

Handling flour and flour products safely

This guidance applies to all types of flour including wheat, gluten free, corn, gram, and rice flour. It may also be helpful when considering the risks associated with sensory play and craft activities using flour where this is not intended to be eaten.

Is uncooked flour safe to eat?

Getting ill from uncooked flour or flour products is rare as they are mostly used as an ingredient in foods to be to be baked or cooked. Thorough cooking makes uncooked flour safe to eat. Food poisoning bacteria have been found in flour and pastry products in the UK, and there are examples from other countries where similar products have been linked to outbreaks of illness.

You should not eat flour or flour products such as pastry and doughs that have not been cooked thoroughly or are not sold as ready to eat. This is because flour is not usually treated during processing to kill any food poisoning bacteria that may be present. Make sure to always follow the manufacturer's instructions provided on the packaging. This will tell you if the product must be cooked or it can be eaten raw.

It is particularly important for vulnerable people, such as young children, those with compromised immune systems and older people, to follow this advice because their immune system may not be able to fight off infections as easily. They should also take care when handling flour and flour products and follow the advice on the 4Cs: cooking, cleaning, chilling and avoiding cross contamination.

Using raw flour safely

Here are some helpful tips to help you to prepare food using flour or flour products safely:

- do not eat or taste uncooked flour or flour products, such as pastry, cookie dough, pizza dough and batter, such as cake mix, unless labelling indicates they are ready to eat
- keep flour and flour mixes (e.g. bread or cake mix) in a sealed bag or container flour can spread easily and contaminate other foods
- follow cooking, storage and handling instructions provided on the packaging
- wash hands thoroughly with soap and warm water before and after handling flour, uncooked pastry, or dough
- clean all surfaces properly wash bowls, utensils, and surfaces with warm, soapy water or your usual surface cleaner and disinfect where necessary

Heat treating flour at home

You may find recipes that provide guidance on how to heat treat flour when cooking at home. However, while heat treatments applied in the home may reduce the risk, we can't be certain that they will kill any harmful bacteria that might be present and eliminate the risk completely. During manufacturing food businesses can apply processes that will kill any food poisoning bacteria that may be present in uncooked flour. This is why some shop bought products such as cookie dough used in ice cream are safe to eat.

You can find more advice on good food hygiene at the following links:

- cooking
- cleaning
- chilling
- and avoiding cross contamination

Using flour or dough for crafts and play activities at home

When using uncooked flour or flour products not intended to be eaten e.g. dough for crafts and play, you may wish to use this advice to support how you manage the risks during these activities.

This advice is intended for the general population and has been produced for those handling these products recreationally.

Operators of care settings or other businesses where children and older people are handling raw flour or raw flour products should also take account of this advice when considering how risks associated with these activities are managed as part of their risk assessment process. Children and older people may be more vulnerable to infection so additional care may be needed when handling these products.

See the Health and Safety Executive's Managing risks and risk assessment at work.

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