

# Bentoli<sup>®</sup> CONNECT

Issue: August 2020

## Inside News

## A Wonderful 50 Year Journey

*William A. Robinson, Sr.  
Chairman*

In 1971, the roots of what would ultimately become to be known as "Bentoli" originated in the USA as a supplier of materials to a shrimp farming industry that was new, exciting, and growing. Today, many years later we have evolved into a manufacturer of specialty additives for all types of animal feed and farming applications. With facilities located in the USA and Asia we continue to service a global marketplace following the same integrity core value, and quality/service business principles that we started out with.

During these almost 50 years within an ever-changing industry, we have been fortunate to establish mutually beneficial business relationships many of which have grown into friendships worldwide. We are sincerely grateful to the many valued customers who have given us the opportunity to earn their business and be their feed additive solutions provider. We remain committed to providing our animal feed and farming industry customers with feed preservation, processing and nutrition solutions that will positively impact their financial and operational performance.

It is amazing how quickly time goes by...

Thank you for being part of our journey, and more importantly for allowing Bentoli the opportunity to serve you.

*William A. Robinson*



**Following the same integrity core value, and quality/service business principles that we started out with**

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Mycotoxins In Feed and Strategies To Decontaminate To Produce Safe Feed.

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# Effects of mycotoxins in gut health - a far more challenge

Dr. Jayanta Bhattacharyya, DGM - Techno-Commercial

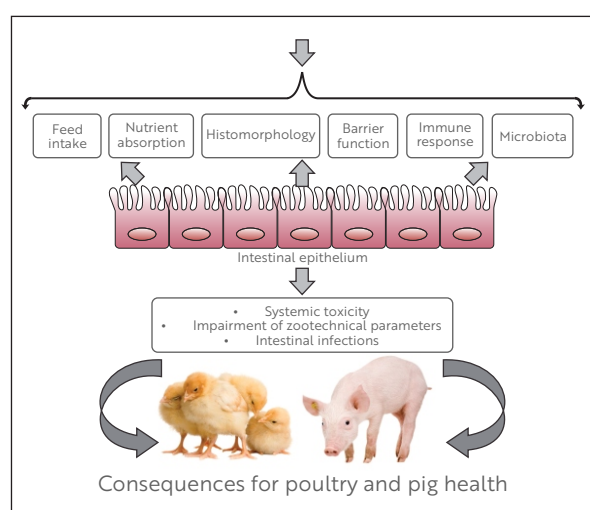
In the recent past while I was making a routine visit to some poultry farms, I found the performance of the flocks were not upto the standard and there was a high mortality percentage and poor feed conversion ratio. In spite of having the best possible biosecurity, nutritional regime and vaccination program in place, farms encountered challenges to get the best performance. After an array of in-farm, laboratory findings it was found mycotoxins were one of the major causes of this problem. For small and medium farmers and integrators it is difficult to set the limit of acceptance of quality parameters of ingredients especially when there is shortage of supply and price is soaring. Ultimately farmers pay a large price due to preventable factors like mycotoxins.

Mycotoxins cause multiple pathogenesis like carcinogenic effects, hepatotoxicity, nephrotoxicity, Immunosuppression, neurotoxicosis, reproductive dysfunctions and teratogenesis. These start to develop either after exposure to high toxic contamination or prolonged exposure to sublethal toxins present in feed. I believe that mycotoxin problems that are obvious in farms are just a **"tip of the iceberg"**. I further believe that acute mycotoxicosis is less common whereas chronic toxicity without showing any noticeable toxicity symptoms is more prevailing in the farms.

As a producer of animal feed, we should have the best practices to decontaminate molds and subsequently mycotoxins. Molds are of two types – field molds and storage molds. Sometimes as a manufacturer, even if we take the best measures to control growth of molds during storage of feed and ingredients, mycotoxins still are a nuisance. The reason behind this scenario is growth of mold and contamination at agriculture field level and we do not have control in the total value chain. Even though you have the best measures to control molds during storage and after feed manufacturing, usage of the best mycotoxin binder is utmost necessary.

More than 500 mycotoxins are identified and out of that 50 are analyzed in the laboratory. Majorly mycotoxins are categories into 5 categories- Aflatoxin, Ochratoxin, Fumonisin, Zearalenone, Trichothecene. One specific mold can produce several mycotoxins and one mycotoxin is produced by several molds. It is always important to have a broad spectrum of control programs in the feed manufacturing process.

Toxins entering the body have to go through several metabolic processes to produce the ill effects on target organs. Irrespective of type, all toxins have to first pass through the intestinal wall to reach hepatic circulation. Intestinal epithelium is the first system which is encountered and become affected resulting into several ill consequences.



- Mycotoxins like DON, Fumonisin, Ochratoxins impair nutrient absorption
- One of the most proliferating cells in the body is villi epithelial cells. A group of mycotoxins like aflatoxins, ochratoxins, patulin, and fumonisin reduce differentiation of stem cells of crypts resulting in less development of enzyme secretory cells, goblet cells, and gut associated defense cells.
- Certain mycotoxins like DON, fumonisin, ochratoxin loosen the intercellular binding and reduces absorptive power of the intestine
- Mycotoxins like DON, fumonisin, ochratoxin loosen the intercellular binding by reducing the synthesis of cementing substance resulting into leaky gut
- Last but not the least, mycotoxins cause oxidative stress and damages and reduce both T-cell mediated and humoral immune response of gut

In today's scenario when gut health and performance are of paramount importance, keeping vigilance on the level of mycotoxins in feed is a standard practice. Along with gut health and performance modifiers added in feed, relying on effective broad spectrum mycotoxin binders like Bentoli's **Fixar**® would be the regular choice to encounter dangerous mycotoxins. Sequestration of all major mycotoxins is only possible when mycotoxin binder has a combination of properly activated phyllosilicate clays along with yeast cell wall and surfactants.

# Obituary:

## Dr Md. Matlubur Rahman

It is with great sadness that we learned of the sudden, and untimely passing of Dr Md. Matlubur Rahman, the Managing Director of Rx Nutrivet, Bentoli's distributor in Bangladesh, and our colleague and friend.

Dr Rahman was born on April 11, 1962 in Bangladesh. He attended and obtained from Bangladesh Agricultural University his DVM degree in 1984, M.Sc in pharmacology in 1997, and Ph.D from Japan's Kagawa Medical University in 2003, where he subsequently also served as an Associate Professor.

In 2006, he accepted a post with Tohoku University, Sendai, Japan as an Associate professor focusing his research on Renal Angiotensin and Hypertension and publishing numerous papers in international peer-reviewed journals.

His private sector career began in 1987, originally with Pfizer in Bangladesh. When returning from Japan to Bangladesh, he joined the Animal Health Division of Renata Limited in the position of Sales Manager. In 2009, he and other partners founded Rx Nutrivet with a focus on serving the Bangladesh livestock sector. Our journey together began here, as Bentoli Inc, USA was one of the early business partners of Rx Nutrivet. An association that both he and we were proud to voice.

Dr Rahman, underwent bypass surgery in early 2020 and had been recovering well. Unfortunately, he was overtaken suddenly on June, 15, 2020 by a massive heart attack, and we lost our friend. He leaves behind his wife, Dr. Kazi Shahanara Ahmed who is a Senior Professor of Entomology at Bangladesh Agricultural University and two sons, Md. Mushfiqur Rahman who is pursuing a Ph.D. in Electrical Engineering at Purdue University, USA and Muftiqur Rahman who is an undergraduate student in Computer Science & Engineering at Islamic University of Technology, Bangladesh.

Bentoli's Chairman, Mr William Robinson Sr., said of Dr Rahman, "He was a man of integrity, who conducted his business with a high level of ethics and quality consciousness. He had full faith in the future potential of the livestock and aquaculture sectors in Bangladesh, and never ceased to put in the hard work and dedication needed to grow the business. He cared deeply for his customers, vendors and Rx Nutrivet partners and associates, and we will deeply miss him."

The entire Bentoli family is saddened by the untimely passing of Dr. Rahman. For those who knew him, we will remain inspired by the memory of his sincerity, humbleness and example of a life well lived.

We send our heartfelt condolences to his bereaving family and Rx Nutrivet colleagues.



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# POST-COVID FOOD SUPPLY

Experts from the food industry agree that COVID-19 and consequent lockdown have significantly changed the food supply globally. The effects vary country to country and have evolved substantially from the initial panic response of stockpiling food supplies. Following is the general consensus among the experts:

1. Food consumed in restaurants is less. Consumers are buying more food to cook at home. So, the demand is for shelf-stable products like frozen meat. Expensive, premium food like beef and seafood have fallen due to the deteriorating economy as well as food service being in lockdown while demand for processed seafood has gone up.
2. Some large meat processing facilities had to be shut down due to a coronavirus outbreak in the facilities and this disrupted the supply chain.
3. Labor shortage has impacted livestock production and processing everywhere.
4. Digitization and automation will have increased influence throughout the value chain of meat production, processing and delivery to the consumers.



## Fixar<sup>®</sup>

### PRESERVATION

- **A RANGE OF BROAD SPECTRUM MYCOTOXIN BINDER**
- **OPTIMIZED SURFACE AREA AND BINDING CAPACITY**
- **WORKS EFFECTIVELY IN VARIED GUT pH**

