

POULTRY

GUT HEALTH

TRIPLE CHECK

Establish the intestinal integrity and protection your birds need, using our **Gut Health Triple Check** program.

The Gut Health Triple Check program serves as a support system to **CLEAN UP** contaminants in feed and water prior to animal exposure, **BUILD UP** intestinal strength to reduce leaky gut and **KNOCK OUT** harmful pathogens for healthier flocks.



CLEAN UP

Target specific profit-robbing contaminants in fat, grain, water and finished feed.

- ✓ ENDOX®
- ✓ Grain SHIELD®
- ✓ KALLSIL™
- ✓ KEM SAN®
- ✓ Myco CURB®
- ✓ RENDOX®
- ✓ Sal CURB®



BUILD UP

Maintain intestinal barrier strength to maximize nutrient absorption and prevent harmful pathogens and toxins from entering the system.

- ✓ Aleta™
- ✓ ButiPEARL™
- ✓ ButiPEARL™ Z



KNOCK OUT

Support intestinal balance to inhibit or eliminate harmful pathogens from infiltrating the body.

- ✓ CLOSTAT®
- ✓ CLOSTAT® WS
- ✓ KEM SAN®
- ✓ VANNIX™ C



SOLUTIONS FOR **POULTRY**

Help each bird reach its full production potential. Establish the intestinal integrity and protection your birds need using our Gut Health Triple Check program.

Aleta™

Aleta offers a concentration greater than 50 percent of 1,3-beta glucans. Beta glucans have been used in humans and livestock as a way to enhance host protective immunity. Minimizing the impact of disease challenges early on in an animal's life can have an effect on their ability to gain weight faster, convert feed more efficiently and may be less likely to spread disease.

ButiPEARL™

ButiPEARL is the leading source of encapsulated butyric acid for providing targeted delivery along the GI tract. Butyric acid is an integral, short-chain fatty acid acting as an energy source for epithelial cells. Butyric acid also increases the expression of tight junction proteins in the intestines and increases antioxidant levels to promote healing in the GI tract.^{1,2}

ButiPEARL™ Z

ButiPEARL Z uses proprietary MicroPEARLS® spray freezing technology to encapsulate two synergistic nutrients, butyric acid and zinc. Butyric acid and zinc play an important role in key biological processes affecting the health and performance of poultry.

CLOSTAT® AND CLOSTAT® WS

CLOSTAT and CLOSTAT WS contain a proprietary, patented strain of *Bacillus subtilis* PB6. PB6 is a unique, naturally occurring, spore-forming microorganism. Kemin internal research has shown PB6 can inhibit *C. perfringens* as well as other pathogens.³ CLOSTAT WS utilizes the same technology with water soluble ingredients.

ENDOX®

ENDOX was formulated specifically to protect finished feeds by safeguarding fat soluble vitamins against degradation, protecting complete feeds from fat oxidation and vitamin loss, and more.

Grain SHIELD®

Grain SHIELD is a high-moisture grain preservative used to control molds and fungi in stored grains such as oats, corn, barley, wheat and sorghum. It contains a minimum of 72 percent propionic acid combined with acetic, benzoic and sorbic acids to work as a broad-spectrum mold inhibitor.

KALLSIL™

KALLSIL reduces caking in poultry feed by absorbing moisture. This results in improved flow in feed ingredients to prevent feed from hanging to the sides of the bins or feeders.

KEM SAN®

KEM SAN is a unique combination of effective organic acids. It has been proven to inhibit and kill a broad spectrum of pathogenic bacteria in drinking water. By reducing the pathogen load in the water, there are less challenges presented to the bird, which helps maintain gut health.

Myco CURB®

Myco CURB is a mold inhibitor for feed, formulated to inhibit mold growth in processed feed ingredients, complete feed and total mixed rations (TMR). Myco CURB contains propionic acid blended with sorbic and benzoic acids and is buffered for improved equipment and employee safety.

RENDOX®

RENDOX stabilizes animal fats and protein meals during the rendering process with antioxidants to maintain product freshness, protect product quality, and increase product shelf life.

Sal CURB®

Sal CURB is an antimicrobial agent made from a blend of aqueous formaldehyde and organic acids. It is used as a *Salmonella* control in feed or feed ingredients to keep products *Salmonella*-negative for up to 21 days.

VANNIX™ C

VANNIX C is a unique, naturally-derived feed additive combining two functional ingredients to help producers improve efficiency. The combination of a polyphenol and direct-fed microbial provide benefits for gut health in poultry with antioxidant, anti-inflammatory and astringent functions, as well as healthy intestinal microflora balance.

CHECK OUT OUR LINEUP AT Kemin.com/GutHealth

1-800-752-2864

REFERENCES

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2. Ma, X. et al. 2012. Butyrate promotes the recovering of intestinal wound healing through its positive effect on the tight junctions. *J. Anim. Sci.* 90:266-268.
3. Katouli, M. et al. 1999. The effect of zinc oxide supplementation on the stability of the intestinal flora with special reference to composition of coliforms in weaned pigs. *J. of Applied Microbiology.* 87:564-573.
4. Zhang, B. et al. 2012. Zinc prevents *Salmonella enterica* serovar Typhimurium-induced loss of intestinal mucosal barrier function in broiler chickens. *Avian Pathology.* 41:361-367.
5. Kemin Internal Document, 09-00010.