



## **Improvement of the quality of milk and other dairy products and compliance with legal standards**

(PRJ-0222-2019)

### **Dairy Standard Agency**

**Quarter 3 2019/2019** (July 2019 till September 2019)

#### **Project goals**

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

##### **Achievements**

*The quarterly sample runs for cycle 70 were completed as per the predetermined schedule and the amount of samples per product are indicated in Table 1 below.*

**Table 1**

<b>Dairy Product</b>	<b>Total</b>
Fresh milk in the categories named packed pasteurised and unpasteurised, pasteurised and unpasteurised retail bulk milk	247
Hard Cheese	52
Semi Hard Cheese	53
Semi Soft Cheese	15
Soft Cheese	7
Cream Cheese	6
Cottage Cheese	17
Processed Cheese and Spreads	10
<b>Total</b>	<b>160</b>

**7 Metropolitan municipalities, 13 district municipalities and 45 local municipalities participated in the sampling runs representing all provinces.**

**Samples were submitted to DSA laboratory as well as SANAS accredited laboratories as per standard procedure and results of milk and other dairy products were benchmarked against food safety, compositional and trade metrology standards as respectively gazetted under the Foodstuffs, Cosmetics and Disinfectants Act, 1972 (Act 54 of 1972), Agricultural Product Standards Act, 1990 (Act 119 of 1990) and the Legal Metrology Act, 2014, (Act 9 of 2014).**

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

**In respect of product compositional non-compliance, results were forwarded to the Department of Rural Development and Land Reform (DALRRD).**

**DSA in terms of its project protocol and relationships with the relevant authorities (see**

***project goal 6) continuously liaise with the relevant law enforcement bodies, providing support through dairy technical information, workshops and guideline documents to limit the sale of non-conforming products.***

## ***No Non-achievements / underperformance has been reported***

### **Goal 2 - Investigations regarding complaints received in respect of product compliance with legal standards**

#### ***Achievements***

Two complaints were received and investigated by the DSA office.

1. Adulteration of butter - EC
2. Antibiotics in milk sold in WC

## ***No Non-achievements / underperformance has been reported***

### **Goal 3 - Special investigations**

#### ***Achievements***

##### **Listeria Monocytogenes**

During a Board of Directors meeting of the DSA held on 7 November 2018 the importance of Listeria, with specific reference to Listeria monocytogenes in the dairy value chain was acknowledged. As a result, the need was expressed for an introductory literature study focusing on research relating to the presence of Listeria in dairy products with specific reference to the strains of L. monocytogenes.

The aim of this project was to screen milk, soft and semi-soft cheese for the detection of Listeria spp. and L. monocytogenes.

Subsequently a total of 205 samples were analysed for the detection of presumptive Listeria spp. during the DSA's National Milk Monitoring Program for Cycle 70 between July 2019 and September 2019. Out of the 205 samples, eight tested positive for presumptive Listeria spp. This included raw milk and cheese samples and upon further analyses, three of these eight samples tested positive for presumptive L. monocytogenes which have been sent to the University of Pretoria for confirmation. A full report is to be presented to the DSA Board for consideration in November 2019.

##### **Antibiotic project: A comparison of methods for determining antibiotic residues in milk**

The project was established as a collaborative effort together with the Milk SA Research and Development Project of Milk SA. The purpose of this investigation/study is to: determine by using the Randox Infiniplex test kit, (that is unique in its ability to detect a variety different analytes, and different antibiotic compounds, anti-inflammatory compounds, a flukicide and four other potentially harmful residues) if the potential risk exist of the presence of specific chemical residues not normally tested for and detected by means of conventional screen tests in milk for final consumption.

That if detected, such detected chemicals whether below or exceeding the maximum residue limits as prescribed by regulation as part of a formal report be used to sensitise industry regarding the prudent use of antimicrobial agents during milk production (IDF Guide 2103).

To share selected data in a confidential manner with the Department of Health workgroup of experts on antimicrobial residues (AMR) in foodstuffs, serving on the Ministerial Advisory Committee on AMR, known as MAC with the view of improved policy making.

The project has been initiated during August 2019 and a total of 125 samples were analysed until end September 2019. The project is to continue until December 2019 with a projected 300

samples to be analysed.

## ***No Non-achievements / underperformance has been reported***

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

#### ***Achievements***

Reports on non-conforming test results following Cycle 70 monitoring activities of Project 1 were forwarded to the respective government departments at the end of the cycle. Each participating municipality received a quarterly report on the analysis done of 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 number of quarterly reports forwarded to Health Authorities are listed in Table 2 below.

Table 2

Province	Health Authority offices
MP	13
LP	16
WC	16
NW	18
GA	15
FS	19
NC	2
EC	10
KZN	13
Total	122

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 dairy industry members.

National and international food safety alerts for the third quarter of 2019 were monitored.

Table 3 below reflects on the 25 international websites monitored on a weekly basis for possible food safety risks that may have a public health risk on South African consumers:

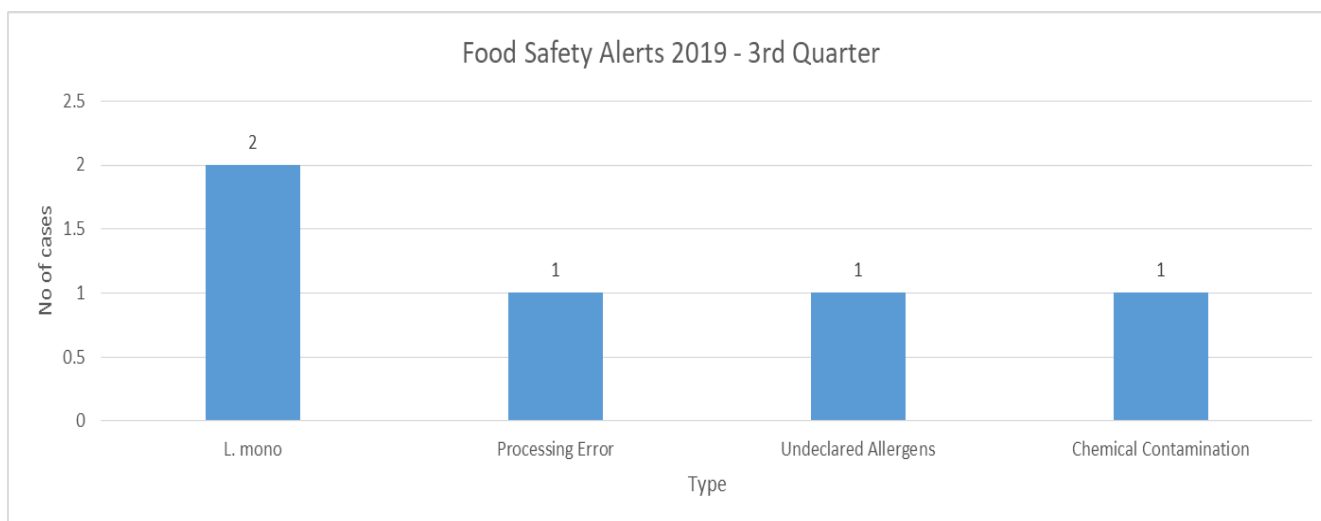
#### REFERENCES:

1. Bill Marler - [marler@marlerclark.com](mailto:marler@marlerclark.com) - Food Poison Journal
2. Centre for Disease Control & Prevention (CDC) - [cdc@service.govdelivery.com](mailto:cdc@service.govdelivery.com)
3. Dairy Reporter.com
4. FACTSSA - [marketing@factssa.com](mailto:marketing@factssa.com)
5. Food Focus
6. Food Focus News
7. Food Safety Magazine - [info@foodsafetymagazine.com](mailto:info@foodsafetymagazine.com)
8. Food Standards Agency - [food.standards.agency@notifications.service.gov.uk](mailto:food.standards.agency@notifications.service.gov.uk)
9. FoodStuffSA - DrinkStuffSA
10. Health & Safety Laboratory - [HSL@public.govdelivery.com](mailto:HSL@public.govdelivery.com)
11. News 24
12. Medical Research Council - [MRC@public.govdelivery.com](mailto:MRC@public.govdelivery.com)

13. National Institute of Allergy & Infectious Diseases (NIAID) - [niaid@service.govdelivery.com](mailto:niaid@service.govdelivery.com)
14. National Institute for Communicable Diseases - [www.nicd.ac.za](http://www.nicd.ac.za)
15. Product Safety Australia
16. SAAFFI (South African Association of the Flavour & Fragrance Industry)
17. United States Food & Drug Administration - [fda@go.fda.gov](mailto:fda@go.fda.gov)
18. USDA Food Safety & Inspection Service - [usfsis@public.govdelivery.com](mailto:usfsis@public.govdelivery.com)

Table 3

FOOD SAFETY ALAERTS – 2019 – THIRD QUARTER				
Total # of Reported Cases	<i>L. mono</i>	<i>Processing Error</i>	Undeclared Allergens	Chemical Contamination
5	2	1	1	1



**No Non-achievements / underperformance has been reported**

## Goal 5 - Remedial action programs with the processors and distributors

### Achievements

Quarterly milk and other dairy product sample results once processed were forwarded to the respective PD's and processors/manufacturers. These activities were followed up by means of interaction with PD's and processors/manufacturers regarding non-conforming test results as well as recommendations for corrective actions. Communication is done either by means of a telephone call, e-mail report, posted report or a visit to the facility.

During C70 visits were paid to processors, PD's and Milk Shops in Mpumalanga (30) Western Cape (7) and Limpopo (1). The DSA Retail Bulk Milk Guidelines and Information Guide of DSA were distributed.

Table 4-Quarterly Summary for Project 1.5 (July to September 2019)

Province	Areas visited	Companies visited	E-mails	DSA further assistance provided
Gauteng	0	0	14	2
Mpumalanga	15	30	10	1
Free State	0	0	12	1
North West	0	0	18	2

Northern Cape	0	0	2	0
Western Cape	4	7	5	3
Eastern Cape	0	0	7	4
Limpopo	1	1	7	0
KwaZulu Natal	0	0	0	0

## ***No Non-achievements / underperformance has been reported***

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

#### ***Achievements***

Communication with authorities and other organisations

a. Department of Health: Directorate Food Control

As a continuous activity DSA in a supportive role, assisted the industry members with queries relating to food labelling, food safety and food additive requirements as well as dairy technical matters. DSA liaison with DOH focused on the identification and surveillance of residues of antibiotics of critical importance for both humans and animals as well feedback on Codex Committee activities.

b. Municipal Health Authorities

Communication with the municipal health authorities mainly focused on interpretation of food safety legislation and elements of law enforcement as per the health regulations under the Foodstuffs, Cosmetics and Disinfectants Act with specific reference to retail unpasteurised and pasteurised bulk milk, certificates of acceptability.

c. Department of Rural Development and Land Reform (DALRRD).

i) Directorate: Inspection Services (IS)

A directive issued on 23 August 2019 from the Acting Deputy Director, Directorate: Food Safety and Quality Assurance, choosing as a result of the case brought by Milk SA against the Department, to instruct officials not to execute their mandate based on information generated by the DSA and that inspection shall be carried out independent of any influence whatsoever from Milk South Africa. The Acting Deputy Director was cordially informed that DSA is primarily funded by a statutory levy imposed by the Minister of DALRRD upon processors and manufacturers of dairy products in terms of the Marketing of the Agricultural Products Act, 1996 to enable it to fulfil its mandate. This includes assisting the Directorate, the Executive Officer and its inspectors in identifying compliant and non-compliant processors and manufacturers in the dairy industry which enables them to identify and then conduct efficient and effective inspections of those members who are non-compliant.

Subsequently Cycle 70 results regarding infringements in terms of the Regulations relating to dairy and imitation dairy products, as a result of the DSA mandate were communicated to DALRRD: FSQA.

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. Formal communication with DALRRD: FSQA also continued regarding the circulation of the second draft amendment of the Regulations relating to dairy and imitation dairy products as well as with industry via the Regulations and Standards Project of Milk SA.

d. 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 NRCS. No formal complaints were raised with NRCS in the third quarter.

e. Perishable Product Export Control Board (PPECB)

Since the filing of papers in the High Court by the Woodlands/Milk SA joint application against

matters relating to the latest appointment of an assignee, no further developments regarding the PPECB SOP regarding dairy export took place during the third quarter.

f. South African Bureau of Standards (SABS)

DSA participated as member in the activities of the Technical Committee SABS TC 70/SC 4, Legal Metrology - sale of goods as well as the SABS TC 034 SC 17 Food products – Hygiene practices in the food industry and technical committee. Committee work resulted in the publication of SANS 10049 and the draft SANS 10330 (HACCP) for public comment. Outcomes were communicated via the Regulations and Standards Project of Milk SA to industry.

**Communication with other organisations**

Milk SA, MPO and SAMPRO

DSA attended the Advisory Committee meetings on which it serves and also interacted on a regular basis with the project managers of the Milk SA Consumer Education Project and SAMPRO Training, MPO Institute for Dairy Technology as well as the Project co-ordinating committee of the Milk SA (DSA, CEP and R&D Project of Milk SA). DSA presented at the MPO North AGM and participated as judge of the MPO Nedbank Stewardship Programme in September 2019.

The Project management of the Regulations and Standards Project of Milk SA consulted regularly with the organised dairy industry with specific reference to the appointment of the DAFF Assignee and regulatory matters. Regular interaction between the project management and the Milk SA legal team continued during the third quarter.

**Milk SA funded DSA additional project: Standardisation of standards for calibration of laboratory equipment**

Liaison with industry members continued regarding the Milk SA project relating to the standardisation of standards for calibration of laboratory equipment resulting in the following progress made. The laboratory is fully functional, by supporting the DSA statutory monitoring project of milk and other dairy products. A delay however was experienced regarding the official commissioning of the standardisation project due to cost and logistical obstacles which are currently addressed by management.

CGCSA: FSI – DSA as 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 Act and the DALRRD appointed Assignee. No meetings were attended during the third quarter.

IDF – DSA MD is a member of SANCIDF and of the IDF Standing Committee: Standards of Identity and Labelling and nominated to the IDF Standing Committee for food additives. The managing director serves as participant of the arranging committee for the IDF WDS 2020 in Cape Town and attended the IDF 2019 WDS in Istanbul from 20 to 26 September 2019.

SAAFost – The DSA MD presented at the SAAFoST congress held in September 2019.

SANCU - DSA as member of SANCU communicates with the SA National Consumer Union regarding dairy food safety and quality related and attend general meetings where applicable.

SASDT - DSA MD as member of the management committee of the Northern region participated in the SASDT management meetings and general meeting during the third quarter. As well as one day symposiums on sustainability held respectively 16 and 18 July 2019.

TERTIARY INSTITUTIONS – 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. No meetings were attended during the third quarter.

***No Non-achievements / underperformance has been reported***

**Goal 7 - Liaison on legislation with authorities and other organisations**

***Achievements***

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

### **1.Department of Health: Directorate Food Control**

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

Regulations relating to milk and dairy products R1555/1997

Global standards for food additives

Codex Committee comments on Food Hygiene

### **2.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 RSA (R260/2015) and dispensations.

### **Non-compulsory South African National Standards – SABS**

SANS 10330: Food safety - Requirements for a Hazard Analysis and Critical Control Point (HACCP) system

SANS 10049:2019 Food safety management – Requirements for Prerequisite Program-mes (PRP's)

### **4.Codex Alimentarius and ISO**

Amendments to the "Codex General Standard for Food Additives" (GSFA, Codex STAN 192-1995)

### **5.DSA Technical Committee**

Technical committee meetings held in the third quarter dealt with:

Project implementation of a *Listeria monocytogenes* investigation on high risk dairy products in the retail

Project implementation of the case study/survey relating the presence of antibiotic residues in milk as based on the Randox Infiniplex analytical method

Survey of chemical composition and somatic cell count of South African goats milk for the purpose of updating criteria relating to industry legal standards

## **No Non-achievements / underperformance has been reported**

### **Goal 8 - Information and education**

#### **Achievements**

DSA presents information sessions based on the DSA Code of Practice and related guideline materials to professional EHP's as well as student EHP's, and other professions such as veterinary and Bsc Agric students. The below table reflects on the amount of EHP students that attended the DSA sessions at the respective tertiary institutions.

<b>Date</b>	<b>University</b>	<b>Total students</b>
24 & 25 Julie 2019	CPUT	23
27 August 2019	UP s	28
5 September 2019	MUT	25
6 September 2019	DUT	20
9 September 2019	TUT	53
10 September 2019	CUT	11

***No Non-achievements / underperformance has been reported***

## **Goal 9 - Media communication**

### ***Achievements***

Two advertorials/advertisements relating to food safety and product composition were published in the Dairy Mail and Plaas Media.

***No Non-achievements / underperformance has been reported***

## **Goal 10 - Development of guideline documentation**

### ***Achievements***

The revision of the DSA Labelling Guide has been completed end June 2019, however due to changes to the current R260/2015 Regulations relating to dairy and imitation dairy products further revision of the guide is foreseen during the fourth quarter. Work on the update of the DSA Code of Practice for Milk Producers with specific reference to biosecurity as well as animal welfare following the publication of the latest SANS 1694, The welfare of dairy cattle has been initiated. Subsequent DSA audit criteria based SANS 1694 has been developed in support of the dairy industry compliance with animal welfare criteria. The update of the DSA Code of Practice for the Secondary Industry as a result of amendment of the latest SANS 10049 and latest draft regulations on compositional standards of dairy and imitation dairy products will receive attention during the fourth quarter.

***No Non-achievements / underperformance has been reported***

**Goal 11 - Milk SA Regulations and Standards Project** The project relates to dairy technical issues, regulations and standards and encompasses industry involvement regarding: <sup>■</sup> Deliberation of industry regulations relating food safety, product composition, metrological and related standards as well as voluntary industry related standards e.g. animal welfare and related matters. <sup>■</sup> Liaison with industry and statutory bodies in terms of draft, promulgated and repealed legislation and effective communication through the Milk SA organisational structures. <sup>■</sup> Liaison and consultation on an internal and external basis and comment within specified time frames via Milk SA organisational structures. <sup>■</sup> Report to industry via Milk SA structures.

### ***Achievements***



The management committee of the Regulations and Standards Project continuously interacted via electronic correspondence with the members of the Regulations and Standards Advisory Committee and where applicable to the organised dairy industry requesting comments on regulations and standards. The revision of the DAFF regulations relating to dairy and imitation dairy products as well as matters relating to the Woodlands /Milk SA high court application received highest priority.

***No Non-achievements / underperformance has been reported***

## Income and expenditure statement

Income and expenditure statement	<a href="#">September Maandstate 2019 - BI1-5.pdf</a> <a href="#">September Maandstate 2019 - BI8-10.pdf</a> <a href="#">September Maandstate 2019 - BI11.pdf</a> <a href="#">September Maandstate 2019 - Voorblad.pdf</a>
Unnecessary spending during period	No

## Popular Report

[DSA Quarterly popular report July to September 2019 stat.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