

# Know the value of the dairy industry



## Consumer Education Project of Milk SA 2016 Seminars



# Purpose of the meeting today

**Challenges when talking to other people about dairy?**

**Where do we get our information/knowledge from so that we are equipped with knowledge about the goodness of dairy?**



*Dairy must be part of your every day life  
You must have a dairy moment!*



**How do we motivate the people around us i.e. friends and family to consume more dairy?**

**Lastly, are you proud of the industry you work for?**

<https://www.youtube.com/watch?v=JCvQk9JBIrw>



**Know  
Your  
Product**  
and present it with pride

# Who or which industry do you work for? How do you answer the question...

- Can you feel proud to be part of this dynamic industry?
- Can you be confident that the dairy is nutritious and improves lives of many people?
- Is it worth sharing the dairy message with friends and family?

**TODAY – you will be empowered  
and inspired about dairy**

**MOMENT OF TRUTH**



Be an Ambassador for  
**Dairy**

# How many people earn their livelihood from dairy?

World wide the dairy sector touches approximately 1 billion people


- 121m dairy farms
- 600m people live on dairy farms
- 400m people are supported by a full-time jobs, created by dairy farming (including feed, fertilizing, milk collection, processing and retail)



Source: Global dairy platform



# South Africa's dairy industry



**Producers of raw milk**  
**± 1 680**

**Milk processors of  
Secondary industry**  
**± 150**  
**± 115 PDs**

**Primary industry**  
**± 40 000**

**Secondary industry**  
**± 25 000**

Average milk production per cow per day was 19,5 ℓ in 2015.  
A total of 96% of milk was sold in the formal market and 2% informally.  
The rest was used for own consumption and calves. (Lacto data, May 2016)

**Milk and dairy products play an important role in the well-being of all South Africans as it supplies important nutritional benefits in a tasty and satisfying way every day!**

- Rich source of a **wide range of nutrients** which contributes to the quality of diets
- It is **vital to well-nourished children** – improves learning ability
- Contributes to **reducing risk of non-communicable** disease





# Why is the dairy industry dynamic?





<p><b>Innovation</b> <b>Pasteurised to long life</b></p>	<p><b>Classification system</b> <b>for dairy products:</b> <b>Introduction of R260</b></p>	<p><b>Initiative to self-regulate the industry through establishing Dairy Standard Agency</b> <b>Food safety</b></p>
<p><b>Plays important role in the economy through development of farm lands/country side which forms the backbone of the industry.</b></p>	<p><b>Consumer Education Project – takes the interest of the consumer into consideration and placing dairy in the right place minds of consumer.</b></p>	<p><b>Networking on international level</b> <b>Members of IDF, GDP and IMP</b></p>
<p><b>Institutional innovation</b> <b>SAMPRO is a pioneer in bringing the dairy industry together within the competition act.</b></p>	<p><b>Yoghurt – product innovation in product and packaging.</b></p>	<p><b>Advanced technology used at dairy farms.</b> <b>Highly scientific farming practices are found in SA</b></p>

# Know Your Product

and present it with pride



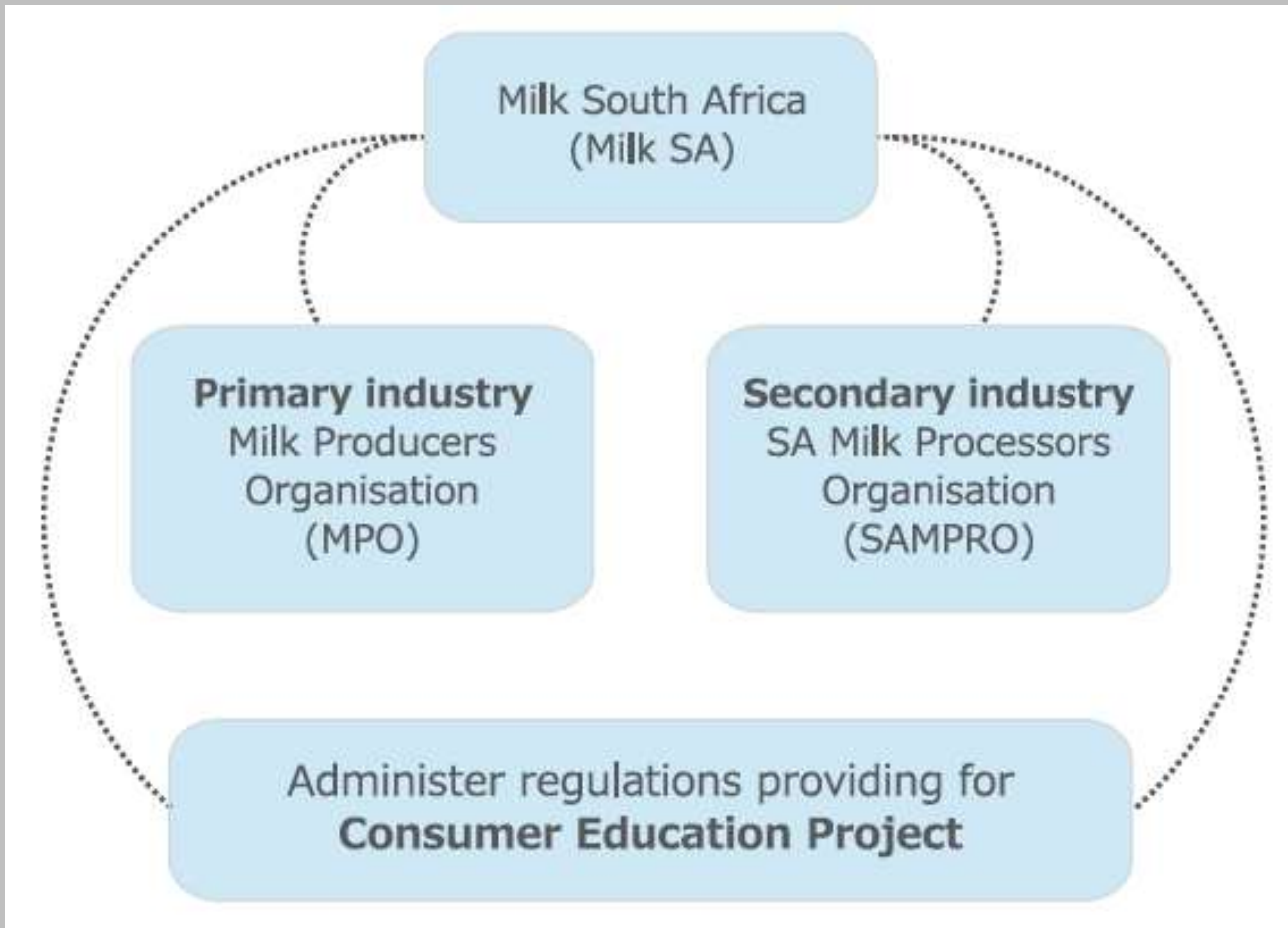
Be an Ambassador for  
**Dairy**

# How do we 'build' the industry?

- Build **trust** in the products
- Communicate the **quality** of nutrients present in dairy
- **Safety** of dairy products on the market
- **Innovation** of the industry



# Aims of the project



- **Educate consumers** on the health and nutritional benefits of the product
- **Address misconceptions** about the product among consumers
- **Positively change consumer behaviour** with respect to consumption of a certain product

# Agricultural Marketing Act Regulation 57

*“From a national point of view and to promote the viability of the dairy industry, **consumers should be informed of the health and nutritional advantages of milk and other dairy products.***

*Informed consumers will not only contribute to the national well-being in respect of nutrition and health, but especially also to the viability and sound development of the dairy industry.*

*The education will be conducted in such a way that it **will not erode the marketing activities of any firm in the dairy industry that are aimed at differentiating its products from that of competitors”.***





## Nature of the project General communication element

Consumer Education  
Project  
of Milk SA



Messages of a scientific nature based on health and nutritional benefits of dairy, conveyed to consumers.

TARGET MARKETS	MEDIA SELECTION AND COMMUNICATION CHANNEL	COMMUNICATION PRODUCTS
TEENAGERS AND YOUNG ADULTS LSM 6-10	Television..... Facebook..... Digital advertising..... Microsite..... Website..... Print/published material.....	Television advertisements Facebook: Dairy gives you go Digital advertising on social media sites and other websites www.dairygivesyougo.co.za www.rediscovordairy.co.za Booklet: Sport nutrition and the role of dairy; fact sheet Promotional articles
PARENTS: MOTHERS WITH CHILDREN LSM 6-10	Print/consumer magazines..... Websites..... Television.....	Promotional articles Fact sheets and leaflets* www.rediscovordairy.co.za www.dairygivesyougo.co.za Television advertisements
LOW SOCIO-ECONOMIC CONSUMERS LSM 4-6	Government clinics..... Printed/published material.....	Educational presentations - to patients and consumers Leaflets in 9 different languages Poster for clinics Promotional articles
PRIMARY SCHOOLS GRADES 1-3 AND 4-7 TEACHERS AND SCHOOL LEARNERS LSM 4 - 10	Educational Material for: • Primary schools • Milk Processors (involved in school tours and education) • Department of Basic Education • Milk Producers Organisation Websites.....	School kit consisting of: Classroom posters, teacher's guides and fact sheets for: • Grades 1-3: From milking to milkshakes • Grade 4-7: Guidelines for healthy eating • Audio visual for grades 4-7: Guidelines for healthy eating • Worksheets on E-Classroom website for grades 1-3 and grades 4-7 www.dairykids.co.za www.dairygivesyougo.co.za www.rediscovordairy.co.za
SPORTS COMMUNITY: ATHLETES & COACHES LSM 6 - 10	Printed/published material..... Websites.....	Booklet: Sport nutrition and the role of dairy Sports fact sheet Promotional articles www.rediscovordairy.co.za www.dairygivesyougo.co.za

The diagram is a simplified representation of the target markets and applicable communication channels and products. The specific target market will not only be reached by the communication products as listed but will also be influenced by messages from other communication products.

\*Fact sheets: Dairy the Whole Story • Bull's Strong Bones • Sport Nutrition; Heat Treating Milk  
Leaflets: Know your product; 1. Dairy essentials; 2. Stronger bones stronger you

## Nature of the project Specialised communication element

Consumer Education  
Project  
of Milk SA



Messages of a scientific nature based on research results regarding dairy health and nutrition, conveyed to health professionals.

TARGET MARKETS	MEDIA SELECTION AND COMMUNICATION CHANNEL	COMMUNICATION PRODUCTS
DIETITIANS <ul style="list-style-type: none"> <li>• University lecturers</li> <li>• Dietetic students</li> <li>• Government clinics</li> <li>• Tertiary training hospitals</li> <li>• Department of Health</li> <li>• Dietitians in private practice</li> </ul>	Educational material..... Printed/published material..... ADSA (Association for Dietitians in SA) Continuing Professional Development (CPD) Website..... Smart Phone App..... Presentations.....	USB Teaching Aid Educational Tool: Healthy eating for the whole family Scientific advertorials Nutrition reviews Dairy-based nutrition booklet Sports booklet CPD articles and symposiums www.rediscovordairy.co.za including the Dairy Health Forum Smart phone App: Dairy nutrition information hub Presentations at conferences, symposiums and sports related events
NUTRITION ADVISORS AND HEALTH PROMOTERS	Department of Health Government clinics	Training tool kit: • Dairy training tool for clinics • Set of 8 visual posters for educational presentation purposes • Leaflets in 9 different languages • Dairy-based nutrition booklet • Poster: Have milk, maas or yoghurt • www.rediscovordairy.co.za including the Dairy Health Forum
DOCTORS NURSES	Printed/published material..... Website..... Smart Phone App.....	Scientific advertorials Nutrition reviews www.rediscovordairy.co.za including Dairy Health Forum Smart phone app: Dairy nutrition information hub

The diagram is a simplified representation of the target markets and applicable communication channels and products. The specific target market will not only be reached by the communication products as listed but will also be influenced by messages from other communication products.  
\*Fact sheets: Dairy the Whole Story • Bull's Strong Bones • Sport Nutrition; Heat Treating Milk  
Leaflets: Know your product; 1. Dairy essentials; 2. Stronger bones stronger you

# Why the need for Consumer Education





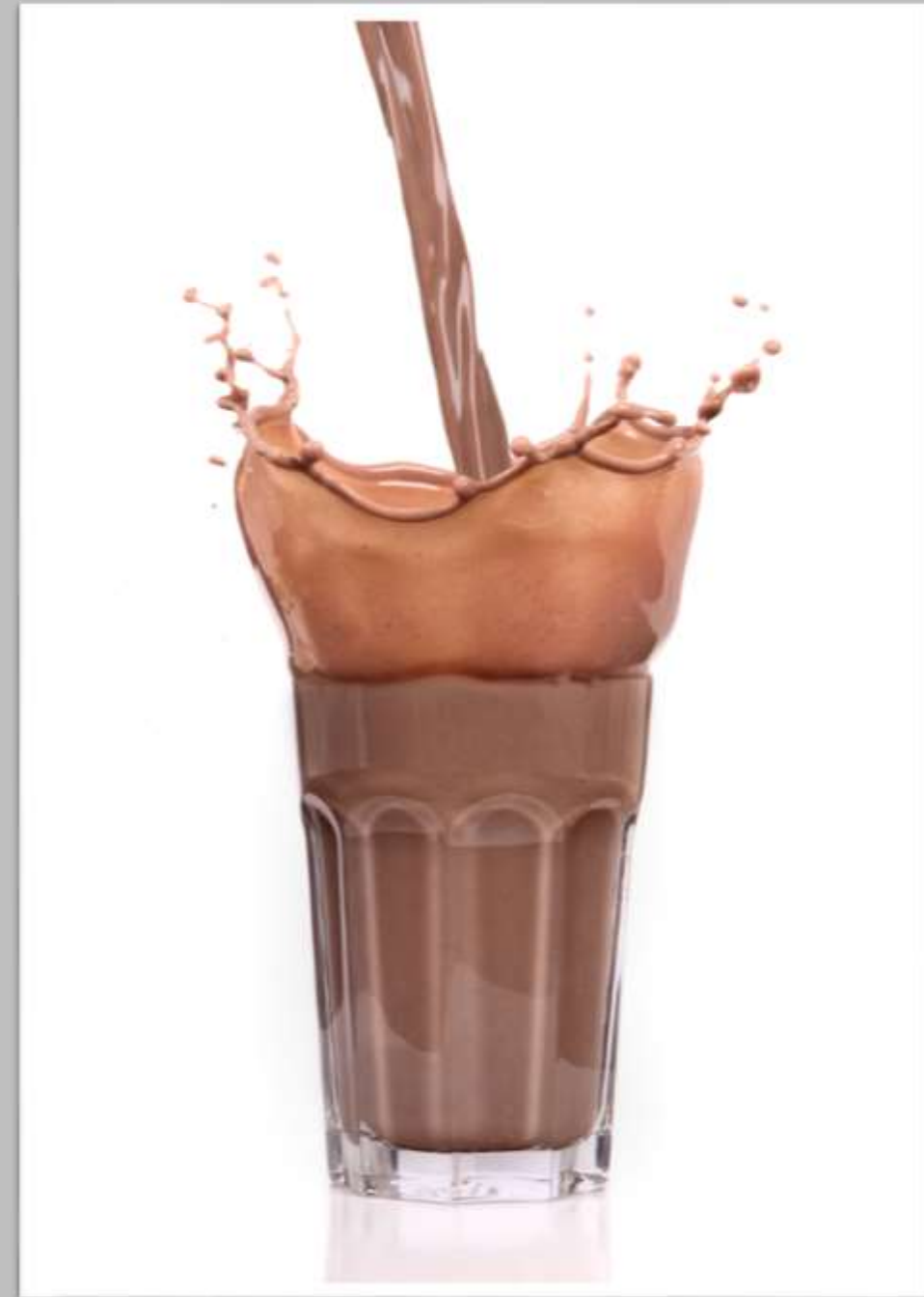
Dairy competes with all products

Dairy is a diverse set of individual products used by consumers in different ways, times and purposes.



# Why the need for Consumer Education

- How to package the dairy health and nutrition messages.
- Bring dairy into the lifestyle of the consumer.





# Building the industry through the Consumer Education Project of Milk SA

## General communication target audiences

- Teenagers and young adults (LSM 6-10)
- Parents: Mothers with children (LSM 6-10)
- Low socio-economic consumers (LSM 4-6)
- Primary schools: Grd 1-3 and 4-7
- Sports community: Athletes and coaches (LSM 6-10)



# TARGET: Teenagers

## Television



<https://www.youtube.com/user/DairyGivesYouGo>

## Facebook



## Tasty Tuesday Treats



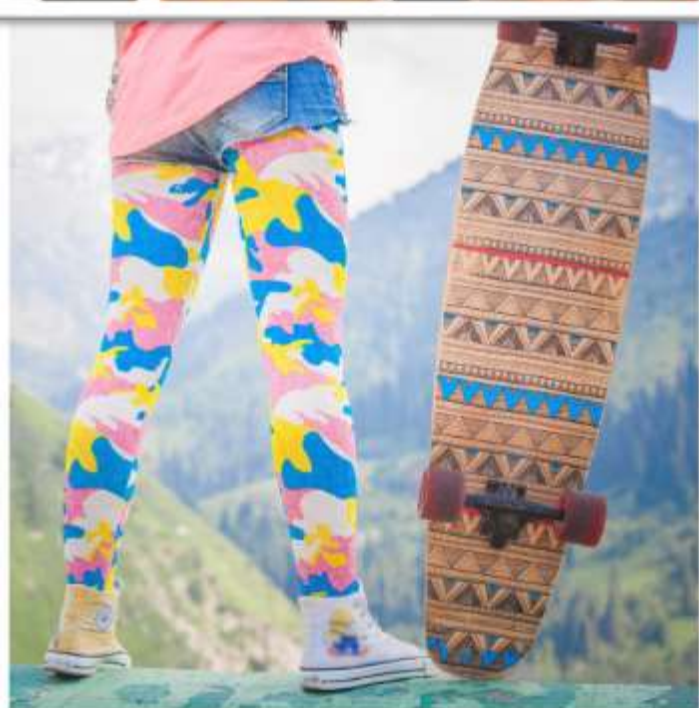
# WHY Teenagers?

- South Africa is a 'young' country with a very **high percentage of teenagers** within the population pyramid;
- Teenagers have fast **growing purchasing power**;
- Teenagers influence **parents' purchasing decisions**;
- High levels of **communication and interaction among teenagers**, which offers a very good chance to leverage marketing efforts through word of mouth;





# WHY Teenagers?



- Teenagers are more **open to advertising messages** than older target groups if communicated in the correct manner;
- Teenagers are **homogenous in terms of changing attitudes**;
- **Teenagers display little LSM differentiation**, which means have typical teenage attitudes independent from living standard and income; and
- **Teenagers of today are the adults of tomorrow.**

# Teenagers: Television

## Television



## Aim

1. Take dairy out of its traditional space of the kitchen.
2. Place dairy in the everyday life-space of the teenager.

## Message

**Dairy gives you go**



**Energy in everyday activities**

# Teenagers: Social media

## Facebook and digital



## Aim

1. Engage with teens
2. Benefit driven messages
3. Engage with the campaign
4. Create traffic to the website

## Messages

1. Goodness of dairy
2. Six key messages
3. Benefits of dairy in the diet



# SOCIAL MEDIA

## Tasty Tuesday treats



**PIZZADILLAS**

# Teenagers: Website

## Television



## Facebook



## Website



[www.dairygivesyougo.co.za](http://www.dairygivesyougo.co.za)

**Infographics**

# NEW TELEVISION ADVERTS TO BE LAUNCHED IN October

## Testing of TV ads before and after development:

- Do teenagers grasp the intended message?
- What is the impact of the 'go-guy' in the advertisements?
- Which of the advertisements are most positively received by teenagers?





# TARGET: Mothers with children



# PARENTS: Mothers with children

## Promotional articles



**Milk matters!**

Milk is for everybody, whether young or old.

Because dairy has specific benefits in all the different life stages, health authorities throughout the world recommend **three servings of dairy a day.** The South African food-based dietary guidelines recommend that you should have milk, nuts and yogurt every day.

Milk contains many nutrients needed for a healthy body. Some of these are calcium, potassium and vitamin A, which are three out of the four nutrients lacking in the diet of many South Africans.

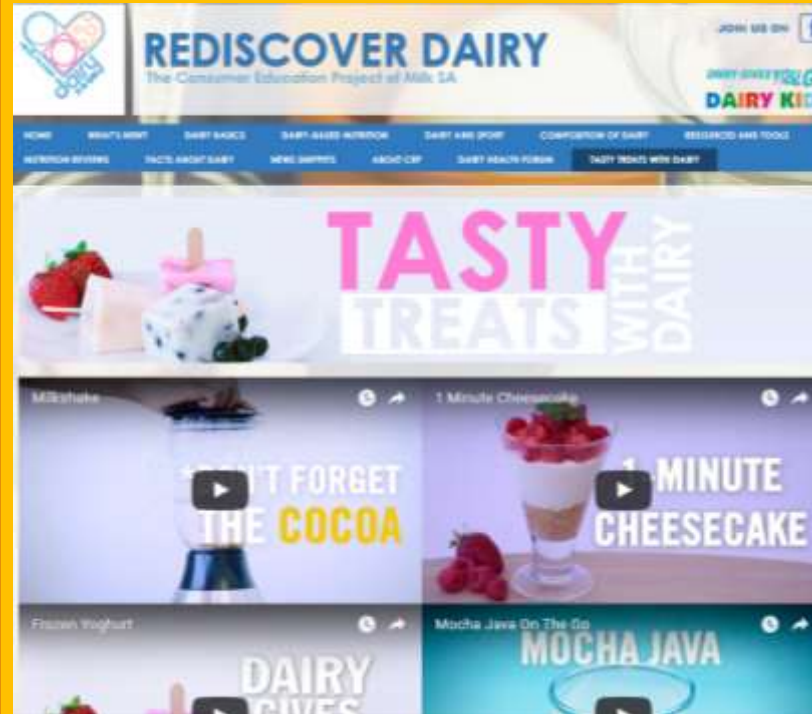
One glass of full-cream milk (200 ml) will give you:
46% of your daily needed Vitamin B <sub>12</sub>
36% of your daily needed Vitamin B <sub>6</sub>
32% of your daily needed potassium
36% of your daily needed calcium
20% of your daily needed potassium
16% of your daily needed protein
14% of your daily needed Vitamin A
12% of your daily needed zinc
9% of your daily needed phosphorus

Make milk part of your healthy food choices every day. It tastes good and is essential for keeping your body healthy.


**dairy EVERY 3-4-DAY DAY**

An initiative by the Consumer Education Project of Milk SA  
For more information visit [www.rediscoverdairy.co.za](http://www.rediscoverdairy.co.za)  
or email [info@rediscoverdairy.co.za](mailto:info@rediscoverdairy.co.za)

## Websites



**REDISCOVER DAIRY**  
The Consumer Education Project of Milk SA

JOIN US ON  **DAIRY GIVES YOU GO DAIRY KIDS**

HOME WHAT'S NEW DAIRY SALES DAIRY-BASED HISTORY DAIRY AND JOBS COMPANION OF DAIRY RESEARCH AND TOOLS

DIETITIAN SERVICES TASTE ASK! DAIRY NEWS PAPERS ASK!O!O! DAIRY REACH FORBID TASTY IDEAS WITH DAIRY

# TASTY TREATS WITH DAIRY

Milkshake 1 Minute Cheesecake

DAIRY GIVES

Frozen Yogurt Mocha Java On The Go

[www.rediscoverdairy.co.za](http://www.rediscoverdairy.co.za)

[www.dairygivesyougo.co.za](http://www.dairygivesyougo.co.za)

## Television





# Mothers with children

## Consumer print



**FUEL UP WITH Flavoured Milk**

Flavoured milk tastes great! But did you know that it is also an ideal beverage to drink after sport?

**What do you need after training?**  
Drinking a glass of milk or flavoured milk after exercise will help your body recover and get you ready for your next activity.  
**During training** - whether at the gym or on the sports field - your body uses energy to keep you going and your muscles burn energy. You also lose electrolytes through sweat.  
**After training** - you need to replace the energy, protein and electrolytes your body has used.

**Why milk?**  
Milk and flavoured milk:  
• have the right amounts of carbohydrate and protein that will help your body to recover more quickly after exercise,  
• provide fluids and electrolytes to help you rehydrate after exercise,  
• are convenient and also taste good, especially when served ice cold,  
• flavoured milk has added carbohydrates because it is sweetened, which means more energy when you need to train harder.

**Practical tips**  
**On the run?** Whether you are training or looking for a snack on the run, flavoured milk contains a mix of nutrients to suit a busy and active lifestyle.  
Place a bottle of flavoured milk in your next sporting activity, so that it will be ice cold when you are ready to make it.  
Real flavoured milk products can be stored out of the fridge and taken anywhere as they are long-life products.

An initiative by the Consumer Education Project of Milk SA  
For more information visit [www.realconsumermilk.co.uk](http://www.realconsumermilk.co.uk)  
or email [info@realconsumermilk.co.uk](mailto:info@realconsumermilk.co.uk)

## Aim

1. Create awareness of **the goodness** of dairy in the diet
2. Give a reason **WHY** dairy must be part of every day diet



## Messages

1. **Benefits** of dairy in the diet
2. **HOW** to include dairy in the diet of the child
3. Six key messages
  - Bone building
  - Muscle strength
  - Nutrient rich
  - Fat content
  - Weight control
  - 3-A-Day



# The process of heat treating milk

Many foods are heat treated to kill harmful bacteria that may be present in food and to ensure that food is safe to consume. One such food is milk. Raw milk, which is exactly as it comes from the cow, is untreated. Such milk may carry bacteria that can have serious health risks.

**Milk can be heat treated by four different methods:**

- pasteurisation
- ultra pasteurisation
- ultra-high temperature (UHT) treatment (to produce long-life milk)
- sterilisation (to produce long-life milk).



The label on the milk container will indicate what type of heat treatment has been applied.

**1 Pasteurisation**

Pasteurisation ensures that the milk is safe for human consumption and extends its shelf life. During pasteurisation, raw milk is heated to 72 °C for at least 15 seconds and then cooled immediately to 4 °C or below.

**2 Ultra pasteurisation**

Ultra pasteurisation is a form of pasteurisation that involves heating milk at a higher temperature. This treatment is used to produce extended shelf-life (ESL) milk. ESL milk can keep for more than 14 days if kept refrigerated below 4 °C.

**3 Ultra high temperature (UHT) treatment**

Milk that has been treated at a very high temperature for a very short time is called UHT milk. This is also sometimes referred to as 'bar milk' or 'long-life milk' and can be kept at room temperature until it is opened. UHT treatment does not reduce the additional goodness of milk, long-life milk is just as good as fresh, pasteurised milk.

**4 Sterilisation**

Sterilised milk also has a long shelf life and can be stored at room temperature until opened. Once opened, it is treated as fresh milk.

Remember that eating is added to milk to make it last longer: the extreme heat treatments just help to give milk a longer shelf life and make it safe to consume.

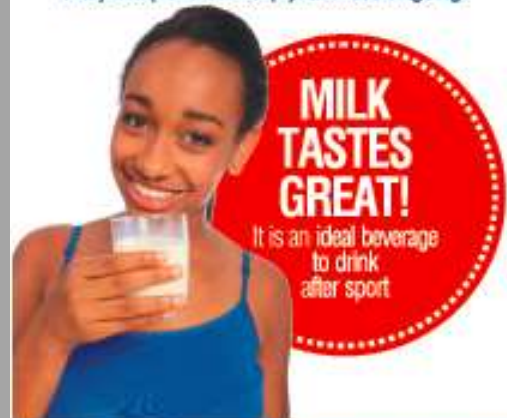
It is legal to sell raw milk in South Africa unless it is approved by the health authorities. Dairy not only gives your body enough energy for the day but also provides the nutrients it needs to function at its best. Benefit from these nutrients by having these servings of dairy a day

An initiative by the Consumer Education Project of M&A SA  
For more information visit [www.rediscoverdairy.co.za](http://www.rediscoverdairy.co.za) or email [info@rediscoverdairy.co.za](mailto:info@rediscoverdairy.co.za)

# Milk and Sport

a winning combination

During training – whether at the gym or on the sports field – your body uses energy to fuel your body and protein to keep your muscles going.



**MILK TASTES GREAT!**

It is an ideal beverage to drink after sport

Milk has the right amounts of carbohydrate and protein to help your body recover more quickly after exercise. Milk provides fluids and electrolytes to help you rehydrate after exercise.

## what do you need AFTER TRAINING?

Drinking a glass of milk or flavoured milk after exercise will help your body recover and prepare for your next activity. Flavoured milk has added carbohydrates because it is sweetened, which means you get more energy when you need to train harder. You also lose electrolytes through sweat. After training you need to replace the energy, protein and electrolytes your body has used.

### Remember

Milk is convenient and tastes good, especially when served cold. Milk contains a mix of nutrients that help you recover and rebuild muscles faster.

**Drinking milk or flavoured milk after any physical activity is ideal to replace:**

- CARBOHYDRATES • ELECTROLYTES • PROTEIN

An initiative by the Consumer Education Project of M&A SA  
For more information visit [www.rediscoverdairy.co.za](http://www.rediscoverdairy.co.za) or email [info@rediscoverdairy.co.za](mailto:info@rediscoverdairy.co.za)



Our on-the-go lifestyle has made snacking a way of life. When it comes to snacking, you want to satisfy your hunger AND your taste buds, yet still make a smart choice. Everyone snacks, but not everyone thinks before they snack!

### 5 reasons to choose dairy as a snack

1. Dairy products are convenient, tasty and versatile snacks that are ideal for any time of the day, especially when you are rushed.
2. Dairy products are a source of key nutrients. You need nutrients every day to keep your body healthy.
3. Children love the taste of dairy. Include it in their lunches to give them key nutrients!
4. Dairy products contain lots of nutrients in a single product, which is money well spent.
5. Milk and flavoured milk are ideal thirst quenchers after a run or workout.

### dairy snack ideas

- Choose mass (cereal), milk, flavoured milk or drinking yoghurt as a beverage.
- Add cheese to any sandwich.
- Eat yoghurt in between meals.
- Yoghurt mixed with fresh fruit is delicious.

There are exciting dairy products on the market. These include mass, yoghurt and drinking yoghurt, cheese, milk and flavoured milk.

**Now you will never have an excuse to not snack smartly!**

An initiative by the Consumer Education Project of M&A SA  
For more information visit [www.rediscoverdairy.co.za](http://www.rediscoverdairy.co.za) or email [info@rediscoverdairy.co.za](mailto:info@rediscoverdairy.co.za)



# Consumer Print

- Stokvel on 27 August.
- Advertorial topics focus on
  1. individual dairy products so that the message is spread evenly across the categories
  2. within the 'nutrient rich'
  3. and 3-A-day messages

**STOKVEL EVENT ANNOUNCEMENT**

**MOVE! STOKVEL IN JOHANNESBURG**  
Join us as we celebrate the strength of a woman

**BE PART OF THIS AMAZING EVENT**

**W**e are celebrating Women's Month and what a better way to celebrate women than by throwing a stellar event. Move! editor, Nonzwakazi Ceketse, invites you to join us as we celebrate women in style. Come in your heels and red dress to this lifestyle event, which will leave you feeling pampered and informed.

**THE LINE-UP:**

- AVBOB representative will educate you on the Group schemes.
- Thulisile Ntombela will share how to become an independent Avon representative and earn extra money.
- Move! fashion and beauty editor, Alexia Tshangana, will give you beauty and fashion tips for the season.
- Consumer Education Project of Milk SA representative, Khanyi Mjwara, will talk to you about the health and nutritional benefits of milk and other dairy products.
- Linda Venter will give you some sewing tips and information about the Bernette Sew & Go machines by BERNINA International.
- Apostle Sibongile Sithole will deliver the word of God.
- Singer Tina Zungu will deliver powerful songs.
- Gospel star, Putuma Tiso, will bless you with spiritual songs.

**FABULOUS SPOT PRIZES TO BE WON**

- A lucky reader stands a chance to win R1 000.
- Two Bernette Sew & Go machines to be won.
- The best-dressed lady will receive an Avon hamper worth R1 000.

**TICKETS COST:**  
R200 each, including lunch and refreshments  
**DATE:** 27 August 2016  
**TIME:** 8:30am for 9am  
**VENUE:** Image Lifestyle Wedding and Conference Venue  
**ADDRESS:** 85 Mint Road, Cnr Carr Street, Newtown, Johannesburg  
**DRESS CODE:** Lady in Red

**ALL ATTENDEES WILL RECEIVE A GOODIE BAG**

Tickets only available at:

**Milk matters!**

Milk is for everybody, whether young or old.

Because dairy has specific benefits in all the different life stages, health authorities throughout the world recommend **three servings of dairy a day.** The South African food-based dietary guidelines recommend that you should have milk, mass and yogurt every day.

Milk contains many nutrients needed for a healthy body. Some of these are calcium, potassium and vitamin A, which are three out of the four nutrients lacking in the diet of many South Africans.

One glass of full-cream milk (200 ml) will give you:

- 48% of your daily needed Vitamin B<sub>12</sub>
- 38% of your daily needed Vitamin B<sub>6</sub>
- 32% of your daily needed phosphorus
- 30% of your daily needed potassium
- 26% of your daily needed potassium
- 16% of your daily needed protein
- 14% of your daily needed Vitamin A
- 12% of your daily needed zinc
- 9% of your daily needed magnesium

**The nutrients in milk and dairy**

Fresh pasteurized milk, long-life milk and milk powder are all equally nutritious and will give you the same benefits. Because vitamin A is fat soluble, milk with a lower fat content has less vitamin A. Full-cream milk is therefore a good choice for children, the elderly and people with impaired immunity, while lower-fat choices such as low-fat and fat-free milk are advised for people wanting to lose weight, those with diabetes and people at risk of heart disease.

**dairy EVERY 3-A-DAY DAY**

Make milk part of your healthy food choices every day. It tastes good and is essential for keeping your body healthy.

An initiative by the Consumer Education Project of Milk SA  
For more information visit [www.redecoventary.co.za](http://www.redecoventary.co.za)  
or email [info@redecoventary.co.za](mailto:info@redecoventary.co.za)



# Consumer Print and Dairy health forum: New classification system



The Consumer Education Project of Milk SA

## The Dairy Health Forum

### New dairy regulation: fat content

No. 3

The reclassification of dairy products in South Africa was introduced end of March 2016. Jompije Burger of the Dairy Standard Agency, our expert for this FORUM, explains what the reclassification means to consumers and industry.

#### What is different in the new regulation?

According to the new dairy and imitation dairy products Regulation 260, one of the important changes is that the fat classes for milk have been redefined. The new fat classes will give consumers more choice when buying dairy products. The most notable change is that a medium-fat class has been introduced. Milk in this class has a fat content of more than 1.5% to 3.3%. Previously, low-fat milk was classified as having 0.5% to 2.5% fat. According to the new definition, the fat content of low-fat milk should now be more than 0.5% to 1.5%. Therefore, 2% milks will no longer be classified as low-fat, but as 2% medium-fat milk.



#### How are the new fat classes defined?

The table below outlines the new fat classes for milk.

Class designation	Previous legislation R 2581	New legislation R 260	
	Fat content (%)	Fat content (%)	Alternate class designation
High-fat milk	At least 4.5	More than 4.5	
Full-fat milk	At least 3.3 but not more than 4.5	More than 3.3 to 4.5	Full-cream milk Whole milk Milk
Medium-fat milk	Not in regulation	More than 1.5 to 3.3	% Medium-fat milk % Medium-cream milk
Low-fat milk	At least 0.5 but not more than 2.5	More than 0.5 to 1.5	Low-fat milk
Fat-free milk	Not more than 0.5	Not more than 0.5	Skimmed milk

#### What is the carbohydrate content of milk?

The carbohydrate (lactose) content of milk is typically 4.8%, but can vary between 4.7% and 5.0% across the different types of milk.

#### What is the protein content of milk in the different fat classes?

Regulation 260 stipulates a minimum protein content of 3% in milk, calculated for fat-free milk. Typically, the protein content can vary between 3.2% and 3.4% across the different types of milk.



The Consumer Education Project of Milk SA

## The Dairy Health Forum

### New dairy regulation: fat content

No. 3

#### Why was the regulation revised?

The changes are mainly as a result of the need to align national legislation with international standards.

According to health legislation and international standards, dairy products cannot be claimed to be 'low-fat' if the total fat content exceeds 1.5% in the case of liquid products, such as milk, or 3% in the case of solid food products. As South Africa is a member of the World Trade Organization and therefore subscribes to the rules of fair international trade, the amendment also prevents possible technical trade barriers.

#### Does the new regulation also apply to yoghurt and cheese?



Yes, the redefinition of the fat-classes also affects other dairy products. Regulation 260 provides fat classes for dairy products such as milk, buttermilk, cultured milk (maas), yoghurt, drinking yoghurt, cottage cheese, evaporated milk and condensed milk. This means that some products formerly classified as low-fat are now classified as medium-fat products.

#### By when do companies have to comply with the new regulation?

The Department of Agriculture, Forestry and Fisheries confirmed that Regulation 260, published in the Government Gazette on 27 March 2015, came into effect on 28 March 2016. Companies have to comply with the requirements of the new regulation by 30 September 2016. Departmental inspectors have been instructed to proceed directly to issuing seizures of non-compliant products after that date.

#### Our expert:

Jompije Burger is the Managing Director of the Dairy Standard Agency (DSA), an independent non-profit organisation which primary objective is to promote dairy quality (product composition) and safety in the interest of the industry and the consumer. Visit: [www.dairystandard.co.za](http://www.dairystandard.co.za)



An Initiative by the Consumer Education Project of Milk SA  
For more information email: [info@rediscoveraldairy.co.za](mailto:info@rediscoveraldairy.co.za) or visit our website at: [www.rediscoveraldairy.co.za](http://www.rediscoveraldairy.co.za)

# Dairy now even more choices!

## A new classification of dairy products was introduced in South Africa at the end of March 2016.

You now have even more choices when buying dairy products. The most notable change is that a **medium-fat class** has been introduced.

The reclassification also affects other dairy products, such as buttermilk, maas, yoghurt, drinking yoghurt, cottage cheese, evaporated milk and condensed milk. Let your choices count! Be sure to include 3 servings of dairy every day to benefit from all the important nutrients in dairy.

### Your milk choices

Milk class	Fat content	May also be described as
Full-fat milk	Between 3.3% and 4.5%	Full-cream milk, Whole milk, Milk
Medium-fat milk	Between 1.5% and 3.3%	Medium-fat milk, eg. 2% medium-fat milk, Medium-cream milk
Low-fat milk	Between 0.5% and 1.5%	Low-fat milk
Skimmed milk	Not more than 0.5%	Skimmed milk

### An initiative by the Consumer Education Project of Milk SA

For more information on the health benefits of dairy and the fat classes of different dairy products, please visit our website: [www.rediscoveraldairy.co.za](http://www.rediscoveraldairy.co.za)



# Dairy now even more choices!

## A new classification of dairy products was introduced in South Africa at the end of March 2016.

You now have even more choices when buying dairy products. The most notable change is that a **medium-fat class** has been introduced.

The reclassification also affects other dairy products, such as buttermilk, maas, yoghurt, drinking yoghurt, cottage cheese, evaporated milk and condensed milk. Let your choices count! Be sure to include 3 servings of dairy every day to benefit from all the important nutrients in dairy.

### Your milk choices

Milk class	Fat content	May also be described as
Full-fat milk	Between 3.3% and 4.5%	Full-cream milk, Whole milk, Milk
Medium-fat milk	Between 1.5% and 3.3%	Medium-fat milk, eg. 2% medium-fat milk, Medium-cream milk
Low-fat milk	Between 0.5% and 1.5%	Low-fat milk
Skimmed milk	Not more than 0.5%	Skimmed milk

### An initiative by the Consumer Education Project of Milk SA

For more information on the health benefits of dairy and the fat classes of different dairy products, please visit our website: [www.rediscoveraldairy.co.za](http://www.rediscoveraldairy.co.za) or email us at: [info@rediscoveraldairy.co.za](mailto:info@rediscoveraldairy.co.za)





# Reaching low-income consumers



Have **milk, maas or yoghurt** every day

The whole family enjoys dairy every day.

Get key nutrients from dairy.

For more facts and facts visit [www.dairy.co.za](http://www.dairy.co.za)

Dairy contains 12 essential nutrients.

### Dairy products

Dairy products include:

- Milk
- Keef
- Cheese
- Drinking yogurt
- Yoghurt

Choose to make from milk.

### How much dairy do you need per day?

One serving of dairy contains 300 mg of calcium.

**3** servings of dairy products per day.

It is recommended that you should have 3 servings of dairy products per day.

How much dairy with to eat?

If you have three servings of milk or cream it will still provide you with all the important nutrients from dairy.

### Just add dairy...

Just by adding dairy to your meal, you can increase the complete nutritional status of your meal, and your day's diet.

Add dairy to your health and diet:

- Add milk and cream to soups.
- Whip up soft-serve yogurt and add some granola.
- A drizzling of yogurt over a salad or on the side.
- Use yogurt as a sauce or dip or drizzle it over a healthy snack option.
- In dinner, you can grate cheese for mushrooms or make a white sauce.
- Top your pizza for a great texture for something special after dinner.
- A splash of milk or buttermilk with some soy sauce makes better.

Add dairy to breakfast time:

**Aim:**  
**To educate and inform on the value of dairy in the diet.**



**Staple food is:**

- Maize meal porridge
- Bread
- Black tea with sugar

**Poverty stricken**



**Poor nutritional status**

**Not enough knowledge to make healthy choices**





# Message that is delivered

- Value of dairy in the diet
- Dairy is nutritional value for money



add 1 cup  
of milk to  
pap for  
**R3.63**



+



add 2 cups  
of amasi  
to half a  
loaf of bread  
**R10.15**



+





# 1. Government clinics and hospitals

Government Clinics –  
educational  
presentations

- Consumers / patients waiting
- Entertain/ educate and deliver a dairy health message

Messages  
“Have milk  
maas or  
yoghurt every  
day”



Dairy improves the  
quality of the diet.

Just add 'dairy' to you  
every day meal



## 2. Reaching the group through trained health educators

Consumer Education Project of Milk SA (CEP) provides training opportunity to train-the-trainer

**CEP**  
Contract with service provider that can overcome obstacles at rural level

Liaison with authorities:

- Dept of Health
- District office
- Dietitian of District office



**Obstacles with Authorities**

- Sceptical towards 'marketing activities' messages
- SA Food-based dietary guidelines
- Balanced diet
- Training by dietitian

# Training of Service provider's Health Educators



## Train the Trainer

Training of DOH Health Promoters (HO)



**Each HP responsible for one clinic in rural area**



# Training of Service provider's Health Educators



Consumer Education Project

- Set goals per year
- Develop communication messages
- Develop training aids
- Train the Health educators
- Test health educators
- Ensure present professional



**Train the Trainer**  
Training of DOH Health Promoters (HO)

**Each HP  
responsible  
for one clinic  
in rural area**



**Trained by the CEP dietitian and Health Educators**



**Trained by CEP dietitian – English**  
**Trained by Health educator – vernacular language**  
**Demonstration** of presentation to HP

**Message is repeated 3 times**

Health promoter is equipped to deliver the dairy and health message to the low-income consumers.



Invest \$30/person (R400 ZAR)

Provided with:

Lesson plan and PPT



Leaflets



Dairy-based nutrition booklet

A4 dairy clinic tool



Posters for clinic





# Lesson plan

Have **milk, maas** or **yoghurt** every day

The whole family needs dairy every day.

For strong bones and teeth

To help with high blood pressure

Get key nutrients from dairy.

An Initiative by the Consumer Education Project of Milk SA  
www.rediscoverdairy.co.za

Dairy training tool for clinics

Everyone in the family needs to eat a variety of food

To ensure a variety of food we all have to eat mixed meals. A mixed meal is a plate of food consisting of food from at least two or more food groups.

Use these guidelines to ensure a variety of foods:

- Vegetables and fruit
- Starchy foods
- Fish, chicken, lean meat or eggs
- Dry beans, split peas, lentils and soy
- Milk, maas or yoghurt
- Water
- Fats
- Salt and sugar

Examples of mixed meals:

- MILK, MEAT OR TOFU: 1 cup milk or soy drink with 1/2 cup meat or tofu
- MEAT: 1/2 cup
- EGGS: 1/2 cup
- VEGETABLES AND FRUIT: 1/2 cup

Dairy products

Dairy is a collective name for all products made from milk.

Dairy products include:

- Milk
- Amasi
- Cheese
- Drinking yoghurt
- Yoghurt

Cheese is made from milk.

Cheese is a very dense source of milk. This makes cheese a rich source of good-quality protein. For this reason cheese can be used as an alternative for meat, chicken, fish or eggs.

Dairy nutrients

Why is dairy good for you?

- You need dairy for strong bones.
- Dairy gives you energy (fuel) to help you go and enables you to work and play or do sport.
- Dairy is important to help you maintain a healthy diet.

Nutrients are the small particles in food that help your body function well.

Calcium

protein

magnesium

potassium

phosphorus

zinc

vitamin A

vitamin B12

vitamin B6

Give you energy

nutrients

Protect you against disease

Avoid the body and make you perform

Calcium from dairy builds strong bones

The skeleton is the framework that supports the body.

If you do not consume enough calcium as a child – and especially as a teenager – you might not be able to deposit enough calcium in your bones to maintain your bones until old age.

Calcium is important throughout all the life stages.



### Dairy as a source of energy (fuel)

Dairy provides nutrients that give you energy (fuel) to keep you going all day and build your bones and muscles. Your muscles use protein to make you strong.

The carbohydrates in sugar in milk is called **lactose**. It gives you **energy** that helps you go. In some small animal diets it is 20% - 25% of what makes you go to work and play. The proteins in milk break down to **amino acids** - what build body cells and tissues.

Your body uses energy all the time!

Feel up with dairy:

- in your lunch box
- after exercising
- as a sports drink

### Everyone in the family needs dairy

Everyone in the family needs dairy in every stage of their life.

**dairy 3-A-DAY FOR ALL**

Three servings of dairy a day can help manage high blood pressure and is good for diabetes. Milk, cheese and yogurt can help a diabetic person to maintain healthy blood sugar levels if taken as part of a healthy diet.

Calcium requirements per day:

Infants	1000 mg to 1300 mg	to maintain strong bones and teeth for the duration of her growing years
Babies and toddlers	700 mg to 1000 mg	to grow and to prevent bone loss
Children ages 4 to 8 years	1000 mg to 1300 mg	to keep up with their growing height and bones
Adolescents	1300 mg	to help the teenage brain, 90% of the total bones, enough to last
Adults	1000 mg	to maintain bone mass and a healthy skeleton
Elderly (over 65 years old)	1200 mg	to prevent osteoporosis of bones and to help the movement of the

### Available varieties of milk

Whether you buy fresh (pasteurized), powder or long-life milk, you and your family will benefit from all the nutrients in dairy.

All types of milk are equally nutritious.

Heat treatment of milk (pasteurization):

- Raw milk
- Heated to 72 °C
- Cooled to 4 °C

Raw milk is not safe to drink.

When the fat is removed from milk the vitamin A content of the milk decreases. Pasteurization (fresh milk) Ultra pasteurization Ultra-high temperature can be used UHT milk or long-life milk. Sterilization (can be used long-life milk)

### Milk powder versus coffee creamers

Milk powder is a substitute for coffee creamers.

Coffee creamers cannot be used as a substitute for milk.

Coffee creamers have NO calcium, protein or any of the other important nutrients found in milk.

Full-cream MILK POWDER

### Dairy is good value for money

Dairy is not expensive if you consider what you get for what you pay.

Save money but still add valuable nutrients to your diet.

The nutrients in dairy make it good value for money.

338 ml 100 kJ 14 g carbohydrates + all the valuable nutrients	340 ml 100 kJ 15 g carbohydrates NO added nutrients
---	---

add 1 cup of milk to pop for R3.63

add 2 cups of pop to half a loaf of bread R10.15

### Lactose intolerance

Lactose is the natural sugar found in milk. People who are lactose intolerant often experience stomach pain, cramping, bloating, flatulence, diarrhea and nausea after they have eaten dairy.

Confirm lactose intolerance with your doctor.

Here is how you can tolerate lactose better:

- sip
- stir
- slice
- spoon
- try

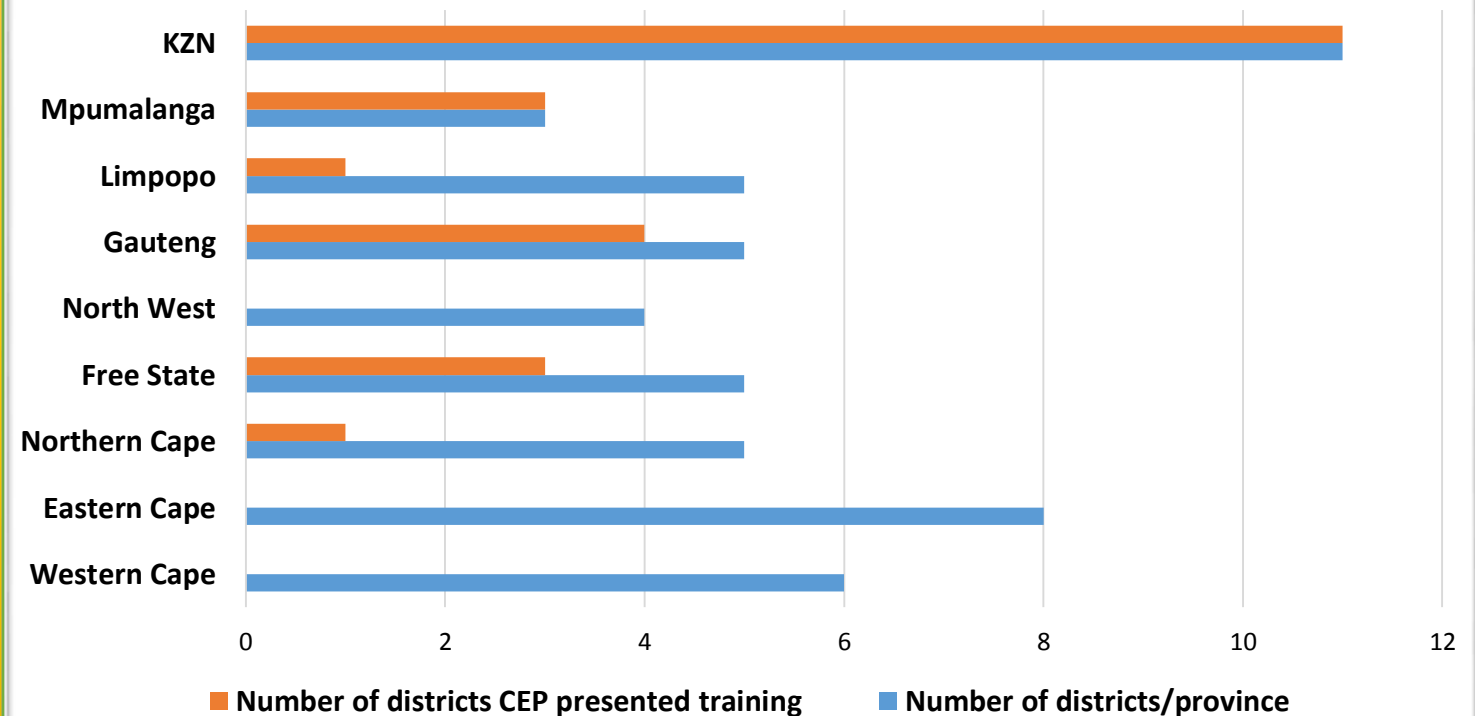
Spread over the nutrients in dairy, even if you are lactose intolerant.

# Program reach

- 44% of districts in SA
- 871 Nutrition advisors and Health promoters



### Districts where CEP presented training









# How do we 'build' the industry? RECAP!

- Equipped with knowledge
- Have the TV ad on your phone
- Know the website i.e.  
[www.dairygivesyougo](http://www.dairygivesyougo)
- Facebook page: DGYG
- Use 'moment of truth'



# 10 facts the leaflet can teach you

1. Nutrients in dairy
2. Why is dairy good for you
3. How to add dairy to the diet
4. Types of milk available
5. Importance of calcium
6. How much calcium
7. Bone building stages in life
8. Lactose intolerance
9. Rehydration with dairy
10. Dental health

**You need 3 servings of dairy a day**

**Know Your Product** 1.  
and present it with pride

**DAIRY ESSENTIALS**

Be an Ambassador for **Dairy**

**Know Your Product** 2.  
and present it with pride

**STRONGER BONES, STRONGER YOU**

Be an Ambassador for **Dairy**

# Building the industry through the Consumer Education Project of Milk SA

## Specialised communication target audiences

- Dietitians and nutritionists
- Nutrition advisors and health promoters
- Doctors
- Nurses





# Health professionals

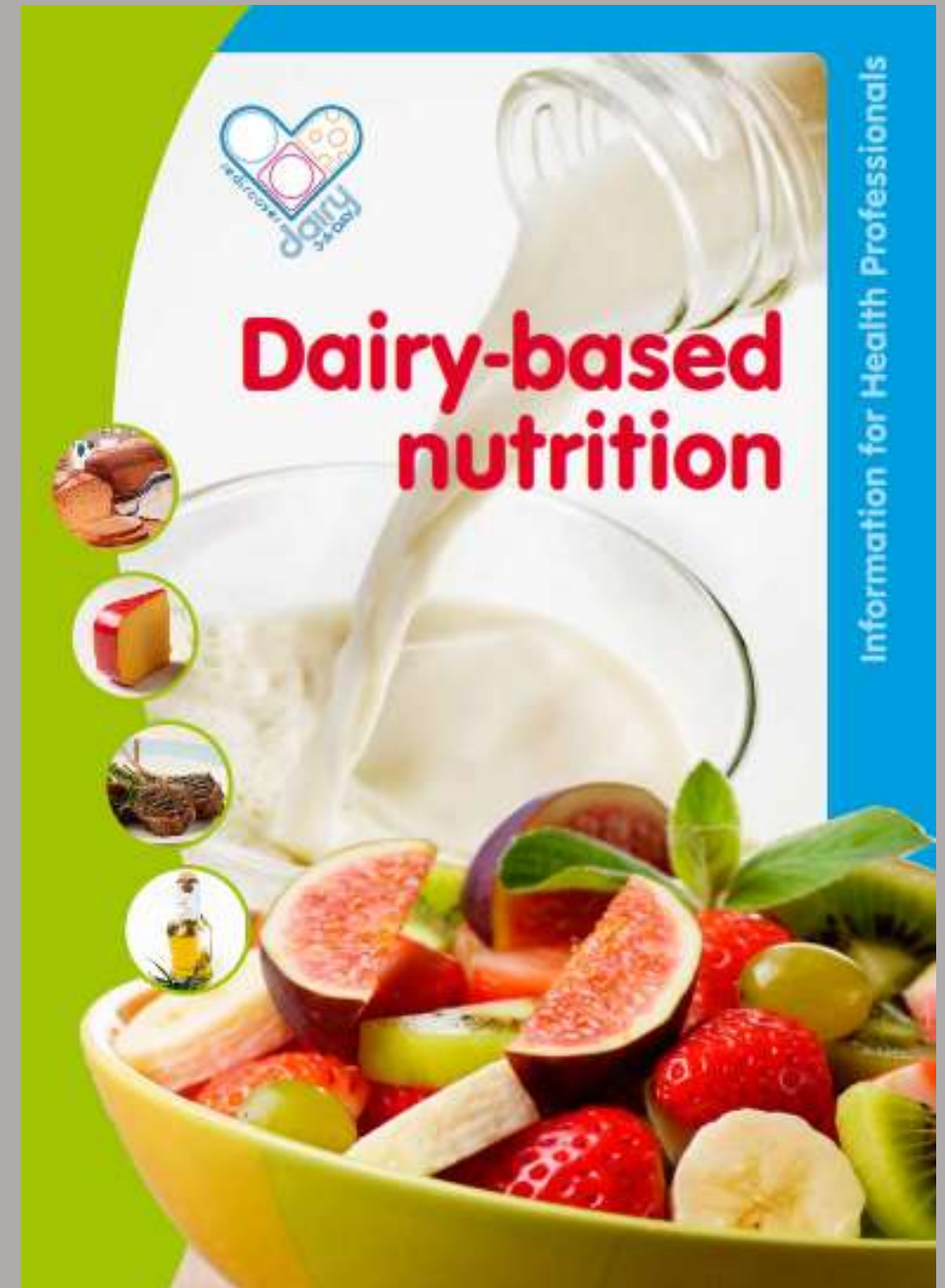
## Aim

### Inform of health benefits

1. Health and nutrition
2. Scientific based
3. Credible messages
4. New research results

### Dairy-based nutrition

- Protein quality
- Saturated fats
- Diabetes
- Hypertension
- Sarcopenia
- Lactose and galactose



# Health Professionals

## Technical advisory committee

- Dr Friede Wenhold
- Dr Zelda White
- Dr Tuschka Reynders
- Prof Rene Blaauw
- Prof Corinne Walsh
- Nicki de Villiers
- Dr Ingrid van Heerden



# Health Professional

## Elements

1. Scientific advertorials and nutrition reviews
2. Continuous Professional Development events and articles
3. Presentations at ADSA event and regional meetings
4. University students

<http://www.rediscoverdairy.co.za/>







# REDISCOVER DAIRY

The Consumer Education Project of Milk SA


JOIN US ON

DAIRY GIVES YOU GO  
DAIRY KIDS

- HOME
- WHAT'S NEW?
- DAIRY BASICS
- DAIRY-BASED NUTRITION
- DAIRY AND SPORT
- COMPOSITION OF DAIRY
- RESOURCES AND TOOLS
- NUTRITION REVIEWS
- FACTS ABOUT DAIRY
- NEWS SNIPPETS
- ABOUT CEP
- DAIRY HEALTH FORUM
- TASTY TREATS WITH DAIRY

# REDISCOVER DAIRY

Scientific information on the health & nutritional benefits of dairy




**DAIRY BASICS**



**DAIRY-BASED NUTRITION**



**DAIRY & SPORT**



**DAIRY NUTRIENTS**



**RESOURCES & TOOLS**



**FACTS ABOUT DAIRY**



**NEWS SNIPPETS**



**ABOUT CEP**

**WHAT'S NEW** >>>

**DAIRY HEALTH FORUM** >>>> 





# REDISCOVER DAIRY

The Consumer Education Project of Milk SA

JOIN US ON



DAIRY GIVES YOU GO  
DAIRY KIDS

- HOME
- WHAT'S NEW?
- DAIRY BASICS
- DAIRY-BASED NUTRITION
- DAIRY AND SPORT
- COMPOSITION OF DAIRY
- RESOURCES AND TOOLS
- NUTRITION REVIEWS
- FACTS ABOUT DAIRY
- FORUM
- TASTY TREATS WITH DAIRY

## Clinic

Communicating nutrition

## Project

a particular target market

- HAVE MILK AND MAAS AND YOGHURT EVERY DAY
- NUTRIENT COMPONENTS OF DAIRY
- CALCIUM – THE ESSENTIAL MINERAL
- CALCIUM RECOMMENDATIONS
- DAIRY FOR SKELETAL HEALTH
- ROLE OF DAIRY IN DIABETES
- DAIRY AND HYPERTENSION
- THE FATS IN DAIRY
- WEIGHT MANAGEMENT WITH DAIRY
- DAIRY ALLERGIES AND LACTOSE INTOLERANCE
- MILK PROTEIN
- SARCOPENIA AND DAIRY
- DAIRY VS CALCIUM SUPPLEMENTS
- 3 A DAY DAIRY AND FAT CONTENT OF MILK
- NUTRIENTS PROVIDED BY DAIRY



DAIRY BASICS



DAIRY-BASED NUTRITION



DAIRY & SPORT



DAIRY NUTRIENTS



RESOURCES & TOOLS



FACTS ABOUT DAIRY



NEWS SNIPPETS



ABOUT CEP

WHAT'S NEW >>>

DAIRY HEALTH FORUM >>>>





# REDISCOVER DAIRY

The Consumer Education Project of Milk SA

JOIN US ON

DAIRY GIVES YOU GO  
**DAIRY KIDS**

- HOME
- WHAT'S NEW?
- DAIRY BASICS
- DAIRY-BASED NUTRITION
- DAIRY AND SPORT
- COMPOSITION OF DAIRY
- RESOURCES AND TOOLS
- NUTRITION REVIEWS**
- FACTS ABOUT DAIRY
- NEWS SNIPPETS
- ABOUT CEP
- DAIRY HEALTH FORUM
- TASTY TREATS WITH DAIRY



Metabolism and health effects of lactose and galactose in milk



Milk protein: new insights into quality and function



Dairy products and Hypertension



Vitamin B12 in dairy: Vital for brain health



Dairy trans fatty acids and cardiovascular disease: Implications for public health nutrition in South Africa



Type 2 diabetes: The role of dairy in prevention



**MILKSPOT**  
Flavoured milk can help children achieve their nutritional needs

DAIRY 2014

An article published in the International Journal of Food Science and Technology (IJFST) reported the results of a study which investigated the effect of a flavoured milk on the nutritional status of children. The study was conducted in a school in South Africa. The results showed that children who drank flavoured milk had a higher intake of calcium and protein compared to those who drank plain milk. This is important because children need these nutrients for healthy growth and development.

The Milk SA Consumer Education Project is a not-for-profit organisation that aims to educate consumers on the benefits of dairy products. For more information, visit [www.rediscoverdairy.co.za](http://www.rediscoverdairy.co.za).

Flavoured milk can help children achieve their nutritional needs

Metabolism and health effects of lactose and galactose in milk

This infographic explains the metabolic pathways of lactose and galactose. Lactose is a disaccharide composed of glucose and galactose. In the body, lactose is broken down into these two monosaccharides. Galactose is then converted to glucose through a series of steps involving the enzyme galactose 4-epimerase. This process is essential for energy production and other metabolic functions.

Metabolism and health effects of lactose and galactose in milk

The Dairy Health Forum  
New dairy regulation: fat content

What is different in the new regulation?

How can you tell the difference between different types of milk?

Product	Minimum Fat Content	Minimum Protein Content
Full Cream Milk	3.5%	3.2%
Reduced Fat Milk	2.0%	3.2%
Skimmed Milk	0.1%	3.2%
Ultra High Fat Milk	8.0%	3.5%

What is the difference between different types of milk?

Full cream milk has the highest fat content, followed by reduced fat milk, and then skimmed milk. Ultra high fat milk is a newer product with a much higher fat content than full cream milk.

New Dairy Regulation - Fat content of milk

Have milk, maas or yoghurt every day

Get key nutrients from dairy.

The whole family benefits from dairy every day.

Key nutrients from dairy include calcium, protein, and vitamins. Dairy products are a good source of these nutrients and are easy to incorporate into your diet.

Kry dit alles ...melk...suivel

Kry jy genoeg kalsium?

3

This infographic provides information on calcium intake from dairy. It lists various dairy products and their calcium content. A large number '3' is prominently displayed, likely representing a recommendation or a key statistic.

Milk - Sports Drink

This milk is the best sports drink.

Milk is a natural sports drink because it contains electrolytes, carbohydrates, and protein. It is a good source of energy and helps with muscle recovery after exercise.





RESOURCES & TOOLS



FACTS ABOUT DAIRY



NEWS SNIPPETS



ABOUT CEP

WHAT'S NEW >>>

DAIRY HEALTH FORUM >>>>

WELCOME TO THE DAIRY WEBSITE

Here you can find scientifically sound nutrition information on dairy and its' role in human health. This site is for Consumers and Health Professionals on 'everything' dairy. We have a special section for the Consumer called Dairy Basics, with reliable nutritional information about dairy. We address all the common questions about dairy in the section Facts about Dairy including the myths. Health professionals are regarded as opinion leaders in the health industry. They advise the public on nutrition, health and illness. As such the health professional plays an important role in communicating the health and nutritional benefits of dairy to consumers. Dairy-based nutrition is where the health professional will find the latest scientific information on dairy. Dairy nutrients contains nutritional tables of all dairy products as well as resources and tools that can be used in practice, with hand-outs available. A new feature, the Dairy Health Forum, is written by various health professionals for consumers wanting to know more about nutrition and dairy. Our expert panel is equipped with the latest scientific information and are keen to interact with you, the public. All information available on this site is available for download to be used in practice, otherwise it can be obtained by contacting us.

NEW DAIRY REGULATION: FAT CLASSES OF DAIRY AND IMITATION DAIRY PRODUCTS. REGULATION 260.

- What is different in the new regulation?
- How are the new fat classes defined?
- What is the protein content of milk in the different fat classes?
- What is the carbohydrate content of milk?
- Does the new regulation also apply to yoghurt and cheese?
- Why was the regulation revised?
- When do companies have to comply with the new regulation?



DAIRYKIDS Learners and teachers this is the place for you

DAIRYGIVESYOUGO Our special micro-site for teenagers

CONTACT US

ABOUT US



Members Login





# REDISCOVER DAIRY

The Consumer Education Project of Milk SA

JOIN US ON

DAIRY GIVES YOU GO  
DAIRY KIDS

- HOME
- WHAT'S NEW?
- DAIRY BASICS
- DAIRY-BASED NUTRITION
- DAIRY AND SPORT
- COMPOSITION OF DAIRY
- RESOURCES AND TOOLS
- NUTRITION REVIEWS
- FACTS ABOUT DAIRY
- NEWS SNIPPETS
- ABOUT CEP
- DAIRY HEALTH FORUM**
- TASTY TREATS WITH DAIRY

## Dairy Health Forum

The Consumer Education Project introduces the new dairy health forum on the reclassification of dairy products in South African.

The reclassification of dairy products was introduced end of March 2016. Jompie Burger of the Dairy Standard Agency, our expert for this FORUM, explains what the reclassification means to consumers and industry. Download all the questions in a PDF file.

## Dairy Health Forum



Jompie Burger  
Dairy Standard Agency

**Click to Ask a Question**

- foods
- Match
- planning
- recovery
- variety

### Latest Questions



**What is different in the new regulation?**  
According to the new dairy and imitation dairy products Regulation R260, one of the important change ...



**How are the new fat classes defined?**  
The following table outlines the new fat classes for milk. ....



**What is the protein content of milk in the different fat classes?**  
Regulation 260 stipulates a minimum protein content of 3% in milk, calculated for fat-free milk. Typ ...

# Health Professional print Metabolism and health effects of lactose and galactose

## Metabolism and health effects of lactose and galactose in milk

Journal of Human Nutrition and Food Science, Department Nutrition and Dietetics, University of the Free State, South Africa  
 Nutrition Research Unit, North-West University, Potchefstroom



### Abstract

Dairy foods are a valuable source of a number of important micronutrients. This review will discuss the major micronutrients in dairy and human health. It will also discuss the role of lactose and galactose in the metabolism of lactose and galactose. The review will discuss the role of lactose and galactose in the metabolism of lactose and galactose. The review will discuss the role of lactose and galactose in the metabolism of lactose and galactose.

### Background

Serum lactate is a key indicator of the overall state of health. It is a product of anaerobic glycolysis and is a key indicator of the overall state of health. It is a product of anaerobic glycolysis and is a key indicator of the overall state of health.



Galactose is a monosaccharide with a beta-1,4-glycosidic linkage to glucose in lactose. It is a component of the disaccharide lactose, which is found in milk.



Milk also contains complex sugars called oligosaccharides, which are composed of three to ten sugar molecules linked together. They are not as sweet as sucrose or fructose, but they provide energy to the infant.

In view of the fact that lactose is the main source of energy for the infant, it is important to ensure that the infant has sufficient lactose in their diet. This is why it is important to ensure that the infant has sufficient lactose in their diet.

### Composition, digestion, absorption and metabolism of lactose

Carbohydrates vary greatly in sweetness, lactose, like all other disaccharides, is sweeter than sucrose. It is a product of anaerobic glycolysis and is a key indicator of the overall state of health.

The smallest carbohydrates are the monosaccharides, which are the building blocks of all carbohydrates. They are the building blocks of all carbohydrates.

## Metabolism and health effects of lactose



## lactose

There is extensive evidence that moderate daily consumption of dairy, as part of a balanced diet, is beneficial to health. Dairy foods are an excellent source of the nutrients calcium, vitamin D (in fortified products), magnesium, potassium, protein and carbohydrates.

### Lactose Intolerance

The enzyme lactase is needed to hydrolyse lactose to glucose and galactose for absorption across the intestinal mucosa. Lactase enzyme levels generally decrease after weaning in most humans. In children with lactase deficiency, the enzyme levels are low, leading to symptoms such as abdominal discomfort, nausea, vomiting, bloating, flatulence and diarrhoea.

Lactose intolerance refers to the digestive symptoms that are associated with lactase deficiency. It is a common condition that affects many people. It is a common condition that affects many people.

Those who consider themselves lactose intolerant may increase their dairy intake, resulting in compromised intake of the nutrients and other beneficial components of dairy. They should consult a dietitian for advice.

- A low lactose diet (not a diet with no lactose) is a healthy way to manage lactose intolerance. It is a healthy way to manage lactose intolerance.
- Dairy foods such as hard cheese, cream cheese and butter are good choices for those with lactose intolerance. They are good choices for those with lactose intolerance.
- Although some symptoms, such as bloating and gas, may be relieved by a low-lactose diet, it is important to ensure that the diet is balanced and provides all the nutrients and other beneficial components of dairy.

### Conclusion

Scientific evidence confirms that lactose, which is naturally present in milk and dairy products, is a valuable source of energy, calcium and other nutrients. It is a valuable source of energy, calcium and other nutrients.

An initiative by the Consumer Education Project of MISA SA  
 For more information email: info@redcrossedairy.co.za or visit our website at: www.redcrossedairy.co.za



Red Crossed Dairy  
 For more information email: info@redcrossedairy.co.za or visit our website at: www.redcrossedairy.co.za

## galactose: friend or foe?

Possible adverse effects of galactose as found in milk have led to some doubt about the generally accepted beneficial health effects of dairy. However, studies suggest that lactose and its metabolites such as galactose are essential to human life, rather than being detrimental to health.

### The facts

- Galactose is a natural structural element in complex macromolecules and serves as a key source of energy.
- Galactose forms part of glycoproteins and glycolipids in the brain and nervous system, which supports a neural and neuroendocrine function.
- Galactose is not found only in lactose-containing food.
- Galactose is detrimental only for people who suffer from galactosaemia.
- Galactose has been shown to have therapeutic potential.



### Sources of galactose

Galactose is not derived only from lactose-containing food sources. It is also found in other sources such as fruits, vegetables and grains. It is also found in other sources such as fruits, vegetables and grains.

### Enzyme deficiencies

The human body is able to metabolise galactose effectively. This process is aided by the enzyme galactase. It is a common condition that affects many people. It is a common condition that affects many people.

### Conclusion

Galactose is essential in human metabolism, with an established role in energy delivery and participation of complex molecules. Studies confirm that lactose and its metabolites such as galactose are essential to human life, rather than being detrimental to health.

An initiative by the Consumer Education Project of MISA SA  
 For more information email: info@redcrossedairy.co.za or visit our website at: www.redcrossedairy.co.za



# LEAFLETS



## Know Your Product

and present it with pride

1.



Be an Ambassador for  
**Dairy**

## Know Your Product

and present it with pride

2.



Be an Ambassador for  
**Dairy**

Christine Leighton  
[christine@dairycep.co.za](mailto:christine@dairycep.co.za)  
[www.rediscoverdairy.co.za](http://www.rediscoverdairy.co.za)

