

Rapeseed & Mustard Cross-Reactivity

LIDL Northern Ireland recently recalled a complete batch of Healthy Fit Vegan Protein Bar, because it contained CANOLA (rapeseed protein) which can cause an allergic reaction to consumers who are allergic to mustard. [Link](#)

Rapeseed protein is an aqueous protein-rich extract from rapeseed press cake originating from the Brassicaceae family. Mustard plants also belong to the same family which includes vegetables such as broccoli, cabbage and cauliflower. Because of this close relationship, their seeds contain similar proteins. Rapeseed and mustard are both oilseed crops, but they differ in their seed characteristics. Rapeseed produces a mildly flavoured oil which is used for general cooking and frying, whilst mustard oil has a pungent aroma and flavour and tends to be used in spicy dishes such as curries and pickles. Unrefined mustard oil has a high **Erucic Acid** content which has been linked to toxic effects on the heart. Its import for food use is banned in the EU and North America.

Mustard Allergy Link

Rapeseed, whilst not a declared allergenic food is closely related to mustard which is one of the 14 major EU allergenic foods. Certain products containing **rapeseed protein**, not necessarily refined oil, may require a warning stating that it may cause a reaction in those allergic to mustard. However, this is not a legal requirement in the EU.

Rapeseed oil can sometimes be listed under generic terms such as "vegetable oil" if the specific source is not required by law.

In the EU, products containing rapeseed oil **must** state its presence in the ingredients label on pre-packed foods. This is not the case for non-pre-packed foods as rapeseed is outside of the 14 major allergens.

Since 2022, some food manufacturers have substituted sunflower oil for rapeseed oil without immediate label changes to avoid adding a "may contains" label.

Research

Long term research into lower Erucic Acid versions of mustard oil mean that it may eventually replace rapeseed oil. Mustard plants are more robust and can withstand many more pests. At the same time, the plant is more resistant to drought and heat and does not lose its seeds like the rapeseed plant.

Refinement Exemption

- Most commercial rapeseed oil is "highly refined"
- The refining process removes the proteins that typically trigger allergic reactions
- Authorities such as the FSA consider the risk of reaction to refined rapeseed oil to be extremely low.
- Fully refined oils are generally considered safe for most but residual traces can pose a risk for the most sensitive sufferers,
- Unrefined or crude oils contain more protein and therefore pose a higher risk.

Cross- Reactivity

Cross-reactivity occurs when the proteins in one food are like those in another, which may trigger an allergic reaction in sensitive individuals. This is particularly relevant to people with a food allergy.

Foods which are seemingly unrelated, such as pink peppercorns and tree nuts, may pose a risk due to their biological similarities. This can happen not only with pink peppercorns and cashew nuts but also with peanuts and lupin, peas, beans and lentils, as they are all part of the same biological family.

Cross-reactivity happens when the immune system mistakes similar proteins in different foods, for the same allergen.

Cross-reactivity is not the same as cross- contamination.

Labelling

- ✓ In 2026, rapeseed oil is not classified as a major food allergen under standard labelling laws in the UK, EU or US. This means that food businesses are not required to highlight or emphasise it in the ingredients list (by using bold type or capital letters) as they must for any of the 14 major allergens.
- ✓ Always read the labels. Look for "rapeseed oil" in the ingredients list. Some products use "may contain" warnings, but this isn't legally required for rapeseed unless it's true after a risk assessment.
- ✓ Contact manufacturers directly if you have a rapeseed allergy to ask about their oil processing.
- ✓ It should be the task of the dietician or doctor to give the information on possible cross reaction to the person allergic to mustard. It is NOT helpful to label products as cross-reactive, when there are so many different individual reactions.

<https://foodallergyaware.co.uk/resources/factsheets/>

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