

Grocery Co-Products for Livestock Feed

Grocery co-products like cull vegetables, dairy products and stale bakery products can be used in livestock rations to reduce food waste and feed costs. There are important things to keep in mind when feeding grocery co-products.

- **Follow Canadian Food Inspection Agency (CFIA) rules regarding feed.** Meat, cannabis, and hemp products are not approved for livestock feed. If you receive any of these products, dispose of them properly.
- **Go through what you receive.** Depending on where you access these co-products, they could contain items that livestock should not consume. Remove food packaging and garbage present in the lot. Dispose of any products that are moldy or rotten on arrival.
- **Sort the products.** As you go through the products to dispose of anything that can't be fed to livestock, it may be helpful to sort the food products. Use co-products that are closer to spoilage first if possible. You can also sort the products out to make your feeding decisions more precise.

Different co-products will provide a different nutrient profile to livestock. Dairy products will be higher in protein, starchy and sugary products will be higher in energy, and leafy vegetables will provide more fibre in the diet.

Grocery co-products can be a great addition to livestock rations. It is important to use traditional feed ingredients, including a mineral program, to provide the base of the ration so that the animal's nutritional needs are met.

- **Store the product properly.** Unlike forages or grains, some grocery co-products may need to be refrigerated, frozen, or otherwise stored to prevent spoilage. Storing the co-products in the way that you would store them for human consumption will increase the length of time that you are able to use them in your livestock diets. For large loads of co-products, alternative methods of storage such as ensiling or making a slurry may be an option. Contact your nutritionist to discuss storage options for the products you receive.
- **Feed Test.** Grocery products haven't historically been fed to livestock in large quantities, so there isn't a lot of information on the nutrient content as it applies to livestock. A feed test will help you develop a ration that will safely meet the needs of your livestock. If feed testing is not an option because of potential spoilage, limit the grocery co-products to 10 per cent or less of the ration. As always, consult with your nutritionist before making changes to your feeding regime.

Some products may need to be processed before they can be fed. Larger, solid fruits and vegetables, like beets, apples or potatoes, can pose a choking risk for livestock. This can be especially dangerous for ruminants as a blockage in their esophagus prohibits their ability to eructate ruminal gases and can result in severe bloat. Processing these products can help prevent the blockages from forming.

Watch for products that are high in starch or fat. Starchy foods, like potatoes, corn or bakery products are highly fermentable by ruminant animals, like cattle or sheep. While feed testing and ration balancing are still recommended, these products can be safely fed by ensuring long-stem forages are available, introducing the product slowly and limiting the concentration in the diet. While using these feeds, watch for signs of acidosis which can include reduced feed intake, diarrhea, and increased breathing rate. Foods that are high in fat, like oil or some dairy products, could contribute to reduced rumen function in ruminant animals. Total diet fat should remain below 6 per cent to promote healthy rumen function.



Livestock should be monitored while feeding grocery store co-products. If you see a decrease in body condition score or feed intake, or signs of illness, reduce the amount of these products that you are feeding and reassess your plan with your nutritionist.

For more information, contact your local livestock and feed extension specialist:

Kindersley

608 12th Ave. East
306-463-5513

Outlook

410 Saskatchewan Ave. W
306-867-5527

Swift Current

101-350 Cheadle St. West
306-778-8285

Prince Albert

Room 141, L.F. McIntosh
Building, 800 Central Ave.
306-953-2363

Tisdale

1105 99th Street
306-878-8842

North Battleford

A131-1192 – 102nd Street
306-446-7962

Humboldt

2414 Westwood Dr.
306-682-6701

Weyburn

60-18th Street
306-848-2857

Yorkton

38-5th Ave. North
306-786-1531

Moose Jaw

Agriculture Knowledge Centre
45 Thatcher Dr. East
Toll-Free 1-866-457-2377