

Editorial

Food Fraud and Adulteration, a Centuries-old Practice



Pius Kölbener

Food authenticity and adulteration were the major driving forces for establishing food regulations worldwide. Switzerland did not escape this general trend. Indeed, in its message to the Federal Assembly in February 1899, the Swiss Federal Council presented the project of the food law as aiming to “end a situation that does not allow us to protect ourselves against fraud of any kind which is occurring in the trade of food and objects of domestic use”. On July 1st, 1909 the first food law entered into force. The intention of its 1st article was, and still is, to protect consumers against fraud as well as food and everyday objects that can endanger health.

Whereas our predecessors were concerned with analyzing the water content of suspicious milk and wine samples, we have recently been confronted with the scandal of mislabeled horse meat: ‘*The Horsegate 2013*’. Currently, expensive foodstuffs such as caviar, truffles or meat are particularly in the focus of criminal activity in an attempt to enhance profit (see cover picture).

Dishonest practices in the food trade have been going on for centuries. But we are reminded that in the Middle Ages, fraudsters were severely punished. Some ancient texts report that culprits were burnt publicly with their spoiled goods. By comparison with today’s standards, one is entitled to think that regulations should be strengthened and sanctions and penalties be reinforced.



Stefan Bieri

Beside the fact that motivation for most food fraud is still the same as it was in ancient days, namely financial gain, such (economically motivated) adulterations may pose serious health risks. The 2008 Chinese milk scandal exemplifies this very much to the detriment of thousands of victims. Milk and infant formula along with other food products were tainted with melamine to boost the apparent protein content. Due to the presence of this toxic nitrogen-rich chemical not only 300’000 children suffered from urinary tract stones, but it also tragically led to the deaths of 11 babies. Court sentences for the fraudsters were heavy: two men were given the death penalty for their involvement in China’s contaminated milk scandal.

Without any doubt the topic of food authenticity and adulteration is both traditional and modern and we are still seeking effective laws and dissuasive sanctions that at least offset the economic gain.

Thus it seemed timely to organize the 2015 edition of the Swiss Food Science Meeting (SFSM) with the topic ‘*Food Authenticity and Adulteration*’. This biennial symposium provides an update on emerging issues related to the food sciences and represents an excellent opportunity for scientists from academia, industry, governmental laboratories or institutions, and food authority bodies to share knowledge in this rapidly progressing field. The 2015 speakers provided insight and guidance on suitable analytical techniques and strategies to detect food adulterations and to test for food authenticity. Furthermore, experts from analytical laboratories and from regulatory bodies shared their concepts of risk assessment and risk management of food adulterations.

Accordingly, it is our pleasure to present you herein a selection of oral presentations that authors agreed to convert into articles for this special CHIMIA issue dedicated to ‘*Food Authenticity and Adulteration*’. We kindly thank all the authors for their contribution as well as the committee members of the SFSM for their reviewing work, and we wish you an instructive and enjoyable read!

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