

## Milk SA - Dairy Standard Agency Programme, 2023 (PRJ-0351-2023) Dairy Standard Agency

## Quarter 3 2023/2023 (July 2023 till September 2023)

## **Project goals**

# Goal 1 - National monitoring of milk and other dairy products in collaboration with Health Authorities

## Achievements

The sample run activities (cycle 85) were completed as per schedule and the number of samples per product is indicated in Table 1 below. The product scope for cycle 85 was milk (raw and pasteurised), and all types of cheese.

		Fresh Milk (A-D)	228	
		Products total (E - K)	266	
TOTAL				
	А	Milk (packed & pasteurised)	120	
	В	Milk (packed & unpasteurised)	5	
	С	Milk (bulk pasteurised)	29	
	D	Milk (bulk unpasteurised (raw))	74	
	E	Hard cheese	72	
	F	Semi-hard cheese	79	
	G	Semi-soft cheese	9	
	Н	Soft cheese	10	
		Processed cheese & cheese spread	53	
	J	Cream cheese	17	
	K	Cottage cheese & cottage cheese with added foodstuff	15	
	L	Imported cheese	2	
	М	Unspecified cheese	8	
	Q	Amasi	1	

#### Table 1 Number of samples per product collected.

During Cycle 85, a total of 4 metropolitan municipalities, 13 district municipalities, and 43 local municipalities actively participated in the sampling procedures.

The samples obtained during this cycle were submitted to the DSA Laboratory Services, following established standard procedures. Subsequently, the results pertaining to milk and various other dairy

products underwent benchmarking against legal standards in the domains of food safety, compositional analysis, and trade metrology. These standards respectively fall under the Foodstuffs, Cosmetics, and Disinfectants Act of 1972 (Act 54 of 1972), the Agricultural Product Standards Act of 1990 (Act 119 of 1990), and the Legal Metrology Act of 2014 (Act 9 of 2014).

Of notable significance is the integration of Enterobacteriaceae testing into the standard suite of the analyses for milk. This strategic enhancement significantly broadened the scope of risk identification, specifically directed toward the detection and management of pathogens within dairy products.

Food safety non-conforming results obtained, were assessed and communicated to the participating municipal health authorities for further action. Contact details of participating authorities as well as processors were updated as per standard procedure.

The DSA, in terms of its project protocol and relationships with the relevant authorities (see project 6), continued to liaise with the relevant law enforcement bodies, providing support through dairy technical information and guideline documents to limit the sale of non-conforming products.

## No Non-achievements / underperformance has been reported

# Goal 2 - Handling of quality problems in respect of product compliance with legal standards

## Achievements

#### Matters dealt with under Project 2 included:

An inquiry into the compliance of fermented products, and adherence to national microbiological and quality standards was undertaken in KwaZulu-Natal. The investigation has now been completed.

Four distinct investigations were conducted to assess compliance with labelling requirements for fermented products, specifically kefir. Three of these investigations have been successfully concluded.

## No Non-achievements / underperformance has been reported

## **Goal 3 - Special investigations**

## Achievements

#### Aflatoxin M1 Analysis - 2023/Q3 - cycle 85

During the third quarter of 2023, designated as cycle 85, a comprehensive analysis of Aflatoxin M1 in various samples was conducted. A total of 228 samples were examined to ascertain their compliance with the legal limits outlined in the regulations governing tolerances for fungus-produced toxins, as stipulated in the Foodstuffs, Cosmetics and Disinfectants Act of 1972 (Act No. 54 of 1972).

#### Sample Analysis:

During this analysis, each of the 228 samples was examined for the presence of Aflatoxin M1. Four of these samples exhibited Aflatoxin M1 levels that exceeded the permitted maximum residue limit (MRL) value of 50 parts per trillion (ppt), as defined in the regulations. Two samples were from the North West, one from KwaZulu-Natal and one from Mpumalanga.

In conclusion, the analysis conducted during cycle 85 revealed that 4 out of 228 samples exceeded the established permissible limit of 50 ppt for Aflatoxin M1. This finding necessitates further scrutiny and appropriate action in alignment with regulatory guidelines to ensure food safety and compliance within the realm of fungus-produced toxin tolerances. The report serves as a critical reference for maintaining the

safety and quality of food products in accordance with established regulatory standards. Further investigations and remedial measures may be required to address the non-compliant samples and mitigate potential health risks associated with Aflatoxin M1. Remedial actions were done through project 5.

#### Labelling and advertising on dairy product packaging

Special investigation on product labelling that might contain deceptive claims that can be misleading to consumers. The focus will be on the correlation between what is printed on labelling and the content of the product. The final project report on the matter will be available end of 2023. Phasing in routine target adulteration to support the project.

## No Non-achievements / underperformance has been reported

## Goal 4 - Milk and other dairy product risk identification

## Achievements

The DSA national dairy monitoring program provides for the sampling of milk categories namely packed pasteurised and unpasteurised milk and retail bulk pasteurised and unpasteurised milk as well as other dairy products. Relevant information regarding food safety and compositional standards for milk, and other dairy products were communicated to the relevant government authorities and dairy industry members as tests were completed.

A summary report has been prepared to assess the status of raw milk sales within municipalities that permit the sale of raw milk for final consumption under R1555 regulations, as well as municipalities that do not permit such sales. This evaluation is part of the Dairy Standard Agency's National Milk Monitoring Programme (NMMP) for the period spanning 2022 to 2023. There was no notable difference in compliance status between the two groups.

#### 4.1 Reporting of results to health authorities

Reports on non-conforming results were forwarded to the respective government departments at the end of each cycle. Each participating municipality received a quarterly report on the analysis of all samples submitted. Non-conforming processors as well as processors whose contact details were verified and who requested to receive test results were provided with individual test reports. The total cycle reports forwarded to health authorities for cycle 85 are indicated in Table 2.

Province	Health authority offices	
Mpumalanga	11	
Limpopo	11	
Western Cape	8	
North West	13	
Gauteng	10	
Free State	9	
Northern Cape	2	
Eastern Cape	7	
KwaZulu-Natal	12	
TOTAL	83	

#### Table 2 Total cycle reports

#### 4.2 Software development

Recent developments and ongoing projects in the realm of information technology and software development within the DSA:

a. Upgrades to the current Management Information System (MIS):

Significant progress has been made in upgrading the DSA's existing Management Information System (MIS). These upgrades aim to enhance the functionality, efficiency, and overall performance of the system, ensuring that it continues to meet our evolving operational needs.

b. Updates to the Laboratory program:

The DSA Laboratory program has undergone important updates to improve its effectiveness and reliability. These updates are designed to streamline laboratory processes, facilitate data management, and optimise overall laboratory operations.

c. Upgrades to the Audit app:

A project to upgrade the DSA Audit application, which plays a critical role in quality assurance and compliance efforts was initiated. These upgrades are intended to enhance the app's user interface, reporting capabilities, and overall usability.

d. New version of the MIS in progress:

Currently, developing a new version of our Management Information System (MIS) is underway. This project represents a forward-looking approach to ensure that the MIS remains technologically up-to-date and capable of meeting the evolving demands of our organisation.

Ongoing initiatives in IT and software development underscore the DSA's commitment to continuously improve its technological infrastructure and systems. These upgrades and developments are essential for maintaining efficiency, data accuracy, and compliance across various aspects of the operations. The DSA will continue to monitor and report on the progress of these projects in future updates.

#### 4.3 National and international food safety and recall monitoring

National and international food safety alerts during 2023 were monitored. Approximately 20 national and international websites were monitored on a weekly basis for possible food safety risks relating to dairy during this year, that could have a public health impact on South African consumers. Twenty international dairy-related alerts were received. No further actions were required based on the monitoring activities.

## No Non-achievements / underperformance has been reported

## Goal 5 - Remedial programs with producers, processors and distributors

## Achievements

Due to the short shelf life of most dairy products, it is crucial to promptly address non-conforming products to ensure appropriate actions are taken by all parties involved. Project 1.5, which follows the activities of project 1.1, offers an effective avenue for communicating information about non-conforming test results and providing recommendations for corrective actions to suppliers. This communication can be achieved through various means such as telephone calls, email reports, posted reports, or on-site

visits to the facilities. Additionally, environmental health practitioners (EHPs) were tasked with communicating all test results to the relevant stakeholders.

During cycle 85, visits were conducted to processors, producers/distributors (PDs), and milk shops across different regions, including Gauteng (3), Mpumalanga (11), Free State (2), North West (14), Western Cape (5), Eastern Cape (9), and KwaZulu-Natal (19). During these visits, the DSA Lab Services pamphlet was distributed to disseminate important information.

Furthermore, the technical personnel from the DSA also extended their support and guidance by visiting EHPs associated with government departments that oversee the processors, producers/distributors, and milk shop retailers. The purpose of this assistance was to streamline the implementation of project 1 by conveying sampling procedures, dairy sample handling practices, and disseminating critical information. This was done with the goal of ensuring the comprehensive sampling of all applicable products in the national dairy sampling program.

Province	Areas visited	Companies visited	E-mails	DSA further assistance provided
Gauteng	2	3	49	1
Mpumalanga	5	11	18	0
Free State	1	2	14	1
North West	5	14	5	0
Northern Cape	0	0	0	0
Western Cape	4	5	43	3
Eastern Cape	6	9	29	3
Limpopo	0	0	15	1
KwaZulu-Natal	7	19	27	0

#### Table 3Visits were paid to processors, PDs and milk shops

## No Non-achievements / underperformance has been reported

## Goal 6 - Communication with the authorities and other organisations

## Achievements

#### 6.1 Department of Health: Directorate Food Control

The DSA in a supportive role to industry, liaised with the directorate regarding queries relating to food labelling, food safety and food additive requirements, as well as dairy technical matters. Technical matters such as the amendment of standards relating to amongst others the draft R3337 of 21 April 2023 as well as Codex standards.

#### 6.2 Municipal Health Authorities

Communication with the municipal health authorities focussing on the interpretation of food safety legislation and implementation of R638 and R328 on law enforcement as per the health regulations under the Foodstuffs, Cosmetics and Disinfectants Act, with specific reference to retail unpasteurised and pasteurised milk as well the sale of raw milk and cheese took place. These engagements were followed up by means of radio talks about the health risks of substandard dairy products as per Project 8.

#### 6.3 Department of Agriculture, Land Reform and Rural Development (DALRRD)

#### i) Directorate: Inspection Services (IS)

Cycle results of the DSA monitoring programs regarding infringements in terms of the regulations relating to dairy and imitation dairy products were still limited by the Directorate: Inspection Services. DARRD officials of the Directorate Food Safety and Quality Assurance were invited to the DSA to strengthen the standing relationships and introduce the DSA Laboratory Services as well as the DSA management information system from which data is populated.

#### ii) Directorate: Food Safety and Quality Assurance (FSQA policy making)

Communication with FSQA regarding dairy product compositional matters and the interpretation of the regulations relating to dairy and imitation dairy products continued in respect of rBST labelling on milk and dairy products. Formal communication with the FSQA also continued regarding the revision of R1510 of 2019 - Regulations relating to dairy and imitation dairy products. A final industry proposal was submitted to FSQA for consideration and consultation.

#### 6.4 National Regulator for Compulsory Specifications (NRCS): Legal Metrology

Standard procedure provides for a quarterly report regarding metrology infringements to the Senior Manager, Inspections: Legal Metrology of NRCS. No formal complaints were lodged with NRCS during the third quarter of 2023.

#### 6.5 South African Bureau of Standards (SABS)

Correspondence from the SABS in respect of South African National Standards as well as information from the International Standards Organisation were appropriately dealt with and ballot papers on standards were attended to.

#### 6.6 Communication with other organisations

#### 6.6.1 Milk SA, MPO and SAMPRO

The DSA interacted on a regular basis with the project managers of Milk SA's Consumer Education Project, SAMPRO, MPO as well as the Project Coordinating Committee of Milk SA whose scheduled meeting took place on 17 August 2023. Extensive contributions were made to the MPO Nedbank Stewardship Program with successful outcomes. The Sampro general meeting was attended, and a PowerPoint presentation was made regarding the progress of the DSA projects as well as the Milk SA Regulations and Standards Project. DSA managing director serves as a member of the DRDC and its management committee and meetings were attended where possible.

#### 6.6.2 Consumer Goods Council of South Africa: Food Safety Initiative (CGCSA: FSI)

The DSA as a member of the Food Safety Initiative (FSI) interacted on a regular basis with the management of FSI regarding matters relating to:

Regulations under the Foodstuffs, Cosmetics and Disinfectants Act;

Agricultural Product Standards (APS) Act and bill;

Regulations: Protection of geographical indications;

Food loss and waste;

The latest developments regarding the front-of-pack labelling and the draft R3337; and

Follow-up discussions regarding assignees appointed under the APS Act.

Collaboration on the front-of-pack labelling initiative continued in 2023 together with the Milk SA Consumer Education Project and industry members in respect of the proposed use of warning signs on dairy products regarding milk fat, sugar and salt on front-of-pack labelling regulations. Further actions to follow during the fourth quarter by means of scheduled meetings.

#### 6.6.3 European Hygienic Engineering & Design Group (EHEDG)

The DSA is a member of the South African steering committee. Following the successful webinar on hygienic design of equipment held on 28 June 2023 under project 8, no actions were planned for the third quarter.

#### 6.6.4 International Dairy Federation (IDF)

The DSA managing director is a member of the South African National Committee of the International Dairy Federation (SANCIDF) and of the IDF Standing Committee: Standards of Identity and Labelling and nominated to the IDF Standing Committee (SC) for food additives and related action teams. Electronic SC meetings were attended where possible, as well as commenting on documents relating to front-of-pack labelling, e-commerce, food additives, questionnaires, and related documents such as comments on Codex standards.

#### 6.6.5 South African Society of Dairy Technology (SASDT)

The DSA managing director as a member of the management committee of the Northern region participated in the SASDT management activity meetings. The student evening partly sponsored by DSA took place in August 2023.

#### 6.6.6 Tertiary institutions

The DSA serves as a member of the advisory boards of the Departments of Environmental Health of the Tshwane University of Technology (TUT) as well as Nelson Mandela Metropolitan University. The purpose of the advisory boards is to give industry inputs and assist the universities with the development of course material for environmental health practitioners (EHPs). One meeting was attended by Mrs J Odendaal, project manager of the DSA.

## No Non-achievements / underperformance has been reported

## Goal 7 - Liaison on legislation with authorities

## Achievements

The DSA continued liaison with the authorities regarding the following legislation and standards:

#### 7.1 Department of Health: Directorate: Food Control

#### Foodstuffs, Cosmetics and Disinfectants Act, 1972 (Act 54 of 1972)

Industry submission regarding the draft R3337: The draft regulations relating to the labelling and advertising of foodstuffs on 31 January 2023 were finalised during the third quarter and submitted on 21 July 2023. DSA liaised with the directorate in respect of the formal use of the Lactoperoxidase system (LPS) by the organised dairy industry under controlled conditions.

#### 7.2 Department of Agriculture Land Reform and Rural Development (DALRRD)

#### Agricultural Product Standards Act, 1990 (Act 119 of 1990)

Regulations relating to the classification, packing and marking of dairy products and imitation dairy products intended for sale in the Republic of South Africa (R1510/2019).

The work on the proposed draft regulation relating to dairy and imitation dairy products was completed and a final submission to DALRRD with the assistance of the Milk SA Technical Working Group was made during the third quarter as planned. A special information webinar was arranged by the Milk SA Regulations and Standards Project on 15 September 2023 to inform industry members of the latest developments.

#### 7.3 South African National Standards (SABS)

The managing director of the DSA serves as chairperson of the SABS TC 034/SC 05 regarding milk and milk products. The first meeting for TC 034/SC 05 took place in June 2023. Dr Mark Chimes as the project manager of the Milk SA Sustainability Project: Animal Health and Welfare has also joined the working groups on "The welfare of dairy cattle and transportation of livestock". The SANS 1694 and 1488 relating to the welfare of dairy cattle and the transport of livestock received priority attention in the preparation of comments to SABS.

Interactions with SABS related to the administration and role of South African members and conveners in the African Organisation for Standardisation (ARSO) TC 04. ARSO's monthly and planetary meetings were well attended during the third quarter of 2023. Several dairy compositional standards have been drafted relating to various species of milk.

# 7.4 International Dairy Federation (IDF), Codex Alimentarius and International Organization for Standardization (ISO)

As a representative of the SANCIDF, the managing director of the DSA participated in the respective IDF SC and action team meetings. The IDF comments on food additives and plant-based foods were also shared with the South African Codex contact point for the purpose of discussion at the next South African preparation meeting of the Codex feedback sessions regarding food additives and pesticide residues. IDF SCSIL was also provided with the latest draft proposals on R1510/2019.

## No Non-achievements / underperformance has been reported

## Goal 8 - Information and education

## Achievements

The DSA presents information sessions based on the DSA Codes of Practice and related guideline materials to professional environmental health practitioners (EHPs) as well as student EHPs, and other professions such as veterinary and B.Sc. Agric students.

On the 3<sup>rd</sup> of August 2023, the Dairy Standard Agency participated in the UP-Dairy School for veterinary students by presenting a session attended by 70 students.

Dairy information sessions for student EHPs were presented on:

4 September 2023 at TUT with 44 students attending.

13 September 2023 at DUT with 26 students attending.

20 September 2023 at CPUT with 16 students attending.

With the presented webinars in 2021 and 2022, the scope of the audiences was widened to include other interest parties and due to the positive rating of the webinars and on popular demand another 10 webinars were lined up for 2023, which started in April 2023.

The fifth webinar, on 26 July 2023 was attended by 176 people and the topic was "The key to effective sampling of milk and dairy products in the trade".

The sixth webinar, on 30 August 2023 with the topic "The process of certifying detergents and disinfectants fit for use in the dairy industry" was attended by 39 people.

"Public health risks related to the consumption of raw milk and dairy products made from raw milk" was the topic of the seventh webinar on 27 September 2023 attended by 84 people.

Recordings of all the webinars on the Dairy Standard Agency's website are useful to re-cap or for interested parties not able to attend the webinars.

## No Non-achievements / underperformance has been reported

## Goal 9 - Media communication

## Achievements

The DSA media communication provided for the following during the third quarter:

July 2023: Print magazine banner ad: DSA Lab Services: The Dairy Mail July 2023: Print magazine article: Die roumelk-risiko: Vra die regte vrae: The Dairy Mail July 2023: Print magazine article: Die roumelk-risiko: Vra die regte vrae: Veeplaas July 2023: Website: Article: Die roumelk-risiko: Maroela Media July 2023: Website: Article & ad: DSA Lab Services July 2023: Website: Article: Die roumelk-risiko: Agriorbit 27 July 2023: Radio interview: Roumelk versus gepasteuriseerde melk (Deel 1): Landbouradio 28 July 2023: Website and social media: Advertorial and banner: DSA Lab Services: The real test of quality: Food Focus 28 July 2023: YouTube: Interview: Roumelk versus gepasteuriseerde melk: Plaas / Farm TV 31 July 2023: Radio interview: Roumelk versus gepasteuriseerde melk: RSG Landbou 1 Aug 2023: Radio interview: Roumelk versus gepasteuriseerde melk (Deel 2): Landbouradio 8 Aug 2023: Online: Humane treatment of dairy calves: www.agriorbit.com Aug 2023: Print magazine: Banner ad: Stockfarm Aug 2023: Print magazine: Banner ad: Veeplaas Sep 2023: Online: Though leadership piece: Sustainability (Heinz Meissner): Food Focus 12 Sep 2023: Radio Interview: Volhoubaarheid (H Meissner): Landbouradio 21 Sep 2023: Online: Proposed amendments to R1510: www.agriorbit.com 23 Sep 2023: Radio interview: Volhoubaarheid (Navorsing en Ontwikkeling, Melk SA, Heinz Meissner): RSG Landbou

## No Non-achievements / underperformance has been reported

## Goal 10 - Development of guideline documentation

## Achievements

The initial project work on a desktop study, collecting and compiling legal standards and listing active chemical substances for the purpose of drafting an industry guideline continued during the third quarter. This guideline document coincides with the planned work of establishing a national chemical residue monitoring program in collaboration with DALRRD. The work is to continue until the fourth quarter of 2023.

# Income and expenditure statement

Income and expenditure statement	PRJ-0351 Sep 2023.pdf
Unnecessary spending during period	No

# **Popular Report**

DSA quarterly popular report Q3 2023.pdf

# Additional documentation

No file has been uploaded

# Statement

Levy funds were applied only for the purposes stated in the contract	Yes
Levy funds were applied in an appropriate and accountable manner	Yes
Sufficient management and internal control systems were in place to adequately control the project and accurately account for the project expenditure	Yes
The information provided in the report is correct	Yes