



QUALITY OF MILK AND OTHER DAIRY PRODUCTS

(PRJ-0073-2015)

DAIRY STANDARD AGENCY

Year 2015 (January 2015 till December 2015)

Project goals

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

Achievements

The quarterly sample runs for 2015 were successfully completed as per predetermined schedules. The total number of samples of milk and other dairy products are as per table 1 below.

Table 1

Dairy Product	Total
Fresh milk in the categories named packed pasteurised and unpasteurised, pasteurised and unpasteurised retail bulk milk	1488
Yoghurt including plain, flavoured and yoghurt with added fruit and/or foodstuffs and drinking yoghurt	197
Cultured milk (Amasi)	127
Butter	53
Cream	112
Cheese (various classes)	230
UHT, ultra-high pasteurised and sterilised milk	78
Condensed milk	32
Powdered milk	20
Dairy desserts	28
Total	2365

On average 8 Metropolitan Municipalities, 13 District Municipalities and 64 Local Municipalities participated in the sampling runs representing all provinces. As per procedure results of all 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 where applicable, the Trade Metrology Act, 1973 (Act 77 of 1973).

As per protocol sample results were e-mailed and/or faxed to participating authorities and contact details were updated. The collection of contact information of processing facilities is considered an ongoing process and requests for the purpose of updating contact details have been communicated to all processors.

Non-conforming results obtained were assessed and communicated to all the respective processors and manufacturers identified. Non-conformance reports of continued substandard results were generated and forwarded to the relevant authorities as official complaints. These included separate reports reflecting the following non-conformances:

- >2% Added Water;
- Inhibitory substance positive;
- Phosphatase positive;
- E.coli positive.

The following graph represents a comparison between the four main categories of fresh milk namely packed pasteurised, packed unpasteurised, retail bulk pasteurised and unpasteurised milk.

No Non-achievements / underperformance has been reported

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

Achievements

Investigation of complaints related to:

Non-conforming milk sold in the Western Cape and Gauteng

Misleading labelling practices of imitation dairy products

Foreign body material in fresh milk

Non-conforming milk due to sub-standard microbiological quality (4)

Milk unfit for human consumption

Milk with quality defects (rancid taste)

Fruit yoghurt not complying to compositional standards

All complaints were documented, investigated and closed out.

No Non-achievements / underperformance has been reported

Goal 3 - Special investigations

Achievements

Addition of colourant and starch to cultured milk (Maas/Amazi) were investigated following a complaint received in the last quarter of 2014. 81 Cultured milk samples were submitted for analysis of which 15 of the 81 evaluated samples (18.5 %) tested positive.

A comprehensive report as part of the standing agreement with the Department of Agriculture, Forestry and Fisheries in terms of the regulations under the Agricultural Product Standard Act, 1990, Act 119 of 1990 was submitted to the Directorate Inspection Services for attention.

Imported UHT milk

An investigation in conjunction with the relevant directorate of DAFF was initiated in order to determine the compliance of imported UHT milk with national standards. Tests conducted on various production dates of UHT milk from three different countries included added water,

phosphatase, inhibitory substances, E.coli, coliforms, butterfat, protein and solids non-fat were conducted. No non-conformances were recorded.

Aflatoxin M1 in fresh milk

An investigation regarding aflatoxin M1 in national (3 provinces) retail milk was conducted during the final quarter of 2015. The investigation was initiated following information gained from the DSA Risk Identification Project.

The MRL = 50ppt or as stipulated in R313 - Regulations governing tolerances for fungus-produced toxin (Foodstuffs, Cosmetics and Disinfectants Act, 1972 (Act No. 54 of 1972) - milk containing more than 0,05 micrograms per kg aflatoxin M1.

	MP	NW	KZ
Samples submitted	50	75	64
Positive results	1	27	0
Exceed MRL of 50ppt or 0.05 microgram per kilogram	0	8	0
%	MP	NW	KZ
% No non conformance	98%	64%	100%
% Positive results	2%	36%	0%
% Exceed MRL of 50ppt /% Calculated on the total amount of samples submitted	0%	10%	0.0%
% Exceed MRL of 50ppt /% Calculated on the positive samples submitted	0%	29%	0.0%

The presence of levels aflatoxin M1 above the prescribed legal limit is considered a serious food safety risk and therefore receive high priority with DSA in terms of facilitation of remedial action plans with the relevant authorities as well as industry members.

No Non-achievements / underperformance has been reported

Goal 4 - Milk and other dairy products risk identification project

Achievements

DSA compiled comprehensive statistical reports following the completion of each quarterly cycle. The reports were interpreted to determine possible industry specific food safety risks. All cycle results indicating non-conformances were subsequently communicated to the respective health authorities.

International food risk monitoring - The following websites and RSS feeds* were monitored on a weekly basis for possible food safety scares that might affect the local dairy industry:

- www.foodproductiondaily.com
- www.dairyreporter.com
- FSA newsletters and alerts
- Dairy Markets monthly newsletter
- www.fda.gov/Safety/Recalls/
- www.foodqualitynews.com/...Alerts/
- www.foodqualitynews.com/Food-Alerts/New-evidence-calms
- www.dairysafe.vic.gov.au/
- www.foodsafety.gov
- www.thefoodsafetynetwork
- International Food Safety Authorities Network (INFOSAN)
- European Union Rapid Alert System for Food and Feed (RASFF) – newsletters
- Google Alert - food poisoning; Food Production Daily
- www.foodpoisonjournal.com;
- www.foodsafetynews.com;
- www.recalls.gov.au;
- [efoodalert.net;](http://efoodalert.net)
- www.fastmoving.co.za

The focus remains on raw milk and milk products due to prevailing high trend of food poisoning cases as a result of listeria cases reported internationally.

*RSS (Rich Site Summary) uses a family of standard web feed formats to publish frequently updated information: blog entries, news headlines, audio and video.

The report (Annexure A) of international food safety incidents and recalls are of particular interest to the Dairy Standard Agency. None of the food safety international alerts as per Annexure A in terms of imports posed a direct risk to the South African dairy industry.

The special investigation regarding Aflatoxin M1 indicated national food safety risks and remedial action plans are dealt with under the project 2.1 (Goal 6).

National food safety risk monitoring - Quarterly analysis and trending of results obtained from project 1 – National milk and other dairy product monitoring program in collaboration with health authorities were conducted.

The presence of high E.coli positive results identified in retail bulk milk and raw packed milk during quarterly cycle runs remained a persistent problem. As a result of the interaction with the municipal health authorities a further increase in retail bulk samples taken in comparison to 2014 were noted. This was mainly due to continuous difficulties experienced with the level of non-compliance (food safety and product composition) of packed unpasteurised and retail bulk milk and follow-up samples by the health authorities based on risk. Non-compliances were communicated to the owners of the relevant businesses and health authorities. Lack of law enforcement remained a common problem within the municipal health authorities in general. DSA procedures were followed to ensure that follow-up work were done according to the project relating to remedial action with producer/distributors and processors (Project 5).

No Non-achievements / underperformance has been reported

Goal 5 - Remedial action programs with the processors and distributors

Achievements

All non-conforming results obtained through analysis of samples submitted by EHP's were communicated to processors and PD's by post or e-mail as well as via EHP's in the case where contact details were not available on the system. The scheduled visits of the DSA to non-

complying facilities were considered to be very successful as the interaction on a one-on-one basis have proven to produce positive outcomes in terms of compliance. As in 2014 DSA continued to use DSA guideline documentation extensively during visits and consultation sessions relating to trouble shooting. As referred to in 4.1.3, law enforcement in general is not actively practiced by the relevant health authorities. Remedial action programs with producer-distributors (PD's) and distributors in this regard plays a significant role with specific reference to assistance, too small/medium dairy enterprises, in many cases not linked to the normal communication network of the organised dairy industry. The relationships between the DSA and the respective authorities are of great importance in terms of this project, and DSA continued to facilitate statutory measures where possible. Facilitation also included workshops with health authorities at municipal district level through workshops (See project 8). Expansion of the activities of this project was considered a priority in terms of the DSA 2015 strategic approach as the role of the DSA as industry self-regulatory initiative is increasingly acknowledged by the government departments and other stakeholders. This approach will continue during 2016.

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

DSA in its supportive role assisted the industry with a substantial amount of queries relating food labelling requirements as well as dairy technical matters which in several cases resulted in facilitation processes with the Directorate. DSA continued formal discussions meeting with officials of the directorate regarding the sale of substandard retail bulk milk regarding a strategy to establish effective law enforcement at municipal level. Legal opinion regarding payment requests for the issue of certificates of acceptability and inspections by certain health authorities in terms of milk shed regulations were initiated. The DSA participated in the Food Legislative Advisory Group (Directorate Food Control) meetings in February and August 2015.

b. Municipal Health Authorities

Communication with the municipal health authorities based on information obtained from project 1 took place on a quarterly basis. Communication was primarily focussed on the implementation of remedial action on non-conforming/substandard milk and other dairy products. Discussions resulted in two workshops scheduled in Eden District Municipality (Western Cape) and Buffalo City (Eastern Cape) in April 2015.

c. Department of Agriculture, Forestry and Fisheries (DAFF)

i) Directorate: Inspection Services (IS)

All cycle results regarding infringements in terms of the Regulations relating to dairy and imitation dairy products, as a result of the DSA national monitoring program were communicated to the Guardian Manager for the Agricultural Products Standards Task Team of the Directorate. Misleading claims, incorrect composition and labelling of dairy products continued to serve as priority.

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

Communication with FSQA included dairy product composition queries, interpretation of the new Regulations relating to dairy and imitation dairy products and the standards and requirements relating to export of dairy products. Misleading claims, incorrect composition and labelling of dairy products continued to serve as priority. Communication regarding the sale of imitation dairy products and the composition of such products in the retail continued. This also led to action by the inspectorate of the Western Cape region taking action against the sale of incorrectly labelled imitation dairy products in the retail. DSA assisted with the facilitation process regarding

industry dispensations relating product compositional standards and labelling requirements.

DSA upon invitation from DAFF and following industry participation submitted its application as proposed assignee of the Department to conduct certain tasks in terms of the relevant dairy regulations as provided for in terms of the Agricultural Product Standards Act.

iii) Directorate Animal Health

DSA participated in various industry meetings with the directorate in an attempt to resolve issues relating to the process of review of the Veterinary Procedural Notice 20. Formal discussions also took place in February with the Chief State Veterinarian Export Control of the Department of Agriculture: Western Cape Government to address VPN related matters and the role of DSA in export certification. Positive results relating to inhibitory substances detected during the cycle runs were communicated to the department as part of collaboration on chemical residue control.

d. National Regulator for Compulsory Specifications (NRCS): Legal Metrology

Quarterly reports regarding metrology infringements were where applicable forwarded to the Senior Manager, inspections: Legal Metrology NRCS, in terms of a standard agreement. Due to no infringements as a result of the DSA national milk monitoring programme, no formal report was forwarded in the fourth quarter of 2015.

e. Perishable Product Export Control Board (PPECB)

DSA liaison with PPECB is primarily focussed on service rendering to the dairy industry in respect of inspection and testing of milk and other dairy products of export facilities as per standard operating procedures. DSA participated together with industry stakeholders and DAFF in the revision of the current Standard Operating Procedure for Inspection of Dairy Products Intended for Export in terms of the APS Act. This process is to continue by means of interaction between the organised dairy industry, other government departments and PPECB via Milk SA structures.

f. South African Bureau of Standards (SABS)

DSA serves on the Technical Committee 1038 : Dairy Standards, Sub-Committee 70D: Legal Metrology - sale of goods as well as giving inputs in the technical committee 1025 Hygiene practises in the food industry. DSA also participated in the SABS TC 1094, Livestock welfare, developing SANS 1694, Standards relating to the welfare of dairy cattle which is in the final stages of completion for public comment. A formal workshop arranged by the SABS was attended together with other industry stakeholders to this effect. Formal meetings with SABS took place regarding the use of the SABS references in the development of the new DSA Code of Practice for the Secondary industry as well as amendments of SANS 1678 and SANS 1679 (Pasteurised and sterilised milk).

g. Communication with other organisations

DSA attended where possible Milk SA Advisory Committee meetings on which it serves and also interacted on a regular basis. As standing arrangement, DSA regularly met with the Consumer Education Project Manager and Sampro Training to discuss relevant issues of importance between the said projects and DSA. The services of the Project Manager of Sampro Training were extensively used in compiling the new DSA Code of Practice for the Secondary Industry.

DSA during the second quarter continued to address the sale of raw milk which served as priority. Follow up advertorials on dairy magazines continued in this regard as well as consultation with municipal health authorities. DSA discussions with the Transformation Project Manager of Milk SA regarding extended services of the Commercialisation of black farmer's project continued. Regular assistance to primary and secondary industry members regarding food safety and product compositional standards were ongoing. Upon request DSA rendered services to the Transformation Project of Milk SA by assessing eight milk production facilities related to the commercialisation of black farmer's project. Regular assistance to primary and secondary industry members regarding food safety and product compositional standards were ongoing. DSA attended and exhibited at the MPO Gauteng Dairy Day at the Belnori estate near Bapsfontein.

CGCSA: FSI – DSA as member of the Food Safety Initiative (FSI) interacted on a regular basis with management. A formal meeting with the manager of the Food Safety Initiative (FSI) regarding the incorporation of the FSI guidelines into the new DSA Code of Practice for the secondary industry took place in February 2015. DSA signed new memorandum of agreements with two more retail companies as part of the DSA strategy to limit the sale of substandard milk and other dairy products in the retail.

IDF – DSA acts as member of the Standing Committee: Food labelling and terminology and provide inputs at the SANCIDF meeting, together with the representative of DAFF. DSA participated in rendering technical comments regarding milk and dairy based products. DSA also attended the IDF World Dairy Summit in Vilnius, Lithuania from 16 to 25 September 2015.

SANCU - DSA communicated with the SA National Consumer Union regarding dairy food safety and quality related issues as and when required.

SASDT - DSA as elected member of the management of SASDT Northern division attended all regional meetings and participated in the 2015 SASDT National Symposium as well as presented on the topic "Industry initiative in support of dairy innovation and promoting the compliance with standards.

SAAFoST – DSA as member of SAAFoST 2015 participate in association's activities when applicable. DSA attended the SAAFoST 2015 national congress in Durban during the first week in September 2015.

Tertiary institutions – DSA serves as a member of the Advisory Committee of the Department of Health at the Tshwane University of Technology as well as Nelson Mandela Metropolitan University. The purpose of the advisory committees is to give industry inputs and assist the universities with the development of course material for Environmental Health Practitioners. DSA rendered specific services to Tshwane University of Technology during November and December 2015.

DEB (Department of Basic education)

DSA liaised with the department regarding the supply of safe milk and other dairy products in terms of the National School Nutrition Programme.

No Non-achievements / underperformance has been reported

Goal 7 - Liaison on legislation with authorities and other organisations

Achievements

DSA liaised with the authorities regarding the following legislation and standards:

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

- Draft Regulations Governing General and Hygiene Requirements for Food Premises, the Transport of Food and Related Matters - R364 of 30 April 2015.

- Regulations relating to milk and dairy products - R1555 of 1997.

- Draft R429 relating to the labelling and advertising of foodstuffs.

- Regulations relating to Foodstuffs for Infants and Young Children (R991/2012)

Agricultural Product Standard Act, 1990 (Act 119 of 1990)

- New regulations relating to dairy products and imitation dairy products R260 of 27 March 2015.

- Regulations regarding the classification, packing and marking of edible ices intended for sale in the Republic of South Africa - R78 of 8 February 2013.

- Draft regulations relating to the import of dairy and imitation dairy products.

- Regulations relating to dairy products and imitation dairy products R260 of 27 March 2015 and dispensations issued in terms of R2581/1987.

- Regulations relating to the export of dairy and imitation dairy products.

- Standards and requirements regarding control of the export of dairy products and the Standard Operating Procedure for inspection of dairy products intended for export in terms of the APS Act of 1990.

Department of Agriculture, Forestry and Fisheries – Directorate animal health

- Draft Veterinary Procedure Notice VPN/20/2015-1: Standards for the registration of a veterinary approved dairy establishment for export.

Non-compulsory South African National Standards – SABS

- SANS 1694 - Standards relating to the welfare of dairy cattle

- SANS 1678 and 1679 (Pasteurised and sterilised milk)
- SANS 10049 Food safety management - requirements for prerequisite programmes (PRPs)
- SANS 10330 – Food safety – Requirements for a hazard analysis and critical point (HACCP) system

Compulsory South African National Standards - SABS

- SANS 289 - Labelling requirements for prepackaged products (prepackages) and general requirements for the sale of goods subject to legal metrology control

All relevant information relating to legislative matters are communicated to the Milk SA: Advisory Committee on Dairy Standards and Regulations, for communication and discussion purposes.

No Non-achievements / underperformance has been reported

Goal 8 - Information and education project

Achievements

DSA presented information sessions based on the DSA Code of Practice and related guideline materials to professional EHP's as well as student EHP's, on a national level, at the undermentioned tertiary institutions. These information sessions are available for government/municipal officials, milk producers, processors and distributors that acquire information regarding food safety and quality prerequisites on a national level.

10 April 2015 – a formal workshop was held with 26 Environmental Health Officers of the Eden District Municipality (26 EHP's attended)

26 April 2015 – a formal workshop was held with 30 Environmental Health Officers of the Buffalo City Municipality in East London (30 EHP's attended)

13 May 2015 – DSA presented at the Association for Dietetics Gauteng South Committee on the topic of integrated chain management of food safety in the dairy industry.

20 May 2015 - University of Johannesburg (48 students attended)

26 May 2015 - Mangosuthu University of Technology (35 students attended)

27 May 2015 - Durban University of Technology (28 students attended)

21 August 2015 – a formal session was held with 38 UP veterinary final year students at Onderstepoort

27 and 28 August 2015 – a formal workshop was held with Environmental Health Officers of the Kenneth Kaunda District Municipality in Klerksdorp with visits to a milk shed and dairy processing facility. (30 EHP's attended)

28 July 2015 – Central University of Technology (58 students attended)

7 September 2015 and 14 September 2015 - Tshwane University of Technology (76 students attended)

14 September 2015 – Cape Town University of Technology (31 students attended)

25 September 2015 – Nelson Mandela University of Technology (19 students attended)

October 2015. DSA presented on request to University of Pretoria Bsc. 4th year students during October 2015.

Tertiary institutions – DSA serves as a member of the Advisory Committee of the Department of Health at the Tshwane University of Technology as well as Nelson Mandela Metropolitan University.

No Non-achievements / underperformance has been reported

Goal 9 - Media communication

Achievements

DSA has signed contractual agreements with Veeplaas and Agri Connect. Twelve articles were published in the Veeplaas/Farmlink and Dairy Mail regarding relevant food safety and product compositional issues. One article was published in the Farmers Weekly in February 2015 and one in the Agri Kultuur Magazine. Two articles were published in Milk Essay newsletter of Milk SA. Five radio recordings were broadcasted with a national radio station, as well as one live television broadcast.

No Non-achievements / underperformance has been reported

Goal 10 - Development of guideline documentation

Achievements

The new DSA Code of Practice for the Secondary Industry was completed end March 2015 and launched at the SASDT national symposium in the Eastern Cape on 15 April 2015.

No Non-achievements / underperformance has been reported

Income and expenditure statement

Income and expenditure statement	Maandelikse bestuurstate November 2015.pdf
Unnecessary spending during period	No

Popular Report

No file has been uploaded

Additional documentation

[DSA Annual Summary Report for 2015.docx](#)

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