CHR. HANSEN

Improving food & health

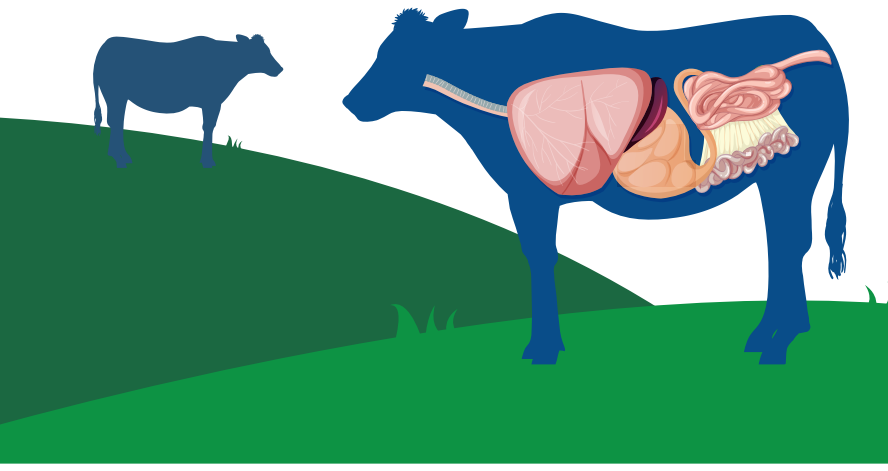
BOVAMINE DEFEND PLUS — THE PROVEN PROBIOTIC—MADE BETTER

Bovacillus™

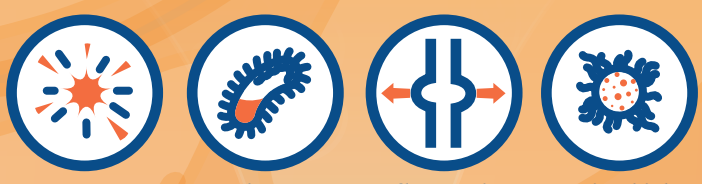
Bovamine® Dairy Plus

HOW CHR. HANSEN PROBIOTICS IMPROVE CATTLE HEALTH

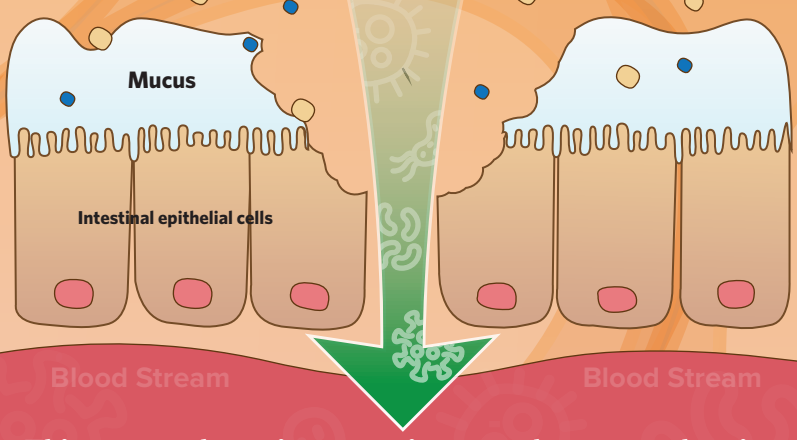
Having a healthy gut is essential for the overall well-being of livestock.



Farm animals go through periods, such as the weaning period, where they are likely to be susceptible to conditions that can compromise their gut health:



This may lead to a state of leaky gut where the intestinal barrier is compromised.



This means that microorganisms, pathogens and toxins are able to enter the blood stream. This can trigger an inflammatory response that can have severe consequences to the performance and health of the animals.

Chr. Hansen science-based, research-proven probiotics can prevent leaky gut caused by stress factors.

Probiotics (good bacteria) bind directly with cells to strengthen the intestinal barrier and prevent potential pathogens from binding to the cells and causing damage.

- Animals absorb a higher proportion of nutrients from feed and expend less energy repairing the GI tract
- More resources are available for growth, mile production, reproduction, immune function, etc.
- Improved performance, welfare & health and food safety

Learn more about the beneficial effects of probiotics on the gut health of livestock

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HOW CHR. HANSEN PROBIOTICS HELP **PRETERM AND COLICKY BABIES**

PRETERM

NEC and its Causes

Necrotizing enterocolitis (NEC) is an inflammatory illness and a severe risk for preterm babies. Worldwide, it is the leading cause of mortality among preterm babies.[1] It is caused by underdeveloped or damaged intestine resulting from injury or lack of blood or oxygen, or by bacterial growth on the intestinal wall.[2]

How does BB-12® help?

Clinical studies involving more than 1,200 preterm infants suggest that a specific, three-strain probiotic blend by Chr. Hansen may help reduce the risk of NEC by up to 50%.[3, 4]

up to **50%** reduced risk of NEC

Three probiotic strains work together:

- *Bifidobacterium*, BB-12
- *Streptococcus thermophilus*, TH-4®
- *Bifidobacterium infantis* (DSM 33361)

This combination has been shown to produce antimicrobial substances and compete with harmful bacteria for adhesion sites in the intestine.[5]

A healthy, robust gut microbiome supports the intestinal tract and the development of a healthy immune system and digestive functions.

COLIC

Colic and its Causes

Infant colic is defined as fussing and excessive, constant crying for extended periods.[6] It affects up to 20% of all infants under three months of age.[7, 8] It is typically caused by lower numbers of good (or beneficial) bacteria, particularly Bifidobacteria, and increased concentrations of potentially pathogenic bacteria[9] in the intestine or gut.

How does BB-12 help?

Bifidobacteria are found in breast milk,[10] and studies suggest that Bifidobacterium, BB-12 helps restore gut microbiome balance by adhering to the gastrointestinal tract and blocking pathogenic bacterial from adhering.

Modifying the microbiota in infants with intestinal dysbiosis is associated with a significant reduction in excessive crying and fussing in infants with colic.[8]

Strict, high-quality production processes are essential.

Since preterm infants are particularly prone to infection, Chr. Hansen has implemented the strictest of production processes. By adding many more requirements beyond what is stipulated, we ensure a safe product that is of the highest quality for this vulnerable group.

1-11 references available upon request.

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