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Online food allergen labeling: is it a matter of concern?

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To the Editor,

Food allergies are increasingly common and represent a significant public health concern. The main way to manage food allergies is to avoid the involved foods (1). In order to do that, food-allergic patients are often advised to rely on food products labels (2). Therefore, it is vital for food labels to clearly indicate allergens, ensuring the safety of consumers with allergies. The rise of e-commerce, accelerated by COVID-19, means more people are buying groceries online (3), highlighting the need for clear labeling in online stores to support safe shopping for those with allergies. The main objective of this cross-sectional study was to assess the online availability and compliance of food product labels, focusing on the identification of allergens.

Food labels from 230 products across four categories (bakery products (36.1%), breakfast cereals (28.3%), vegetable drinks (18.3%), and 40 commercially available complementary foods (CACFs) (17.4%)) were collected both on-site and online from

4 Portuguese grocery retailers/companies between February and March 2022. The information on the companies' web pages was analyzed and then compared with that on the physical label.

All physical products used as a basis for comparison had a label available and an indication of allergens, in accordance with Regulation (EU) No. 1169/2011.

We have identified that 32.6% (n = 75) of products had no label available or readable online. The food category exhibiting the highest label unavailability was bakery products (n = 38; 45.8%), followed by breakfast cereals (n = 21; 32.3%) and commercially available complementary foods (n = 9; 22.5%). Our results also showed that, despite legal provisions, 50.4% (n = 116) of the online products had no allergen identification or declaration in the label when compared to the physical product. Bakery products presented the lowest compliance (39.5%) while the highest compliance was found in CACFs category (65%).

For the products that effectively had allergen identification in the ingredient list, 14.7% (34) also presented an allergen decla-

ration in the end (as “contains X”). However, for the majority of these products (93%), the information contained in the allergen declaration was not in accordance with the list of ingredients. Concerning the precautionary labeling of food allergens (as “may contain traces of”), we also found that, when compared to the physical label, 64% of the online products did not present it. The results of our study reveal a concerning number of products with either unavailable or incomplete/unreadable online labels on websites that offer e-commerce options. Furthermore, we also report errors in allergen identification and/or declaration and discrepancies in the trace declaration between physical and online products, posing a potential threat to the safety and inclusion of consumers with food allergies.

Despite legislative obligations arising mainly from Reg. (EU) 1169/2011, inconsistencies in allergen labeling persist, highlighting the need for continuous monitoring and stricter enforcement to safeguard consumers with food allergies, especially on the online setting. Our findings align with the challenges reported in recent investigations for both allergen labelling (4, 5) and general food products online labelling (6, 7), although these studies do not address online allergen labeling. Then, our study provides a sample for a pioneering descriptive analysis in the European context considering the digital food environment for a consumer with food allergies, reinforcing the importance of monitoring labeling compliance and extending it to all products. Nevertheless, our study has some limitations, particularly with regard to the number and diversity of products analyzed. The results presented emphasize the need for effective compliance with labeling legislation and underscores the importance of collaborative efforts by regulatory bodies, manufacturers, and retailers to ensure the online accessibility and clarity of food labels. Addressing these issues is crucial to ensure the safety and well-being of consumers in the rapidly growing landscape of online food commerce.

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Contributions

AT: conceptualization, methodology, formal analysis, investigation, writing – original draft. FC, MFL, MP: conceptualization, methodology, formal analysis, investigation. IP: conceptualization, methodology, writing – review & editing, visualization, supervision.

Conflict of interests

The authors declare that they have no conflict of interests.

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