



FOOD BY-PRODUCTS

AS SUSTAINABLE ANIMAL FEED
SOLUTIONS



Refers to the utilization of residual materials or leftovers from food processing and manufacturing that are not suitable for human consumption but can be used as feed ingredients for animals.

- Sustainable animal feed from food by-products is an innovative approach that can help reduce waste and minimize the environmental impact of both the food and agriculture industries.

Source

- Brewer's grains
- Fruit and vegetable waste
- Grain milling by-products
- Oilseed meal
- Bakery waste
- Distiller's dried grains
- Pulp and pomace

Collaborating with experts in animal nutrition and feed processing can help develop effective and safe methods for repurposing food by-products into sustainable animal feed.



Benefits



- **Waste reduction**

Reduced food waste and divert materials that would be discarded in landfills.

- **Resource efficiency**

Make better use of resources, including water, energy, and agricultural inputs.

- **Economic benefits**

Reduced feed costs for farmers, contributing to the economic viability of livestock production.

- **Nutritional Value**

Provides essential vitamins, minerals, proteins, and fats needed for animal health and growth.

Commercial production



1. Sourcing raw materials

- Raw materials can include grains (corn, wheat, soybeans, etc.), oilseeds, protein-rich meals, and other agricultural by-products.

2. Grinding and mixing

- Raw materials are ground to reduce their particle size, making it easier to handle and mix uniformly.
- The different ingredients are thoroughly mixed to create a balanced and nutritionally complete feed.

3. Extrusion or Pelleting

- Feeds are processed through extrusion or pelleting machines, which use heat, pressure, and mechanical force to shape the feed.
- It improves feed texture and digestibility & also kills potential pathogens due to the high temperatures involved.

4. Packaging

- Final product is packaged into bags, totes, or bulk containers.

