

## Foods/Fruits to Keep away from your Horse

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During drought or food scarcity, horse owners tend to be tempted to feed their horses on readily available food or fruits or giving treats to their horses after a job well done. Knowing the type of food or treat to give your horse is quite important for your horse's health. Most of these fruits when been consumed especially in large portions obstruct the gastrointestinal tract. Some horses can withstand the consumption of little quantity of some of these fruits or food but it is best to keep your horses away from them.

### Tomatoes

While grazing, horses generally tend to avoid consumption of tomato plant. But one still need to monitor them because tomato is toxic when consumed. Tomato is part of the Solanaceae family and the plant contains a tropane alkaloid, atropine which slows down gut function thereby resulting in gastrointestinal disturbances such as diarrhea or colic.

### Apples with the seed

Apple is a lovely treat which many owners enjoy feeding their horses. Utmost caution need to be observed when treating horses to apples because the seed is toxic when been consumed especially in large quantity. Apple seed contain amygdalin, a substance which forms hydrogen cyanide when crushed and metabolized and then enters into the blood stream. This reduces the oxygen carrying capacity of the blood cells to various cells in the body resulting in cellular death.

### Onions and garlic

*Allium cepa* and *Allium sativum* popularly known as onion and garlic respectively are known to be toxic when consumed by horses. *Allium* contains the toxin N-propyl disulfide which when released is broken down into various sulfides that inhibits functions of red blood cells leading to anemia and methemoglobinemia which tend to reduce the oxygen capacity of the blood. The rapid onset of symptoms may be determined by the quantity of *Allium* species consumed as idiosyncrasy amongst horses does occur.

### Chocolate

Chocolate is known to be toxic to animals most especially dogs and horses and could lead to a medical emergency, most especially when consumed in large quantity. Chocolate contain caffeine and theobromine, a methylxanthine present in cocoa which tends to increase the influx of intracellular calcium and the release of catecholamines resulting in increased heart rate. The initial sign to observe after consumption is hyperactivity. Other signs include seizures, tremors, etc.

### Cabbage

Cabbage belongs to the Cruciferae family and does contain raffinose, a complex sugar which is composed of galactose, glucose, and fructose. Cabbage tends to remain undigested when consumed by horses. On passage into the large intestine, the available bacteria acts

on it by breaking it down and due to the presence of raffinose, results into intestinal gas formation which poses a great danger to horses. It is generally advisable not to feed cabbage to your horse.

### Dairy products e.g. milk and cheese

Horses are known to be lactose intolerant most especially horses older than three years as reported by Roberts MC (1975). Lactose intolerant also occurs in foal, which is usually due to absence of lactase, an enzyme secreted by the intestine which helps to hydrolyze lactose when milk is consumed from the dam. When any dairy product is consumed, it remains undigested, leading to increase in bacterial fermentation in the cecum and can result in signs such as colic, diarrhea, weight loss.

### Grass cuttings or mowed lawn cuttings

Feeding grass cuttings is a common practice among horse owners which unknowingly poses a serious health threat to horses. This is due to some reasons listed below:

- The cuttings are rapidly ingested since it has been chopped into smaller pieces so there is less chewing before passage to the stomach. Fermentation process starts after grasses are cut and this process continued on passage of the food to the stomach. Fermentation in the stomach results in gas formation which can lead to colic development for the horse.
- When grasses are mowed, poisonous plants could have been mowed alongside the grasses which can be harmful when consumed by horses.
- In some instances, sand are been packed together with the cuttings which when consumed by the horses exposes them to colic formation.

### Potatoes

Potatoes, like wise tomatoes are member of the nightshade family, a toxic wild plant for livestock. Potato contains toxin glycoalkaloids (solanine and chaconine) that disrupts the functioning ability of the gastrointestinal tract leading to gastrointestinal distress. It can also cause obstruction in the digestive tract posing serious health issues. Signs noticed include excessive thirst, inappetence, respiratory distress, colic, etc.

### Excess grains

When horses are exposed to grain overeating, the undigested portion of the grain is passed down to the hindgut where fermentation takes place resulting in excess acid and gas formation which leads to diarrhea and abdominal pain. Also, the resident bacteria later dies off releasing endotoxins which are absorbed and carried down through the bloodstream to the limbs resulting in laminitis, a painful condition that affects the horse's feet [1-4].

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