

# Official milk testing in 2023

Official milk testing (MT) is a testing programme anchored in public law. The testing centre Suisselab SA in Zollikofen is commissioned to carry out the tests. The Milk Testing Ordinance (SR 916.351.0) and the FDHA Ordinance on Hygiene in Milk Production (SR 916.351.021.1) provide the legal framework.

## 1 Analyses

MT is an important means of ensuring that the hygiene and quality requirements for raw cow's milk are met. Moreover, it is a prerequisite for the exportability of Swiss milk and milk products. In each month in which milk is produced, the cow's milk delivered by each milk producer must be tested at least twice as part of MT based on the following criteria:

Table 1: Milk testing criteria

Criterion	Requirements	Method
Plate count at 30°C (per ml)	< 80,000 cfu	fluorescence optical count <sup>1</sup>
Somatic cell count (per ml)	< 350,000 cells	fluorescence optical count <sup>1</sup>
Inhibitors	not detectable	microbiological inhibition test <sup>2</sup>

<sup>&</sup>lt;sup>1</sup> Calculated geometric average of at least two samples per calendar month. If, exceptionally, only one result is available in any given month, this is used instead of the geometric mean.

#### 2 Results

Evaluation of the results for 2023 took into account the cow's milk test samples from Switzerland, excluding those from France (zone milk) and the Principality of Liechtenstein. The full-year results for cow's milk were as follows:

Table 2: Comparison of the 2020, 2021, 2022 and 2023 full-year results for plate count

Plate count	2023	2022	2021	2020
Number of analysed samples	381'538	390'633	402'029	409'419
Mean, arithmetic (cfu/ml)	10'423	10'031	10'168	10'569
Number of samples exceeding the limit	2'714	2'861	2'840	2'907
Number of samples exceeding the limit (%)	0.711 %	0.732 %	0.706 %	0.710 %
Number of bans	14	10	5	15
Number of bans (%)	0.004%	0.003%	0.001 %	0.004 %

Source: TSM

 $<sup>^2</sup>$  FSVO-approved methods are listed in the technical instruction concerning the performance of official milk testing.

Table 3: Comparison of the 2020, 2021, 2022 and 2023 full-year results for somatic cell count

Cell count	2023	2022	2021	2020
Number of analysed samples	381'679	391'246	400'609	408'368
Mean, arithmetic (cells/ml)	132'002	133'885	133'283	133'949
Number of samples exceeding the limit	11'182	12'331	12'317	12810
Number of samples exceeding the limit (%)	2.930 %	3.152 %	3.075 %	3.137 %
Number of bans	58	61	57	50
Number of bans (%)	0.015 %	0.016 %	0.014 %	0.012 %

Source: TSM

Table 4: Comparison of the 2020, 2021, 2022 and 2023 full-year results for inhibitor detection

Detection of inhibitors	2023	2022	2021	2020
Number of analysed samples	384'685	393'796	404'418	411'901
Number of bans	173	203	194	261
Number of bans (%)	0.0450 %	0.0515 %	0.0480 %	0.0634 %

Source: TSM

# 3 Milk delivery bans and their lifting

The cantonal enforcement authority imposes a ban on milk deliveries in the event of any positive detection of inhibitors, a third plate count rejection within four months or a fourth somatic cell count rejection within five months.

If the milk delivery ban results from a positive inhibitor test, the ban cannot be lifted until the milk producer has shown evidence to the authority that appropriate action has been taken to remedy the causes and that the result of the inhibitor detection test for the milk ready to be delivered is negative. The competent authority decides on a case-by-case basis whether an additional inspection is necessary.

If the milk delivery ban results from repeated rejections due to elevated plate or somatic cell counts, the competent cantonal authority must perform an on-site inspection. In addition, the milk must meet all legal requirements.

### 4 Comparison of the 2023 data with values for previous years

A comparison of the 2022 and 2023 data shows, as in previous years, a reduction in the total number of analysed milk samples. This is mainly attributed to the decrease in the number of milk-producing farms. Even though the percentage of bans due to repeated plate count infringements rose slightly in comparison with the total number of samples analysed in 2023, the percentage of samples exceeding the rejection limit for all three criteria is slightly below the previous year's level.

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