

Has the Rise in Gluten- and Dairy-Free Products affected the Prevalence of Allergen Mislabelling Incidents in Food ?

Food Alerts, Incidents and Recalls due to Undeclared Allergens

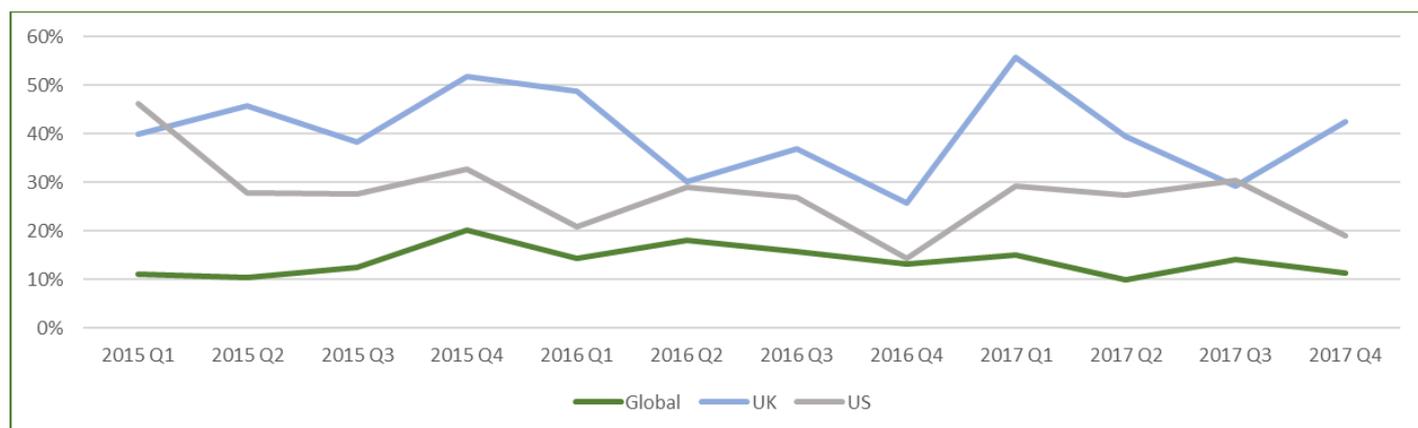
The risk of unlabelled allergens is independent of food type, other than being higher in manufactured foods than primary produce. The hazards relate to labelling errors or omissions, or to cross-contamination of products or ingredients. Alerts and recalls are based on test results or traceability information, not on the predominance of allergies in the consumer population, and everyone is auditing and testing for the same list of allergens.

The only underlying trend that might be anticipated, therefore, is a reduction of incidents as manufacturing controls of allergens improve. Any other underlying trends would be surprising; whether geographical variation, differences between different food types, or trends over time.

Reported alerts, though, do not only reflect the underlying incidence rate. They also reflect differences in the priority that is given to allergen audits, testing, alerts and recalls by different regulatory authorities, accreditation bodies, and food manufacturing sectors.

The relative national reporting of allergen labelling incidents has remained static over the past three years.

Unlabelled Allergen Incidents as a % of all Collated¹ Food Safety Incidents, 2015 - 2017



It is unsurprising that western nations such as the UK and US are over-represented compared to the global average. They have a greater predominance of manufactured food, and food safety systems that demand testing and audit for allergen label verification. What is more surprising is that the roll-out of food manufacturing standards that place an even greater emphasis on allergen controls (BRC 7 in the UK; FSMA in the US) had little impact on the relative reported prevalence. It may be that there was a counteraction of two effects; a reduction in underlying prevalence due to better controls, but an increase in reporting due to enhanced testing and audit.

It is unclear why the reported relative prevalence should be consistently higher in the UK than the US. One hypothesis is that the frequency of audit and testing to verify allergen labelling is relatively higher in the UK.

¹ All reported incidents used in this paper are as collated on the Fera Horizonscan database. "Allergens" refers to the 14 EU regulated allergens, but excludes mandatory labelling of sulphite preservatives. A recall due to two undeclared allergens is counted as two incidents.

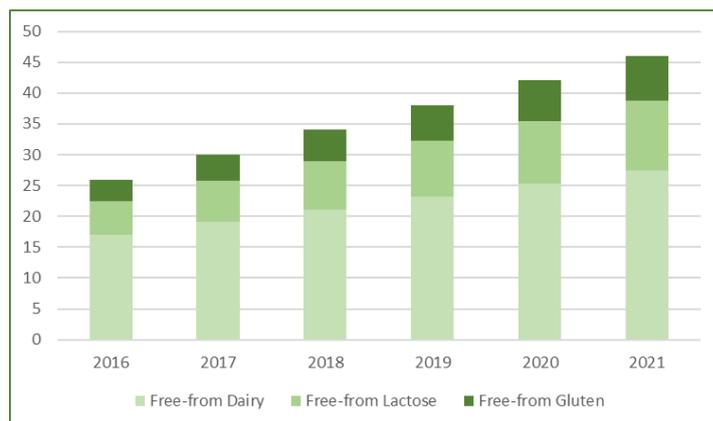
"Free-from" products are defined as those explicitly labelled as such, or those where the consumer would have a reasonable expectation (e.g. soy milk versions of standard dairy products, or rice-flour versions of bakery products). "Obvious gluten" or "obvious dairy" are technical labelling compliance failures, but where there is little risk of allergic consumers unwittingly buying the produce e.g. unlabelled milk in cheese, or unlabelled gluten in wheat flour.

Free-from Foods

One consistent trend has been the recent growth in foods marketed as explicitly gluten-free or milk-free. This is a global phenomenon driven by customers with intolerances or seeking perceived health benefits, as well as customers with allergies. All forecasters agree that this trend will continue.

An interesting question is whether this trend has any impact on the relative frequency of allergen incidents involving gluten or milk; either a reduction in incidents due to better production control of specialist foods, or an increase in incidents due to intensified testing of these specialist foods and their ingredients and more stringent compliance criteria.

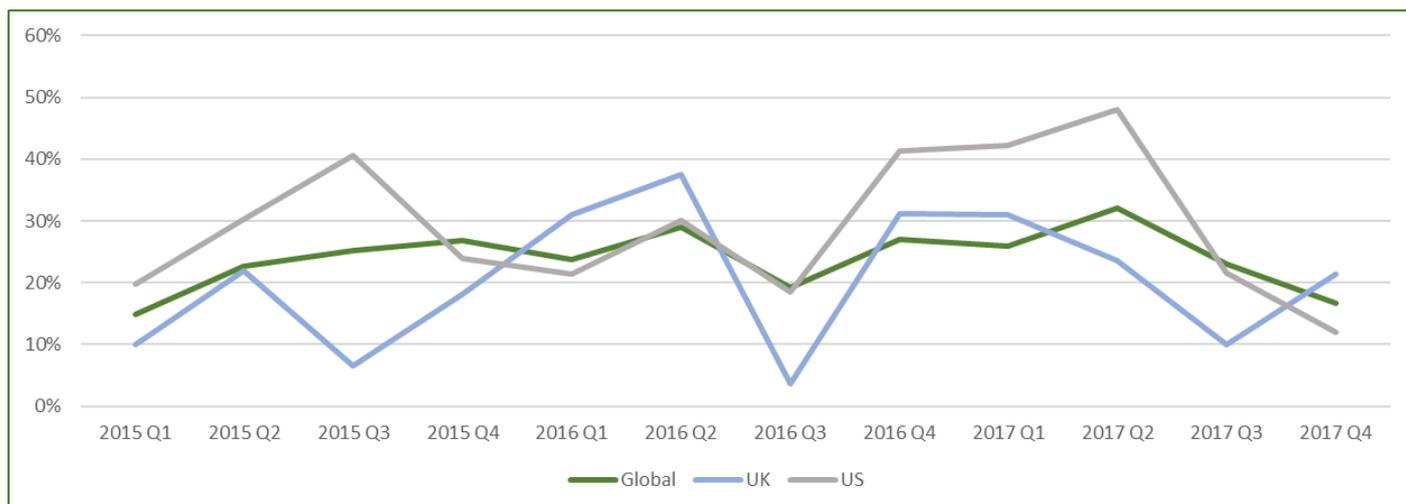
Predicted Global Sales Growth, US\$billion (source: Euromonitor 2016)



Labelling Incidents Relating to Milk

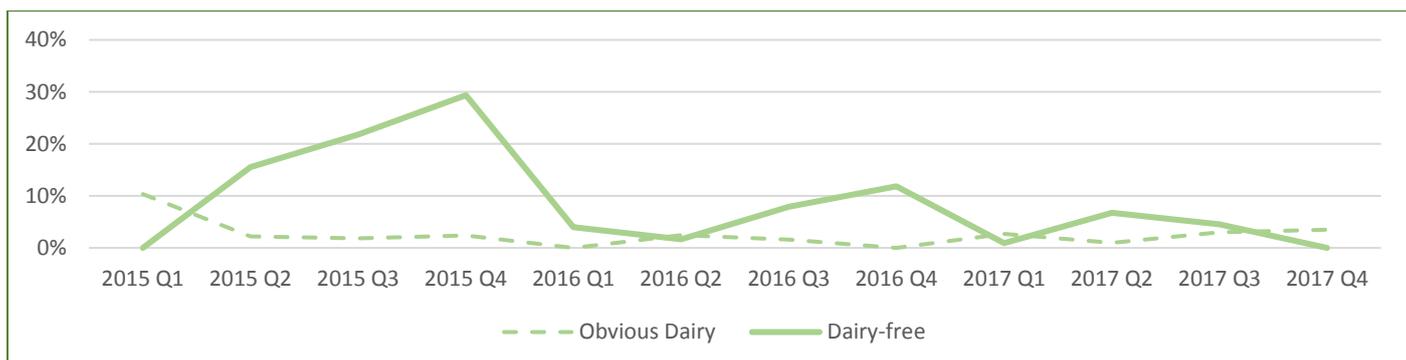
The relative prevalence of milk labelling incidents has remained unchanged, despite the growth in dairy-free and lactose-free products, with the UK and US reflecting the overall global picture.

Milk, as a Proportion of Undeclared Allergen Incidents, 2015 - 2017



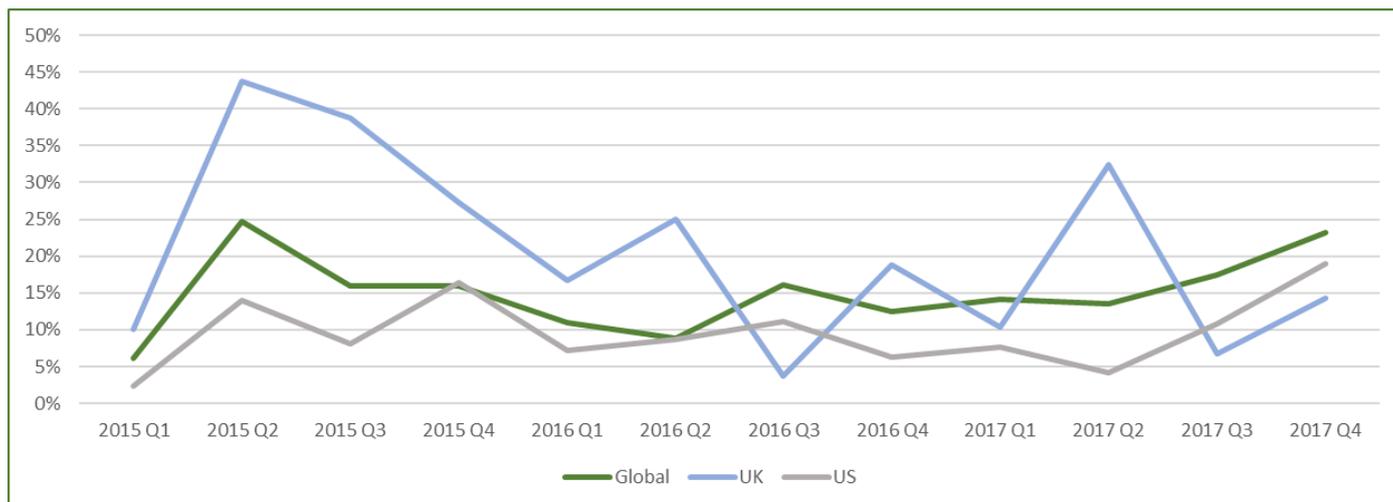
Free-from products now account for relatively few of the milk labelling incidents. Spikes in 2015 and 2016 were due to the rapid market growth in coconut milk, and its (possibly fraudulent) contamination with cows' milk. Once these coconut-milk issues were addressed, there were very few incidents in products sold as milk-free.

Undeclared Milk: Global Incidents relating to Free-from Products¹, and mislabelling of Products obviously containing dairy

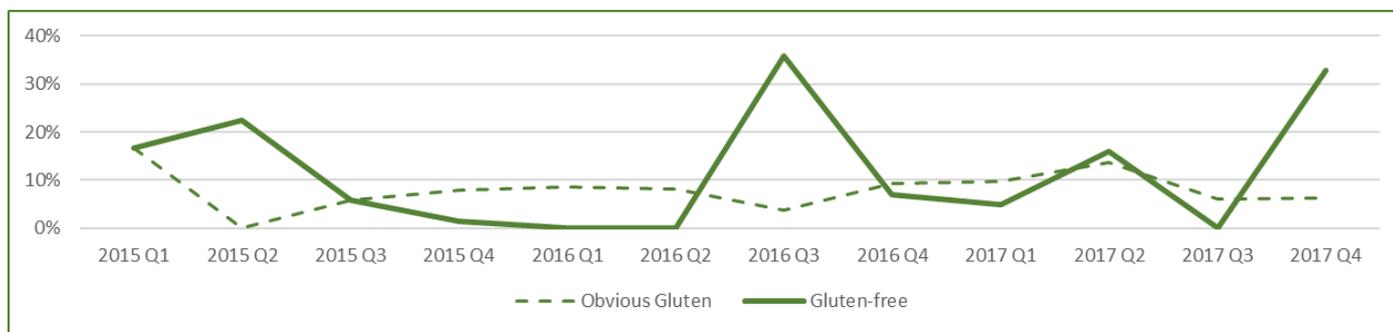


Labelling Incidents Relating to Gluten

Gluten, as a Proportion of Undeclared Allergen Incidents, 2015 - 2017



Undeclared Gluten: Global Incidents relating to Free-from Products¹, and mislabelling of Products obviously containing wheat



It is unclear why the UK reported proportionally more gluten mislabelling incidents in 2015 and early 2016. The absolute UK numbers are smaller than in the US, so UK trends can be skewed by multiple recalls relating to a single incident, but there was no obvious incident that accounted for the relatively high 2015 frequency of gluten reports.

Gluten consistently accounts for a lower proportion of US allergen mislabelling incidents than the global average.

There are periodic and varied incidents relating to gluten in gluten-free products, with no consistent culprits or trends. This picture has remained unchanged over the three years. It is also noteworthy that a consistent 10% of gluten labelling incidents are shots-in-the-foot by manufacturers or retailers; the label simply being in the wrong language, or a gluten declaration missing from an obvious product such as wheat flour or bread.

Conclusion

Neither the rise in sales of free-from products nor the roll-out of manufacturing standards with stricter controls on allergens have disrupted the pattern of reported allergen mislabelling incidents. National differences between the US and UK remain consistent, and probably relate to differences in testing and reporting rather than any underlying reasons.

The persistent re-occurrence of gluten in gluten-free products is concerning. If this continues to account for around 10% of gluten mislabelling incidents then the potential for brand-damage and undermined confidence in "free-from" labels is huge, given the anticipated introduction of consumer home-test kits over the next five years.

Manufacturers will need to ensure that they detect and resolve their own problems before products hit the shelves and customers upload their own test results to public databases.