

FOOD ALLERGEN MANAGEMENT

7 February 2017, Rome

Within the framework of the EU-funded Project **iFAAM** (Integrated Approaches to Food Allergen and Allergy Risk Management), a workshop on "**Introduction to food allergen management**" was held on 7 February 2017 in Rome, Italy. The workshop provided an introduction on food allergen management on the following topics:

- iFAAM - FP7 EU-funded project activities
- Food allergen management across the supply chain
- Role of testing in food allergen management and an introduction to different types of testing
- Practical hands-on sessions using common rapid methods in allergen testing for monitoring cleaning

Luca Bucchini (*Hylobates*) welcomed all the 35 participants from Industry, SMEs, consultants, consumers associations, research but also national control institutions. He described the main results of the iFAAM project as well as the activities carried out by Hylo such as visits to European SMEs and the food allergen recalls database. He presented the main EU regulations on labeling and security, pointing out that it is important to have an allergen team and to rely on existing good practices to manage the allergen risk. He also highlighted what are the vulnerability and sanitization issues with examples of real contamination scenarios in European SMEs.

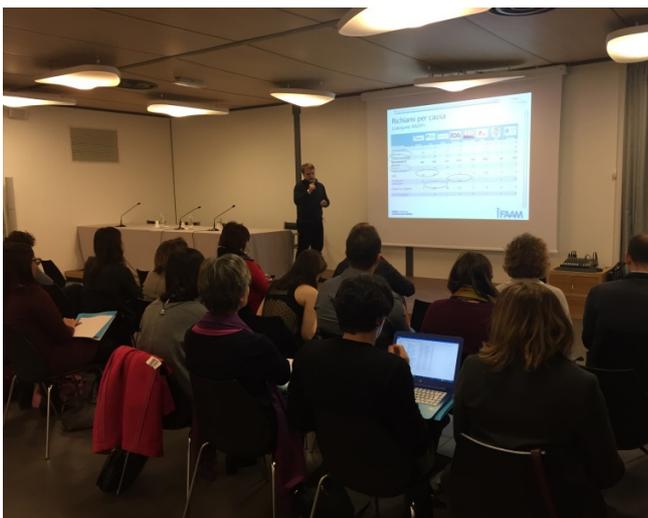


Figure 1 - Luca Bucchini, allergen management

Luca Bucchini said: "*The breadth of expertise in the room - from enforcement authorities to food industry to consumers - proves that food allergen management is still a hot topic in Italy. Contrary to perceptions, the problem has not been solved or gone away: recalls are still at records levels across the world. We need more of these practical sessions, particularly as iFAAM tools for risk assessment and management become available.*"

He answered several questions and several comments were made by the participants that shared their experience, making it clear that there are several problems to solve as well as much interest in this topic. This presentation was followed by **Roland Poms** (*MoniQA*) who started by explaining the reasons for the necessity for allergen analysis. He then introduced the different analytical methods available for allergens: immunochemical detections methods (ELISA), DNA-based methods (PCR) and peptides (Mass Spectrometry). He presented pros and cons for each method, also explaining the matrix and hook effects. Moreover, he highlighted the key points to consider before choosing a method and clarified that there is not a BEST METHOD for all food matrixes.



Figure 2- Roland Poms, analytical methods

He concluded with some recommendations on how to assure quality and reliability of analytical results. He also answered to several questions on validation and reference materials. Before the practical session, **Dario Deli** (*Romer Labs*) presented the lateral flow device (LFD) to be used in the following session to detect allergens with a surface swab for milk, egg and gluten. He stressed the importance of considering some critical practical aspects, such as the fact that most of the samples are very processed, there are no reference methods or certified food matrix, and the results of tests performed with different methods can be not comparable.



Figure 3- Dario Deli, Romer Labs



Figure 4- Francesco Fieramosca, Tecna

Francesco Fieramosca (*Tecna*) explained that he chose to present the allergen test for peanuts because it's allergy it's quite spread and it may cause very severe reactions, accounting for 60% of lethal allergic reactions. He then presented how to use the kits - rapid Peanut allergen test (strip) - to detect the

presence of low concentration of peanuts in raw materials and for Peanut – free status and how to read the results. All the participants moved to an equipped room and had the chance to use test kits themselves, working in small groups. First, **Serena Leardini** (*Romer Labs*) explained how to use the kit to detect surface contamination for milk, egg and gluten (using milk, biscuits containing both eggs and gluten, rice flour with the addition of wheat); the surface was contaminated with an allergen (1st test), afterwards it was cleaned with water only (2nd test), followed by proper sanitization using appropriate detergents (3rd test).



Figure 5- Serena Leardini, Romer Labs



Figure 6- Valeria Bassani, Tecna

Valeria Bassani (*Tecna*) instead explained how to use the strip to test the presence of peanuts in samples of crumbled bread and peanuts using micropipettes, test tubes and the kits. This process was different from the previous ones as the sample had to be diluted in a solution first. For most of the participants it was the first time they carried out these kinds of test and they were very interested in understanding the process and read the results. They asked for more time to practice and do more tests!



Figure 7-Participants waiting for their test results

One of the participants wrote:

“Great event, interesting the practical part and the presence of participants with different backgrounds”.

Within the evaluation survey, the overall score for the event was excellent (9) and respondents stated that they wish to attend further training on validation methods, allergen management (especially presenting industry case studies) but also food/allergen regulation and labeling.

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