



Official milk testing in 2021

The official milk testing (MT) is a testing programme anchored in public law. The testing centre Suissselab 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 ¹
Somatic cell count (per ml)	< 350,000 cells	fluorescence optical count ¹
Inhibitors	not detectable	microbiological inhibition test ²

¹ 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 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 2021, 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 2020 and 2021 full year results for plate count

Plate count	2021	2020
Number of analysed samples	402'029	409'419
Median (cfu/ml)	4'244	5'391
Mean, arithmetic (cfu/ml)	10'168	10'569
Number of samples exceeding the limit	2'840	2'907
Number of samples exceeding the limit (%)	0.706 %	0.710 %
Number of bans	5	15
Number of bans (%)	0.001 %	0.004 %

Source: TSM

Table 3: Comparison of the 2020 and 2021 full year results for somatic cell counts

Cell count	2021	2020
Number of analysed samples	400'609	408'368
Median (cells/ml)	131'202	131'569
Mean, arithmetic (cells/ml)	133'283	133'949
Number of samples exceeding the limit	12'317	12'810
Number of samples exceeding the limit (%)	3.075 %	3.137 %
Number of bans	57	50
Number of bans (%)	0.014 %	0.012 %

Source: TSM

Table 4: Comparison of the 2020 and 2021 full year results for inhibitor detection

Detection of inhibitors	2021	2020
Number of analysed samples	404'418	411'901
Number of bans	194	261
Number of bans (%)	0.0480 %	0.0634 %

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 2020 and 2021 data

A comparison of the 2020 and 2021 data shows, as in previous years, a reduction in the total number of analysed milk samples. This is attributed to the decrease in the number of milk-producing farms. The percentage of samples that resulted in a milk delivery ban due to repeated exceeding of somatic cell counts in 2021 is at a slightly higher level than in previous years. In the case of milk delivery bans due to multiple increased plate counts or a positive inhibitor test, the percentage values show a slight decrease. Currently, no specific measures need to be taken.

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