



# Official milk testing in 2022

The official milk testing (MT) is a testing programme anchored in public law. The testing centre Suis-selab 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

The 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 the MT based on the following criteria:

**Table 1: Criteria for Milk Testing**

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>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.

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

## 2 Results

For the evaluation of the results from the year 2022, the cow's milk test samples of Switzerland were taken into account, excluding those from France (zone milk) and the principality of Liechtenstein. The results for the full year were as follows:

The following total annual results were determined:

**Table 2: Comparison of the 2019, 2020, 2021 and 2022 full year plate count results**

Plate count	2022	2021	2020	2019
Number of analysed samples	390'633	402'029	409'419	426'640
Median (cfu/ml)	4'993	4'244	5'391	5'184
Mean, arithmetic (cfu/ml)	10'031	10'168	10'569	10'537
Number of samples exceeding the limit	2'861	2'840	2'907	3'370
Number of samples exceeding the limit (%)	0.732 %	0.706 %	0.710 %	0.790%
Number of bans	10	5	15	12
Number of bans (%)	0.003%	0.001 %	0.004 %	0.003%

Source: TSM

**Table 3: Comparison of the 2019, 2020, 2021 and 2022 full year somatic cell count results**

<b>Cell count</b>	<b>2022</b>	<b>2021</b>	<b>2020</b>	<b>2019</b>
Number of analysed samples	391'246	400'609	408'368	427'828
Median (cells/ml)	132'572	131'202	131'569	130'109
Mean, arithmetic (cells/ml)	133'885	133'283	133'949	130'397
Number of samples exceeding the limit	12'331	12'317	12'810	12'390
Number of samples exceeding the limit (%)	3.152 %	3.075 %	3.137 %	2.896%
Number of bans	61	57	50	49
Number of bans (%)	0.016 %	0.014 %	0.012 %	0.011%

Source: TSM

**Table 4: Comparison of the 2019, 2020, 2021 and 2022 full year inhibitor detection results**

<b>Detection of inhibitors</b>	<b>2022</b>	<b>2021</b>	<b>2020</b>	<b>2019</b>
Number of analysed samples	393'796	404'418	411'901	428'850
Number of bans	203	194	261	270
Number of bans (%)	0.0515 %	0.0480 %	0.0634 %	0.0630%

Source: TSM

### **3 Milk delivery bans and their abrogation**

The cantonal enforcement authority shall impose a ban on milk deliveries in the event of any positive detection of inhibitors, the third objection to the plate count within four months and the fourth objection to the somatic cell count 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 that is 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 increased plate or somatic cell counts, the competent cantonal authority has to perform an on-site inspection. In addition, the milk has to meet all legal requirements.

### **4 Comparison of the 2022 data with the values of the previous years**

A comparison of the 2021 and 2022 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. The percentage of samples exceeding the rejection limit is slightly above the previous year's level for all three criteria, but is comparable to the average values of the last three years. The same applies to the number of milk delivery bans. Currently, no specific measures need to be taken.

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