

## **WATER: The Essential Nutrient For Horses**

Of the five basic nutrients: protein, energy, water, minerals, and vitamins, water is the most essential nutrient in the horses diet. It has been seen that horses deprived of water for 3 to 4 days will not consume feed. Even if feeds containing abundant levels of protein, energy, vitamins, and minerals and small amounts of moisture, are offered to water starved horses, they will be of no benefit. A minor reduction in water intake may cause dehydration which will cause decreased performance, shock and possibly death.

Water composes the majority of the horse's body and accounts for several very important functions including:

1. Regulation of body temperature
2. Aide in the transportation of nutrients
3. Necessary for waste removal
4. Aids in digestion, absorption, and utilization of nutrients

Under ideal conditions horses should have free access to water, comparable in quality to human drinking water. Water should be free of chemical contaminants, bacterial and protozoa and contain acceptable levels of trace minerals and heavy metals. The North Carolina Department of Agriculture, many health departments and various labs offer quality testing services.

Water intake levels vary greatly from horse to horse. Normally a horse will consume one gallon of water per 100 pounds of body weight. Example: an 1,100 pound horse will consume an average of 10-12 gallons of water daily. The water intake rate can be quite variable, dependent upon the dry matter content of the diet, the environmental temperature and production stage or activity.

### Estimated Water Intake For Horses

<u>Activity</u>	<u>Gallons/Day</u>
Non-Working	4-8
Gestation	7-9
Peak Lactation	9-11
Medium Work	9-15
Heavy Work	12-15

### ***General Recommendations***

1. Provide fresh, clean water free choice, except to hot horses immediately following exercise.
2. Monitor water intake daily.
3. Remove ice routinely during freezing conditions.
4. Increase the dry matter content of the diet prior to prolonged freezing periods.
5. Clean water buckets and water systems daily.
6. Test water quality of new water sources.