

# Whole Soybeans For Dairy Cows

BY DR. GEORGE F. W. HAENLEIN  
Extension Dairy Specialist  
University of Delaware

ments and soybean oil meals are priced by hundredweight. Thus the cost of beans must be converted to a hundredweight price. Since 100 divided by 60 equals 1.67, multiply the bushel price of beans by 1.67 to get the price of beans per hundredweight. Add the cost of grinding and roasting the beans to this price.

The percentage of protein in soybeans and in protein supplements differs. To calculate the cost of a pound (or of 100 pounds) of crude or digestible protein from each source, divide the price per hundredweight by the percent of protein it contains. If, for example, the cost, including grinding, of 100 pounds of soybeans is \$8, then \$8 divided by 37.9 (crude protein in soybeans) is the cost of 1 pound of protein from that source. Multiply this figure by 100 to determine the cost of 100 pounds of protein.

Example comparisons of the cost of protein from various sources are shown in the following table:

	If the cost per bushel is (\$1),	the cost per 100 lbs. is (\$),	and if the crude protein content air dry is (%),	then 100 lb. of crude protein will cost (\$)* in this feed,
Whole Soybeans	4.79(x 1.67)	8.00	37.9	21.11
Soybean Oil Meal	---	12.00	48.0	25.00
16% supplement	---	7.50	16.0	46.88
Cottonseed Meal	---	11.00	43.0	25.58

\*The cost per 100 pounds of the protein source divided by the percent of its crude protein content times 100 equals the protein cost per 100 pounds from that source

Besides being a good protein buy, ground soybeans are also a source of low-cost energy. And by adding this energy to the ration, they further reduce costs.

Example comparisons of the cost of energy from the above sources:

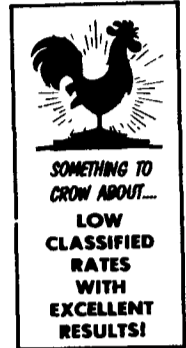
	If the cost/100 lbs. is (\$),	and if energy content in % TDN is,	then the cost of 100 lbs. TDN will be (\$),
Whole Soybeans	8.00	87.6	9.13
Soybean Oil Meal	12.00	78.0	15.38
16% Supplement	7.50	68.0	11.03
Cottonseed Meal	11.00	78.4	14.03

How much does this save? Protein supplements such as those I've

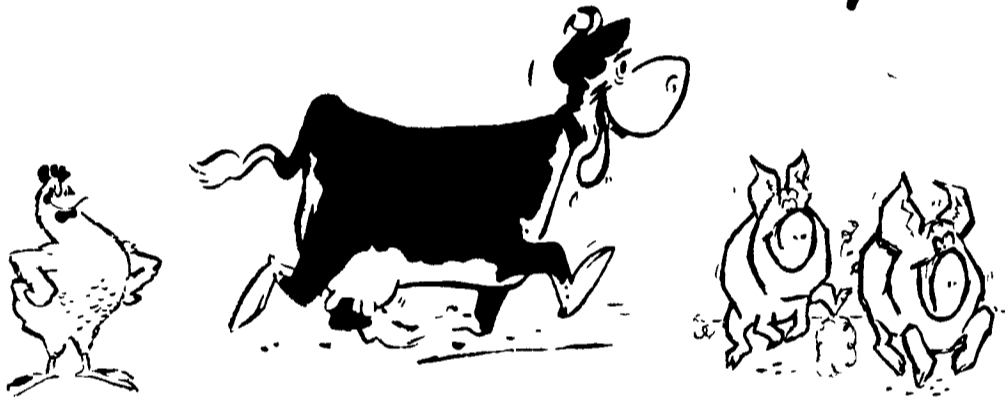
discussed usually supply about 320 pounds of crude protein in 16 percent rations. If 100 pounds of crude protein in ground soybeans (see the first table above) cost \$21.11, then 320 pounds will cost \$67.55. If the protein in soybean

oil meal costs \$25 per 100 pounds, 320 pounds will cost you \$80. At this price, feeding ground soybeans would save you \$12.45 per ton of feed mixed.

In the above example, the difference between the cost of 100 pounds of soybean oil meal and whole soybeans (\$12 minus \$8) is \$4. It has been calculated that any time the difference between the price of meal and whole soybeans — raw or roasted — is \$2.52 or more per 100 pounds in favor of whole beans, it pays to use beans.



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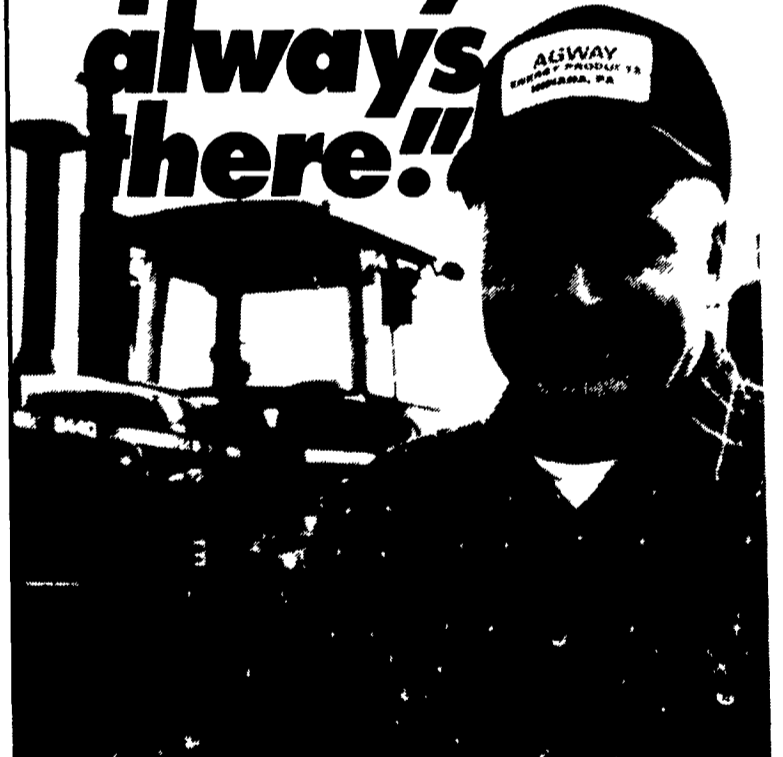
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