

KitoShield for Farming Use

Chitosan ointment is a **natural**, **food grade** product derived from chitin. It offers **significant advantages for treating various conditions** in animals, including inflammation, fungal infections, bacterial infections, and post-surgical recovery.











What causes Digital Dermatitis in cattle?

Digital dermatitis is caused by the bacteria Treponemes. These bacteria thrive in wet and dirty environments but can also survive in old and dry manure, easily infecting the skin of cow's feet.

Cows with pre-existing claw problems or injuries are more susceptible to developing digital dermatitis. The bacteria can enter through small cuts or abrasions in the skin.

KitoShield for Farming Use

Chitosan ointment is a natural, edible product derived from chitin. It offers significant advantages for accelerating wound healing due to fungal infections, bacterial infections, and other injuries.

Day 1 Application to infected area

Day 2 Inflammation reduced

Day 3 Lame leg back on ground

Day 4 Animal steady on Lame leg

Day 5 Animal returned to Field



Key advantages:

Bio-organic and Food Grade

Eliminates the risk of poisoning if the animal licks the treated area, unlike steroid creams.

Antimicrobial

Provides effective antibacterial and antifungal action.

Wound Healing

Promotes faster wound healing and reduces dead skin cell formation in comparison to traditional treatments.







Information

Ringworm is a fungal infection of the skin with a worldwide distribution. The disease is of significant economic consequence to the farmer since growth rates are affected in the active stage of infection and the disease causes hide damage.

Epidemiology

The infection is spread primarily through direct contact between animals, with clinically infected animals being the greatest source of infection. The spores of ringworm fungi survive many months and in some cases years in the farm environment and may be transmitted either by fomites (brushes, gates, feed carts...) or by asymptomatic carriers to susceptible hosts. There is an increased risk of outbreaks during building work, with a much higher number of spores being released into the air.



Day 1 Notable reduction in Fungal activity within 24 hrs



Day 6
Majority of fungal growth reversed with increasing new thickening hair growth.



Day 3

New hair growth evident with reduction in Fungal growth overall



Day 9 Complete restoration of hair growth with only minor scarring.









In wound healing and post-surgical recovery



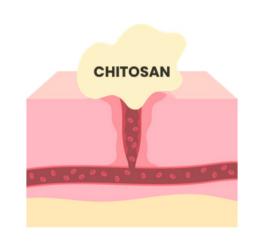
Red blood cells adhere to chitosan because of their opposite charges which causes bleeding to stop (Hemostasis).

The cationic nature of chitosan causes the aggregation of red blood cells and platelets which accelerates the formation of fibrin clots.

During skin regeneration

Major roles of chitosan during skin regeneration includes: forming barrier against infection, encouraging natural blood clotting, and providing scaffold for cell growth, which in turn strengthens new tissue and minimizes scarring.

Chitosan accelerates wound healing and minimizes scar by depolymerizing into N-acetyl glucosamine, which initiates the production of fibroblast. Fibroblast is responsible in secreting collagen proteins and stimulates increased level of hyaluronic acid.



References

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