

Hogs and black walnuts

Reducing feed costs and enhancing flavor with pork production on small farms

Oregon Sustainable Agriculture Land Trust (OSALT) fact sheet

Hogs can be a beneficial addition to small, diversified natural and organic farms. Profits, however, can be thin, with purchased grain mixtures typically accounting for more than half of the cost of raising a hog to market weight. Replacing part of the “hog mash” with lower cost food sources can have a direct impact on a small farm’s profitability.

One free (or nearly free) hog food source - locally abundant but often overlooked - is black walnut. Many urban and suburban lots have mature black walnut trees, producing large amounts of nuts, and residents may deliver these to a farm to avoid dumping charges.

Black walnuts can be harmful to grazing horses, however, and there are legitimate questions about toxicity with hogs. In addition, the hogs themselves do not always recognize black walnuts as food, sniffing at the nuts and then moving elsewhere.

This research fact sheet looks at three things: the safety of black walnuts as a food source for hogs, the best ways to teach hogs to eat these nuts, and the impact on pork flavor.



Black walnuts are a high quality (and overlooked) food source for hogs

Are black walnuts safe for hogs? To answer this question, we asked experts on swine nutrition at Michigan State University and Kansas State University. The conclusion: there are no known toxicity issues with black walnuts and hogs. Hogs have evolved eating nuts and other forest floor foods, and hogs are able to use black walnuts as a high quality food source. A second safety concern is the walnut shells themselves – could they rupture a hog’s intestines? This also does not appear to be an issue. Hogs spit out most of the shells before swallowing, and the shell fragments that are ingested could serve a beneficial purpose – the sharp edges may kill adult roundworms.

How can hogs be taught to eat black walnuts? Hogs do not instinctively recognize black walnuts as a food source, and need to be coached. We use a fairly straight-forward method. When the hogs are three months of age, we crush a handful of black walnuts (with a hammer), and give the entire crushed mixture (green/black hulls, shells and nuts) to the hogs daily. We gradually mix in un-cracked walnuts. At approximately four months, the hogs have strong enough jaws to bite open whole nuts. A video of our hogs eating black walnuts is posted here: http://www.youtube.com/watch?v=ZHQ6DB_pUnc (or search YouTube for “kurobuta hog eating black walnuts”).

What about flavor? Many niche pork producers, in Europe and here in the Pacific Northwest, use acorns, chestnuts and hazelnuts to enhance the flavor of their pork. The oil-rich nuts change the fatty acid content of the pork – and the flavor change may be most pronounced with older, less-lean, heritage breeds of hogs (we raise Berkshire/Kurobuta hogs). We haven’t done side-by-side taste trials, but in our (admittedly biased) opinion, our autumn black walnut fed hogs had exquisite taste.

The bottom-line: Black walnuts can be an excellent supplemental hog food source for small farmers, enhancing flavor and increasing profit.

Sources used:

- Cole, Leslie, “Portland’s charcuterie-obsessed chefs are prompting local farmers to feed hazelnuts to hogs, in the quest for a distinctive Northwest-style prosciutto”, *The Oregonian*, 23 June 2009
- Goodband, Robert, Professor/Extension Specialist, specializing in swine nutrition and management, Department of Animal Sciences and Industry, Kansas State University, personal interview, 9 February 2012
- O’Meara, Bridget, “Small scale pastured hog production”, *Grassworks grazing guide*, 2010
- Rozeboom, Dale, Professor/Extension Specialist, Department of Animal Science, Michigan State University, personal interview and email correspondence, 7 February 2012