increase the cloths' softness and it is supposed to ensure that the beeswax does not become brittle and peel off the fabric. The BfR advises against its use because the transfer of jojoba oil from the beeswax cloths is very likely when they come into contact with fatty foods. In animal experiments, jojoba oil has demonstrated toxic effects in intestinal cells.

### **Do germs accumulate in beeswax cloths?**

Beeswax cloths cannot be cleaned at high temperatures since the coating material would melt. This means the cloths cannot be cleaned hygienically. For this reason, the cloths should especially not come into contact with raw food of animal origin since the germs can be transferred to other foodstuffs if they are reused. Plant-based foods can also be contaminated with infectious agents, albeit less frequently. Therefore, although it cannot be completely ruled out, the risk of transmission is lower with plant-based foods.

**Further information on the subject from the BfR website:**

Health risk assessment of food contact materials

[https://www.bfr.bund.de/en/health\\_assessment\\_of\\_food\\_contact\\_materials-528.html](https://www.bfr.bund.de/en/health_assessment_of_food_contact_materials-528.html)

Information on jojoba oil can be found in the BfR Opinion “Jojoba seeds are not suitable for consumption” (in German)

[https://www.bfr.bund.de/cm/343/jojobasamen\\_sind\\_nicht\\_fuer\\_den\\_verzehr\\_geeignet.pdf](https://www.bfr.bund.de/cm/343/jojobasamen_sind_nicht_fuer_den_verzehr_geeignet.pdf)



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