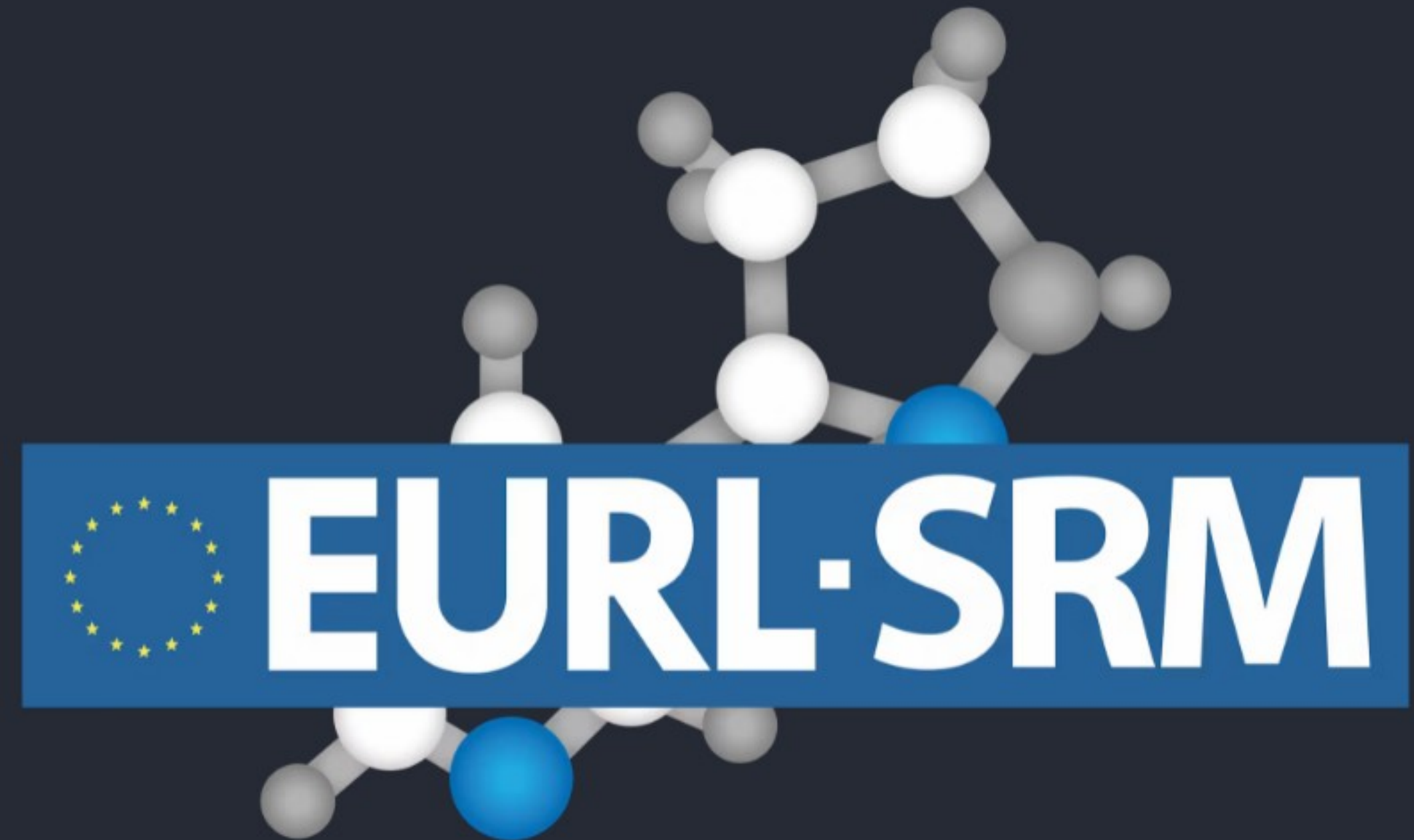


NRL-SRM WORKSHOP

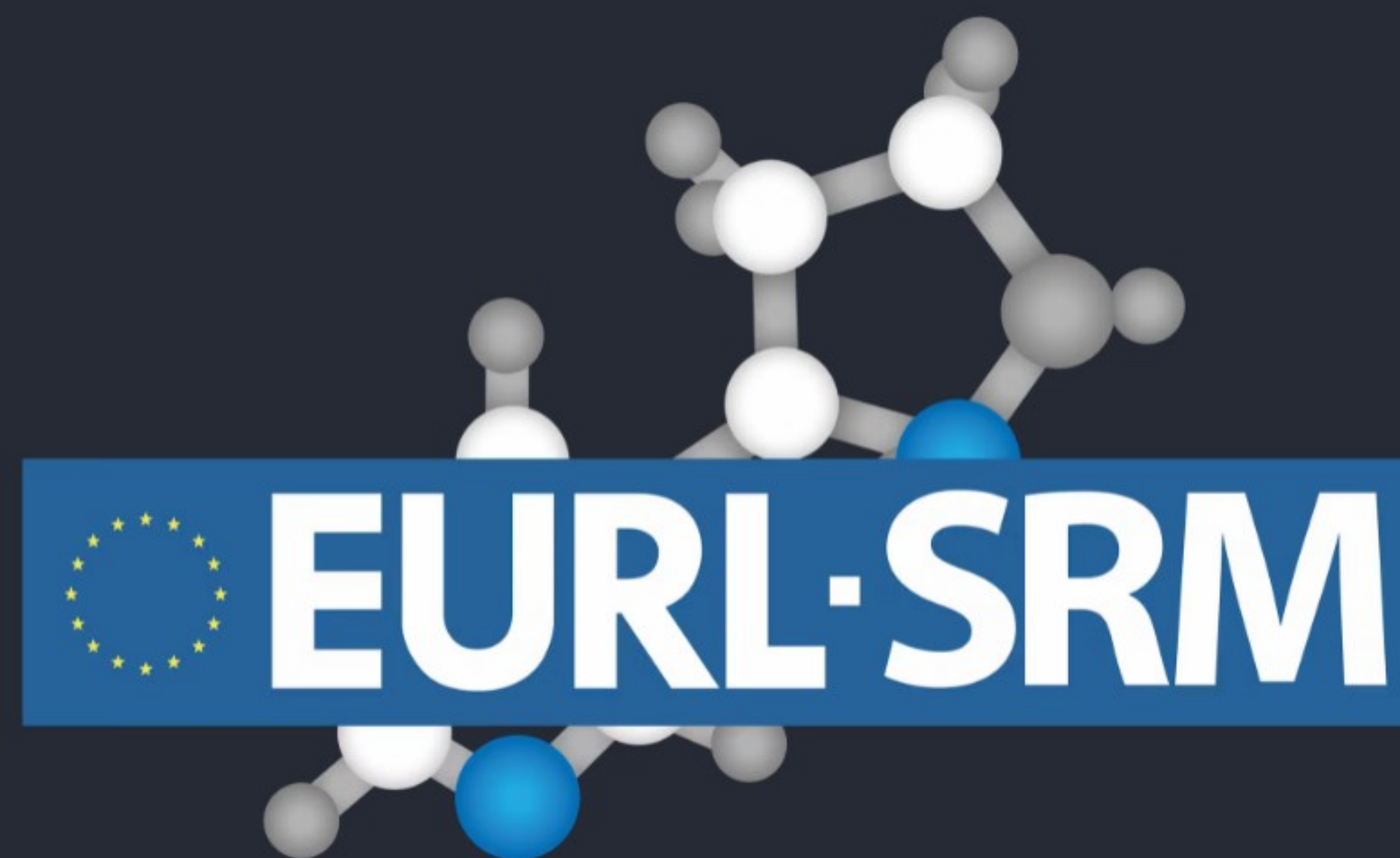
Questionnaire for Assessing Current Practices & Knowledge

SRM Workshop, Stuttgart, 1st and 2nd July 2024



NRL-SRM WORKSHOP

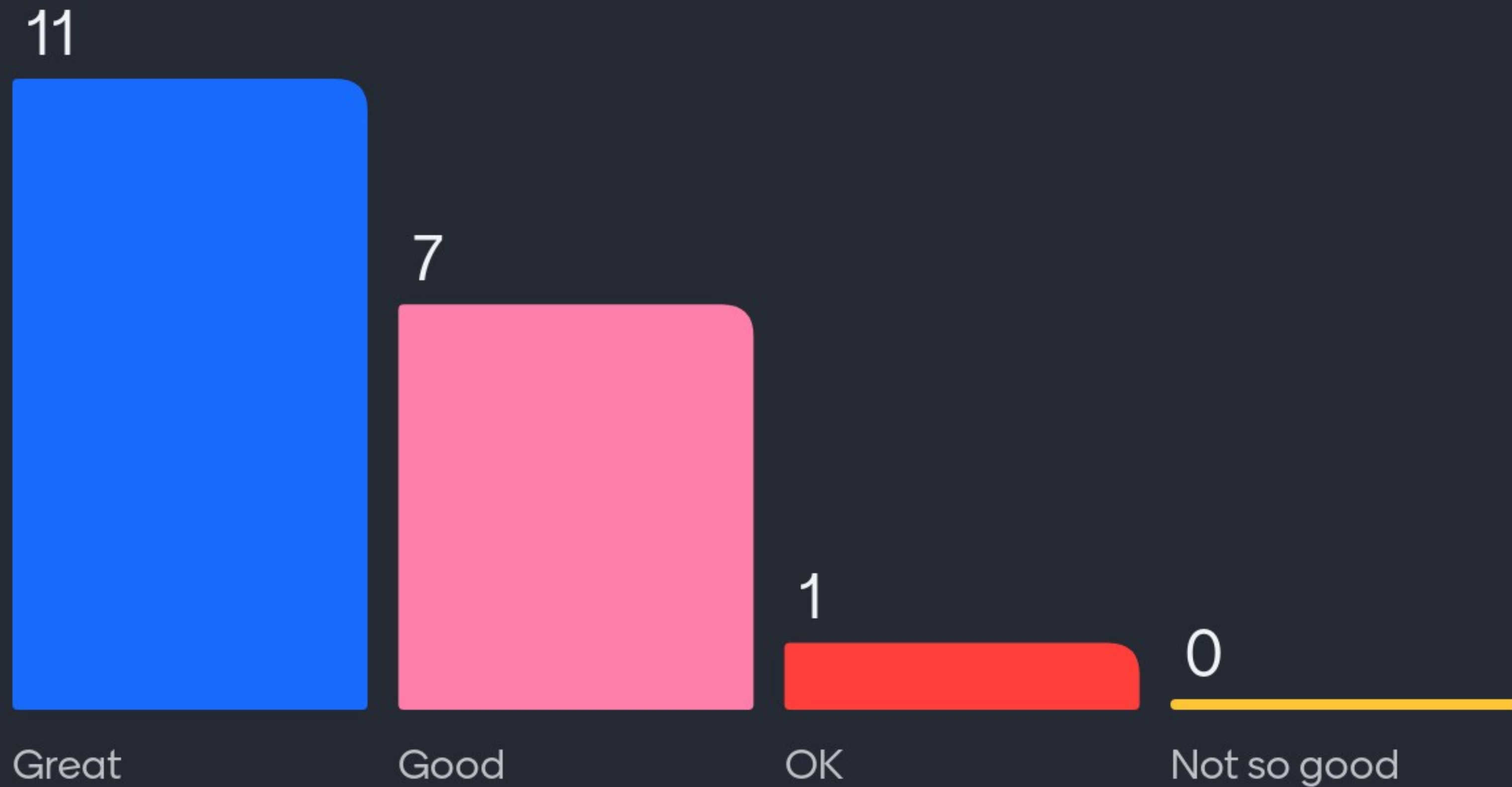
Questionnaire Link



How are you feeling today?

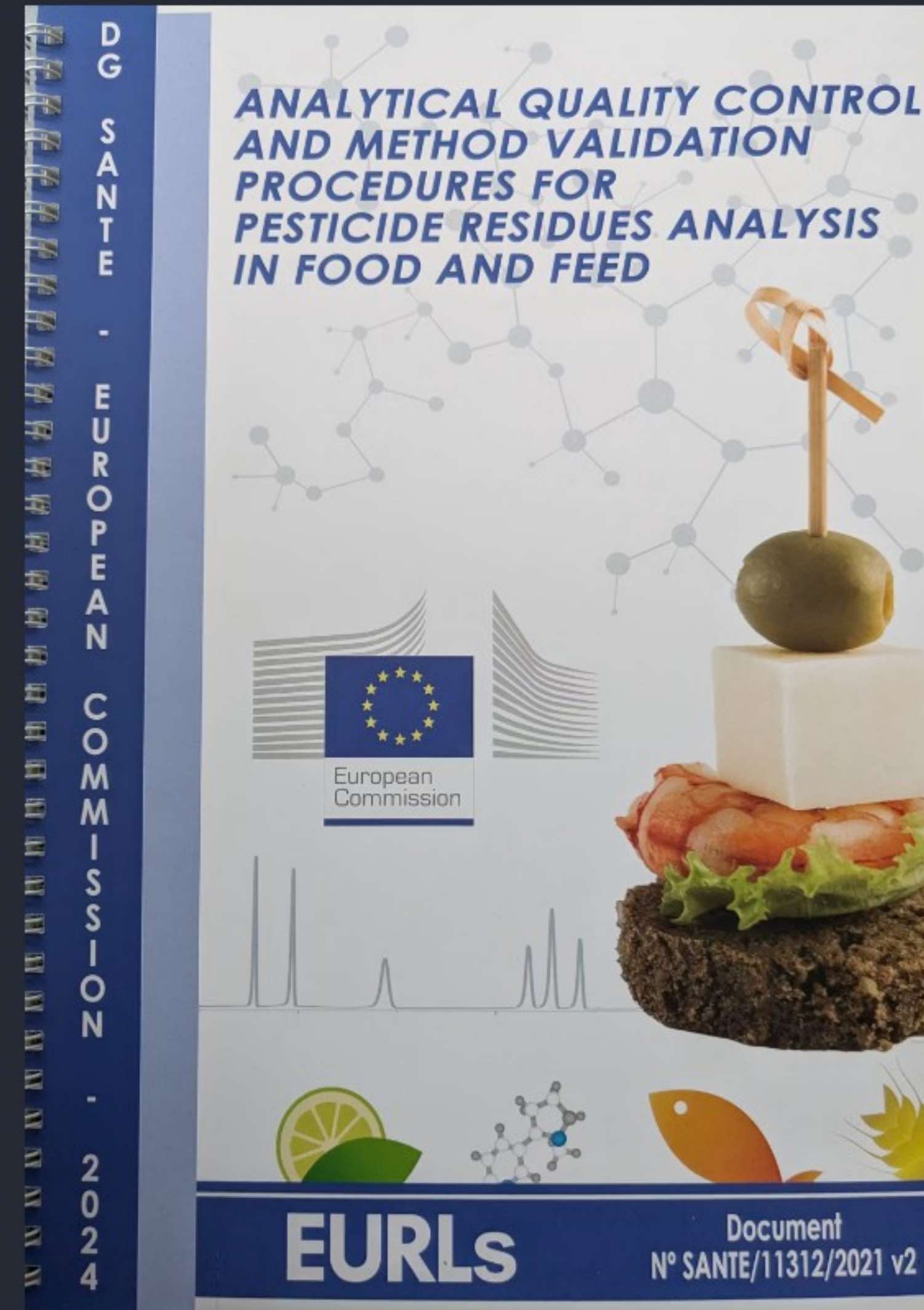


Yesterday's dinner was ...

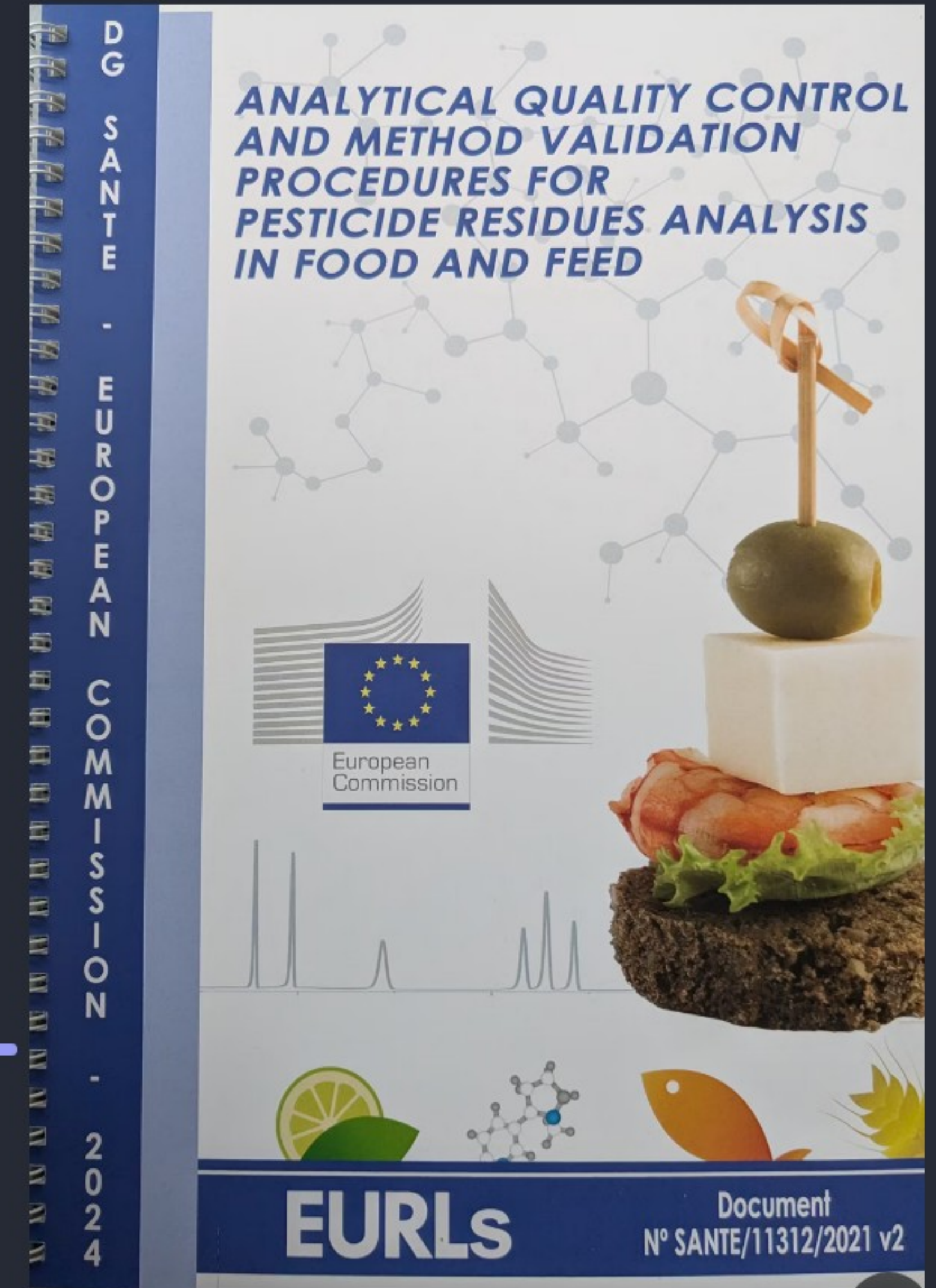
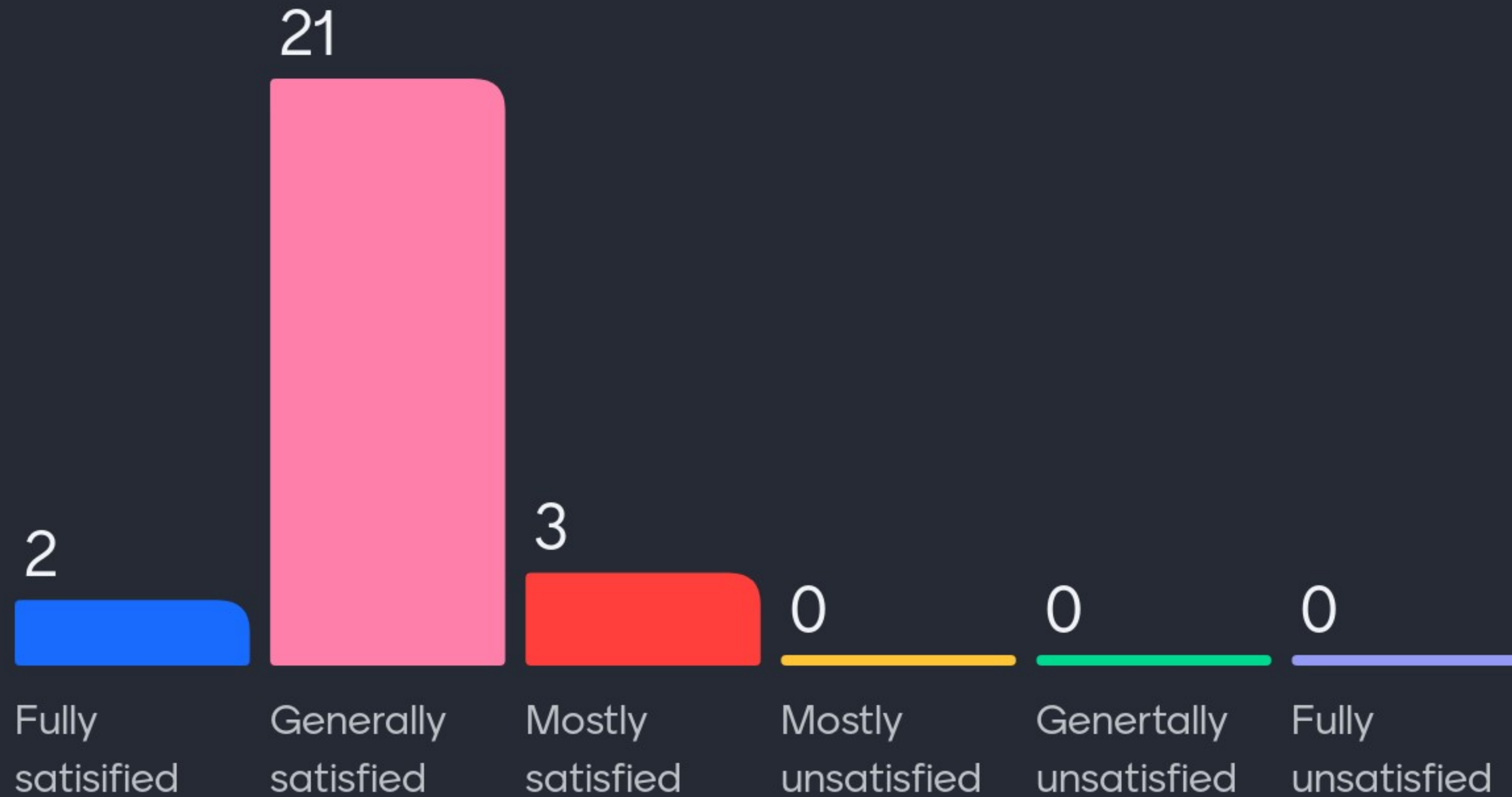


AQC-Procedures AQC-Document AQC-Guidelines SANTE-Guidelines SANTE Document

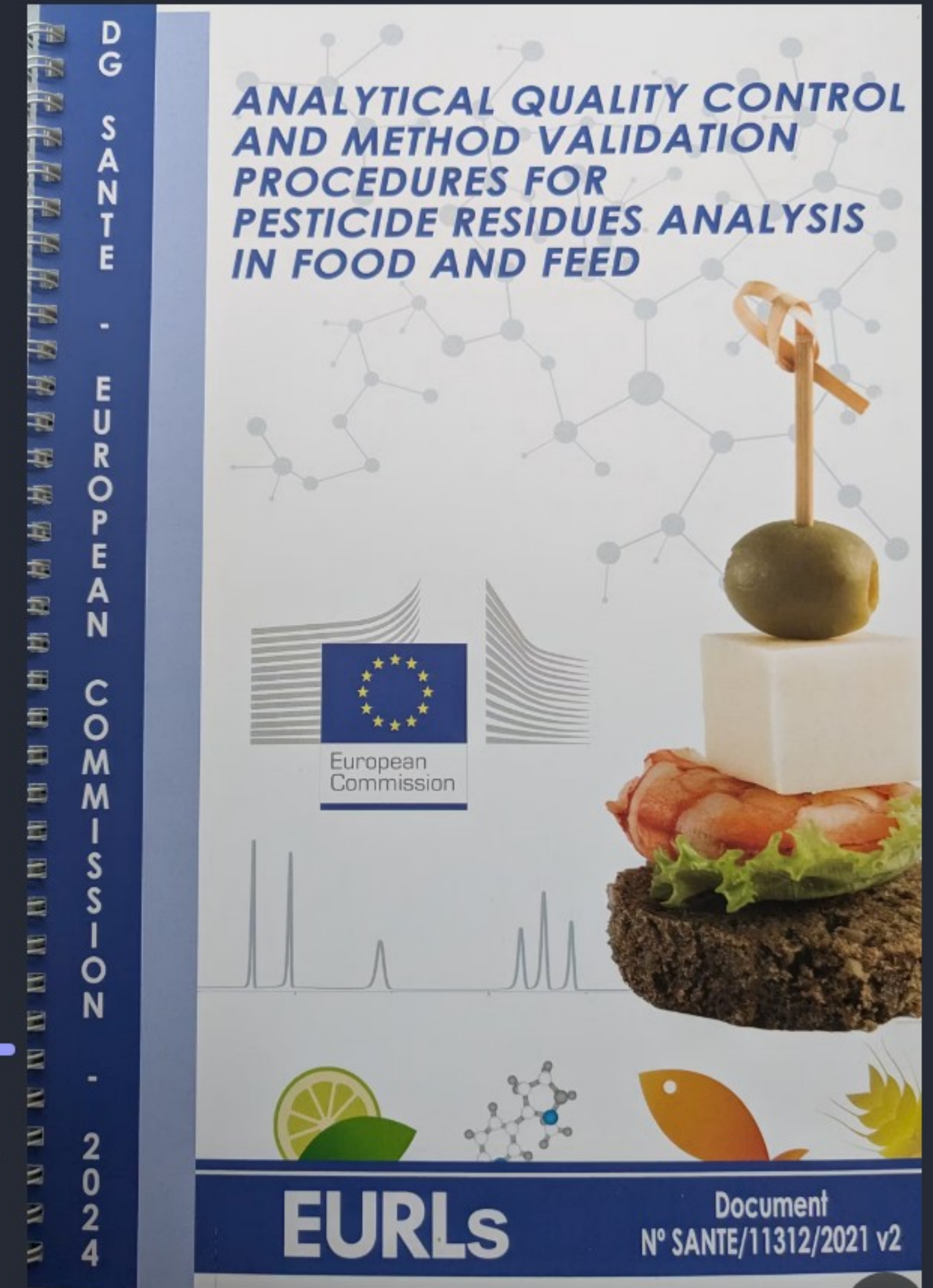
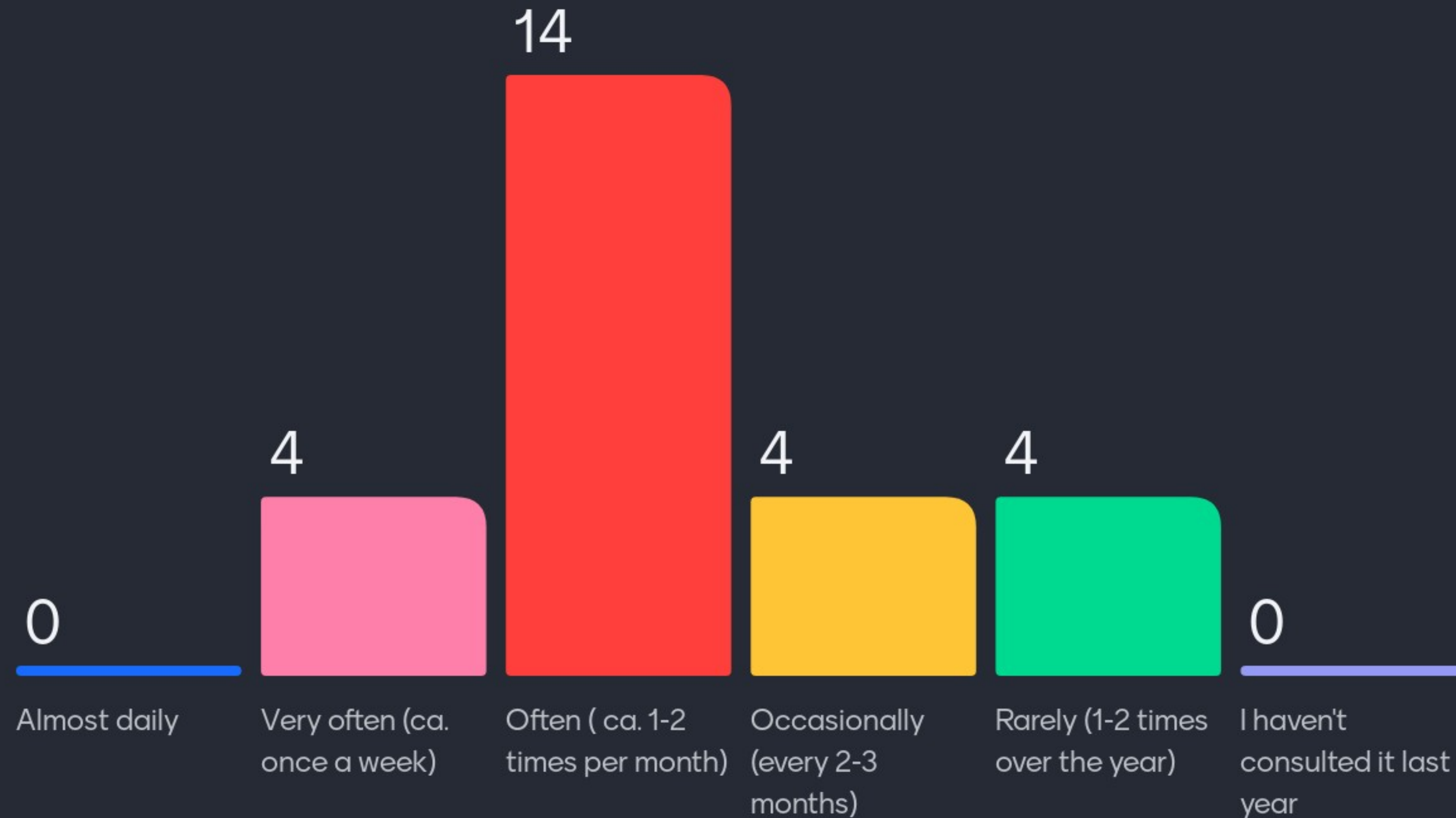
SANTE/11312/2021 - V2



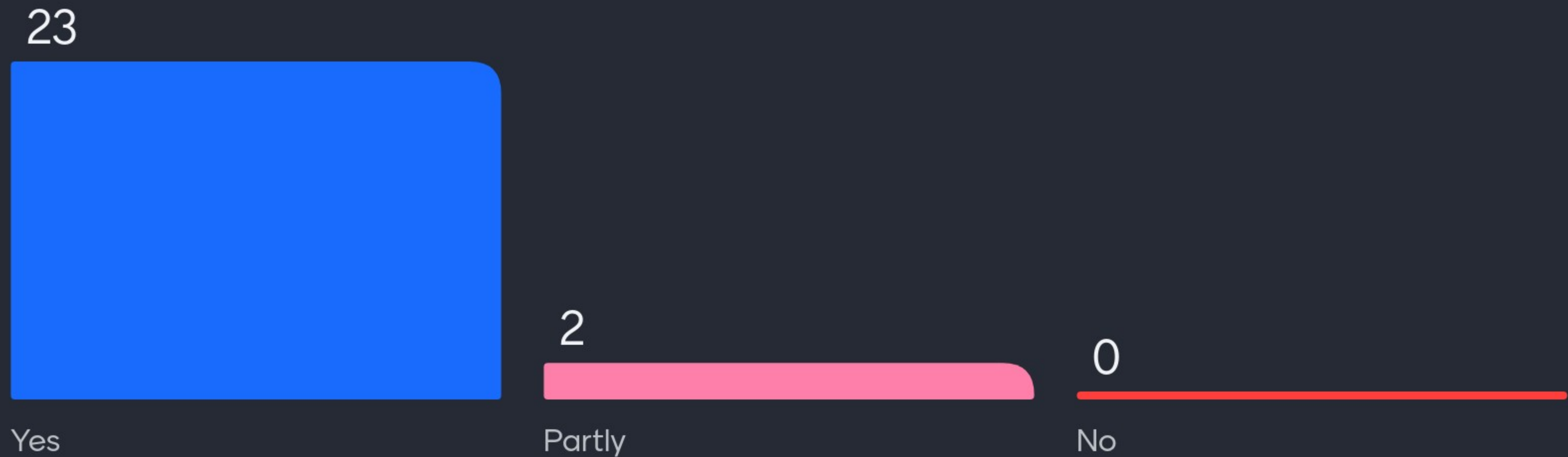
How satisfied are you with the SANTE document?



How often have you consulted the AQC-document in the last year? (chose the closest match)



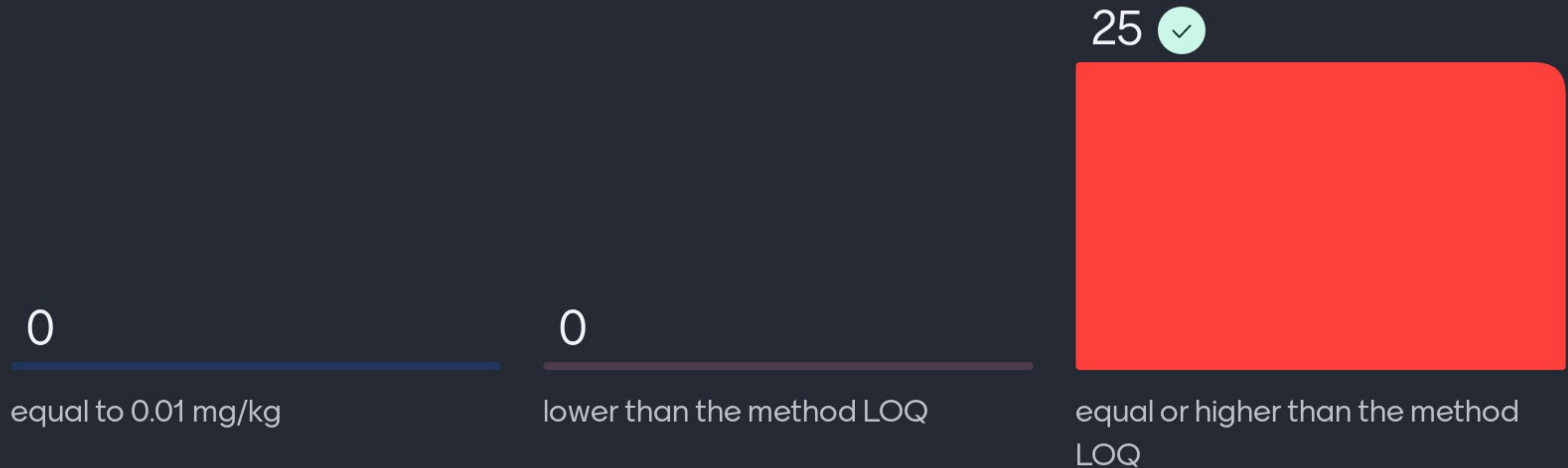
Has the SANTE document been helpful for establishing the QC system for pesticide residue analysis in your lab?



The criteria of the AQC document are to be considered as ... ?



Based on the AQC-Document the
REPORTING LIMIT (RL) for any pesticide
analyzed should be ...



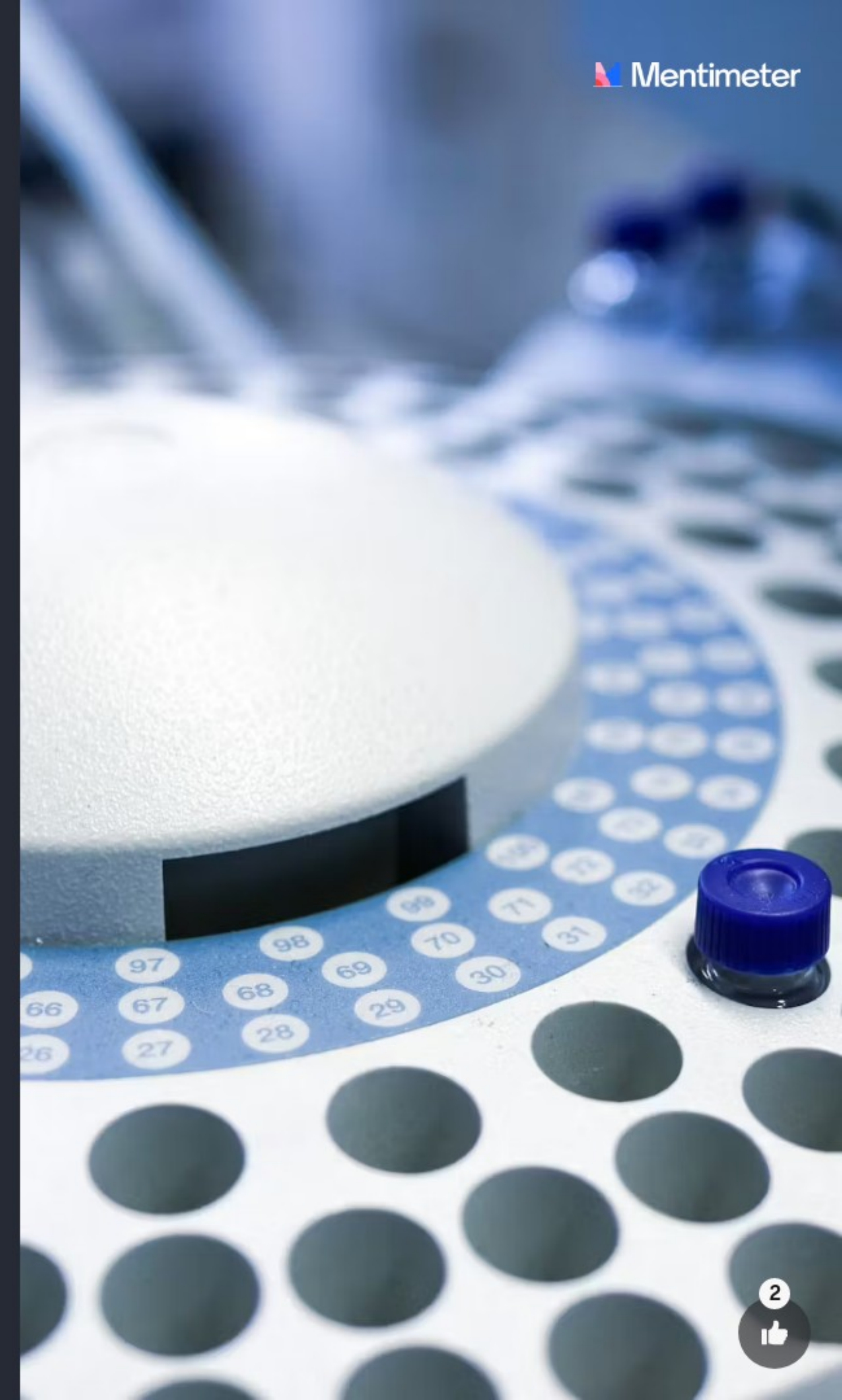
Based on the AQC-Document the LOWEST CALIBRATION LEVEL (LCL) for a target analyte should be ...

1
equal to 0.01 mg/kg

0
always lower than the analyte RL

23 ✓
equal or lower than the analyte RL

Recovery & Matrix Effects



What is meant by the term "recovery" in the AQC Document?

24



"APPARENT RECOVERY" (Ratio between SPIKED analyte conc. in sample vs. conc. DETERMINED by the method employed)

1



"ABSOLUTE RECOVERY" (Proportion of the spiked analyte remaining in the final point of analysis)

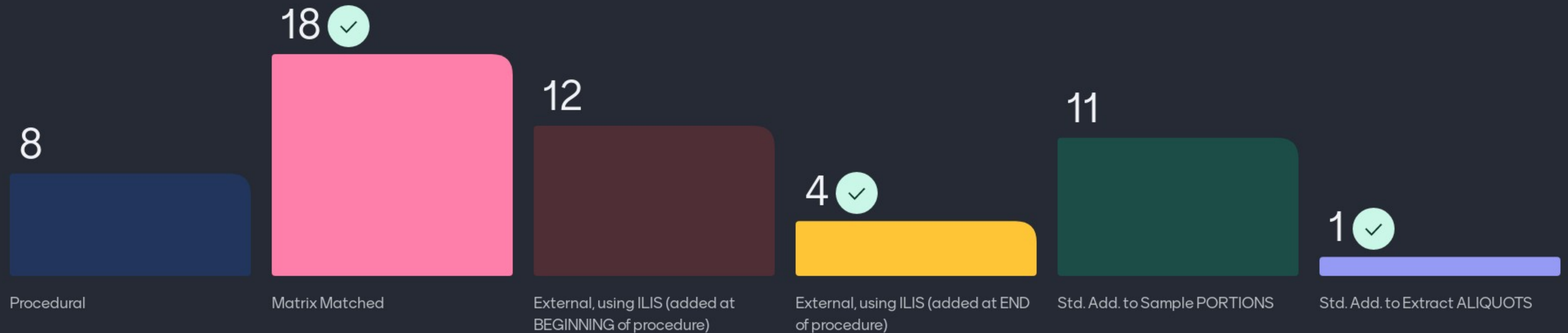
0



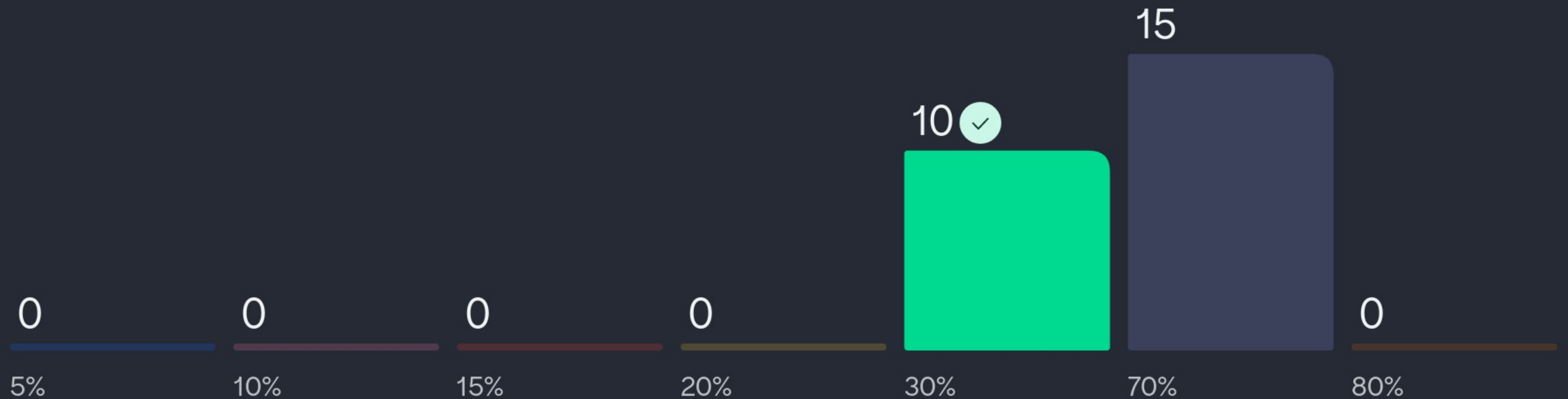
Don't know



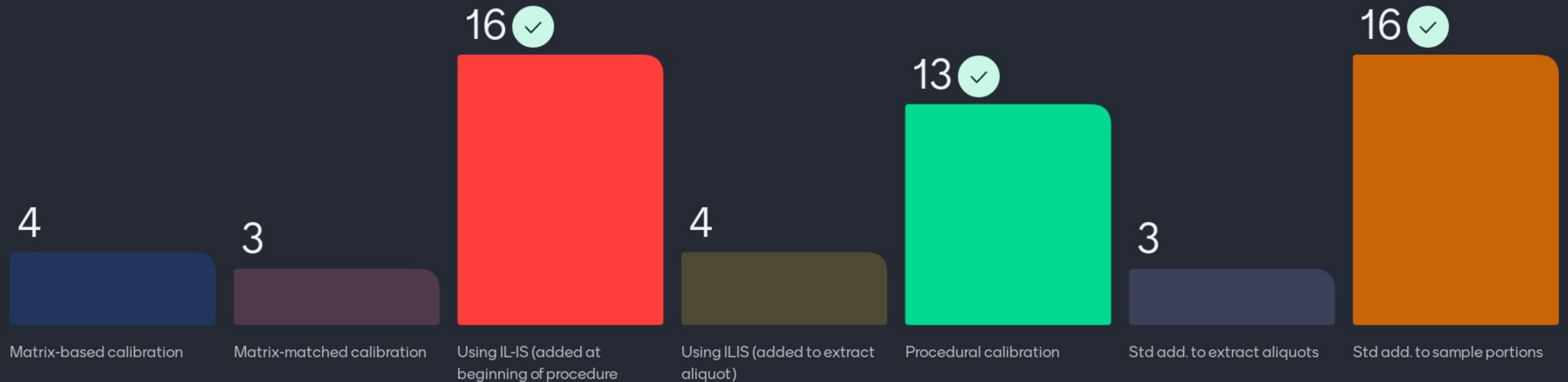
Which calibration approach(es) are useful for obtaining a reasonably good estimate of the **ABSOLUTE RECOVERY** of an analyte by a method?



What is the MINIMUM ABSOLUTE RECOVERY required for a successful validation according to the SANTE Document?



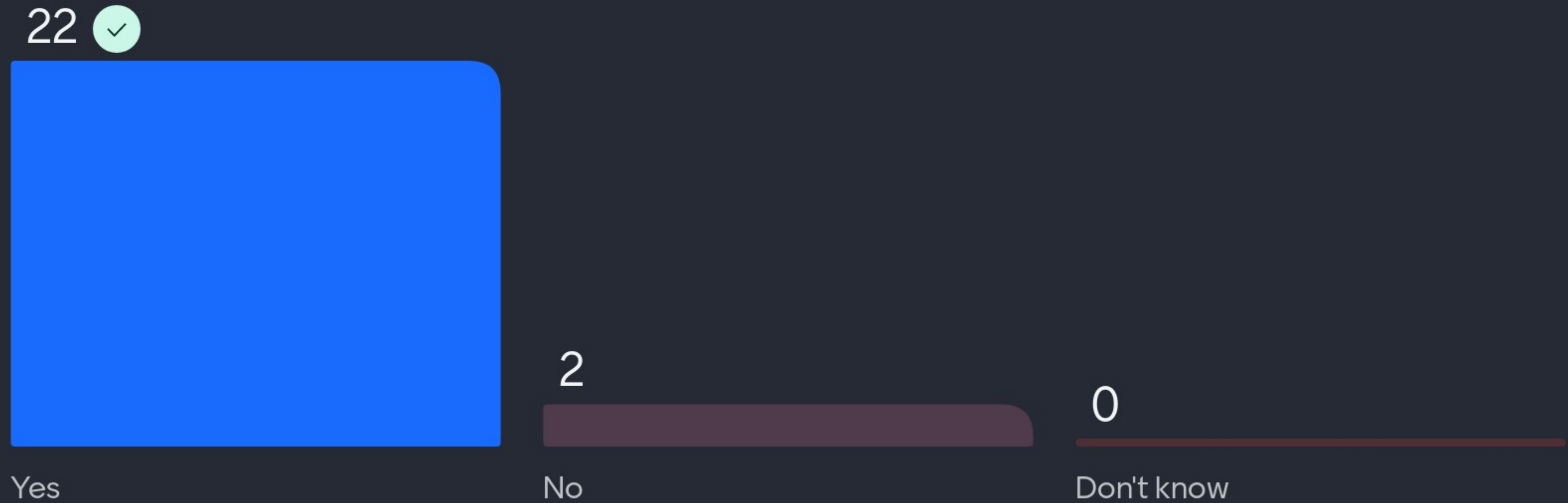
Using which of the following approaches results are corrected for poor absolute recovery?



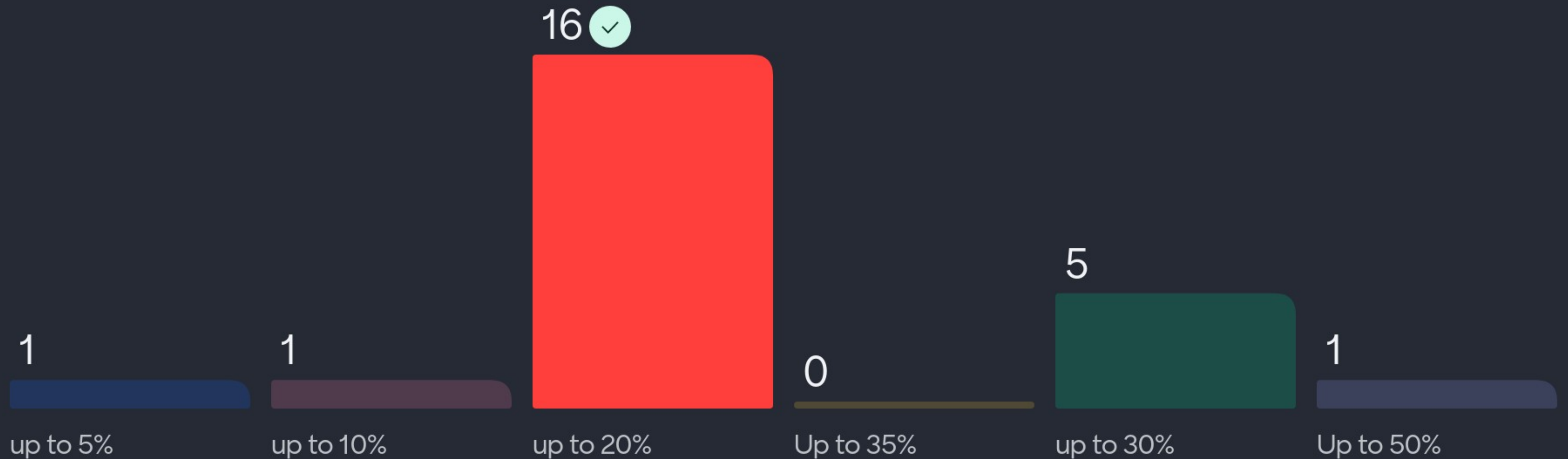
What practical recommendation is given in the AQC document concerning CORRECTION of results FOR METHOD BIAS?



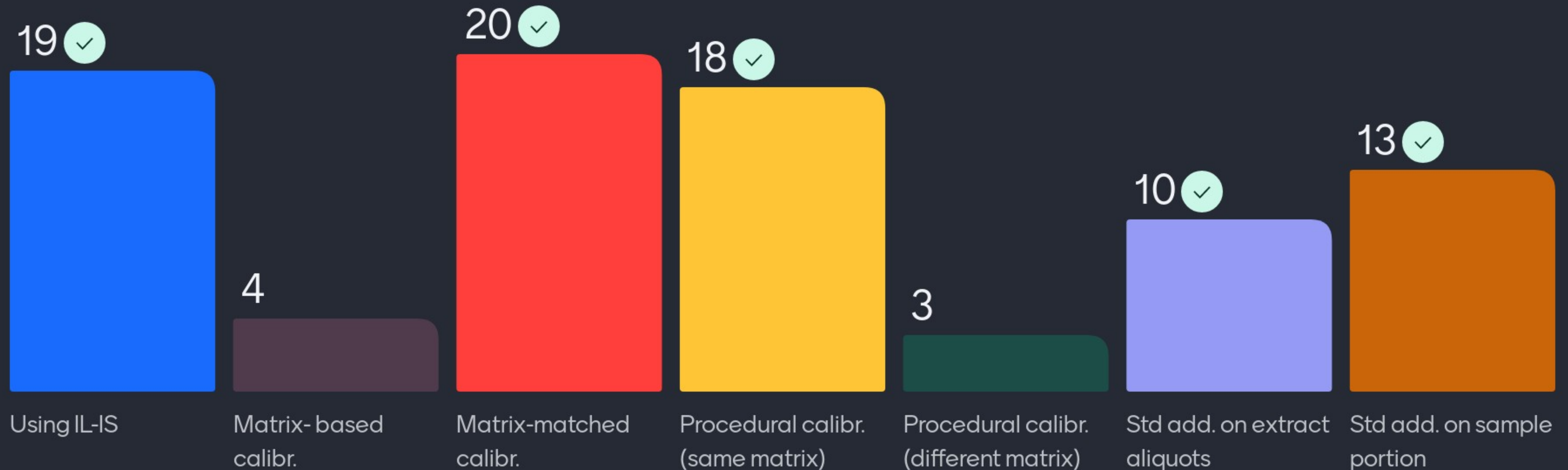
Are Matrix Effects a Validation Parameter?



Up to which level can Matrix Effects be considered negligible ?



In which cases is the matrix effect compensated?



Residue Definitions

How would you tackle this RD: Sum of bentazone, its salts and 6-OH (free and conj.) and 8-OH bentazone (free and conj.), expr. as bentazone)

2

Analyze free bentazone, free 6-OH bentazone and free 8-OH bentazone, express results as bentazone and sum up

19

Transform everything to free bentazone via Hydrolysis and analyze the released bentazone as a common moiety

4



Analyze free bentazone. Separately analyze 6-OH and 8-OH bentazone following de-conjugation. Express all results as bentazone and sum up

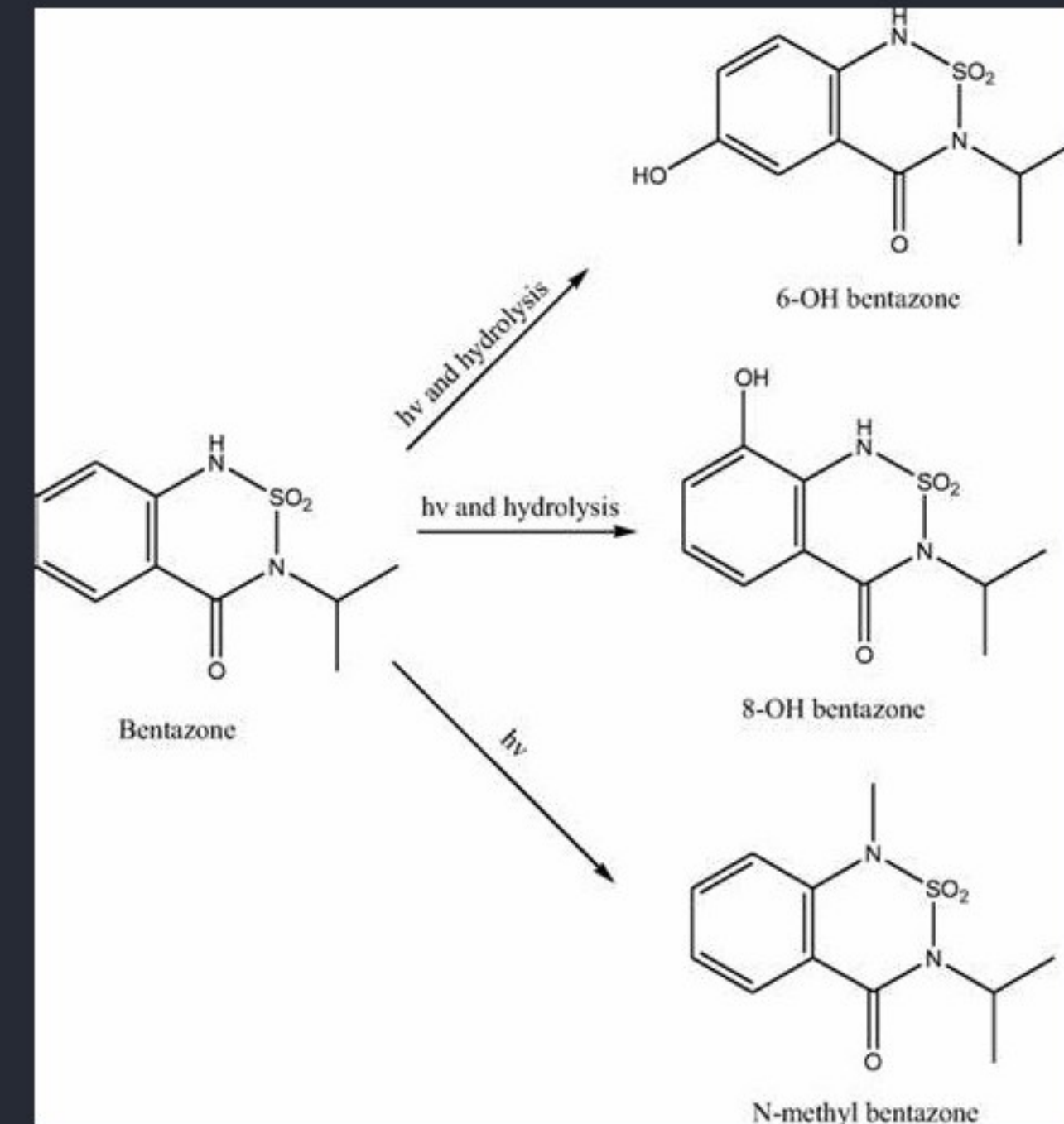
2



25



Bentazone and Metabolites



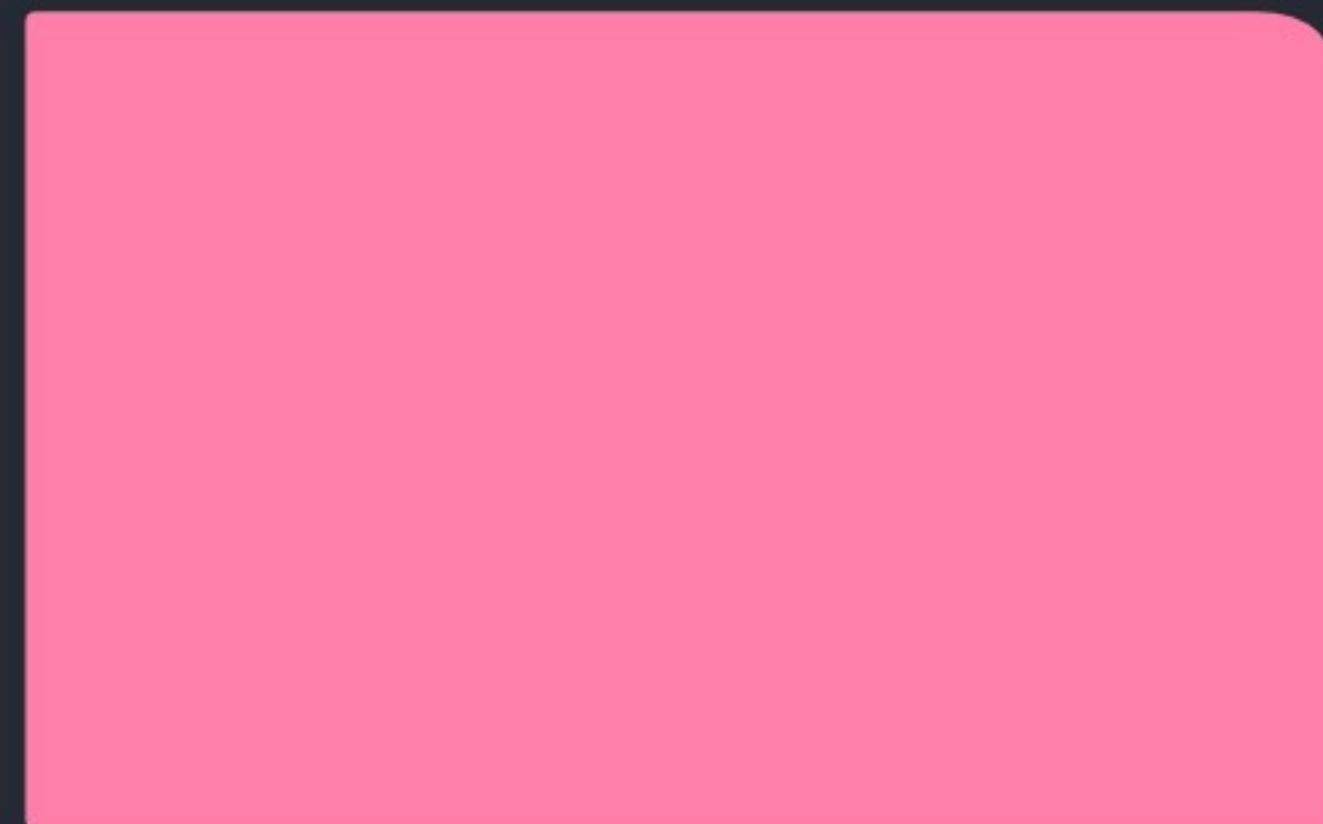
In theory, how would tackle this RD: MCPA and MCPB (MCPA, MCPB including their salts, esters and conjugates expressed as MCPA)

5



Hydrolyze MCPB and any esters and conjugates of MCPA & MCPB and analyse released MCPA as a common moiety

9



Transform esters and conjugates of MCPA and MCPB to free MCPA and MCPB, express the latter as MCPA and sum up

10



Analyze MCPA&MCPB esters. Separately hydrolyze conj. and analyze free+released MCPA&MCPB. Express all (esters+free+released MCPA&MCPB) as MCPA, sum up

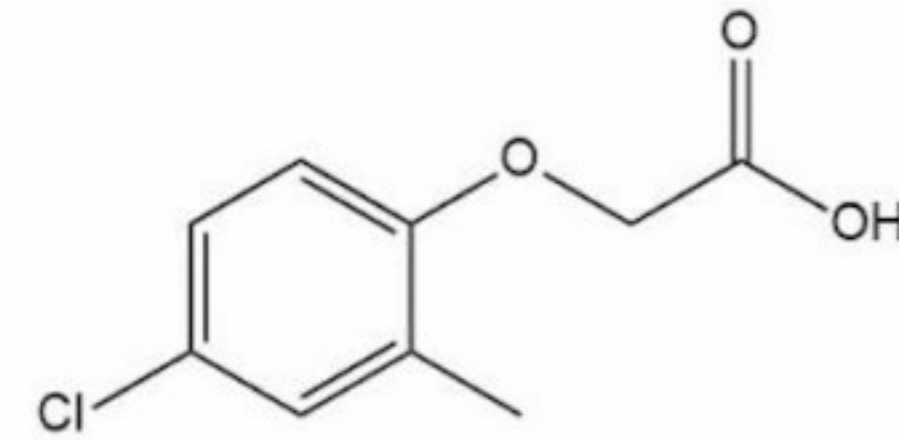
2



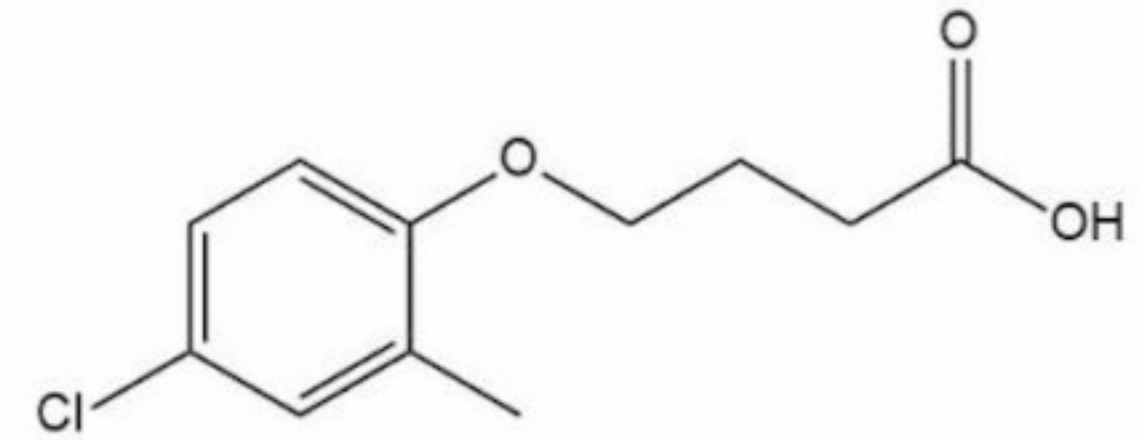
24



MCPA and MCPB

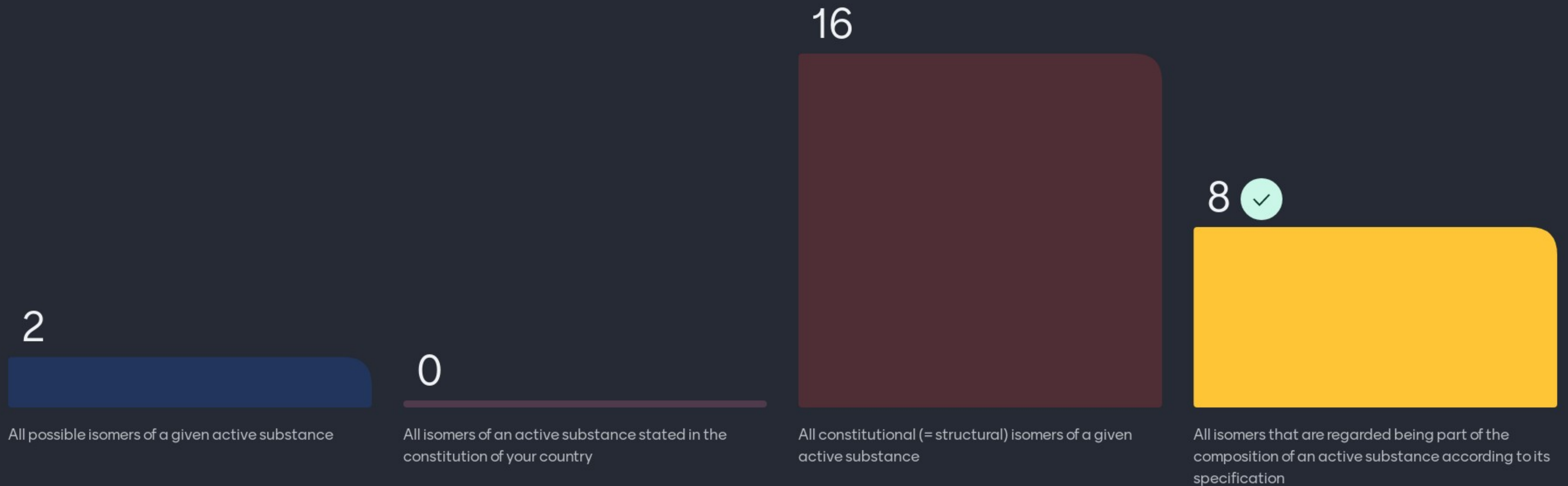


MCPA

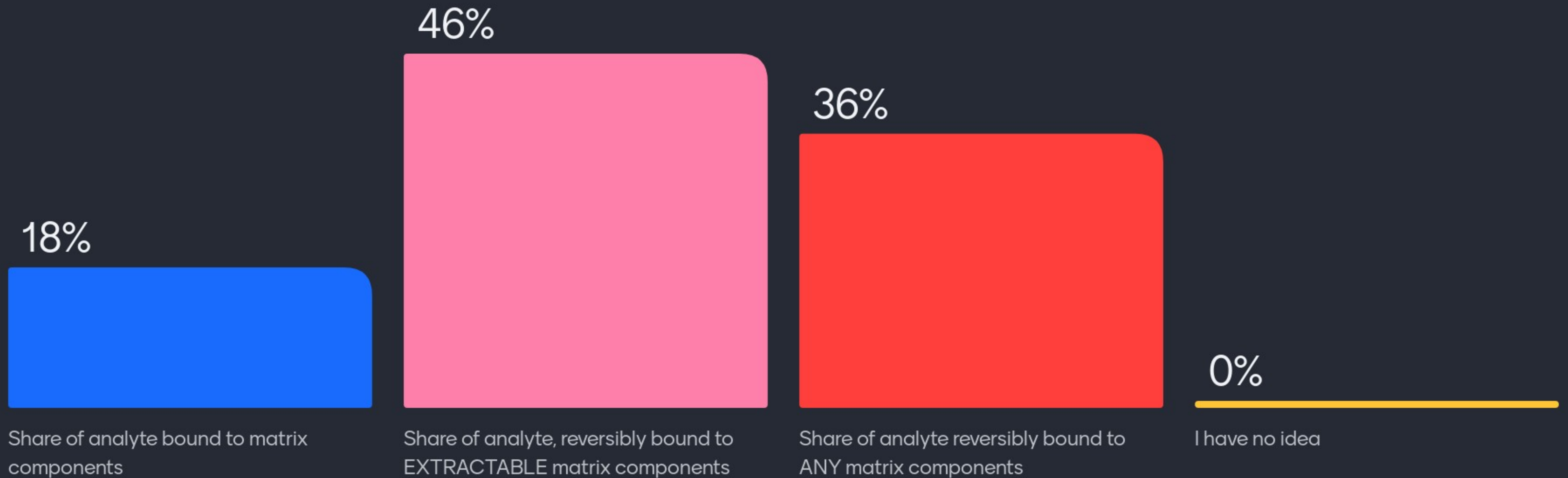


MCPB

What is meant by "CONSTITUENT ISOMERS" within residue definitions ?

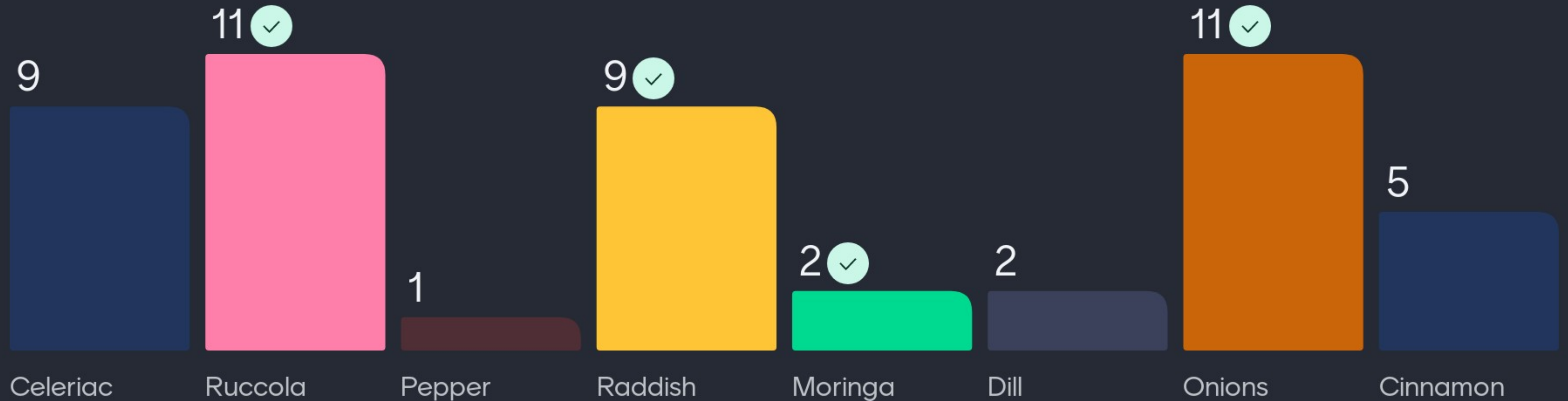


What is understood under "CONJUGATES" in residue definitions?

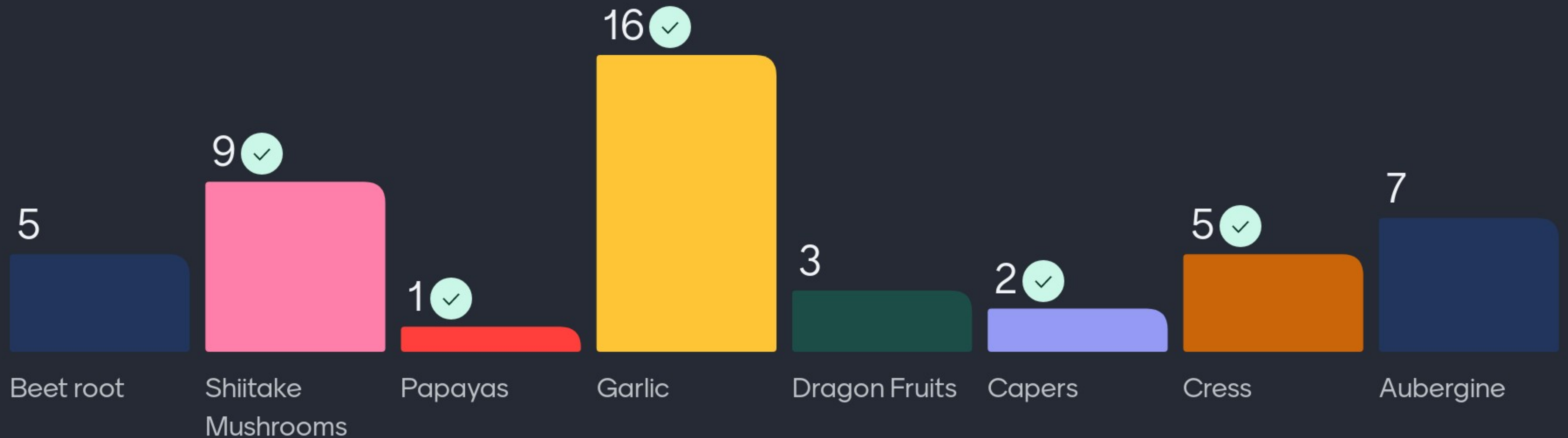


Further Analytical Questions

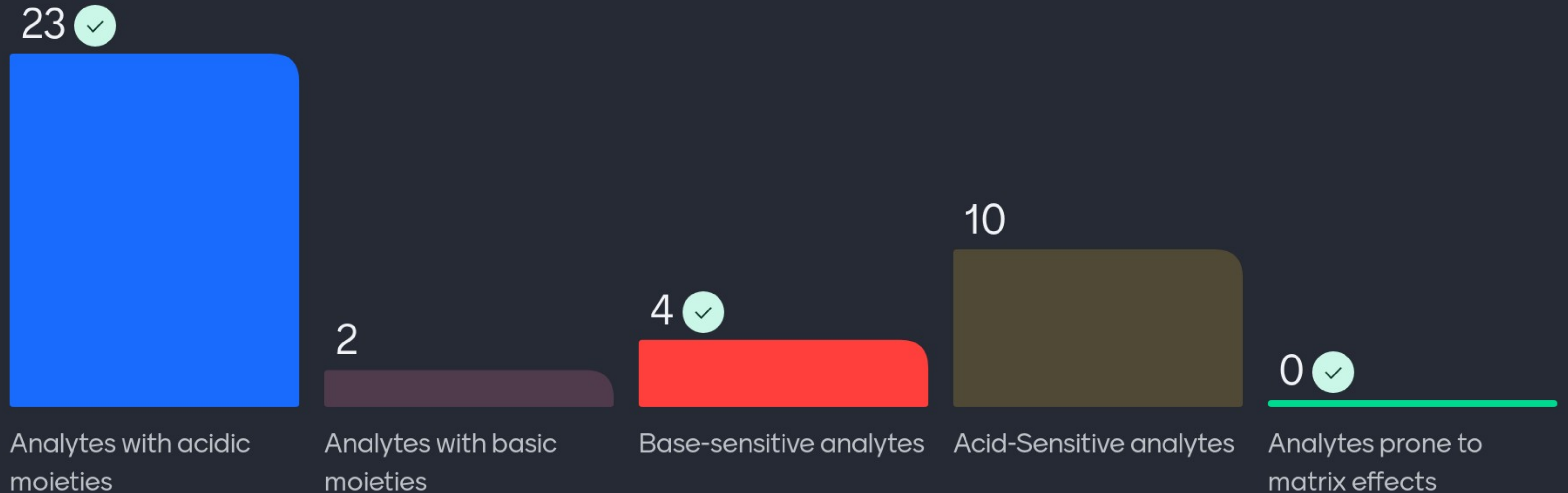
Which of the following Commodities are known to create CS2 Background levels in DTC analysis? - PART 1



Which of the following Commodities are known to create CS2 Background levels in DTC analysis? - PART2



Which analytes may be affected during or following dSPE cleanup with PSA?



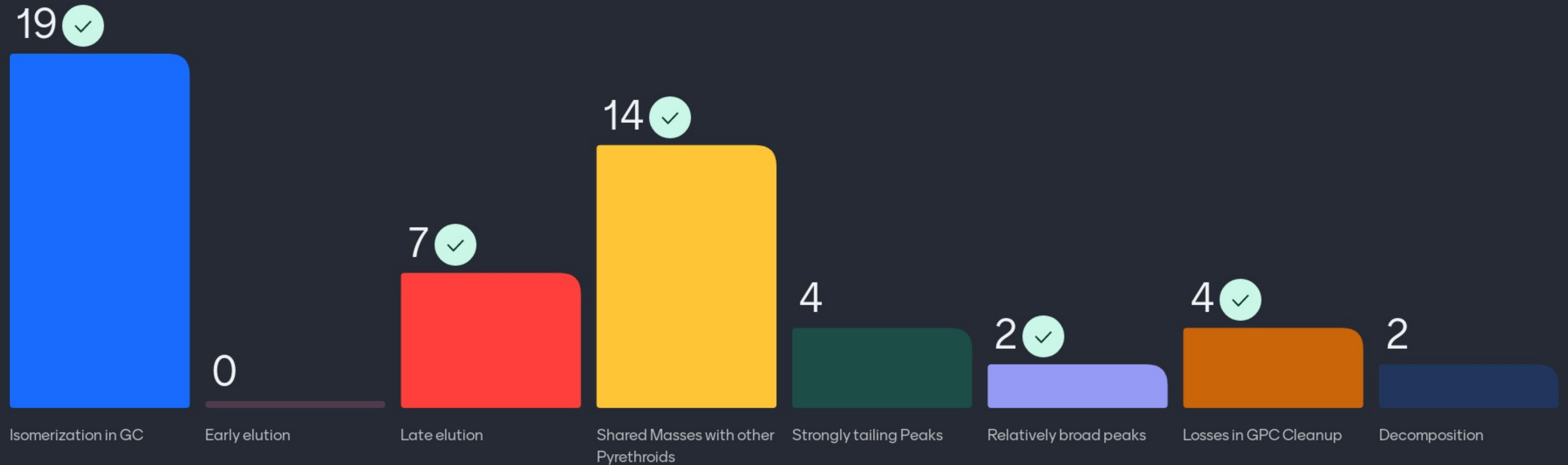
Why is the presence of excessive fat in a sample critical in QuEChERS



Which analytes may be affected during dSPE cleanup with GCB (Graphitized Carbon)?



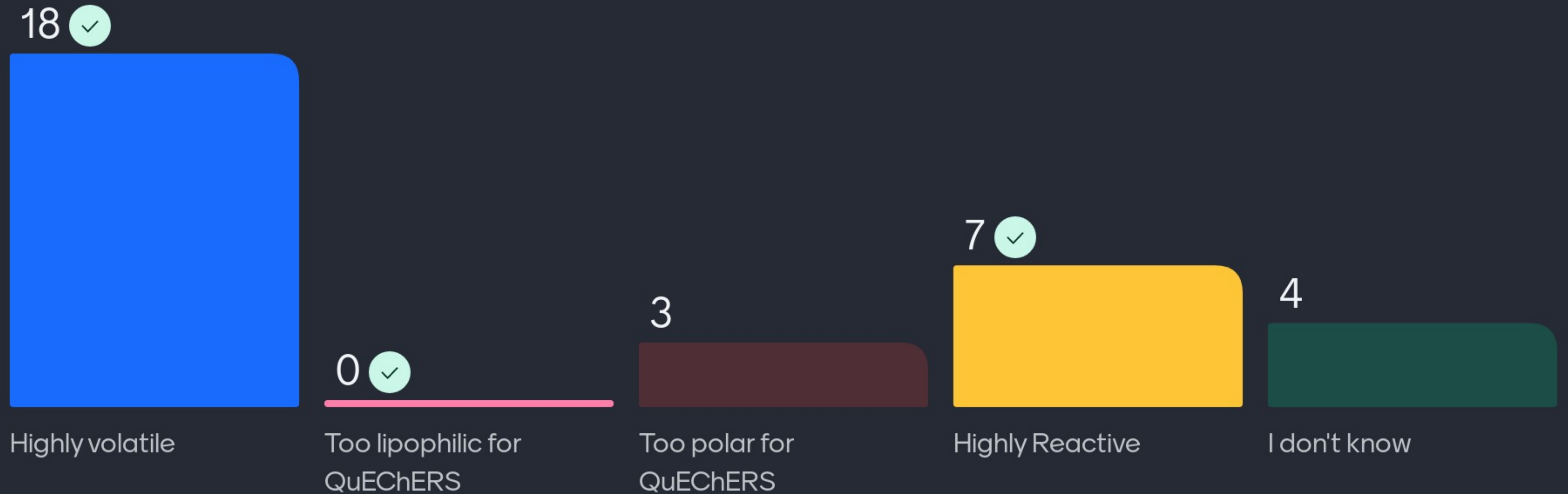
What kind of behaviour is typically observed when analyzing pyrethroids ?



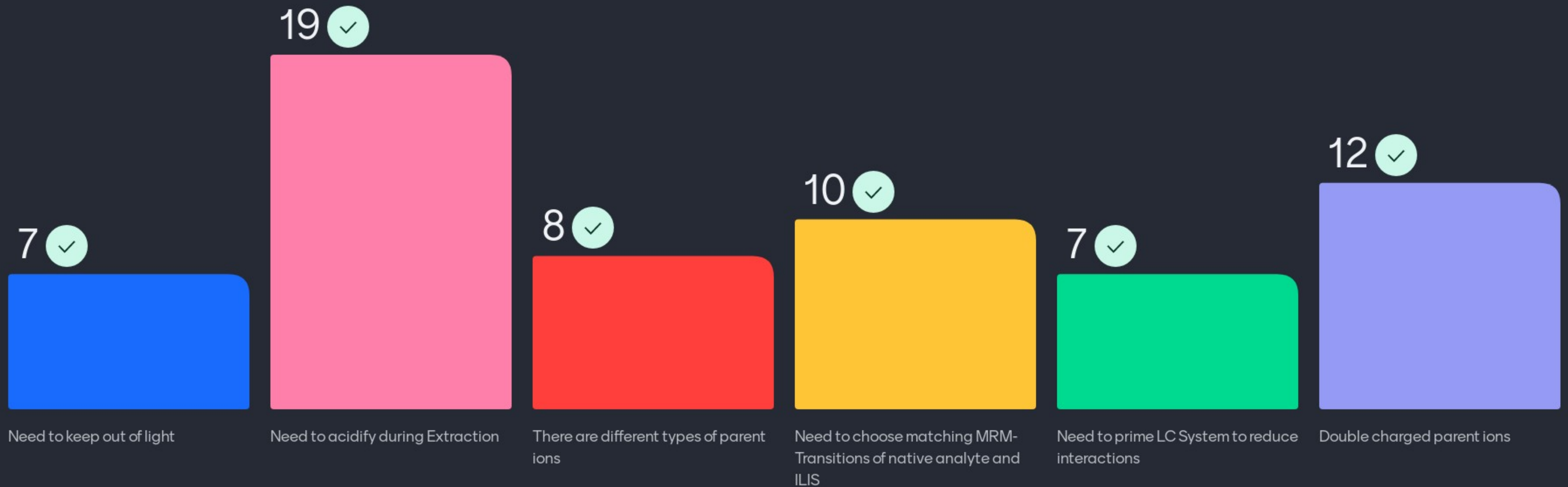
Which of the following analytes are preferably stored in plastic vessels ?



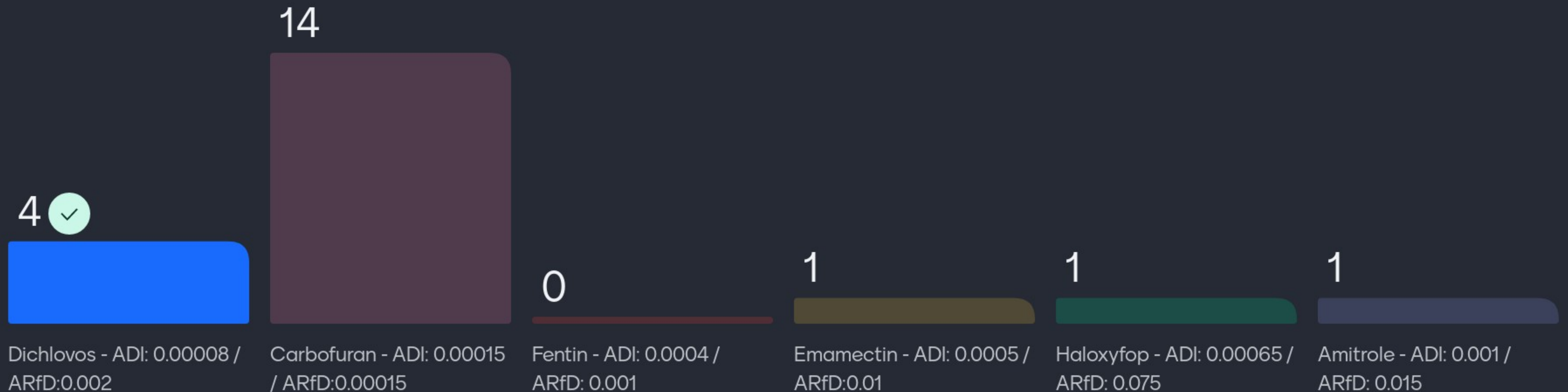
Which are the main problems during the analysis of Ethylene Oxide (as such)?



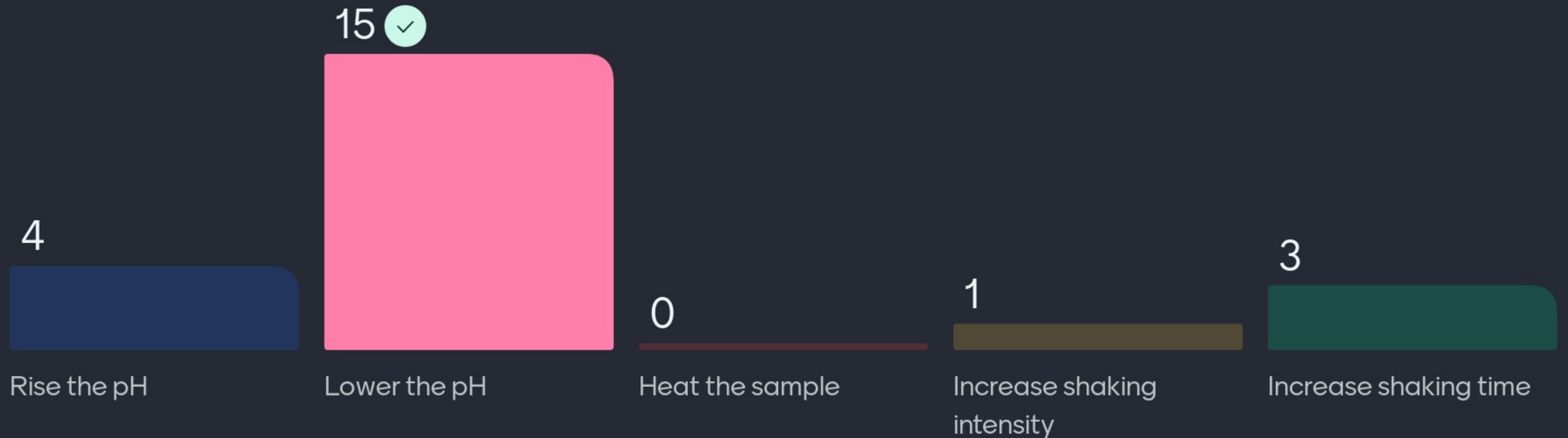
What are some typical issues to consider when analyzing for Paraquat/Diquat?



Which of the following compounds has the highest CHRONIC TOXICITY (ADI/ARfD values [mg/kg BW/d])?



An ACIDIC PESTICIDE gives low recoveries using QuEChERS. What would you try first to rise the recoveries?



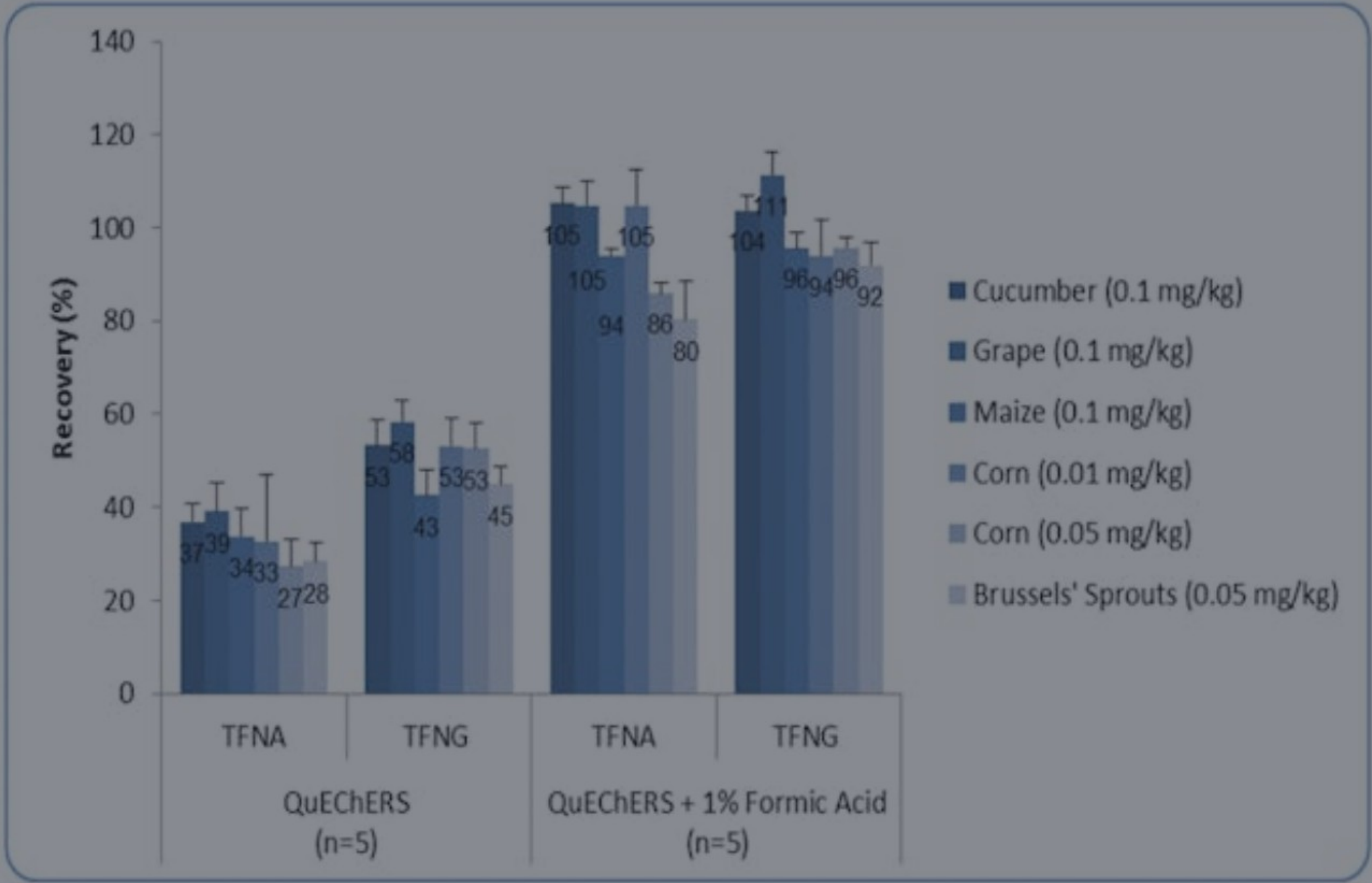
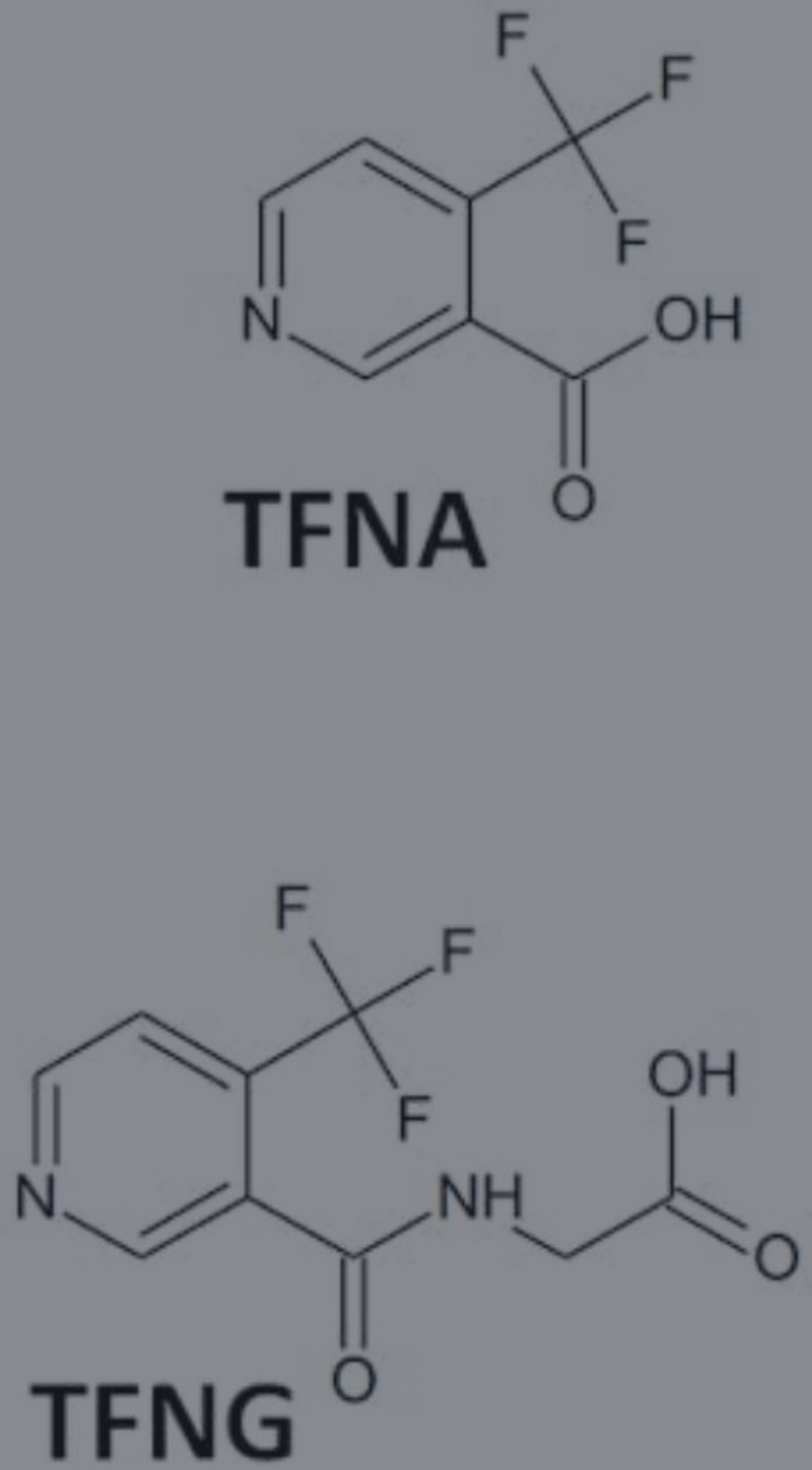


Figure 1: Comparison of recovery data for TFNA and TFNG using QuEChERS or acidified QuEChERS



Which of the following compounds tend to experience LOSSES if sample HOMOGENATES are left to stand at room temperature



What are the main procedural differences when it comes to Monitoring Copper levels in food via the Contaminants or the Pesticides approach?

0

Extraction/Cleavage

0

Measurement

0



Sampling

0

Preparation of samples prior
to analysis

Which of the following compounds has the highest ACUTE TOXICITY (ADI/ARfD values [mg/kg BW/d])?

0

Dichlofos - ADI: 0.00008 /
ARfD: 0.002

0



Carbofuran - ADI: 0.00015
/ ARfD: 0.00015

0

Fentin - ADI: 0.0004 /
ARfD: 0.001

0

Emamectin - ADI: 0.0005 /
ARfD: 0.01

0

Haloxypop - ADI: 0.00065 /
ARfD: 0.075

0

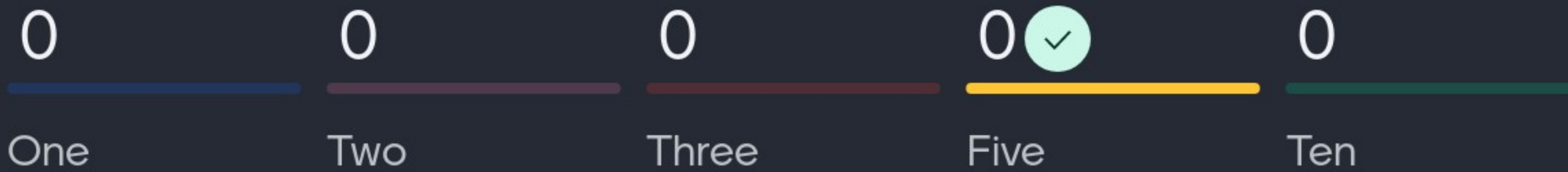
Amitrole - ADI: 0.001 /
ARfD: 0.015



Which of these factors does NOT influence the extractability of INCURRED pesticides?



At least how many watermelons should be randomly sampled for preparing a laboratory sample ?



Thank you for your
participating!

DANKE!
THANK YOU!
MERCI!
GRAZIE!
GRACIAS!
DANK JE WEL!

• • • • •



Travel was Good?

