

Blooming biomes mean blooming profits

FARM THE BIOME WITH **SIGNIS**



FOR BIOMES THAT ARE GOOD TO GROW



Business blooms when you farm the biome

A healthier biome doesn't just mean a healthier herd, it means healthier profits too. You can now employ an intelligent feed strategy by adding a new class of feed additive – stimbiotics, to target the microbiome.

This stimulates biome proliferation and promotes gut resilience when challenged by pathogens. It's an innovative approach extracting more from the diet, improving fibre fermentability and promoting pig growth in a completely new way.

Global feed industry growth-from-health practices are changing¹⁻³

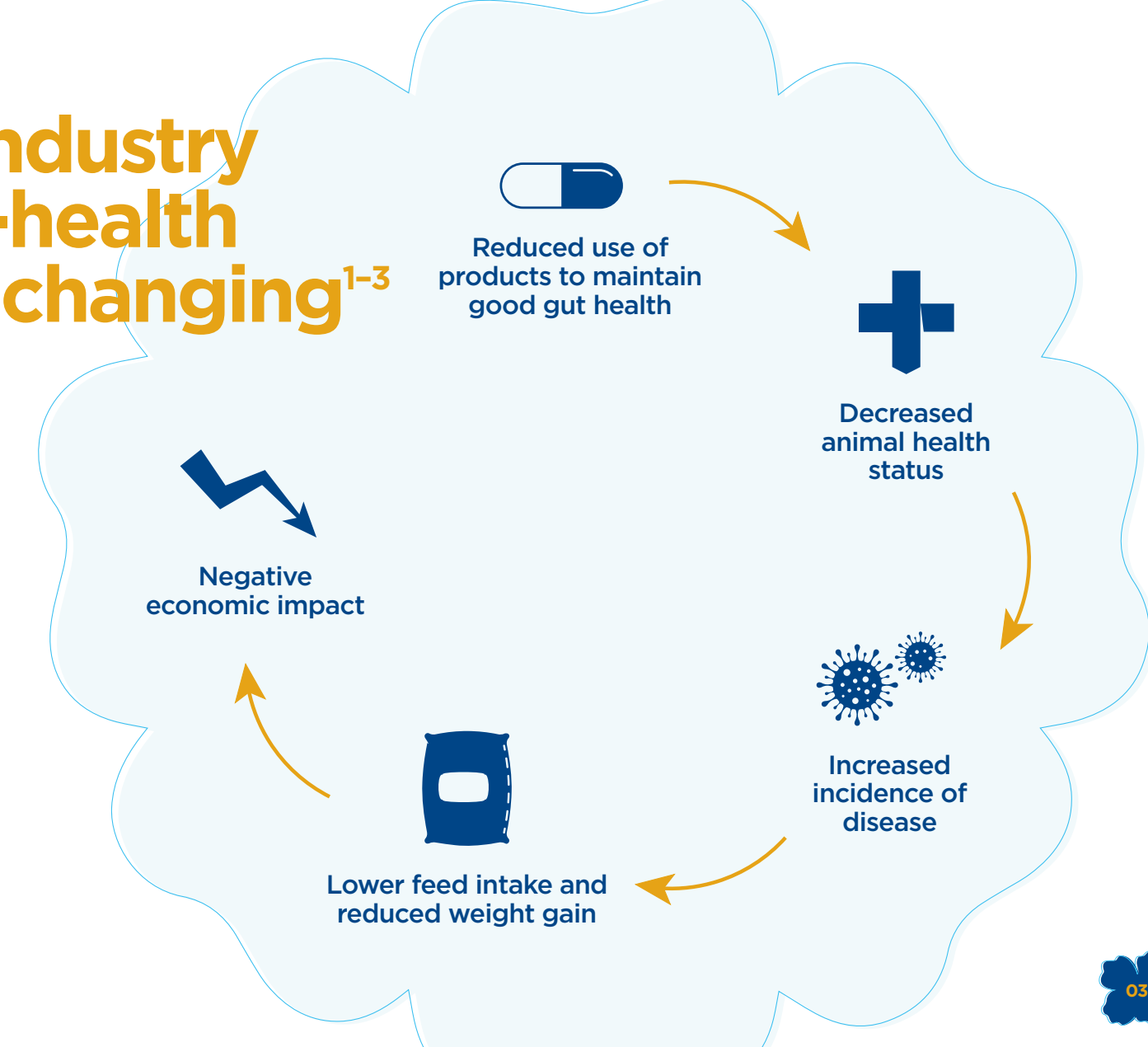
The use of antibiotics and other anti-infective products are falling dramatically in most regions of the world for two main reasons:

- ✿ To reduce the development of resistance and preserve the efficacy of the agents
- ✿ To address rising consumer demand for 'more natural' farming methods

This has directly affected animal health and performance and there have been economic consequences, consequences that are currently insufficiently addressed.

The challenge of maintaining animal health remains and is even rising in some instances.

This has prompted AB Vista to seek solutions beyond nutrition and to explore the untapped potential of enhancing (we call it farming) the gut microbiome in order to achieve a similar result, but from a very different process.



Harnessing the gut microbiome – the endogenous health asset¹

Without antibiotics, an alternative nutritional strategy is needed to meet the challenge of achieving the right balance between health, performance and feed efficiency. The gut microbiome is central to improved gut health and ensuring optimum gut health helps to ensure the best performance in terms of feed efficiency and consequent body mass improvement.

Optimal gut resilience gives animals the best chance of dealing with multiple challenges which could otherwise result in such things as:

- Intestinal lesions
- Dysbacteriosis (e.g. Salmonella)
- Ear necrosis

This enhanced gut resilience resulting from a healthy intestinal microbiome means animals can extract the nutrients required for growth and production more efficiently. So health status, previously founded on an exogenous source, can now be attained by stimulating an untapped endogenous source.



Fibre is key to unlocking the potential of the microbiome

The microbiome is a dense and highly complex community of micro-organisms both good and bad.

They play a crucial role in overall animal health, specifically in gut health, in the extraction of energy from undigested nutrients (especially fibre), and the development and maintenance of the immune system. Optimisation of the microbiome's potential must consider the status of the feed when it reaches the gut and how the microbiome adapts to this.

An optimal microbiome depends on



What you feed the microbiome

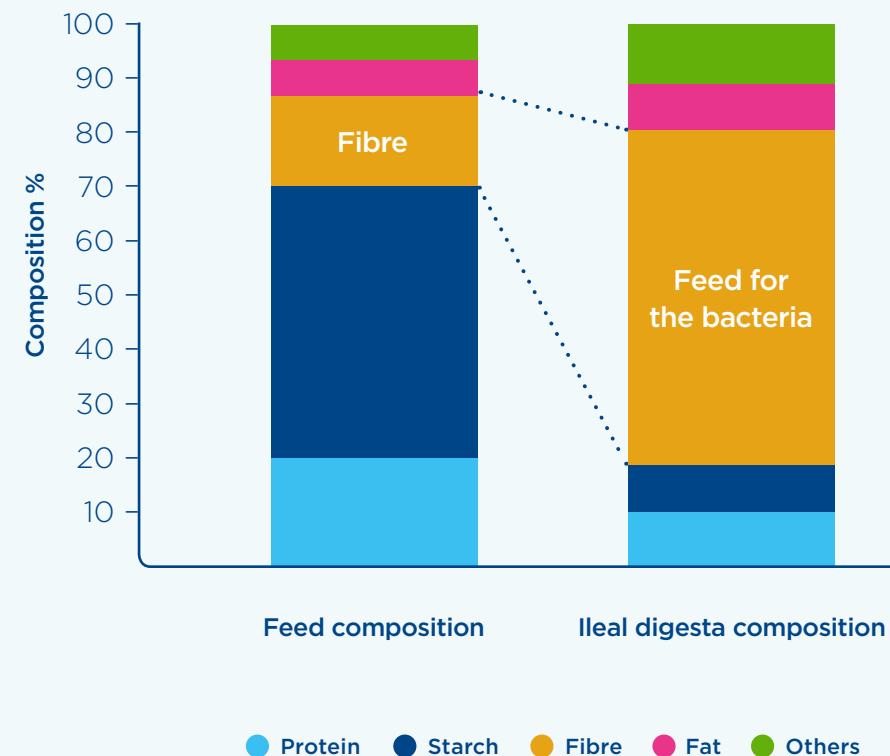


Adaptation of the microbiome over time – age related

Fibre feeds good bacteria.¹ Good bacteria fuel growth.

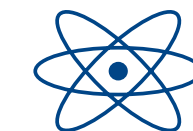
What feeds the animal is not the same as what feeds the microbiome. Animal feed is relatively high in carbohydrate and protein whereas the microbiome thrives better in a much more abundant fibre environment.

The normal ileal digesta is a fibre-rich environment which encourages the microbiome to fractionate and ferment fibre. However, this existing process is amplified by Signis so that more short chain fatty acids are produced for assimilation by the animal.

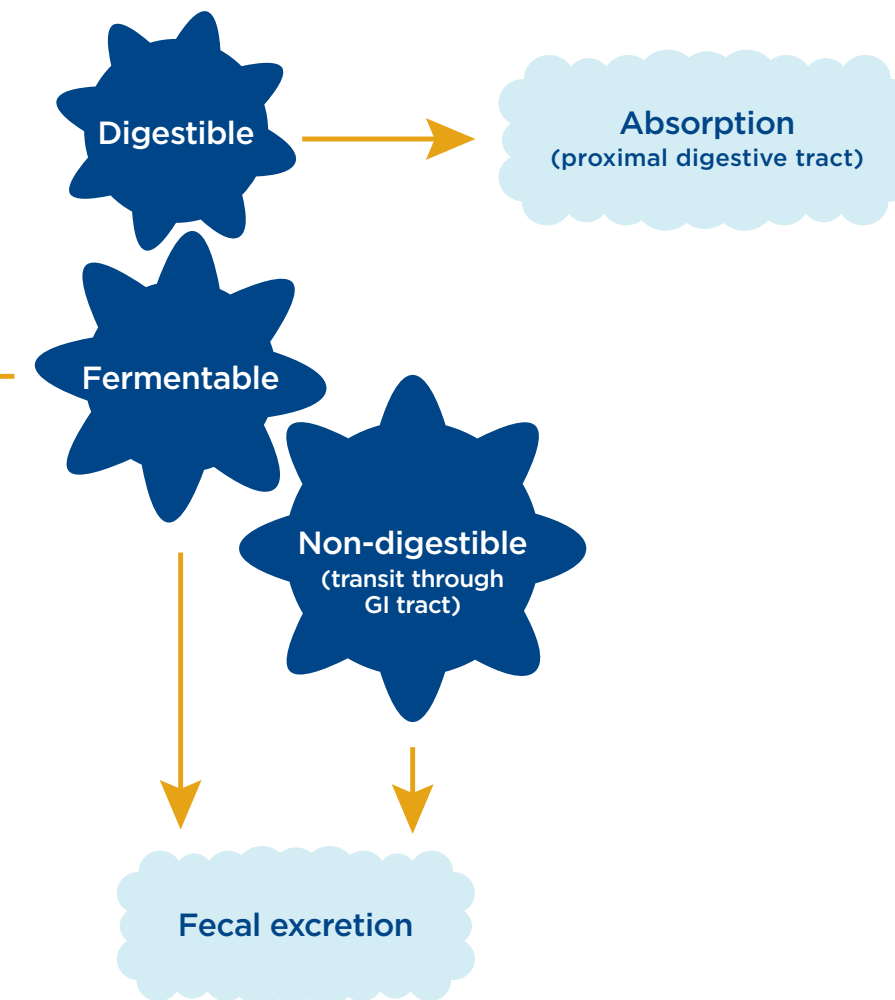


Fibre fermentability directly affects energy output

The interplay between the digestibility of feed at different stages in the GI tract has important consequences on fermentability and energy output.



~10-30% energy maintenance requirements (in poultry/pigs)



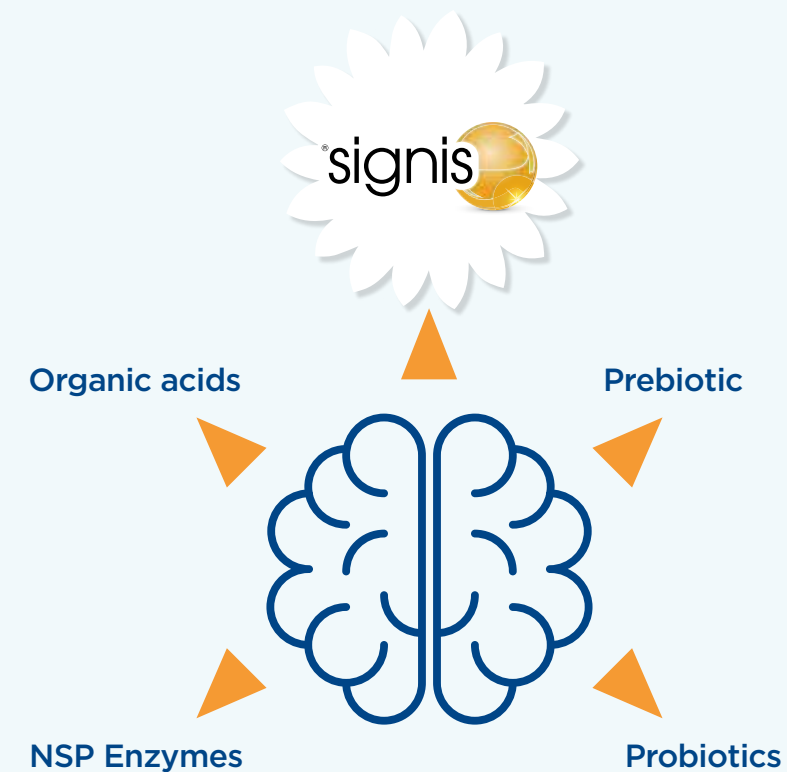
Signis. The first of a new class of microbiome modulators – stimbiotics.

Making a well-informed, intelligent choice when choosing an appropriate feed additive is made easier with the arrival of Signis.

Signis is not a prebiotic. Prebiotics are delivered in high concentrations as a substrate for hindgut fermentation.

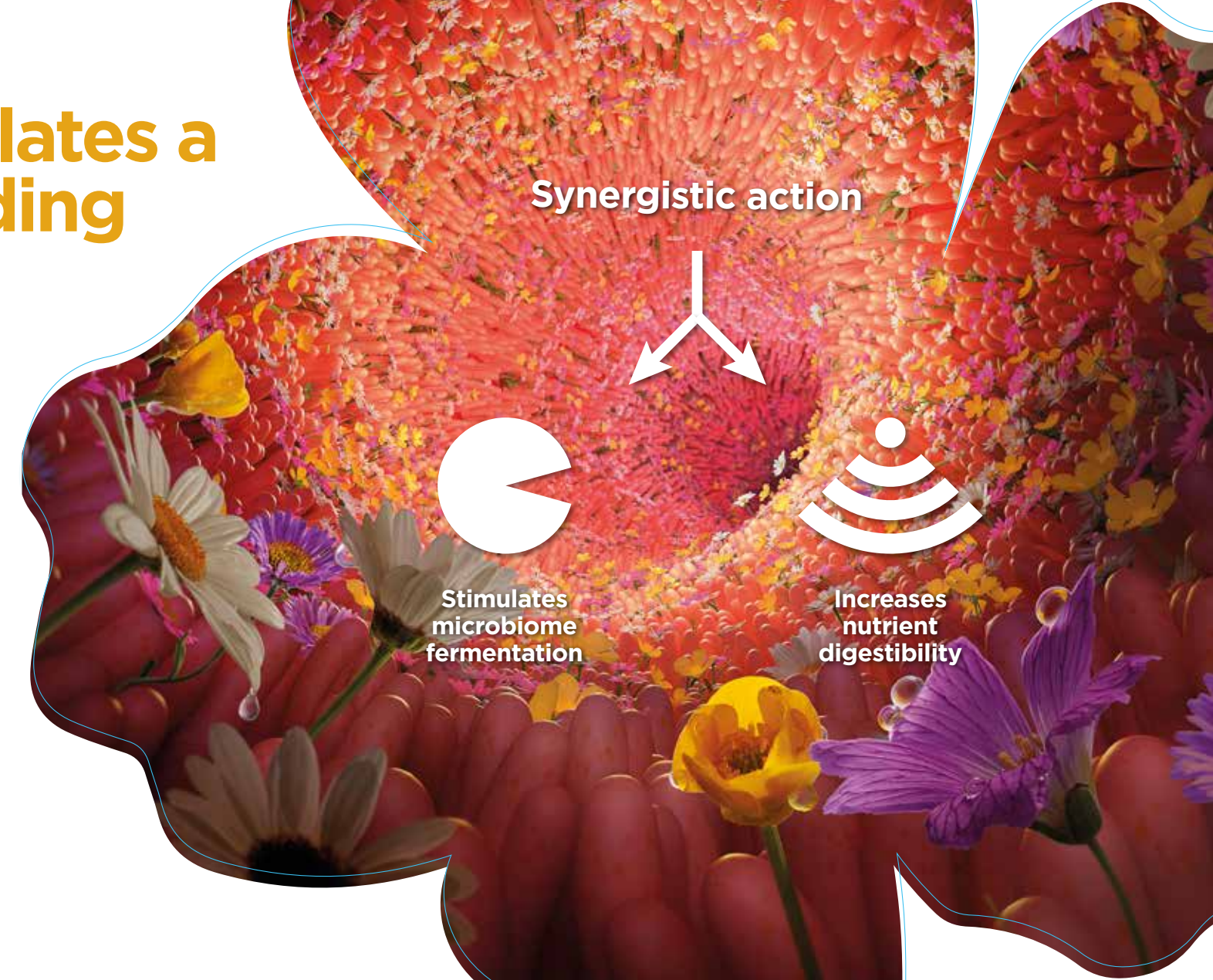
Signis is a stimbiotic – a product that is delivered at low concentrations to signal and accelerate the fermentation of fibre already in the gut.

**SIGNIS IS THE SMART CHOICE TO IMPROVE
GUT RESILIENCE AND PERFORMANCE**



Signis stimulates a fibre-degrading microbiome

Signis is unique and carefully calculated to provide precision synergism, which promotes further fibre fractionation. This is a sensitive mechanism and Signis has been rigorously developed to optimise the process.



Synergistic action

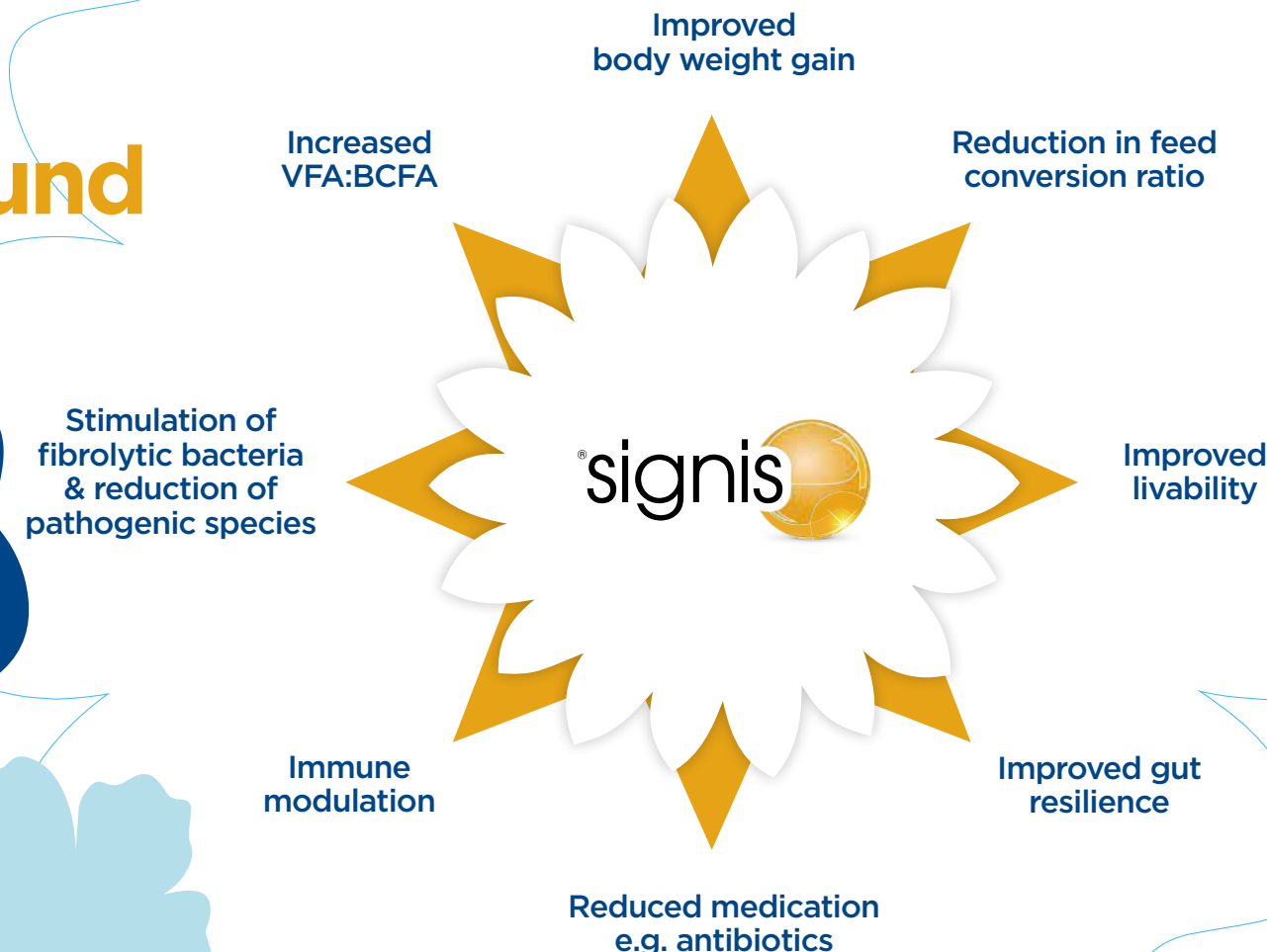
**Stimulates
microbiome
fermentation**

**Increases
nutrient
digestibility**

Signis for healthier profits all round

The multiple benefits of SIGNIS combine to offer health, resilience, performance and greater profits. This winning combination is helping to redefine modern-day feed strategies.

VFA: Volatile fatty acids.
BCFA: Branched-chain fatty acids.



Signis. An intelligent addition to the feed industry.



Signis stimulates the microbiome's ability to ferment fibre



Signis optimises gut function



Signis improves resilience and livability



Signis improves nutrient digestibility



Signis improves performance



Signis reduces production costs

MAKE SIGNIS PART OF YOUR FEED ACTION PLAN AND START FARMING THE BIOME

AB Vista adds considerable value to Signis and the 'Farming the Biome' concept through our unmatched suite of technical and support services which combine to deliver best-in-class global feed solutions – localised and adapted to your particular needs.

ABVista

The most important additive is intelligence

