For those with Celiac Disease, navigating labels is an ongoing struggle and something we do every time we go shopping, even reading the labels of things we have checked before, because ingredients and recipes change.

"May contain wheat/gluten" is a phrase that the company has **willingly shared.** It's not required by law unless it's an actual allergen is in the product. In other words if it did indeed contain wheat, they would to specify it under the allergen section.

The 'may contain' part is letting you know that it's likely produced/prepared/packaged in a facility where wheat is present and therefore carries a risk for cross contamination.

The other thing is that wheat free does not mean gluten-free and visa versa.

The product has to say "gluten-free" on it to be gluten-free as that means it has been tested to be under the 20 parts per million of gluten required by law in most places (although some countries require it to me 10ppm or less)

This is because the proteins in wheat are gliadin and glutenin. The portion glutenin is what is often extracted and used as an additive in many foods due to it's binding agent. Therefore something labelled wheat free does not necessarily mean gluten-free and visa versa.

Many celiacs experience cross contamination even with products labelled gluten-free at times, because they could be making gluten products in the same facility, or using the same equipment. It is only the final product that is tested for gluten, not everything around it.

How do manufactures test for gluten?

First, we need to understand that any company that manufactures/produces food has to adhere to the regulations of their country regarding allergens and the labeling of gluten-free.

To do this, they need to be able to test their own products (called inhouse testing). They will use various methods such as the sandwich R5 Elisa sandwich test, lateral flow tests ,G12 antibody ELISA assay and others. This article explains them nicely.

Certified Gluten-free, as in all countries, is an extra step a company can take. They can get testing done by an accredited third party testing facility that is much more stringent and stricter. This is not required by law anywhere, but rather is a voluntary process and helps ensure peace of mind for many with Celiac Disease. This process is normally quite costly.

Regulations per country

The UK:

https://www.food.gov.uk/safety-hygiene/food-allergy-and-intolerance States: "There is no specific legal requirement to label food with 'may contain'. However, food must be safe to eat and information to help people with allergies make safe choices, and manage their condition effectively, must be provided."

The Codex Standard 118 –1979 and EC Regulations (No. 828/2014) define "Gluten Free" foods as containing less than 20 mg gluten/kg. Foods containing above 20 mg/kg but below 100 mg/kg of gluten must be labelled "Very Low Gluten." In other words in order to put the words gluten-free on food, it still needs to have gone through the basic testing to prove it contains 20ppm or less. Basic testing means the test they preform in-house (not related to third party certified GF) Each company needs to have measure in place to test their final product meets the requirements.

https://www.food.gov.uk/safety-hygiene/food-allergy-and-intolerance https://www.beyondceliac.org/gluten-free-diet/food-labeling-laws/

The USA:

The laws for USA changed in 2014. Products who have the gluten-free wording need to have their own quality control measures in place and must be under 20 ppm. It also states products natural gluten-free can have the gluten-free label on (like an egg or apple)

https://www.beyondceliac.org/gluten-free-diet/food-labeling-laws/https://gluten.org/2021/04/30/wheat-mentions-on-gluten-free-food-labels

https://www.fda.gov/food/food-labeling-nutrition/questions-and-answers-gluten-free-food-labeling-final-rule

South Africa:

https://journals.co.za/doi/pdf/10.10520/EJC-1cb758492f https://www.fda.gov/food/nutrition-education-resourcesmaterials/gluten-and-food-labeling

Australia:

https://www.sahealth.sa.gov.au/