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Gluten labeling in non-packaged food sold in catering businesses: the importance of cross-contamination and good manufacturing practices

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The incidence of food allergies has been increasing in recent years and among food allergens, gluten has been identified as a major public health concern. Because there is no cure for gluten allergy, its avoidance is the best strategy to allergic individuals. Recently, non-packaged foods sold in the catering businesses were required by law to declare allergens. However, since gluten can be unintentionally introduced into food due to the cross-contamination and non-compliance of good manufacturing practices, improper label declaration may occur. The aim of this study was to assess the potential (cross-) contamination of foods with gluten due to the shared activities with utensils/equipment and the non-compliance of good manufacturing practices. Samples of non-packaged foods (n= 35) and surfaces of utensils and equipment (n=50) were collected in four kitchens belonging to a collective catering company. ELISA kits were employed to perform the gluten analyses.

In general all food samples have gluten, including garnish, salads and soups in which would not be expected to find this allergen. This suggests that gluten-free products are susceptible to cross-contamination, probably due to the unsystematic activities developed in these establishments and the non-strictly compliance of good manufacturing practices. However, the concentration of gluten in most foods was <20 ppm, which allows classifying them as gluten-free. Likewise, in all surfaces traces of gluten were found. Nevertheless, although cleaning is not absolutely effective in removing gluten, this process can reduce its content to significantly lower levels. In conclusion, for the proper labeling of gluten in non-packaged food sold in catering business, periodic training programs and routine supervision should be applied to ensure that procedures are being carried out effectively. It is also crucial the regular food testing and the assessment of the effectiveness of sanitation to ensure that cross contamination are not occurring at levels of risk.