How Do Cows Make Milk?

1. The cow eats feed which contains many nutrients.
   - Water
   - Vitamins & minerals
   - Protein
   - Carbohydrates
   - Fats

2. The feed is broken down, mixed up, and moved through her 4 stomach compartments:
   - Rumen
   - Reticulum
   - Omasum
   - Abomasum

3. The digested feed moves to her small intestine . . .

4. . . . where the nutrients are absorbed into the bloodstream and carried to the udder . . .

5. . . . where the cow puts the nutrients together in another form to make milk. Absorbed nutrients are also used to nourish the rest of the cow’s body.

6. Undigested feed passes out as waste (manure).
A Peek Inside a Dairy Cow

large intestine  small intestine  rumen

udder

blood

feed in

milk out

The Udder
Where milk is made

blood  secretory cells

collection gland  milk duct

teat
How Much Milk Does One Dairy Cow Make?

8 gallons (on average) every day!

But many cows make 12 gallons or more each day!

12 gallons of milk (100 pounds) can make:
- 200 cartons of milk
- 8 gallons of ice cream
- 5 pounds of butter
- 10 pounds of Cheddar cheese
- 12 pounds of Mozzarella cheese
Each Year the Average American consumes . . .

- 21 gallons of milk
- 31 pounds of cheese
- 6 gallons of ice cream

One day’s worth of a dairy cow’s milk can make enough Mozzarella cheese to top 40 pizzas!