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What is the 'Beef Challenge'?

The 'Beef Challenge' is the term used to describe the three critical issues affecting your enterprise profitability on a daily basis. Every beef farmer, feed manufacturer and nutritional consultant constantly strives to address this Beef Challenge.

The Beef Challenge:





Maximise Daily Liveweight Gain

I. Maximise Daily Liveweight Gain (DLG)

- · Optimise system to finish cattle faster
- Faster finishing improves carcass quality





Produce this Beef Cheaper (More Efficient)

2. Produce this beef cheaper (more efficient)

- · Feed costs have increased significantly
- · More beef from the same feed





Produce Higher Grades & Quality

3. Increase meat yield and grading quality

- More carcass = more profit per head
- Increased carcass grading = increased profitability.

The Solution

Yea-Sacc from Alltech® is the only technology to respond to the Beef Challenge and fulfill all three demands simultaneously.

Alltech has constantly invested in new independent trials with Yea-Sacc which is already backed by more research than any other yeast product on the market. The results speak for themselves:



^{*}Results based on average of independent trials conducted by: R. Fallon et al; Teagasc Grange Research Centre, Ireland, 2003; C. Kneale et al; Harper Adams, University College, UK, 2004; A.G. Gurita, Institute for Ruminant R & D, Balotesi, Romania, 2003; C. Tanguy et al; Institut Polytechnique LaSalle, Beauvais, France, 2008

Understanding Yea-Sacc

- the driver of herd profitability



Three major factors contribute to overall beef production profitability:

- 1. Central to profitability is ensuring that each animal is achieving its optimal growth potential every day.
- 2. The way this weight gain is achieved is determined by the efficiency with which the animal converts its feed into beef. This is simply the cost of feed intake versus the return on beef produced.
- 3. Finally the speed at which the animal achieves their finishing weight is the ultimate driver of profitability:
 - Reduced days to killout
 - · Reduced number of feeds
 - Faster laying down of muscle tissue
 - Higher meat grades
 - Increased carcass profitability

Understanding the technology behind the Yea-Sacc effect



Optimum rumen function provides the platform to maximise dry matter intake and the efficiency of its use. The longer the rumen stays in its most efficient zone of digestion, the greater the potential of the rumen to release nutrients from its feed.

Recent research conducted by G.J. Lascano and A.J. Heinrichs, at Penn State University concluded that this Yea-Sacc rumen effect was observed equally in both high concentration diets and in high forage diets.

Yea-Sacc stimulates the bacteria responsible for both fibre digestion and acid removal. It achieves an elevation of rumen pH leading to more efficient total digestion of both feed and forage.

The increased availability of nutrients allows for more beef production and also ensures that the cost of all feed intake is optimised allowing the animal to lay down more tissue faster from the same feed inputs.



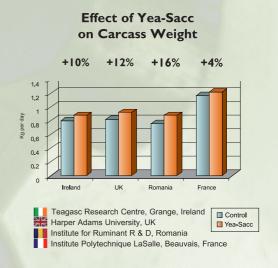
More beef



Increased global feed costs along with increased supply and demand pressures for cheaper beef has given rise for the need to ensure optimal carcass growth and size.

Yea-Sacc has been consistently proven over the past 20 years to increase carcass yield.

In the trials shown to the right, the increased beef production observed came primarily from the same quantity of feed and the balance from increased dry matter intake. This demonstrates the cost benefits of including Yea-Sacc in your feed.





More efficiently



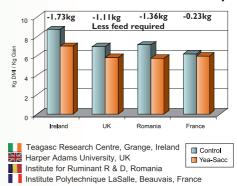
Feed efficiency comes from an optimised rumen environment. The longer the rumen stays above a pH of 6.0 the greater the digestion efficiency.

Yea-Sacc stimulates the bacteria responsible for acid removal, elevating rumen pH, leading to more efficient digestion with an average increase of 8%*.

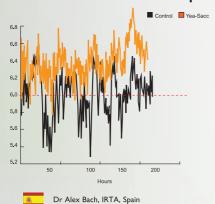
Research with Yea-Sacc has shown:

- Increased average rumen pH
- Reduced rumen pH variations
- Reduced time below a pH of 6
- Maximised time in the efficient digestion zone.

Effect of Yea-Sacc on feed efficiency



Effect of Yea-Sacc on Rumen pH



"More Growth from the same feed." The research trials above clearly demonstra

The research trials above clearly demonstrate that a reduction of between 1.1kg and 1.4kg less dry matter of feed is required to produce the same kg of weight gain.

Faster live weight gain



Achieving greater daily liveweight gain is the single quickest way to improve profits on any beef operation.

Beef animals achieving their desired slaughter weight faster greatly reduces the number of days to be fed.

Yea-Sacc trials have consistently shown an average increase of 11% in DLG across a range of between 1.2kg and 1.8kg per day.

The Yea-Sacc advantage simply gives beef producers the option of:

- Achieving higher weights over the same time or
- Reduced feeding days with finished animals sent to slaughter much quicker.
 (21 days faster versus the control shown in the UK study on the right)

Effect of Yea-Sacc on Daily Liveweight Gain



Teagasc Research Centre, Grange, Ireland
Harper Adams University, UK
Institute for Ruminant R & D, Romania

Institute Polytechnique LaSalle, Beauvais, France

☐ Control☐ Yea-Sacc





Good livestock management is the ability to achieve a balance between rumen health and excellent growth rates through economic feeding whilst achieving optimum production and profitability.

Factors influencing beef performance

Key Factors	Heritability / Breeding	Feeding & Management
Fertility	10%	90%
Calf survival	5%	95%
Weaning weight	25%	75%
Feed efficiency	40%	60%
Conformation (shape)	50%	50%
Saleable meat yield	30%	70%



System approach to quality beef production

- Achieve maximum growth rates in distinct growing and finishing periods
- Duration and intensity of finishing period to complement target market
- Rumen friendly rations are essential for optimum feed conversion efficiency
- Correctly balanced diets will deliver better feed conversion efficiency
- Maximise health and immunity with correct mineral, vitamin and Yea-Sacc supplementation.



The proven solution to...

The Beef Challenge



All leading independent trials* shown throughout this publication have demonstrated the efficacy of Yea-Sacc as the unique solution to resolve all three key issues of the Beef Challenge. Yea-Sacc, when used as part of a nutritional strategy has been proven to provide:

More beef, more efficiently, faster liveweight gain

*Results based on average of independent trials conducted by: R. Fallon et al; Teagasc Grange Research Centre, Ireland, 2003; C. Kneale et al; Harper Adams, University College, UK, 2004; A.G. Gurita, Institute for Ruminant R & D, Balotesi, Romania, 2003; C. Tanguy et al; Institut Polytechnique LaSalle, Beauvais, France, 2008

Bringing expertise to the equation

Yea-Sacc from Alltech demonstrates how all-natural technologies supported by constant research can help move the industry forward and meet the challenges of animal production through the provision of nutritional solutions.

Almost 30 years of research with Yea-Sacc allows Alltech to provide the most consistent product possible to the beef industry.



Alltech Global HQ, Kentucky, USA



European Bioscience Centre, Co Meath Ireland

Assuring quality products

Alltech Quality System (AQS) is a system that incorporates the requirements of all of the major global certifications.



AQS is operational in Alltech's 32 maunfacturing facilities across the globe. This ensures that the product you receive adheres to the highest standards of quality, safety, traceability and consistency.

Insist on the proven solution, insist on



To start using Yea-Sacc, the proven solution to **The Beef Challenge**, ask for it by name.

Yea-Sacc can be included in your ration by your feedmill. Yea-Sacc is also available as part of Alltech's FarmPak® range which is suitable for use in total mixed ration systems (TMR) or in diet feeders. This complete range of products may also be available through your local distributor or feedmill.



For further information, please contact your local Alltech representative.

Your local office can be located by logging on to www.alltech.com

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