

## **Analytical strategy for food authenticity and characterization of food frauds**

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The Joint Laboratories Service is a governmental agency working mainly for the French Customs and the French Fraud Repression administrations.

It is constituted of 11 labs, in France mainland and overseas, of different sizes and specialities working together in network. Among this network, the laboratory of Paris is particularly in charge of analysis of various food products to detect some frauds. Those frauds may have for consequences some economic losses for the French administration as well as some consequences on the health safety of population.

The purpose of the lecture will be to present our analytical strategy in front of a potential fraud involving food products such as fruits, vegetables, eggs and so on.

In particular, different examples of recent caseworks and the analytical ways to face them will be developed. The first one will be the use of etephon on pineapples or bananas to mature them quicker. The second one will deal with the use of additives in egg white in the industry. And finally, an illustration of how analytical chemistry allows us to show that the mention « grow in France » may be abusively used.

The main analytical techniques presented will be LC-QToF, LC-MS-MS and viscosimetry.

**Keywords:** Food Fraud, analytical chemistry, pesticides, additives

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