

Sugar in Grass

There is a growing concern about feeding excess amounts of sugar in grass to horses, as there are several serious conditions that may arise including: laminitis, colic and insulin resistance. Horses may vary in their sensitivity to high-sugar feed as there are many factors that determine a reaction, such as: obesity, age and predisposition to insulin resistance or laminitis.

Sugars make up carbohydrates, which are the building-blocks of grass and so are naturally occurring and necessary in the formation of the plant. As a result, there are not any species of grasses that are consistently low in sugar. The amount of sugar in grass fluctuates seasonally and throughout each day and night and as a result, there are management practices that may limit the amount consumed during grazing.

Sugars are generally highest:

- ◆ In the lower few inches of the plant
- ◆ In stressed plants (plants that are subject to low fertility soils and drought)
- ◆ In the afternoon or evening, UNLESS the previous day was hot followed by a cool night (typical in spring and fall), in which case, sugars are highest in the morning
- ◆ In the vegetative state of the plant (early spring or during re-growth)

To avoid allowing grazing on high-sugar pastures:

- ◆ Avoid overgrazing
- ◆ Avoid allowing fields to become stressed
- ◆ Be aware of how daily/nightly temperature fluctuations may affect sugar content in grass
- ◆ Limit grazing during predominantly vegetative growth