GFORSS LEARNING

Food Safety Laboratory Capacity Building

Evaluation 1

1. For each of the following categories of food contaminants (pesticides, mycotoxins, POPs and veterinary drugs), which products are likely to be contaminated among the following products: wheat, cow steak, salmon, water, crustaceans, milk, bread. Include all the potential products.

   Example: Phycotoxins: Salmon, Water and Shellfish

2. Risk management

   a. Explain why it is not adequate to use the same Maximal limit for aflatoxin in all food products.

   b. Give example of other risk management options

3. Utility of rapid methods

   a. Explain why rapid methods like LFD are not reference methods (with few exceptions).

   b. Explain how rapid analytical techniques could be useful for the monitoring of food contaminants.

4. ELISA

   a. What are the particularities of competitive ELISA tests compared to sandwich ELISA tests?

   b. Explain the difference between a direct and an indirect format.

   c. Explain why the washing steps are important in ELISA.

   d. Explain why the respect of incubation times is essential in ELISA.

5. Hook effect

   a. Explain why the hoof effect is a problem for food regulations purpose.

   b. Explain the different options to avoid this risk.

   c. Explain why the competitive format is not affected by the hook effect.

   d. Do you think that the hook effect can occur in sandwich ELISA assay?

6. What categories of food contaminant are usually tested by ELISA?