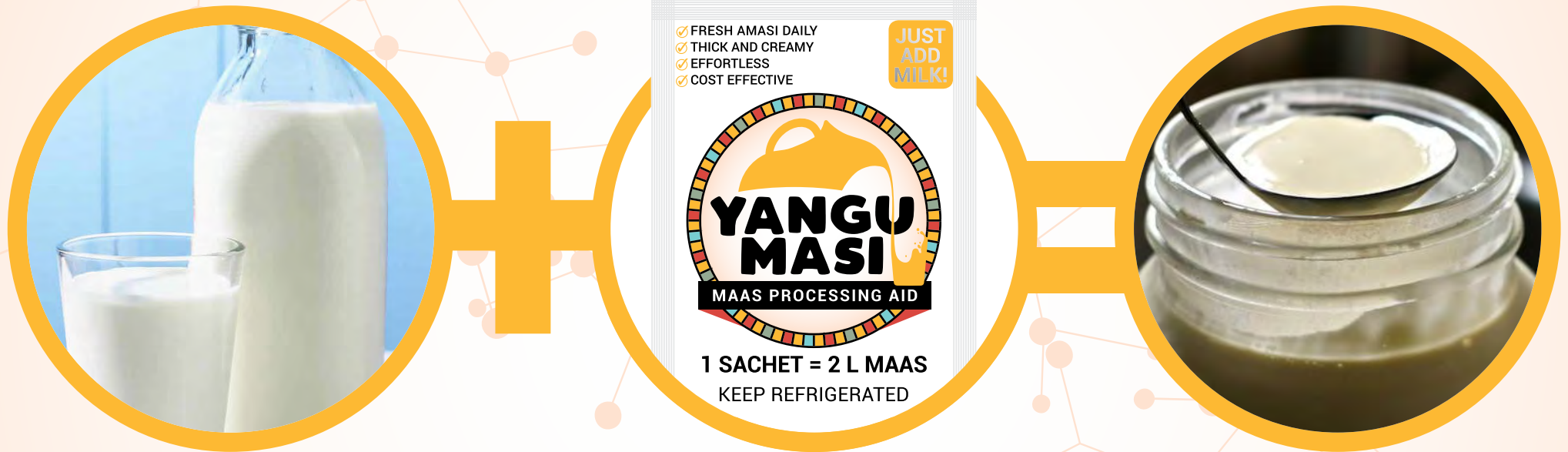




**YANGU
MASI**

MAAS PROCESSING AID

CHALLENGE THE CONVENTION?



AMASI = MAAS

A traditional fermented milk drink of the indigenous people of South Africa. It is creamy white in colour, has a smooth texture, and sour in taste.

INTRODUCING YANGUMASI

Yangu:

My/mine
(Swahili)

Masi:

Amasi

WHY YANGUMASI?

The use of YanguMasi sachets create opportunities to explore alternative market segments, i.e. home use and value addition to milk by small-scale and substance farmers, especially into Africa.

**JUST ADD YANGUMASI
TO MILK AND ENJOY
FRESH AMASI!**

1 SACHET = 2 L MAAS



DIRECTIONS FOR USE



1

Add
1 sachet
to 2 L milk.



2

Stir,
and wait
30 minutes.



3

Stir again
until completely
dissolved.



4

Leave covered
for 18-20 hours
at room
temperature.



5

Refrigerate
and enjoy!

(storage: treat as
normal milk product.)

INGREDIENTS LIST AND NUTRITION

NUTRITION TABLE OF TYPICAL FULL CREAM AMASI

Nutrients per 100g	Amasi
Energy	269 kJ
Protein	3,2 g
Carbohydrate Of which sugars	5,0 g 4,6 g
Total Fat	3,4 g
Saturated fat	2,2 g
Monounsaturated fat	1,0 g
Polyunsaturated fat	0,1 g
Trans fatty acids	0,1 g
Calcium	120 mg
Sodium	48 mg

YANGUMASI INGREDIENTS LIST

Mesophilic culture
Enzyme technology
<p>Labelled as a processing aid</p> <ul style="list-style-type: none"> • Cross-linking will continue throughout shelf-life until the pH is too low (pH < 4). • The enzyme* is gradually inactivated upon acidification over the shelf-life period. <p>*Enzymes = proteins that speed up the rate of chemical reactions.</p>

- Due to fermentation, Amasi is regarded as nutrient dense and a good source of high quality protein.
- Fermented products such as Amasi contains less lactose compared to fresh milk, therefore it is well tolerated by people who are lactose intolerant.
- Amasi can be consumed as a meal.
- Meat substitute where it is served with pap/maize.
- Consumed as a beverage.
- Affordable source of protein.

DIRECTIONS FOR USE

1. Add 1 sachet to 2 L milk.
2. Stir, and wait 30 minutes.
3. Stir again until completely dissolved.
4. Leave covered for 18-20 hours at room temperature.
5. Refrigerate and enjoy!

INGREDIENTS: Microcrystalline cellulose • Dextrose • Non-animal coagulant (Enzyme) • *Bacillus coagulans* (BC4) culture • Tricalcium phosphate • Starter culture • Free-flow agent.



Specially packed for Synercore (PTY) Ltd
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Tel: +27 21 879 1681 www.synercore.co.za

PRODUCT OF THE REPUBLIC OF SOUTH AFRICA

7,5 g

References:

BMI Research (2017). *Buttermilk and Maas in South Africa*, July 2018. Media feedback report 2018. [Internet document]. URL <https://www.bmi.co.za/wp-content/uploads/2018/09/Buttermilk-and-Maas-Media-Feedback-Report-2018.pdf>. Accessed 10 February 2019.

Rediscover Dairy (2015). Dairy products: Amasi. Changing attitudes, norms and perceptions. <http://www.rediscoverdairy.co.za/wp-content/uploads/2014/09/Meet-Amasi.pdf>. Accessed 13 March 2019.

ADDED BENEFITS OF ENZYME TECHNOLOGY

- Non-animal coagulant (enzyme) supports fermentation and improve the texture of self-produced Amasi.
- Will allow for a more controlled fermentation.
- Enzyme technology enhances the texture and mouthfeel of Yangumasi by targeting amino acid cross-linking of milk proteins.



FINAL PRODUCT BENEFITS

- ✓ Improved texture and mouthfeel
- ✓ Increased viscosity
- ✓ Less syneresis
- ✓ Enhanced gel firmness
- ✓ Slower post-acidification

NOVEL VS. SUSTAINABLE



NOVEL
(FORMAL MARKET)



Added by
consumer at home

SUSTAINABLE
(INFORMAL MARKET)



Added by small-scale and
subsistence farmers

AMASI MARKET OF SOUTH AFRICA



COMMERCIAL SAMPLES

AMASI MARKET OF SOUTH AFRICA

NIELSEN SAMPLE AS PERCENTAGE OF THE ESTIMATED TOTAL DEMAND				
PRODUCT		A NIELSEN SAMPLE	B ESTIMATED TOTAL DEMAND ¹⁾	A AS PERCENTAGE OF B
Pasteurised milk and ESL milk	(Litre)	319 131 939	662 972 813 ³⁾	48.1
UHT and sterilised Milk	(Litre)	376 821 896	926 006 067 ³⁾	40.7
Flavoured milk	(Litre)	21 866 454	36 491 863 ³⁾	60.2
Yoghurt	(Litre)	187 704 648	227 623 831 ³⁾	82.5
Amasi	(Litre)	143 779 846	179 724 806 ³⁾	80.0
Pre-Packaged cheese	(Kg)	25 007 913	100 781 003 ^{2), 3)}	24.8
Cream cheese	(Kg)	3 226 097	5 100 461 ³⁾	63.3
Butter	(Kg)	9 124 602	20 120 642 ³⁾	45.3
Cream	(Litre)	10 874 185	22 189 787 ³⁾	46.1

1. Retail sales plus non-retail sales for the period January to December 2017.

2. Includes hard and semi-hard cheeses, pre-packaged and other.

3. Estimated figures calculated by the Office of SAMPRO based on the BMI figures of 2012 and 2013 and inflated by the growth rates as shown by Nielsen figures.



AMASI MARKET OF SOUTH AFRICA

67% of South African households consume maas.

(Target Group Index consumer data, 2014)

- **82.4% of consumers are black.**
- Consumers are generally aged between 35-49 years.
- Mostly consumed by the lower socio-economic groups (LSM 1 – 5).
- **50% of households consume Amasi** with maize meal porridge.
- **10.3% of households consume Amasi daily.**
- **13.8% of households consume Amasi once a week.**

Amasi is considered a more affordable source of protein in a struggling economy, therefore category will grow in the short to medium term.

KwaZulu-Natal is the main region in regards to production and sales, accounting for 35.7% of the total volume in 2017.

- This region has a greater number of farmers producing Amasi and in this region the product is one of the biggest components of their staple diet.
- The average selling price of buttermilk and Amasi in the region was slightly lower compared to other regions, possibly due to the increased competition.
- Excess Amasi production in KZN is distributed throughout the rest of the country.

In 2017 buttermilk and Amasi increased by 5.6% in volume as consumers started to purchase cheaper protein alternatives.

- In 2017, top and bottom end retail dominated the buttermilk and Amasi distribution.
- **60.4% of Amasi sales** were through top end retail.
- **20.8% Amasi were sold** through bottom end retail (regional players selling large volumes, including farm stores where consumers purchased directly from the producer).

References:

BMI Research (2017). *Buttermilk and Maas in South Africa*, July 2018. Media feedback report 2018. [Internet document]. URL <https://www.bmi.co.za/wp-content/uploads/2018/09/Buttermilk-and-Maas-Media-Feedback-Report-2018.pdf>. Accessed 10 February 2019.

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WHY AFRICA?

Milk production in Africa = 5% of the world milk production.

Highest milk producing countries in Africa: Ethiopia, South Africa and Sudan.

Milk production in SSA doubled from 1996 – 2013, reaching 33 million tons.

Kenya has over 600 000 smallholder dairies. Dairy producers and their families consume about 40% of the milk produced, and the remainder gets transported to milk collection stations. From there 15% is processed and the rest is consumed raw or lost due to spoilage.

More than 80% of the milk volume is produced and marketed through informal channels by smallholder dairy units and pastoral communities.

Approximately 25–50% of the milk produced in Sub-Saharan Africa is lost because of spoilage prior to reaching the consumer.

One of the main problems in the informal dairy sector is the excess milk that is being produced and wasted due to poor access to markets, rejection at markets, milk handling practices, lack of trained personal and marketing intelligence.

Many Sub-Saharan countries depend on imported milk or powdered milk, which account for 24–60% of the milk quantity consumed.



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MILK PRODUCTION IN AFRICA 1996-2020 (1,000MT) ALL TYPES

Country	1996	2000	2006	2010	2013 ¹	2020 ²	96/13%
Egypt	4,007	4,590	6,800	6,300	6,200	7,000	+54%
Algeria	870	1,130	1,500	1,550	1,700	1,900	+95%
Tunisia	610	880	900	1,080	1,200	1,500	+96%
Morocco	870	1,180	1,610	2,150	2,400	3,100	+275%
Sudan ³	3,560	4,000	5,480	5,373	5,400	6,000	+51%
Ethiopia	960	1,340	2,400	3,040	4,500	6,300	+468%
Cameroon	130	140	160	160	170	190	+31%
Nigeria	380	390	460	490	500	59	+32%
Uganda	620	740	990	1,230	1,300	2,100	+109%
Tanzania	650	1,386	1,650	1,739	1,853	2,200	+185%
Kenya	1,910	2,220	3,500	3,910	4,200	4,900	+119%
Zimbabwe	210	182	47	51	56	100	-275%
South Africa	2,170	2,070	2,570	2,890	3,000	3,200	+47%
Other	1,500	1,750	2,050	2,700	3,200	4,000	+115%
Total	19,989	21,921	30,577	33,163	39,179	43,080	+98%

1: estimates, 2: prognosis, 3: excl. camel milk | Source: FAO, IFCN, PM FOOD & DAIRY CONSULTING

VALUE PROPOSITION

FEATURES

- ✓ Make your own Amasi
- ✓ Unique packaging
- ✓ Increased creaminess and mouthfeel
- ✓ Reduced syneresis and increased gel strength

- ✓ FRESH AMASI DAILY
- ✓ THICK AND CREAMY
- ✓ EFFORTLESS
- ✓ COST EFFECTIVE

JUST
ADD
MILK!



1 SACHET = 2 L MAAS
KEEP REFRIGERATED

FORMAL

BENEFITS

- Quick and easy to use.
- Fun and interactive.
- Fresh Amasi daily.
- Anywhere, any place, any time.

ATTRIBUTES

- **Cost effective** (own Amasi vs. store bought maas).
- **Convenience** – no need for measuring various ingredients.
- Ferment at **room temperature** – no special equipment required.

INFORMAL

BENEFITS

- **Sustainable:** Reducing waste of fresh milk due to conversion to fresh fermented product.
- **Community Upliftment:** Additional income for small-scale farmers.
- **Food Security:** Value addition to their raw product (milk).

ATTRIBUTES

- **Cost effective** (easy and compact storage).
- Can be formulated to include: lactase, probiotics, colour, and flavour.
- **Easy to use**, with no education required.
- Ferment at **room temperature** – no special equipment required.

PACKAGING, STORAGE AND TRANSPORT



STORE

at refrigerated temperatures (4°C)
for up to 6 months.

TRANSPORT

at ambient temperature can be considered,
depending on duration.

EXPLORING INNOVATION

ADDING BENEFICIAL INGREDIENTS

Innovating Amasi

Lactose free
(Lactase enzyme to
produce lactose-free Amasi)



Probiotics addition
(Added health benefits using
ambient stable *B. coagulans*)

Flavours and colourants e.g. banana
and strawberry Amasi

Protective cultures
(Reduce the risk
of pathogens)

- ✓ FRESH AMASI DAILY
- ✓ THICK AND CREAMY
- ✓ EFFORTLESS
- ✓ COST EFFECTIVE

1 SACHET = 2 L MAAS
KEEP REFRIGERATED

CONTACT

