

Validation of SureFood® kits

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Why SureFood® Kits are validated

- To make sure they meet our high quality requirements at any time
- To ensure you an easy establishment in your lab
- To give you an efficient support when you are including our methods in your accreditation

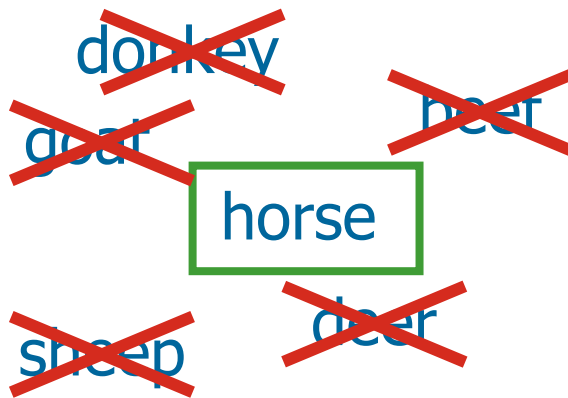
SureFood® validation includes experiments concerning:

- Specificity
- Sensitivity and detection limit
- Correctness (false positive/false negative rates)
- Robustness
- Different matrices
- Ring trials and proficiency testings

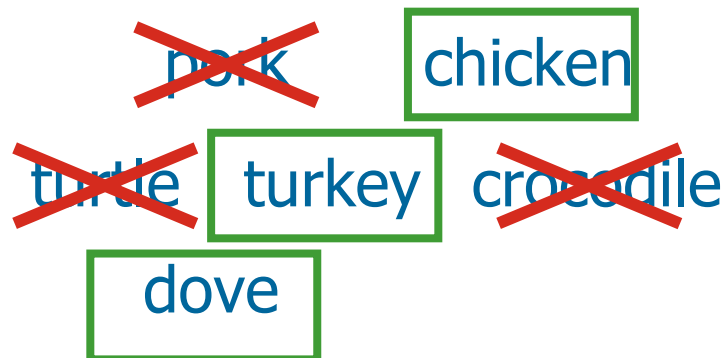
Specificity

- We make sure, that the kit only detects what it is intended to detect
- We make sure, that the kit detect everything that is intended to detect
- If there are unavoidable cross-contaminations the customers gets notified in the respective documents (validation report, manual)

Horse specific method:



Poultry specific method:



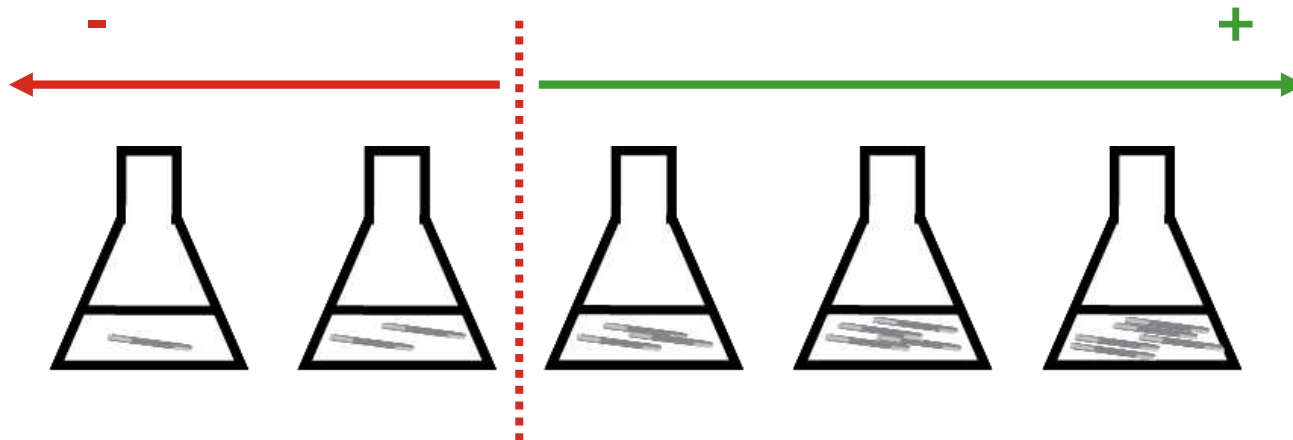
Sensitivity and detection limit

Theoretically determined limits of detection and quantification

- Detection and quantification limit according to DIN 32645

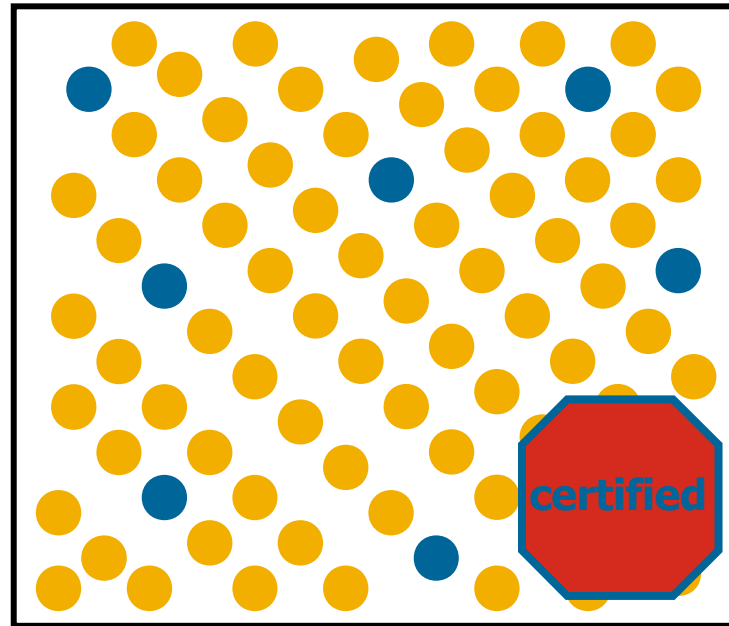
Practically determined limits of detection quantification

- In dependency of the matrix



Correctness of quantification

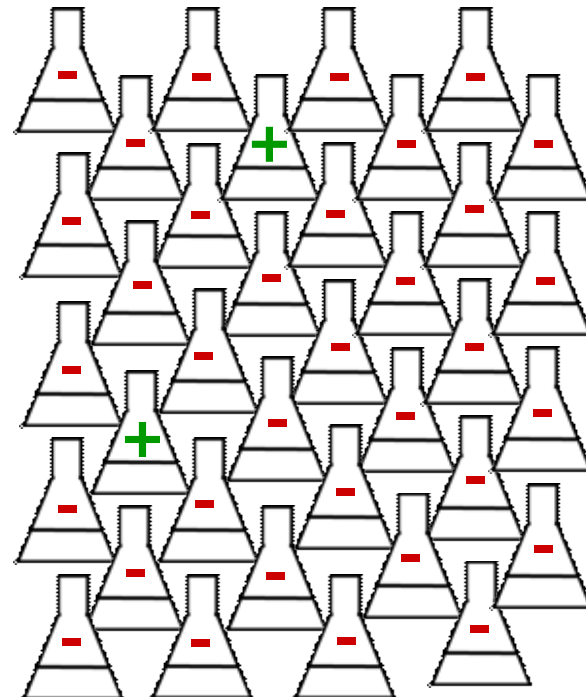
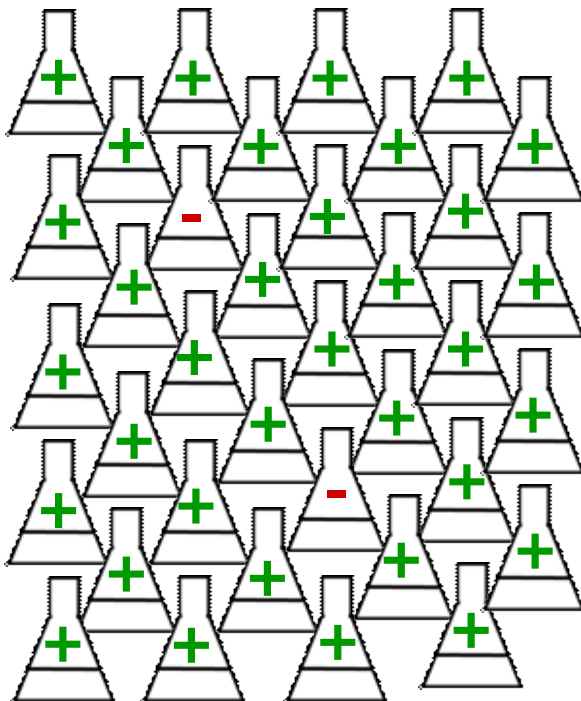
- Certified reference materials
- Repetitions on several days
- Aim: a minimum of deviation of $\pm 30\%$



Correctness

qualitative methods

- % false positives in negative samples
- % false negatives in positive samples
- Determination with samples at the detection limits of the method
- Aim: statistical safety of 95 %



Robustness

Definition

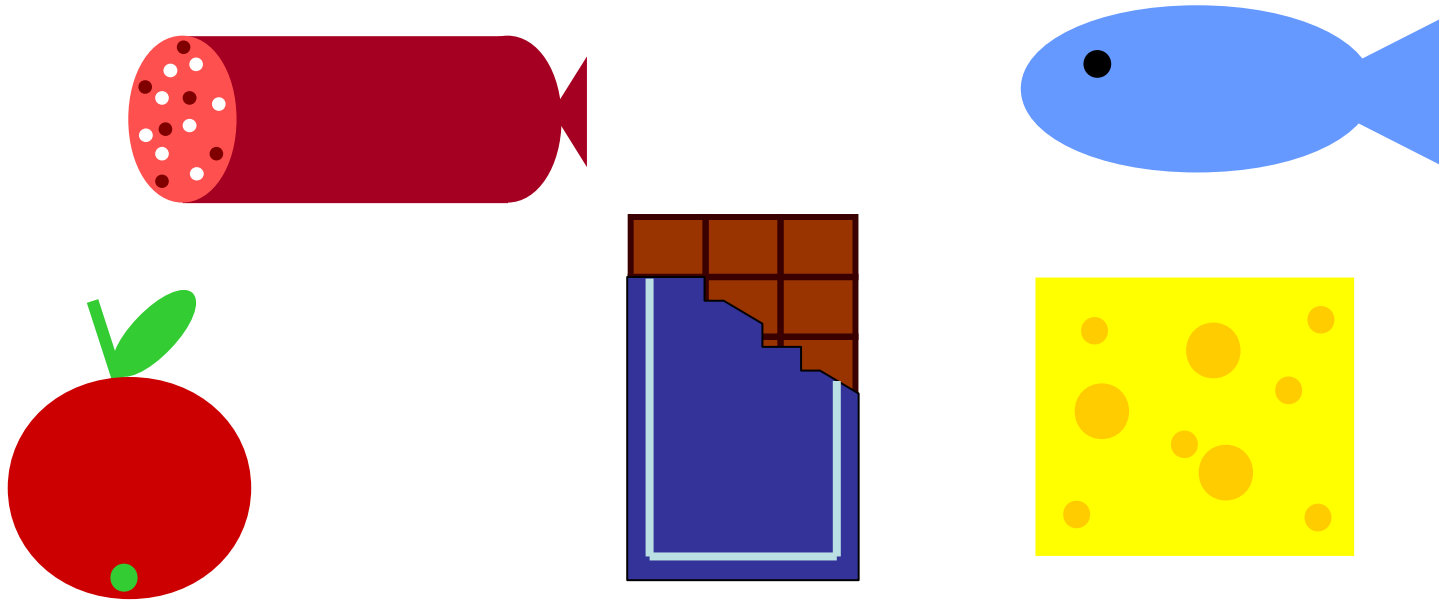
Determination of the dimension of the capacity of small but relevant variations for which the method parameters stay stable.

Examples for influences on the analytical method:

- variations in the composition
- storage conditions
- variations in temperatures

Matrices

- During the validation process we analyse a broad range of relevant food matrices
- The range of matrices is continuously extended by use of our methods in our accredited service laboratory



Ring trials, proficiency testings

- National organisations
- International Organisations
- Accreditation according DIN 17025:2005



How we can help you

- Small excerpts of our validation studies are available as „validation reports“
- If more information is required (e.g. during accreditation), we can compose respective customized documentations for customers

Thank you for listening!

