

Questions and Answers

BY PETER HUNTINGTON, BVSc, AND MARK LLEWELLYN

Q What are naked oats, and how do they differ from whole and dehulled oats?

Structurally, naked oats contrast with whole oats in one notable way. The kernels of whole oats are tightly enveloped by husks; the husks of naked oats are loosely attached to the kernel and fall away during harvesting, leaving the kernel exposed. Nutritionally, the absence of husks increases the concentration and digestibility of some nutrients in naked oats, namely energy and fiber. The energy content in naked oats is similar to that of corn. The husks constitute the majority of the fiber found in whole oats. Without husks, naked oats are inherently lower in fiber. Naked oats should not be confused with dehulled oats. While naked and dehulled oats have similar nutritional properties, they are not the same. The husk is mechanically removed during the processing of dehulled oats. As dehulled oats are relegated to more intense processing, kernels may be damaged, resulting in possible rancidity and refusal by the horse.

Whisked away with the husk of naked oats is the comfortable margin of safety whole oats afford horsemen. In switching from whole oats to naked oats, equivalent volumes should not be fed. Due to their energy density, naked oats should be fed in smaller quantities. A horse eating 10 pounds of conventional oats would derive the same amount of energy from approximately seven to eight pounds of naked oats. As with other energy-rich feedstuffs, overfeeding naked oats could lead to colic or laminitis. While care must be taken in how they are fed, naked oats are useful for horses with high energy needs.

Q What is linseed meal, and is its use widespread in the horse industry?

The by-product of linseed oil extraction from flax is linseed meal. Linseed oil is typically not used in the feed industry. However, linseed meal is a source of low-quality protein suitable for adult horses. Because it is deficient in lysine, an amino acid critical for growth, linseed meal is an inappropriate protein source for young stock. With superior protein sources available, namely lysine-rich soybean by-products, more horsemen today use mechanically processed linseed meal to improve coat condition. Linseed meal produced by mechanical means has a higher fat content than that produced by solvent processing. The increase of fat in the ration adds much revered bloom to the coat.



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Q My grandfather has told me that he frequently fed his horses ear corn years ago. Are there any advantages or disadvantages to feeding ear corn?

Although not commonly used today, ear corn was once a popular feed for horses. While it remains a useful feedstuff for horses, ear corn does have three primary drawbacks. First, in its natural state corn may be rather indigestible by some horses due to its hard kernel casing. Aged horses with poor teeth, for example, may not be able to crack the casing. Due in part to this resilient shell, corn is usually rolled, crushed, cooked, or otherwise processed before being added to feeds so horses can maximize its starch content during digestion. Second, there is a risk for mold proliferation on ear corn, particularly on corn that has withstood drought or excessive moisture. Fumonisin are noxious mycotoxins that proliferate on corn. Only a small concentration of a fumonisin is necessary to induce a fatal neurologic condition called moldy corn poisoning or equine leukoencephalomalacia (ELEM). High-quality, processed kernels, those normally used in textured feeds, rarely harbor fumonisins. Third, feeding straight corn can be a touch and go proposition as it contains twice as much energy as an equal volume of oats. Overfeeding corn (or any energy-rich meal) may cause obesity and high-spiritedness. Corn contains minimal fiber, so feeding large quantities of it may more readily lead to colic, diarrhea, or founder than feeding a meal of oats. The shortcomings of ear corn have curtailed its widespread use in modern feeding management. ☹☹

Kentucky Equine Research Team Member Directory



Allfarm AG

Ruttimatt 130
Pfeffingen, CH-4148
Switzerland
011-41-61-751-7501
011-41-61-753-9620 Fax

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ASSOCIATE TEAM MEMBER:

Feed Mill Express

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