“Allergen Hunt”: an educational experience for primary school children in Turin, Italy

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Aims: Around 8% of children suffer from food allergy, worldwide. Children who become aware about the good food safety practices via practical experiences are more likely to perform long-term protective behaviours and may disseminate knowledge to families.

Here we describe our workshops aimed to engage primary schools to join an educational experience about allergenic food. The activities were included in the “EXPO 2015 events” host by the municipality of Turin.

Methods: We designed the “Allergen Hunt” Workshop as follows:
- Welcome telling “The fairy tale about Sabrina” who discovers to be allergic to hazelnut and learns how to manage her allergy.
- Presentation of the main allergenic foods.
- “Guess the allergen here inside”- children have to select the right allergen-card that can be hidden in some proposed foods.
- “Special cookies”- children are divided in two groups: group A cooks hazelnut cookies (using play dough and green glitter powder as hazelnut flour) and group B cooks coconut cookies (using play dough and gold glitter powder as coconut flour); then few cooks of group A go to help group B and vice versa.
- Dissemination of rules on behaviour to prevent cross-contaminations.

Results and Discussion: From 11th to 15th May 2015, ten primary schools (216 children) joined our workshops: 29.6% of the first class (age: 6 y-o), 40.3% of the second (7 y-o), 18.5% of the third (8 y-o), and 11.6% of the fifth class (10 y-o). All of them knew the word “allergy” for environmental allergens, and many of them had already heard about milk, peach and hazelnut as food allergens. We presented the most frequent food allergens (milk, eggs, wheat, nuts, soybeans, crustaceans, molluscs, fish) among the ones reported by EU Regulation 1169/2011; we chose to add to the list peach, kiwifruit, and sesame seeds because they are usually eaten by children and may cross-reacted with environmental allergens. Younger children showed great interest in the “Special cookies” handling game. “Guess the allergen here inside” did unexpectedly excite older and younger children: most of them answered correctly and were aware about the presence of milk in ham and eggs in hamburgers.

Conclusions: Children were interested in learning more about food allergens and in joining the practical experiences we proposed. Participants were often competent, sensitive to food allergy topic and interested to know the rules to manage food allergy and to reduce contamination during food handling and preparation.