

**Featured Topic:** **Food for Thought . . .**

## GMO (Roundup Ready®) versus Non-GMO

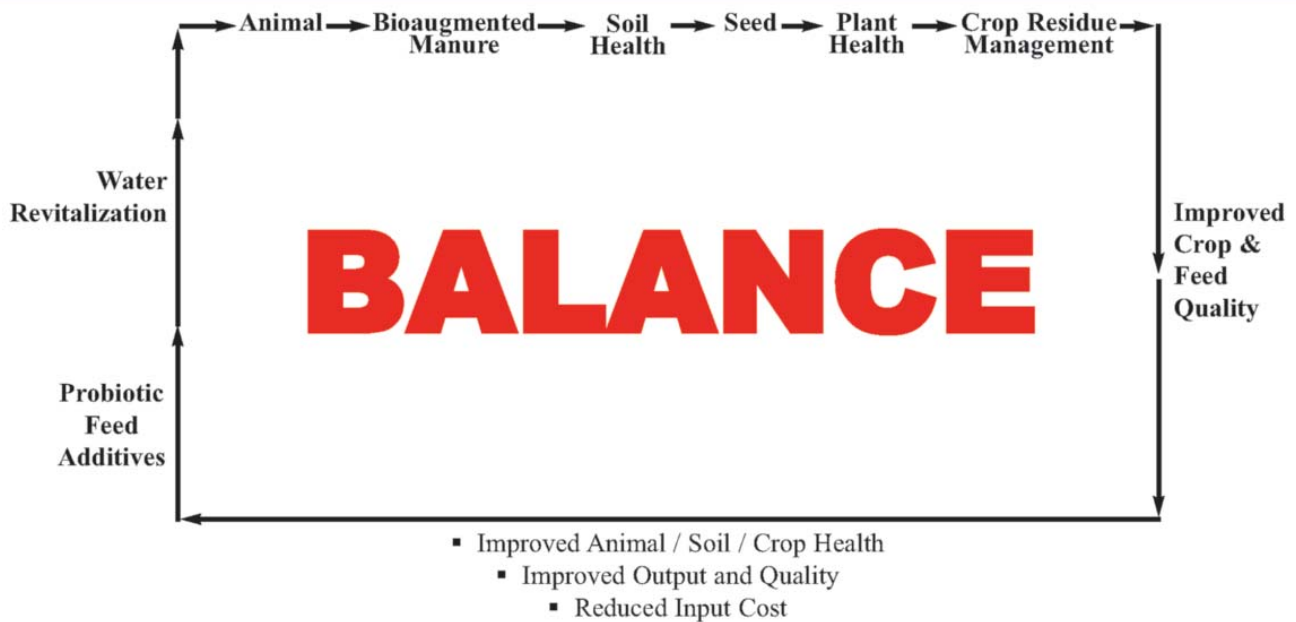
The old saying is, “*We are what we eat and how we digest our foods.*” The same is true of our livestock and poultry.

**“Let food be your medicine and medicine be your food.”**

Livestock health and productivity is determined by nutrition. Healthy feed has the available nutrients in the right levels/ratios, and is of high energy while devoid of toxins.

ProfitPro’s Full-Circle System™ is all about “**BALANCE**” and achieving the highest possible health and productivity in all aspects of livestock/poultry production.

### FULL-CIRCLE ANIMAL, MANURE AND SOIL-PLANT SYSTEM™ Solving Environmental and Economic Issues



Balance can only be achieved if one understands the role that **minerals** and **microbes** play in our entire Full-Circle Production System. How minerals and microbes are managed determine the health of our animals, manure, soil, plants and the quality of the feed that is fed to livestock/poultry.

The fact is, feed quality and the resulting livestock production is largely determined by the health of the soil, while soil health is determined by the proper balance of our minerals and microbes.

#### What does Mineral and Microbial Balance Do?

Reduces	Improves
<b>Compaction</b>	<b>Drainage/Aeration</b>
<b>Disease</b>	<b>Microbial activity</b>
<b>Insects</b>	<b>Soil organic content</b>
<b>Weeds</b>	<b>Recycling of nutrients</b>
<b>Inputs</b>	<b>Mineral balance and availability</b>
<b>Toxins</b>	<b>Crop residue digestion</b>
<b>Salts</b>	<b>Water utilization and efficiency</b>
<b>Mineral tie-up</b>	<b>Optimize the plants genetic potential</b>
<b>Plant stress</b>	<b>Improves feed/food quality</b>

# MANURE MANAGEMENT NEWS

The following nutritional analysis “Nutrients, Glyphosate and Formaldehyde (in ppm) in GMO Corn Compared with Non-GMO Corn” production system highlights our point of discussion. Please compare the nutritional values and toxin levels of each production system. Which of these feed sources do you believe, when fed, will result in the best livestock/poultry health, productivity and uniformity? The comparative data speaks for itself.

**Nutrients, Glyphosate and Formaldehyde (in ppm) in GMO Corn Compared with Non-GMO Corn Grown in Adjacent Fields in Minnesota in 2012**

Ingredient	GMO <sup>1</sup>	Non-GMO <sup>2</sup>	Nutrient	GMO <sup>1</sup>	Non-GMO <sup>2</sup>
Glyphosate	13	0	Manganese	2	14
Formaldehyde	200	0	Iron	2	14
Nitrogen	7	46	Zinc	2.3	14.3
Phosphorus	3	44	Copper	2.6	16
Potassium	7	113	Molybdenum	0.2	1.5
Calcium	14	6,130	Boron	0.2	1.5
Magnesium	2	113	Selenium	0.6	0.3
Sulfur	3	42	Cobalt	0.2	1.5

<sup>1</sup> The GMO corn was grown in a field that has been no-till, continuous GMO corn (Roundup Ready<sup>®</sup>) with a glyphosate herbicide weed control program for 10 years.

<sup>2</sup> The Non-GMO corn has not had glyphosate (or Roundup<sup>®</sup>) applied to the field for at least five years.

## Comparison of GMO Corn versus Non-GMO Corn

### GMO – Non-Food Grade

- Higher disease problems
- Higher medical costs
- Reduced productions / gains
- Loss of profits
- Higher death losses
- Increased feed consumption
- Lower conversion
- Lower quality manure
- Mineral deficient foods
- Higher costs / lower profits

### Food Grade – Mineral Dense

- Less disease
- Lower medical costs
- Higher productions / gains
- Higher profits
- Lower death losses
- Reduced feed consumption
- Higher conversion
- Higher quality manure
- Mineral dense meats and grains
- Lower costs / higher profits

Another old saying is, “*You can pay me now or pay me later.*” Remember most all disease in plants and animals, as well as humans, is a result of improper nutrition and toxins in our feed/food. Reduced cost, operational stress and, thus improved profitability, can be achieved by feeding livestock the highest quality of feed possible.

ProfitPro, through its **Full-Circle System™**, which enables the following, can help achieve higher levels of performance in your dairy, swine, beef, poultry and cropping operations:

- Animal:
  - ✘ Probiotic feed additives
  - ✘ Water revitalization technologies
- Manure:
  - ✘ Manure Master™ Program
- Crops and grain/forage quality:
  - ✘ Crop AdvantagePlus™ Program
  - ✘ Soil mineral balancer
  - ✘ Plant nutrient calculator

For a one-on-one discussion of your individual livestock, poultry or cropping program, contact ProfitPro. We can provide guidance and the technology to help you achieve greater returns on your assets.