



LINKS TO AGRICULTURE



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STEERING THROUGH THE CHUTE



Cattle are ruminants which means they have a four-part stomach. This allows the cattle to be able to digest plant cellulose, unlike humans. This unique digestive system allows them to make use of low quality feed and forages that other animals are unable to digest.

Beef cattle are also known as upcyclers. This means they can turn natural resources such as solar energy into high quality proteins, vitamin B-12, iron, zinc, and other valuable products. Rays from the sun fall upon millions of acres of range land and pastures supplying energy for grass and forages to grow. The cattle then eat this renewable resource which has no nutritional food value to humans and convert it into healthy food better known as beef.



Nutritious meat is not the only valuable product that comes from upcycling. More than 44% of a beef cattle's weight can be transformed into byproducts such as leather, pharmaceutical (or medicine), cosmetics, and pet food just to name a few!

Around 85% of nutrients consumed by cattle come from grass, roughage, and byproducts from biofuel and food production industries that are not edible to humans. Some of these byproducts include those from fruit, vegetables, distiller grains, and wheat millings that would otherwise end up in landfills.

The most popular breeds of cattle in the United States are: Angus, Charolais, Herford, Simmental, and Red Angus. These breeds are the most popular because of their good mothering trait's and their ability to convert the food they consume into high-quality meat.

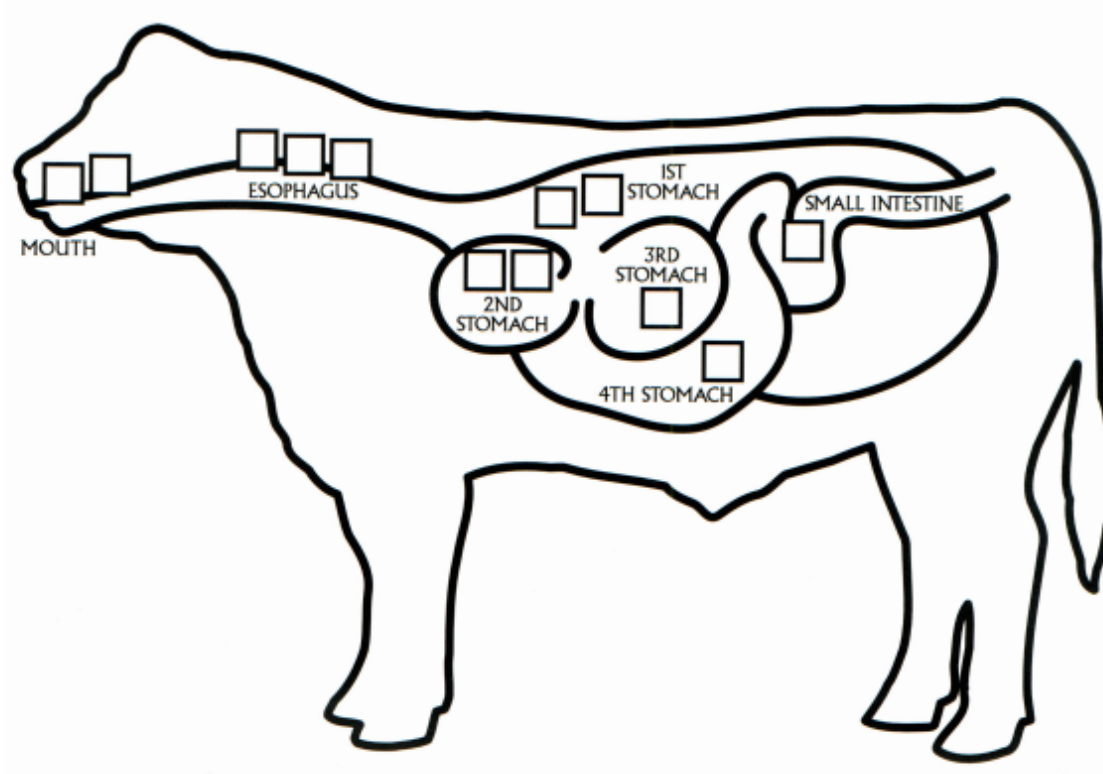


Directions

Read the information below and then follow the path of food as it moves through the ruminant stomach by writing the step numbers in the boxes on the diagram below. Some of the numbers will be used more than once.

RUMINANT STOMACH

1. Teeth tear and chew food in mouth
2. Food travels down esophagus
3. Cud (swallowed food) mixes and softens in stomachs 1 and 2
4. Cud returns to mouth for more chewing by rear molars
5. Cud passes through stomachs 1,2,3, and 4 as it is digested and nutrients absorbed
6. Waste materials pass through intestines and exit body as manure





Career Corner

Large Animal Veterinarian- Bovine Veterinarians maintain the health of beef cattle by traveling to farms and treating patients with routine and emergency appointments. They also maintain animal health records, meet government reporting requirements, and keep current in their work with continuing education.

How Large Animal Veterinarians Benefit Agriculture:

- Ensure food-producing cattle stay healthy.
- Prevent and control diseases among animals and animals and people.

Large Animal Veterinarians Study:

- Animal Science
- Chemistry



SCAN ME



Farm Facts

- ◇ Despite the myth that cattle are one of the leading sources of greenhouse gas emissions, they are only responsible for 2% of the greenhouse gas emissions in the United States.
- ◇ Cattle consume 2.6 pounds of grain per pound of beef; similar to poultry and pork.
- ◇ 7% of harvested corn grain in the United States is used to feed beef cattle.
- ◇ More than 90% of cattle farms are family-owned and operated.

Calling all Chefs!

Beef Jerky Trail Mix



Ingredients:

- 1 cup chopped beef jerky
- 1/2 cup whole almonds (or any nut of your choice)
- 1/4 cup dried cranberries (or any dried fruit of your choice)
- 1/4 cup of sunflower seeds (or any seeds of your choice)

Directions:

- Mix all ingredients in a medium bowl.
- Store in an airtight container in the refrigerator.
- Enjoy as a snack after school, after practice , or take along on a hike!

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