

Value of **ProCrypt™** for Liver Abscesses in Cattle

Economic loss from liver abscesses in US beef cattle is about \$60 million each year from condemned livers and reduced performance and health. The incidence of abscessed livers average from 12% to 32% in most feedlots and in 2016, 30.8% of US beef livers were condemned at slaughter.

Liver abscesses represent a major economic loss to producers, packers, and consumers. Besides liver condemnation and carcass yield reduction, economic loss includes reduced feed intake, reduced weight gain, and decreased feed efficiency.

Incidence of liver abscesses are influenced by both feeding and management practices.

Fusobacterium necrophorum and *Actinomyces pyogenes* are the primary infective bacteria that cause liver infection. When acidosis occurs in cattle, rumen tissue becomes inflamed and damaged allowing the infective bacteria an entry into the blood stream and to the liver where the infection or abscess develops.



Benefits of **ProCrypt™**:

- Maintains optimal rumen pH and incidence of acidosis
- Supports the integrity of the rumen wall affecting penetration of infective bacteria
- Maintains optimum mucosal and crypt protection and tight junctions of the intestinal villi which causes “leaky gut” and pathogen entry into tissues
- Affects pathogen attachment in the intestine reducing toxin production and inflammation
- Impacts pathogen load by inhibition of their communication (“quorum sensing”) and food deprivation
- Affects pathogen population and growth in the intestine by binding with naturally occurring acids in the intestine that disrupt pathogen food availability

ProCrypt™ is an OMRI certified feed additive from selected chestnut wood (*Castanea Sativa*) that supports the health of animals.

ProCrypt™ provides a diversity of bioactive polyphenols providing optimum use and absorption of nutrients and maintenance of a strong immune system.

ProCrypt™ can be used in all livestock species and is safe for the environment.



ProCrypt™ Provides Value Added Benefits

- **Protection of young calves** through optimum IgG levels in colostrum
- **Maintenance of a low pathogen load** by aiding in the maintenance of healthy intestinal tissue and action of selective astringent properties
- **Broad spectrum protection:**
 - **Protozoa** - Cryptosporidium and Coccidiosis
 - **Bacteria** - E. Coli, Salmonella, and Clostridia
 - **Virus** - Rotavirus and Coronavirus
- **Maintains intestinal integrity** – aids in prevention of leaky gut in the small intestine
- **Maintains optimum liver health and function** – high antioxidant qualities and helps regulate rumen pH to prevent acidosis and development of liver abscesses
- **Promotes good rumen function** – Optimum feed efficiency and nutrient intake levels promote growth, production, and animal health
- **No withdrawal issues** – usage at any stage of production
- **Heat stable** to over 300F – feed processing is no issue

Contact your KeyAg Sales representative for more information on **ProCrypt™** and other KeyAg products for your operation.