

# Sweating Buckets

## WHY DO HORSES SWEAT?

Horses sweat to **COOL** their bodies!

A thin layer of moisture is formed on their hair



As this moisture evaporates, it carries heat with it



By removing the heat, the horse is cooled

## ELECTROLYTES

Electrolytes or body salts are responsible for many functions such as water balance and muscle contraction.

Table salt, or sodium chloride changes when it is mixed with water. Sodium and chloride break apart to form sodium and chloride ions. These 'ions' have a charge and are now considered electrolytes.

### Sweat Electrolytes

Sodium (Na)  
Chloride (Cl)  
Potassium (K)  
Calcium (Ca)  
Magnesium (Mg)



## WATER & EXERCISE



Horses exercising at a high intensity in hot weather can produce 10-15L of sweat per hour!

High Intensity Short-burst	3 - 5L per session
High Intensity Longer time	5 - 11 L total for 1 day
Moderate Intensity Longer time	10 - 40 L for entire ride

## PROBLEMS

Sweating helps get rid of heat BUT only when the sweat is evaporating.

Air temperature, wind speed and humidity all effect how easily the sweat will evaporate.

Humidity prevents complete evaporation (the air already has moisture so it isn't "eager" to take up more from the sweat)

On humid days, sweat cannot transfer heat from the body to the air like it can on a dry day.

If a horse loses too much water from its body and does not drink enough to replace it they will become DEHYDRATION

## DEHYDRATION

Can lead to other health problems:

- Heat stress
- Colic
- Possible death

### Equine Guelph HANDY HINT

As the horse becomes dehydrated, skin loses elasticity. Perform a skin pinch test on his shoulder by pinching and lifting the skin away from the shoulder.