

blood  
sweat  
and  
iron

# Hippiiron<sup>®</sup>

Iron Injection  
for Horses



Ausrichter

# When horses sweat they lose iron

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## Iron loss in sweat

*Meyer (1986) estimates that the concentration of iron in sweat to be as much as 21 mg/litre. Horses in intense exercise may lose as much as 25-30 litres of sweat per day and this sweat loss would represent a net iron loss of 500mg/day (25 litres x 21mg/litre of iron). With these sweat losses and the possibility of greater synthesis of haemoglobin and myoglobin (muscle iron containing compound) in the athletic horse there may be a reason to believe that the athletic horse has a greater requirement for iron.*

(Australian Equine Veterinary Journal, Vol 16(3) 1998.)

## Racing horses need effective iron treatment

Racing horses need effective iron treatment to replace iron lost in sweat and from blood loss. Iron is essential for haemoglobin and the formation of red blood cells which are critical for the blood's oxygen carrying capacity. Oxygen is essential for the cardiac muscle to meet the racing horses high heart stroke volume and to sustain performance.

(Irvine GHC, J, Am. Vet Med., 133, 59[1958])

## Oral Iron supplementation

Two published studies report oral iron supplementation was ineffective in increasing haemoglobin levels and pack cell volume.

(Nutritional Requirements of the Horse 1989; Radostits OM *et al* Veterinary Medicine Eighth edition.)



# Blood counts and haemoglobin levels in racing horses

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Regular blood counts are important for monitoring haemoglobin, packed cell volume, and iron serum levels which directly indicate if performance limiting iron deficiency is a cause of 'poor performance'.



*Most laboratories measure haemoglobin the same way and the range for optimum oxygen capacity of haemoglobin in blood is 14.5-15.5gm/100mL of blood.*

(McGregor A, [www.gateway.net.au/~mcvc](http://www.gateway.net.au/~mcvc))

## To increase haemoglobin blood levels

Hippiron Iron Injection for Horses has been tested in racing horses (thoroughbreds and standardbreds). It is effective in increasing haemoglobin, packed cell volume and iron serum (blood) levels. Depending on the severity of the iron deficiency it may require 1-5 treatments of Hippiron (20mL). In cases of severe iron deficiency Hippiron may be given daily. In these cases consult your veterinary surgeon.

## For maintenance of haemoglobin levels

Regular Hippiron treatment will maintain haemoglobin levels. Iron requirements and treatment frequency are influenced by:

- **Sweat loss**
  - Climate and humidity
  - Level of exercise and intensity of training
  - Racing frequency – the more racing the more iron treatment
- **Age – 2-3 year olds have a higher need for iron**

Hippiron Iron Injection for Horses is recommended weekly.

# Hippiron<sup>®</sup>

## Iron Injection for Horses

*For treatment of iron deficiency in  
racing horses.*

### **Description**

A brownish pyrogen free sterile alkaline solution. Iron (Fe) 20mg/mL as Ferric-Hydroxide-Sucrose compound.

### **Mode of Action**

When injected Hippiron breaks down into carbohydrates and trivalent Iron Hydroxide which is stored in the form of Ferritin (depot iron) in the liver; from there it is transported in the form of transferrin to the site of erythropoiesis (where red blood cells are formed).

### **Indications**

For treatment of iron deficiency anaemia in horses.  
Anaemias due to parasitism, poor nutrition, haemorrhage.  
To improve oxygen uptake.

### **Dosage**

By intravenous injection,

*Foals 10mL (200mg) per week.*

*Adults & Yearlings 20mL (400mg) per week.*

The frequency and length of treatment will depend on the severity of the iron deficiency.

### **Warning**

In extremely rare instances an anaphylactic reaction can occur. Appropriate treatment for anaphylactic shock should be instituted.

### **Storage**

Store below 25°C (Air Conditioning).  
Protect from light. Do not refrigerate.

### **Presentation**

20 mL vial



**Vifor**

A product of Vifor (International) Inc. Switzerland.



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