

# Treatment of wounds with ApiH (wound ointment and wound spray)



## Instructions for veterinary use

### Description ApiH

The product's strength is the unique and patented composition of nine Lactobacillus and four Bifidobacterium varieties of lactic acid bacteria from honeybees that work together (=H13microbiome™) and form bioactive substances (=H13ferment™).

The wound ointment contains H13microbiome™ in a matrix of sterile heather honey and water. The spray contains the bacteria (H13microbiome™) together with their active substances (H13ferment™).

It is the same composition and concentration of lactic acid bacteria as Dr. Alejandra Vásquez and Dr. Tobias Olofsson discovered in their research at Medical Microbiology, Lund University. The products are the result of 18 years of Swedish research and development.

### Management of ApiH

ApiH is available both as an ointment and as a spray and has the same area of use. The wound ointment also contains honey, and it can be used to apply bacteria directly to the wound. If it is difficult to reach with the ointment, the spray can also be used and sprayed directly into the wound.

**The products are stored in a freezer to keep the bacteria inactive until treatment begins. Always keep the tubes frozen when not in use, after use the tubes can be placed in the freezer again or in the fridge for 5 weeks.**

### The treatment processes

1. The ointment or spray is thawed and applied directly to the wound evenly over the entire wound surface. When treating closed wounds, as much scab as possible is removed, to access the wound but without causing suffering to the horse. A tube that has contents left is preferably stored in the freezer again or in the refrigerator and can be used at the next treatment occasion.
2. Adjust a sterile compress to the size of the wound, moisten the compress adequately with tap water and apply over the treated wound (Fig. A.). On those wounds that are too difficult to access to apply ApiH directly into the wound, the ointment or spray can be applied over the centre of the compress instead.

An alternative, proven by trotting horse handlers, is to treat without compresses and bandages. Then the products must be used more often, 2 times a day, preferably morning and evening. Then, both spray and ointment are advantageously used. The spray is applied first and then the ointment. Depending on how the wound looks, it may need to

be washed off with water before reapplication.



Fig. A. A sterile compress is adapted in size to the wound.

3. A suitable bandage is used to keep the compress in place. A porous foam plastic (Animal Polster) with an adhesive side can be used (Fig. B), but when a traditional cotton and gauze dressing can be used, it should be preferred because such a dressing fits better.



Fig. B. Compress with the wound product is held in place on the hock with bandages of the "Animal Polster" type, a porous foam plastic with an adhesive side that is cut as desired. Compress over the joint/vertebra is traditionally bandaged with cotton, gauze and vet wrap.

4. The bandage can be changed after 2 days but also earlier if necessary, depending on whether the horse has managed to destroy/remove the bandage. Now also inspect how the healing process is progressing.

5. Repeat the treatment until the wound heals, which normally takes between 7-20 days, but can vary for individual cases. When the wound is closed and hair comes back, the treatment is stopped.