



The Value of Bread for Swine Feeding¹

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At times stale bread may be available as a feed ingredient for swine. When cheap enough, bread is an effective substitute for grains in the ration. The composition of white enriched bread is shown in Table 1.

On a weight-for-weight basis, the water content of bread (36%) is 3 times that of corn (10%). We should realize that water in feed ingredients is of no greater value to the animal than water from any other source. Compared to corn, the extra water in bread dilutes concentration of energy and other nutrients. Here are some guidelines for utilizing bread in swine feeding:

- 1) Bread is approximately 75 to 80% as valuable as corn for swine feeding. Therefore, if bread can be purchased for 75 to 80% of the price of corn, it may be economical.
- 2) Feeding bread may cause constipation due to its low fiber content (<1%). This is particularly a problem in confinement operations where pigs do not have access to other sources of fiber.
- 3) Higher moisture coupled with lower fat content makes bread less valuable for swine feeding than certain other bakery wastes (such as doughnuts or cake) due to lower concentration of energy in bread.
- 4) Rations that contain bread should be adequately fortified by vitamin and mineral supplementation in a manner similar to supplementation of rations that contain grains.

A comparison of the value of bread versus corn (¢/lb), based on the price of corn for a range of corn prices, is given in Table 2.

Table 1. Composition of white enriched bread

Nutrient	Composition, %
Dry matter	64
Crude protein	8.5
Crude fat	2.0
Crude fiber	.3
Nitrogen-free extract	52

Table 2. Comparison of the value^a of bread vs corn (¢/lb) based on the price of corn for a range of corn prices

\$/bu	Corn	White Bread
	¢/lb	¢/lb
2.75	4.9	3.7
3.00	5.4	4.1
3.25	5.8	4.4
3.50	6.2	4.7
4.00	7.1	5.4

^aBread is assumed to be worth 75% as much as corn on a weight-for-weight basis. This does not account for increased handling costs associated with the use of bread; e.g., factors such as removal of bread from wrappers and disposal of these wrappers.

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