

QSSB Soy Foods and Animal Nutrition Content

Winter/Spring Bundle

Animal Nutrition Article

Evaluating Soy in Beef Cattle Rations

Key Takeaways:

- Beef producers evaluate ingredients based on forage quality, cattle needs, consistency, and nutrient value—not simply lowest cost.
- Soy-based ingredients offer flexible, high-quality options. Soybean meal and soybean hulls serve different purposes, but both can play valuable roles when matched correctly to the ration.
- Competitive pricing, local processing, and consistent cattle response have made soy-based feeds a reliable tool for many producers when used with guidance from nutrition and Extension experts.

For beef producers, choosing feed ingredients isn't just about chasing the lowest price. It's about matching cattle needs, forage conditions, and available feedstuffs in a way that keeps animals performing consistently.

“Soy just works for us,” says Kentucky producer Fred Sipes. Sipes started farming in the 1990s, and as his business grew, he expanded his operation to include beef cattle, along with row crops like soybeans and corn.

Starting With the Forage Base

Most beef rations start with forage, like pasture, hay, or silage. Evaluating the quality of that forage is the first step in determining whether additional supplementation is needed.

“Forages like hay and silage are generally the base of most cattle rations,” says Travis Meteer, Beef Cattle Specialist with University of Illinois Extension. “Once

you understand forage value, you can determine where supplementation makes sense.”

From there, producers look beyond simple price comparisons. Feed ingredients are evaluated for cost per unit of protein and energy, consistency of supply, and overall quality. Heat-damaged, moldy, or contaminated feeds can reduce intake and increase health risks, making quality just as important as cost.

“Ultimately, several factors dictate whether a feed ingredient is used,” Meteer explains, “including price, availability, quality, storage and handling needs, dry matter, and nutrient analysis.”

Where Soy Fits in the Ration

Soy ingredients are often part of that evaluation. Soybean meal and soybean hulls serve different roles but can both contribute to a balanced ration when they fit nutrition needs.

Soybean meal is commonly used to meet protein needs, particularly in young or growing cattle, while soybean hulls provide a highly digestible fiber source that works well in forage-based systems.

“Even though soybean meal and soybean hulls have very different nutrient profiles, they’re both high-quality ingredients,” Meteer says. “It’s about using the right tool for the job.”

For producers like Sipes, who raise both cattle and crops, soybean hulls have proven themselves to be a good fit, especially when supplementing forage diets.

“If we’re growing it, just like with our corn, why not run it back through the cattle?” he says. “The hulls we use are processed about 60 miles from our farm, and they’ve worked really well for us. It fits what we’re doing, and the cattle respond to it.”

Supporting Rumen Health

One advantage of fiber-based feed ingredients like soybean hulls is how they complement forage diets. High-starch supplements can lower rumen pH, reducing fiber digestion and overall efficiency.

“Negative associative effects are commonly discussed when feeding high-starch grains to animals on forage-based diets,” Meteer explains. “Fiber-based feeds like soybean hulls are often a better match when you’re trying to maintain rumen health.”

That balance matters to producers who want consistency in intake and performance without disrupting digestion.

Cost, Availability, and Real-World Decisions

Economics certainly play a role in feed formulations. Soy-based feeds continue to be more cost-competitive with other ingredients, making them a more frequent part of ration discussions.

Producers often work closely with nutritionists, veterinarians, Extension specialists, and feed mills to adjust rations as prices and availability change.

“If you’re not familiar with soy-based feeds, do your research,” Sipes advises. “Talk to your nutritionist, talk to your vet—but I can say the soybean hulls have worked really well for us.”

For many beef producers, soy is one more tool that, when used thoughtfully, helps cattle perform and operations maintain efficiency. To learn more about soy-based solutions for cattle, swine, poultry, and more visit

<https://can.ussoy.org/>.

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