

Livestock Upcycle By-Products

In 2022, California livestock consumed over 10 million tons of by-products from human food, fiber, and biofuel production which are not otherwise useable to humans. In fact, they consumed¹:



Over 2 million tons of canola meal
(By-product of canola oil)



Over 1.1 million tons of cottonseed
(By-product of cotton)



Over 1 million tons of almond hulls
(By-product of almonds)

Over 500,000 tons of distiller's grains
(By-product of ethanol)

Over 500,000 tons of cull fruits and vegetables (non-saleable for human food)

Dairy cattle consume over 60% of this feed¹.

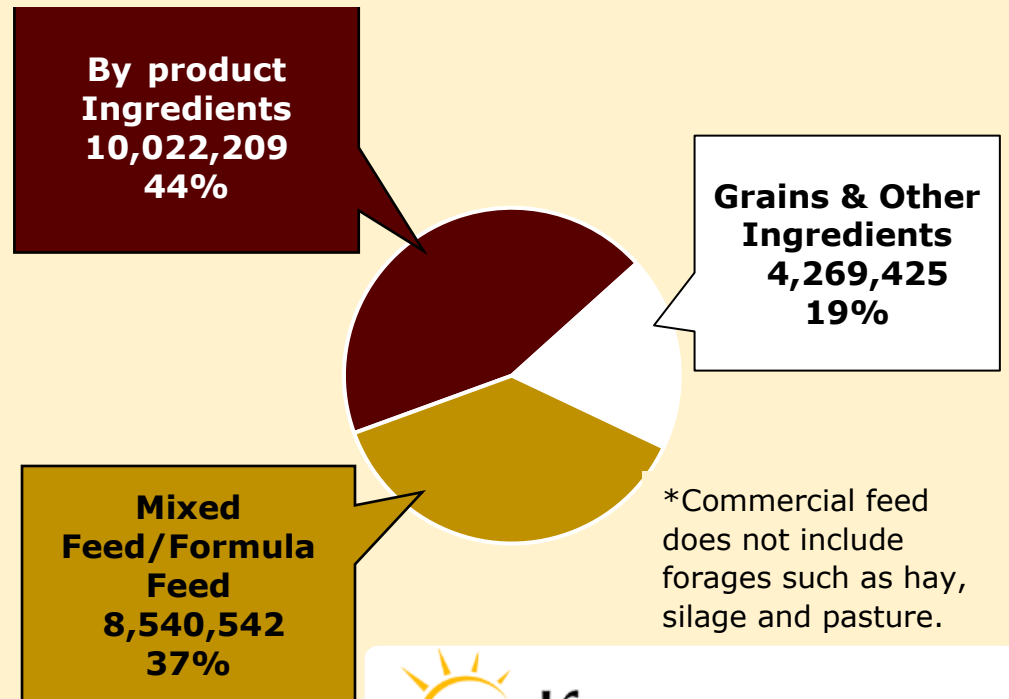
Over 85% of what cattle consume is feeds that humans cannot utilize, including by-products (40%) and forages (45%)². If these by-products were not diverted to feed, they would likely go to landfill². The carbon emissions of sending by-products to a landfill are, on average, 60% greater than feeding them to cows². Livestock "upcycle" by converting forages and by-products into high quality, nutritious product such as meat, milk, and eggs.

1: Based on commercial feed tonnage reported to California Department of Food and Agriculture Commercial Feed Regulatory Program.

2: Sourced from [CLEAR Center](#) at University of California, Davis.



2022 Tons of Commercial Feed*¹



*Commercial feed does not include forages such as hay, silage and pasture.



CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE