Why our calibration samples?

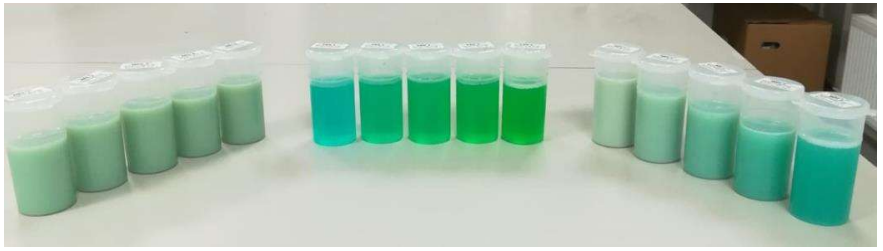
- The transfer of Qlip as a ISO 17025 accredited lab into your own facility
- Access to our dairy experts
- Subscription based
- Freshly conserved milk is:
  - Similar to your own production samples
  - Stable up to 3 months
  - Includes seasonal variation
  - **Ready to use**
    - Minimizes the 'human error'
  - Protein structures remains intact
  - Higher accuracy
- Adjustable ranges (customisation)
- Available with matching control samples
- **<u>EXPECTATION: from 2023 Qlip will be ISO 17034 accredited</u>**

Qlip calibration samples programme

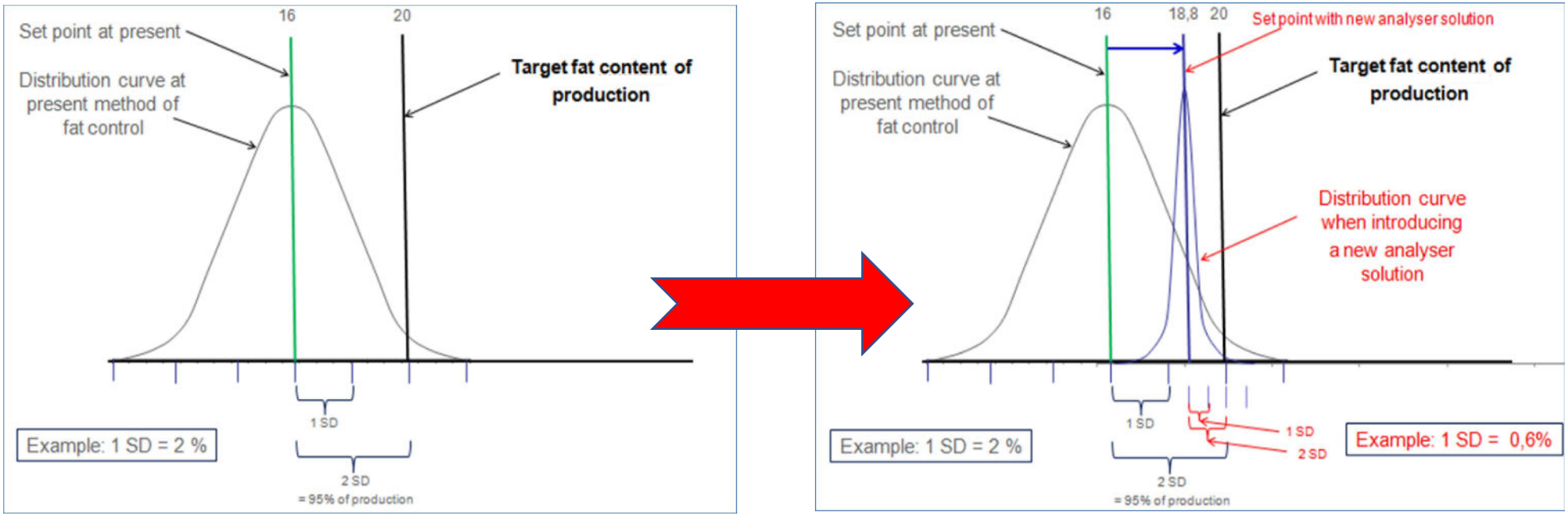
Qlip calibration and control samples have been specifically developed for the calibration and control of infrared instruments.

GENERAL

Matrix	Calibration samples	Parameters	Range
Milk	Somatic cell count C1 - C5	Somatic cell count	200 - 800 x 1000 cells/ml
Milk	Somatic cell count C1 - C7	Somatic cell count	200 - 2000 x 1000 cells/ml
Milk	Skimmed milk F1 - F5	Fat	0,05 - 0,27% m/m fat
Milk	Skimmed milk P1 - P5	Protein, total solids	2,1 - 3,6% m/m protein
Raw milk	Fat F0 - F6, Protein P1 - P5 and Lactose L1 - L5	Fat, protein, lactose, total solids, casein	0,05 - 6% m/m fat, 1,7 - 5,1 % m/m protein, 2,9 - 5,8% m/m lactose
Raw milk	Fat F0 - F8, Protein P1 - P5 and Lactose L1 - L5	Fat, protein, lactose, total solids, casein	0,05 - 8% m/m fat, 1,7 - 5,1 % m/m protein, 2,9 - 5,8% m/m lactose
Raw milk	Fat F9 - F12	Fat	9 - 12% m/m fat
Raw milk	Urea U1 - U6	Urea	15 - 80 mg/100 g
Raw milk	Freezing point FP1 - FP8	Freezing point	-0,47 - -0,54 °C
Goat milk	Fat F1 - F5	Fat, protein, total solids	2,5 - 6,5% m/m fat, 3,3% m/m protein, 11 - 14,5% m/m total solids
Goat milk	Protein P1 - P5	Protein	2,0 - 4,5% m/m protein
Goat whey	Fat F1 - F5	Fat, protein, total solids	0,05 - 1,0% m/m fat
Whey	Fat F1 - F5 and Protein P1 - P5	Fat, protein, lactose, total solids	0,04 - 0,36% m/m fat, 0,5 - 1,2% m/m protein
Cream	Freezing point FP1 - FP8	Freezing point	-0,45 - -0,54 °C
Cream	Fat F1 - F5 (23% - 31%)	Fat, protein	23 - 31% m/m fat
Cream	Fat F6 - F11 (33% - 44%)	Fat, protein, lactose, total solids	33 - 44% m/m fat
Cream	Fat F12 - F13 (20% - 21%)	Fat, protein	20 - 21% m/m fat
Cream	Protein P1 - P5	Fat, protein	1,7 - 2,6% m/m protein

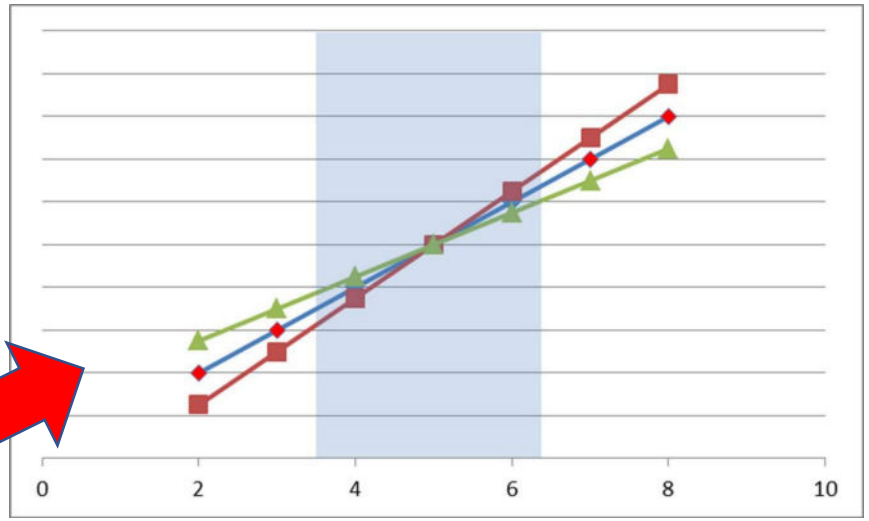


Purpose of calibration



When to check your calibration?

- **Daily!**
- Change in instrument
- Change in environment
- Change of matrix (totaly or partly)
- Change in time



- Single–point-calibration = no calibration
  - Variety is key

Periodical calibration!!

Qlip
Quality assurance in dairy