



Blue Pacific
MINERALS

CLEVER *by* NATURE



OptiGuard[™]
THRIVE 

PRODUCT OVERVIEW

**Advanced Gut
Health, Immunity,
& Growth for Calves**



BUILDING **HEALTHY CALVES**
FROM BIRTH TO WEANING.

EVERY GREAT COW STARTS AS A **HEALTHY CALF**

The first 12 weeks of life determine the future productivity of every replacement heifer.

The development of the digestive tract, immune system, and rumen during this period has a lasting impact on:

- Daily liveweight gain
- Feed conversion efficiency
- Disease resistance
- Weaning success
- Future milk production
- Lifetime profitability

A calf is born with an undeveloped rumen. During the first weeks of life, it depends almost entirely on milk for nutrition, while its digestive and immune systems are still maturing. **OptiGuard™ Thrive** has been developed to support calves through this critical period, helping them transition from milk to solid feed while establishing a healthy digestive system.

WHY GUT HEALTH COMES FIRST

More than 70% of the immune system is associated with the gastrointestinal tract. A healthy digestive system helps calves digest nutrients more efficiently, utilise calf starter more effectively, maintain stronger immunity, grow more consistently, and better prepare for weaning.

Our multi-functional gut health programme replaces basic vitamin supplements to directly address common farmer problems such as scouring calves, poor starter intake, slow rumen development, and weaning stress.

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EVIDENCE-BASED ACTIVE INGREDIENTS

OptiGuard™ Thrive lets the digestive tract flourish with billions of good bacteria. It features targeted active microbials and postbiotics backed by extensive scientific research to enhance calf health and development.

1. SACCHAROMYCES CEREVISIAE FERMENTATION PRODUCTS

Included as a functional calf additive (SmartCare) to support healthy calf development during the early stages of life. Clinical research demonstrates the profound value of Saccharomyces cerevisiae postbiotics in bovine health:

- Respiratory Health & Immunity:** Supplementing with S. cerevisiae fermentation products lessens the severity of viral-bacterial coinfections (such as BRSV and Pasteurella multocida) by reducing lung pathology and promoting metabolic changes that favour healthy development (McDonald et al., 2021).
- Growth & Efficiency:** Feeding these fermentation products to Holstein calves significantly improves post-weaning average daily gain and feed efficiency, while reducing the need for post-weaning respiratory treatments (Klopp et al., 2022).
- Pathogen Resilience:** During periods of digestive stress, such as a Salmonella enterica challenge, S. cerevisiae supplementation improves starter intake and promotes more solid faecal consistency (Harris et al., 2017). Overall, these postbiotics exert vital immunomodulatory effects, stabilise the ruminal environment, and enhance epithelial barrier integrity (Chae et al., 2024).

2. CLOSTAT® SP (BACILLUS SUBTILIS PB6)

A proven Bacillus subtilis probiotic that supports intestinal health by helping maintain a favourable balance of gut microorganisms.

- Targeted Pathogen Inhibition:** Bacillus subtilis PB6 offers proven protection against pathogens including Clostridia, Salmonella, and E. coli through the secretion of bioicidal proteins and quorum quenching (Kemin Industries).
- Digestive Integrity:** It supports gut integrity, helps maintain digestive health, and supports nutrient utilisation.
- Clinical Outcomes:** Encourages healthy manure consistency and actively reduces gut inflammation to prevent conditions like leaky gut.



DIRECTIONS FOR USE:

Designed to be added to milk and electrolytes to easily distribute to calves.

- Standard:** Add 5g per calf, per day to milk.
- Stress/Recovery:** In times of stress or recovery, add 10g per calf, per day to electrolytes or milk.

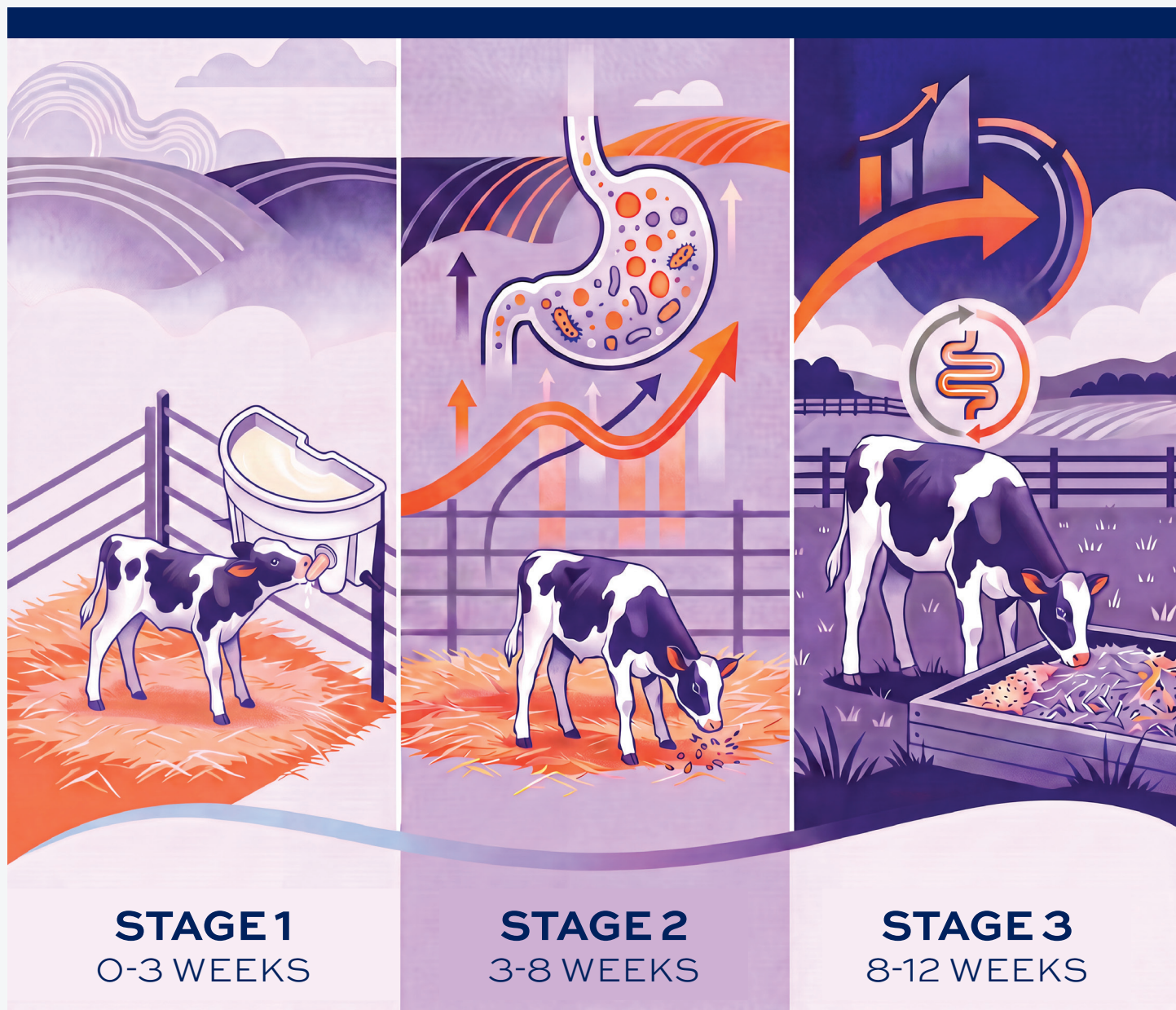
ESSENTIAL TRACE ELEMENTS & VITAMINS

OptiGuard™ Thrive includes five trace elements and essential vitamins required to get your calves performing at their peak.

TRACE ELEMENTS <i>Formulated per 5g dose:</i>	
Zinc (10mg)	Crucial for immune function, enzyme activation, and maintaining healthy cellular structures.
Copper (Organic) (2.5mg)	Vital for iron metabolism, immune response, and connective tissue development.
Cobalt (Organic) (0.25mg)	Essential for rumen microbes to synthesise Vitamin B12, heavily supporting energy metabolism.
Iodine (0.3mg)	Necessary for thyroid hormone production, which regulates basal metabolic rate and early growth.
Selenium (0.1mg)	A powerful antioxidant that works synergistically with Vitamin E to protect cells from oxidative stress and tissue damage.

VITAMINS <i>Formulated per 5g dose:</i>	
Vitamin A (1000 IU)	Supports eye health, immune system, growth, and epithelial tissue integrity.
Vitamin D3 (500 IU)	Supports bone growth, calcium metabolism, and skeletal development.
Vitamin E (20mg)	Supports immune function, antioxidant protection, and muscle health.
Vitamin B1 (2mg)	Supports energy metabolism, nervous system function, and appetite. Vitamin B1 deficiency occurs when calves have insufficient thiamine (Vitamin B1). Younger, often pre-ruminant animals initially get their thiamine from milk, but their rumen bacteria sometimes do not produce sufficient thiamine when weaning. Another cause of deficiency is the presence of thiaminases - enzymes that can be ingested or produced by gut bacteria - which cause thiamine deficiency by destroying it or hindering its function. Ingested sulphur can also play a role in thiamine deficiency.

PHASED SUPPORT FOR THE FIRST 12 WEEKS



Building the Foundation:

Supports early digestive health, establishment of beneficial gut bacteria, immune function, healthy appetite, and early growth.

PRE-WEANING

Maximising Growth:

During this stage calves rapidly increase concentrate intake while the rumen develops. Supports gut microbial balance, nutrient digestion, feed conversion, and consistent growth.

WEANING

Smooth Transition:

Weaning is one of the highest stress periods in a calf's life. **OptiGuard™ Thrive** supports continued feed intake, digestive stability, growth through the transition, and reduced weaning setbacks.

***OptiGuard™ Thrive** supports every stage*

REFERENCES

Feeding *Saccharomyces cerevisiae* fermentation products lessens the severity of a viral-bacterial coinfection in preweaned calves.

Paiton O McDonald 1, Courtney Schill 1, Teresia W Maina 1, Beulah Samuel 1, Madison Porter 1, Ilkyu Yoon 2, Jodi L McGill 1 Affiliations - 1 Department of Veterinary Microbiology and Preventive Medicine, Iowa State University, Ames, IA 50010, USA. 2 Diamond V Mills Inc., Cedar Rapids, IA 52404, USA. PMID: 34673945 PMCID: PMC8599294 DOI: 10.1093/jas/skab300

Influence of *Saccharomyces cerevisiae* fermentation products, SmartCare in milk replacer and Original XPC in calf starter, on the performance and health of preweaned Holstein calves challenged with *Salmonella enterica* serotype Typhimurium.

T L Harris 1, Y Liang 1, K P Sharon 2, M D Sellers 1, I Yoon 3, M F Scott 3, J A Carroll 4, M A Ballou 5 . Affiliations - 1 Department of Animal and Food Sciences, Texas Tech University, Lubbock 79409. 2 Department of Animal and Food Sciences, Texas Tech University, Lubbock 79409; USDA-Agricultural Research Service Livestock Issues Research Unit, Lubbock, TX 79401.3 Diamond V Mills Inc., Cedar Rapids, IA 52404.4 USDA - Agricultural Research Service Livestock Issues Research Unit, Lubbock, TX 79401. 5 Department of Animal and Food Sciences, Texas Tech University, Lubbock 79409. Electronic address: michael.ballou@ttu.edu. PMID: 28734601 DOI: 10.3168/jds.2016-12509. <https://pubmed.ncbi.nlm.nih.gov/28734601/>

Effects of feeding *Saccharomyces cerevisiae* fermentation products on the health and growth performance of Holstein dairy calves.

May 2022 JDS Communications 3(3):174 - 179. DOI:10.3168/jdsc.2021-0172. License CC BY 4.0. Authors: R.N Klopp, R.E Centeno-Martinez, Ilkyu Yoon, T.A Johnson. https://www.researchgate.net/publication/359275050_Effects_of_feeding_Saccharomyces_cerevisiae_fermentation_products_on_the_health_and_growth_performance_of_Holstein_dairy_calves

***Saccharomyces cerevisiae* Fermentation-Derived Postbiotics Supplementation to Dairy Calves: Effects on Growth, Metabolism, Immune Status and Preliminary First Lactation Outcomes, by Marta Sfulcini.**

1ORCID,Vincenzo Lopreato 2,Florenzo Piccioli-Cappelli 1,Vania Patrone 3ORCID,Marta Bisaschi 3ORCID,Ilkyu Yoon 4ORCID,Alessandro Maria Zontini 5ORCID,Mario Barbato 2ORCID,Luca Cattaneo 1ORCID,Ivonne Archetti 6ORCID,Erminio Trevisi 1ORCID andAndrea Minuti 1,*ORCID. 1 Department of Animal Science, Food and Nutrition (DIANA), Faculty of Agricultural, Food and Environmental Sciences, Università Cattolica del Sacro Cuore, 29122 Piacenza, Italy. 2 Department of Veterinary Sciences, Università di Messina, 98168 Messina, Italy. 3 Department for Sustainable Food Process - DiSTAS, Università Cattolica del Sacro Cuore, 29122 Piacenza, Italy. 4 Diamond V Inc., Cedar Rapids, IA 52404, USA. 5 Cargill Animal Nutrition and Health, 29017 Fiorenzuola D'Arda, Italy. 6 Istituto Zooprofilattico Supramentale della Lombardia e dell'Emilia-Romagna, Via A. Bianchi 9, 25124 Brescia, Italy. Animals 2025, 15(18), 2728; <https://doi.org/10.3390/ani15182728>. Published: 18 September 2025. <https://www.mdpi.com/2076-2615/15/18/2728>

Beneficial effects of *Saccharomyces cerevisiae* fermentation postbiotic products on calf and cow health and plausible mechanisms of action.

Front. Anim. Sci., 20 November 2024. Sec. Animal Physiology and Management. Volume 5 - 2024 | <https://doi.org/10.3389/fanim.2024.1491970>. Jeong-Byoung Chae, Amy D. Schoofs, Jodi L. McGill. Department of Veterinary Microbiology and Preventive Medicine, Iowa State University, Ames, IA, United States. <https://www.frontiersin.org/journals/animal-science/articles/10.3389/fanim.2024.1491970/full>

