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VENDOR SEMINAR:

Analytical Efficiency in Food Allergen Testing

Analytical efficiency in food allergen testing

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About 2% - 5% of the adult population suffers from one or more food allergies. Amongst children these numbers seem to be twice as high. Although not a food allergy, celiac disease is often mentioned in the same context. It is estimated around 1% of the population suffers from this gluten triggered auto-immune disease. Extrapolating this number to the number of households, this would mean that the number of people affected by a food allergy (directly or indirectly) is probably 3 - 4 times higher. On top of that if people are asked if they think they have a food allergy up to 25% - 30% of the people answers positively. All in all the number of consumers that need or want to be informed about the presence of allergens in food is significant and this has become an important market segment for the food industry.

To protect allergic consumers and to assure consumers are informed in a correct way about the presence of allergens in their food, labeling legislation is in place in a growing number of countries all around the world. These legislations reflect to some extent the local differences in occurrence of allergens, but are almost all based on the so called "Big 8" of food allergens (Milk, egg, fish, crustacean, tree nuts, peanuts, wheat and soybeans). For gluten (or "gluten-free") separate legislation is in place in many countries.

In order to meet this legislation and customer requirements, food producers should have a solid allergen management in place. One of the pillars of food management is testing - raw materials, finished products but also at the actual production site. Testing for food allergens may however be challenging, many factors influence the quality of the results like sampling, sample preparation, analytical method. Nevertheless results should be available rapidly, preferably at low costs, thus emphasizing the need for increased analytical efficiency.

This seminar will address solutions to improve the analytical efficiency of food allergen testing from different angles:

- **The use of rapid test methods in allergen management**
- **Automation of analytical methods in food allergen testing**
- **Multiplexing by PCR for food allergen detection**
- **Quality assurance in food allergen testing**

Trends in food allergen analysis will be discussed as well as the impact they may have.