Trace Element Physiology and the Bovine Immune responses are interrelated and work in tandem for animal health and wellness.



#### Improve Herd Health

Many producers experience frustration when all efforts to prevent disease seem to be in vain. Even with vaccinations, management adjustments, environment and nutritional changes, nothing seems to make a difference, in fact, sometimes the harder you try, the worse things can get. What is missing? More and more cases are being reported by veterinarians and producers that they are having poor responses to vaccination and treatment programs. This is where the evaluation and understanding of the animal's immune system becomes essential. The animal's ability to respond to its environment immunologically is paramount. Most of the clinical data accumulated relates to the inter-relationship of micronutrient physiology (trace minerals) immunoglobulin production and its relationship to disease. We must consider immune incompetence or malfunction as related to faulty trace element metabolism and/or deficiency. STARTING FLUID complete mineral program from TRACER Nutrition can help.

# **ALSO AVAILABLE FROM TRACER:**

TRACER PLATINUM 110
TRACER GOLD 120
TRACER GOLD 60
TRACER LIFE ENHANCER BOLUSES
TRACER LIFE ENHANCER GEL
TRACER CALF MAXX
TRACER DIGESTADE
TRACER PLATINUM 245 (EQUINE)
TRACER PLATINUM 90 (GOAT)
CUSTOM FORMULATIONS

Contact a Tracer Nutrition Representative to learn more about your herd's "Nutrition Insurance!"

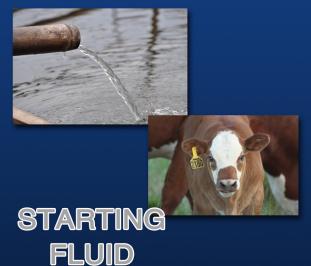
620.865.2041 - Office

Contains Added Copper...Do Not Feed to Sheep



620.255.4345 620.865.2093 Fax www.tracerminerals.com





Get your cattle off to their best possible start with Tracer Starting Fluid.

A novel formulation of Amino Acid Chelated trace minerals.

Immunity, Breeding, Vaccination, transportation and weather stress, starting programs

"You can trace every sickness, every disease and every ailment to a mineral deficiency"

Dr. Lineus Pauling, Nobel Prize winner

www.tracerminerals.com

#### **GUARANTEED ANALYSIS:**

Zinc	1.21%
Copper	1.21%
Manganese	
Magnesium	1.01%
Potassium	

INGREDIENTS: Zinc Amino Acid Chelate, Copper Amino Acid Chelate, Manganese Amino Acid Chelate, Potassium Amino Acid Complex, Magnesium Amino Acid Chelate, Water.

## **Amino Acid Chelated Minerals**

## **Prescription chemistry**

Chelation of trace minerals is a very precise science. Only an amino acid chelated trace mineral can resist digestion and maintain its integrity as it travels through the digestive system. Amino acid chelates are primarily absorbed in the jejunum area of the small intestine.

Tracer Nutrition utilizes true amino acid chelated minerals which are formed by connecting an amino acid to a mineral, forming an electrically neutral, heterocyclic ring structure that helps avoid interactions with antagonistic minerals such as iron and sulfur. This structure helps assure maximum mineral availability and absorption. The absorption process of a true amino acid chelate is more efficient and requires less metabolic energy because of its chemical structure.

Trace minerals are an absolute requirement for the formation of immunoglobulins: IgG1, IgG2, IgM, B-Cells, T-Cells and others. These cellular components are controlled by enzyme systems that have a trace mineral at their core. Starting fluid helps provide the body with necessary trace minerals to help the body create these cells to mount an immune response.

Subclinical trace element deficiencies have a variety of clinical signs similar to infectious diseases and are very difficult to diagnose.

### **Dosage Rates:**

Starting fluid can be added to stock tank water at a rate of 1 quart per 500 gallons of drinking water.

It can be drenched at a rate of 11 cc per head per day.

At these recommended rates Starting Fluid is formulated to deliver the following based on a 500 lb. calf:

170 mg Amino Acid Chelated Zinc

170 mg Amino Acid Chelated Copper

70 mg Amino Acid Chelated Manganese

142 mg Amino Acid Chelated Magnesium

142 mg Amino Acid Complexed Potassium

For baby calves the dosage rate is 1.5 ml per head per day: as a drench, in water or added to milk replacer..

Package size:

Starting Fluid is available in the following

1 quart (80 doses)

2.5 gallon (800 doses)

30 gallon drum (9,600 doses)

275 gallon tote (88,000 doses)

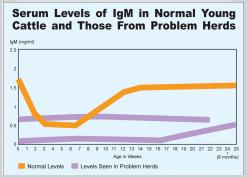
# Other products from Tracer Minerals:

Life Enhancer Gel and Powder formulations
Tracer Platinum 220 free choice cattle mineral

Tracer Mineral formulations are "Nutrition Insurance" for your current mineral program.



STARTING FLUID and other supportive therapy products from TRACER MINERALS have been proven to enhance immune system responses.



## When to use Starting Fluid

- Pre-Weaning and vaccination.
- Pre-Shipment of Cattle to feedlots.
- On arrival at farm or feedlot and throughout the entire starting phase.
- Pre-Breeding, Pre-flushing of donors, Precollection of bulls.
- For baby calves
- When cattle are stressed

. . . . .

- Use in water tanks
- Use as a drench alone
- Add to other drench fluids

"I have started thousands of cattle and struggled with my program, now I use Starting Fluid, my vaccines work better, response to treatments have improved and my death loss has declined dramatically. I recommend Starting Fluid for anyone with cattle health issues."

DF, Winchester, KY