



## NUTRAPRO SUPPORTS IMMUNE FUNCTION DURING THE CRITICAL GROWTH PHASE FOR YOUNG CALVES

NutraPro plasma offers value to calf milk replacer companies and calf raisers by providing both a highly digestible source of protein and a steady source of functional proteins to help support the immune health of pre-weaned calves. Specially selected for high solubility in water, NutraPro can replace other proteins typically used in young calf diets and offers performance you can see in this critical growing phase.



### CALF PERFORMANCE

There have been numerous research trials conducted to evaluate the effects of animal plasma on the growth and performance of pre-weaned calves. In these trials, NutraPro performs as well as or better than standard all milk and alternative protein milk replacers. Improvements include:

- Fewer, shorter scour episodes
- Reduced medication costs
- Improved gain
- Increased starter intake
- Lower cost than all-milk-protein milk replacers

#### AVERAGE DAILY GAIN



#### MORTALITY



#### TREATMENT DAYS



#### SCOUR DAYS



## FEEDING RECOMMENDATIONS

### IN MILK / WASTE MILK

Recommended inclusion is 1/3 bag of NutraPro per 300 gallons of waste milk. If mixing a 300-gallon milk tank, add 18.4 pounds of NutraPro replacing equal pounds of CMR to balance solids. Mix thoroughly and provide 2-4 quarts of the resulting mixture per calf per feeding.

### MILK FROM INGREDIENTS

Formulate in 5% NutraPro replacing other milk products on a protein basis. Mix thoroughly and provide 2-4 quarts of the resulting mixture per calf per feeding.



*Our mission is to help animals thrive through the use of innovative functional proteins that positively impact performance*

## ABOUT APC

Our story began over 40 years ago when APC scientists discovered the powerful role plasma derived functional proteins play in helping support and maintain normal immune function in baby pigs. Since that initial discovery, our scientists have seen powerful, consistent and effective results across multiple species.

APC's spray dried plasma (SDP) products are used for health benefits, adding value through the unique properties that positively impact billions of animals each year.

## ABOUT PLASMA

Spray Dried Plasma (SDP) is a dry powder rich in functional proteins obtained from blood collected during the harvest of healthy animals destined for human consumption. The method of production involves the separation of red cells from plasma followed by the high temperatures and pressure of spray drying, resulting in a homogeneous powder that has been used in animal nutrition as a functional ingredient since the 1980s.

SDP contains a complex mixture of functional proteins including:

- Transferrin = binds iron
- Lysozyme = attacks bacteria
- Growth factors = stem cell repair
- Cytokines = anti or pro inflammatory
- IgG = binds toxins and pathogens

## PRODUCT OPTIONS

100% BOVINE | 100% PORCINE | UV PROCESSED

### References:

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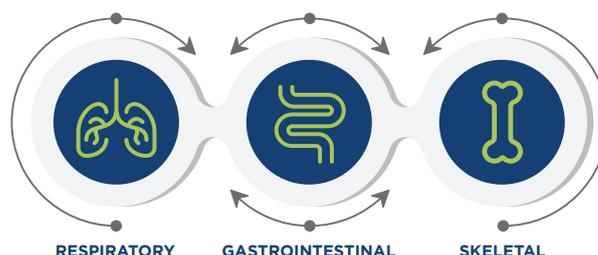
## HOW PLASMA WORKS

Plasma has multiple actions on animals, but in simple terms, oral consumption of plasma helps the immune system respond to challenges more quickly and efficiently.

The effects of plasma are systemic, meaning it affects all immune systems and has a broad and sustained effect on efficiency of the total body immune system response to stress.

### THE IMMUNE SYSTEM CONNECTION

Orally fed plasma has a multi-systemic effect on animals.



For more information,  
contact an APC Sales or Technical  
Services Representative



WATCH THEM *thrive*

APCproteins.com