

comfortable **COWS**

Comfortable cows produce more milk of higher quality, and live longer productive lives.

To provide comfort, cows have:

- **Clean**, comfortable bedding
- **Free** access to food and water 24 hours/day
- **Freedom** to move about their living area and choose when they eat, drink and rest
- Well-ventilated housing areas let in fresh air while providing protection from wind, cold and rain
- Fans and sprinklers to **stay cool** during hot months

healthy **COWS**

Cows are monitored closely every day to ensure their health.

- **Milking routines** minimize risk of udder infection and improve milk quality
- **Vaccinations** prevent disease
- Calves are born without a strong immune system, so they are housed in a clean environment and fed colostrum that is loaded with antibodies and nutrients

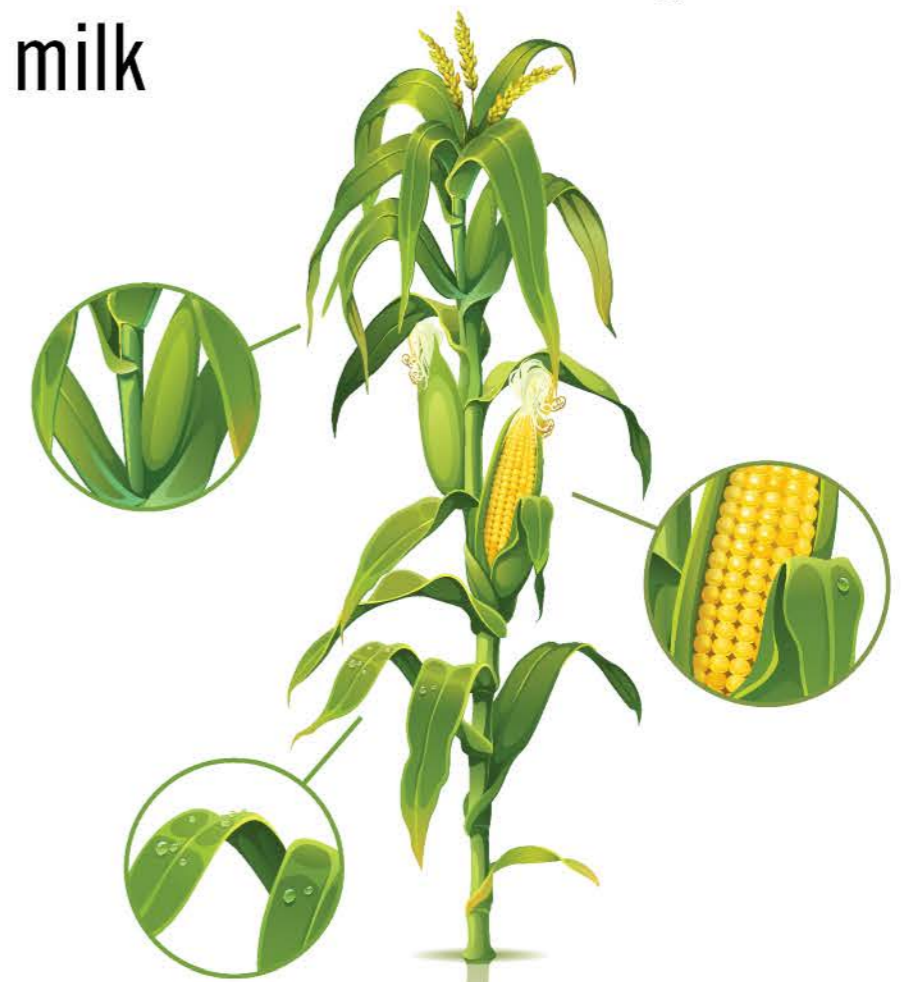
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the **ECOLOGICAL** **advantage** of **RUMINANTS**

Because of their 4-chambered stomach, dairy cows are excellent at concentrating and transforming nutrients from human inedible feeds into milk

Plant Component	Plant Dry Weight %
Human edible (grain)	50.0 %
Human non-edible	50.0 %
Leaves (12.5)	
Husk (6.8)	
Cob (8.4)	
Stalk (29.9)	



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farm **energy** EFFICIENCIES

Did you know?

- Dairy producers are cutting costs and saving energy on lighting, refrigeration, and water heating & cow cooling on their dairy farms
- Low-temperature detergents cut water heater costs and wear-and-tear on milking equipment
- More efficient technologies can reduce lighting energy use by 50 to 70%, while increasing cow comfort
- More efficient ways to pre-heat water can cut energy use needed to generate hot water by 40 to 50%



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water RECYCLING

Did you know? Dairy producers recycle water 3 to 5 times

FRESH WATER

travels through a plate cooler to cool milk from the cows



WASHING

Goes in tank flush system to clean floors

DRINKING

Or collected and used for (cow) drinking



PLANT FOOD

Travels to lagoon where it mixes with nutrients and creates liquid fertilizer to irrigate the crops and pasture

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natural **nutrient RECYCLING**

Did you know?

- A 1,400-pound cow eats 100 pounds of feed, drinks 40 gallons of water, and produces approximately 10 gallons of milk in just one day
- The 17 gallons of manure she produces daily is applied to the farm field as fertilizer
- This manure has enough nutrients to grow 56 pounds of corn
- Applying manure back to the land maintains soil fertility and reduces the need for synthetic fertilizer
- By returning most nutrients from their feed back to the land, dairy cows create an efficient nutrient cycle. This recycling of nutrients helps make producing crops more sustainable



productive **COWS**

Did you know?

U.S. cows are among the most efficient, productive cows in the world

Compared to 1944 the U.S. dairy industry now produces a gallon of milk using:

90% less land

75% less manure

65% less water

63% smaller carbon footprint

These improvements are attributed to:

Cow health and nutrition

Cow housing

Genetics and breeding

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RECYCLING ingredients

Dairy
cows eat a
variety of
plant matter
by-products
historically
considered
as waste

