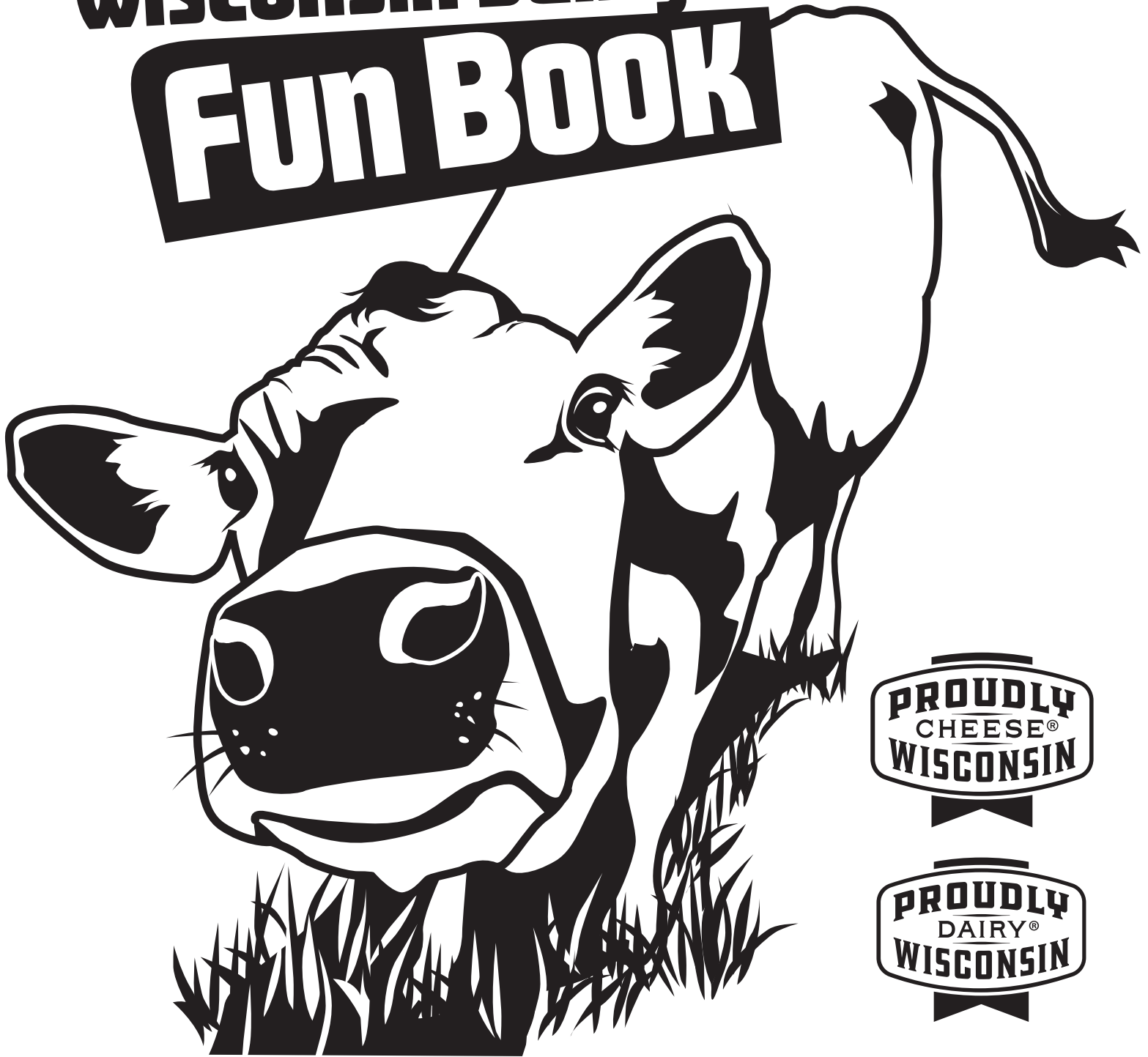




Wisconsin Dairy **FUN BOOK**



©2021 Dairy Farmers of Wisconsin
2021 Edition of Wisconsin Dairy Fun Book
www.WisconsinDairy.org

Let's Explore Wisconsin, AMERICA'S DAIRYLAND

Colby Cheese

Colby Cheese is named after a city in Clark County.

Big Cheese

Wisconsin is home to 141 cheese plants that produce more than 600 varieties, types and styles of Wisconsin cheese—almost double any other state.



Agriculture

For more than 180 years, agriculture has driven the state's economy.

STATE DOMESTIC ANIMAL



Cheese Curds

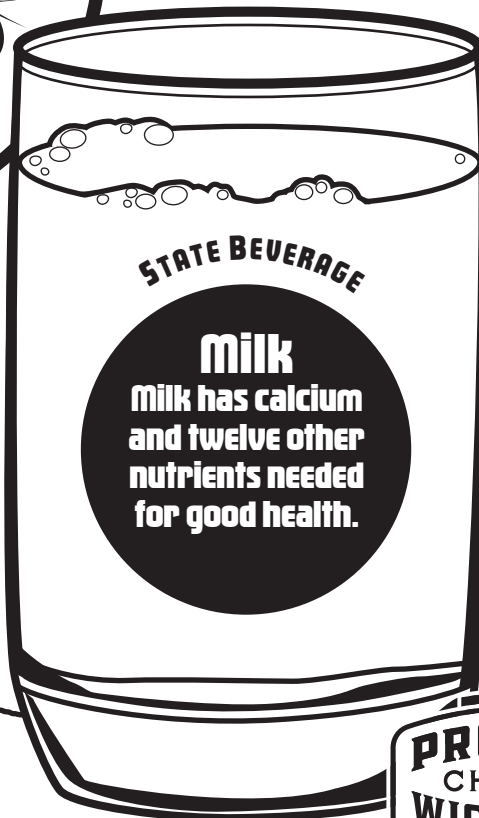
People in Green Bay eat more cheese curds than anywhere else in the United States.

Dairy Cow

Wisconsin is home to more than 1.27 million dairy cows.

Wisconsin

makes more cheese than any other state, making more than one of every four pounds produced in the United States.



Dairy Farm

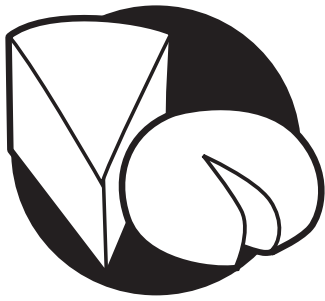
Wisconsin's more than 6,500 dairy farms produce over 14% of all milk and 26% of all cheese in the United States.



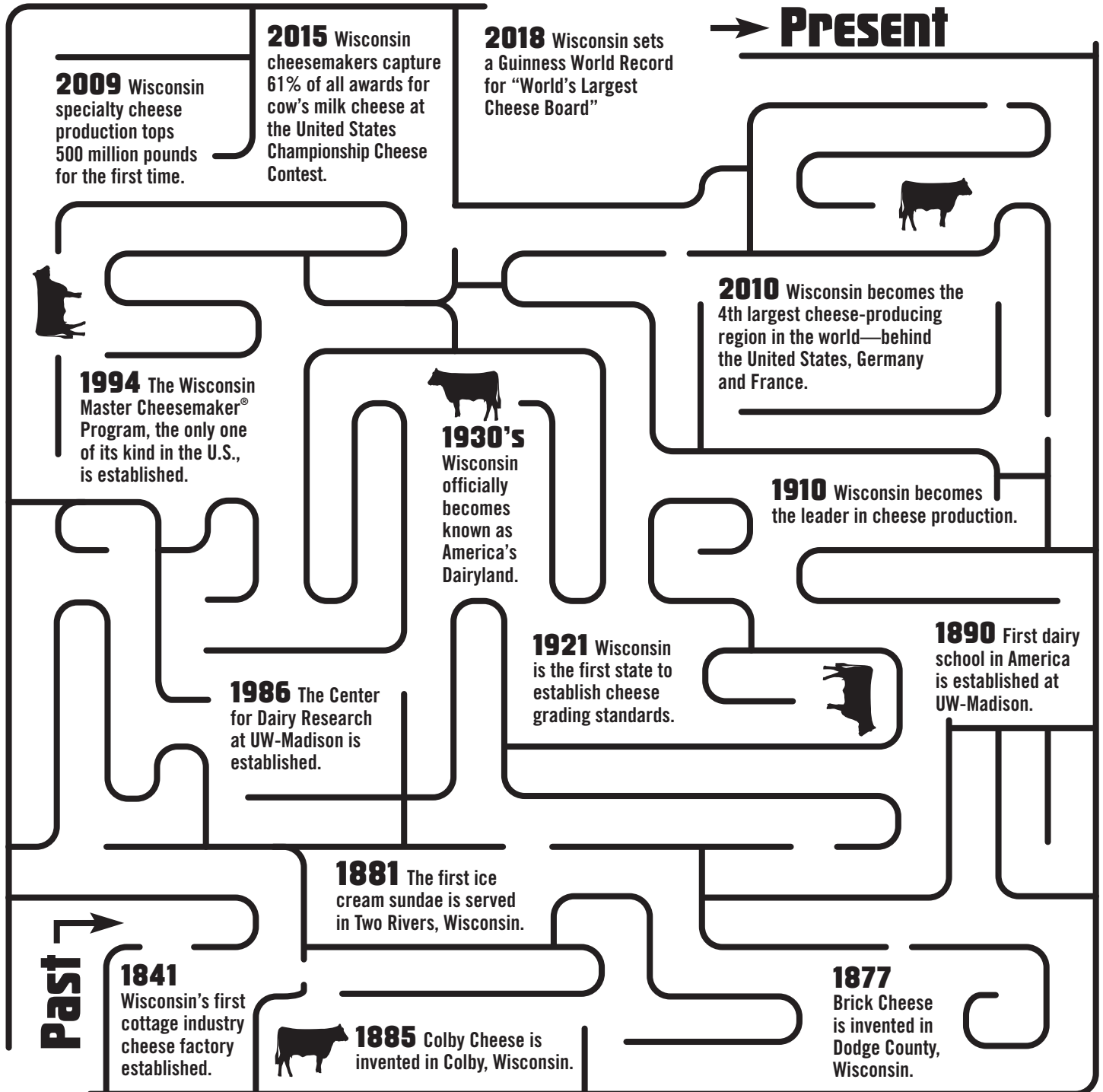
CHEESE

A piece of cheese the size of an adult's thumb has the same amount of calcium as one cup of milk.



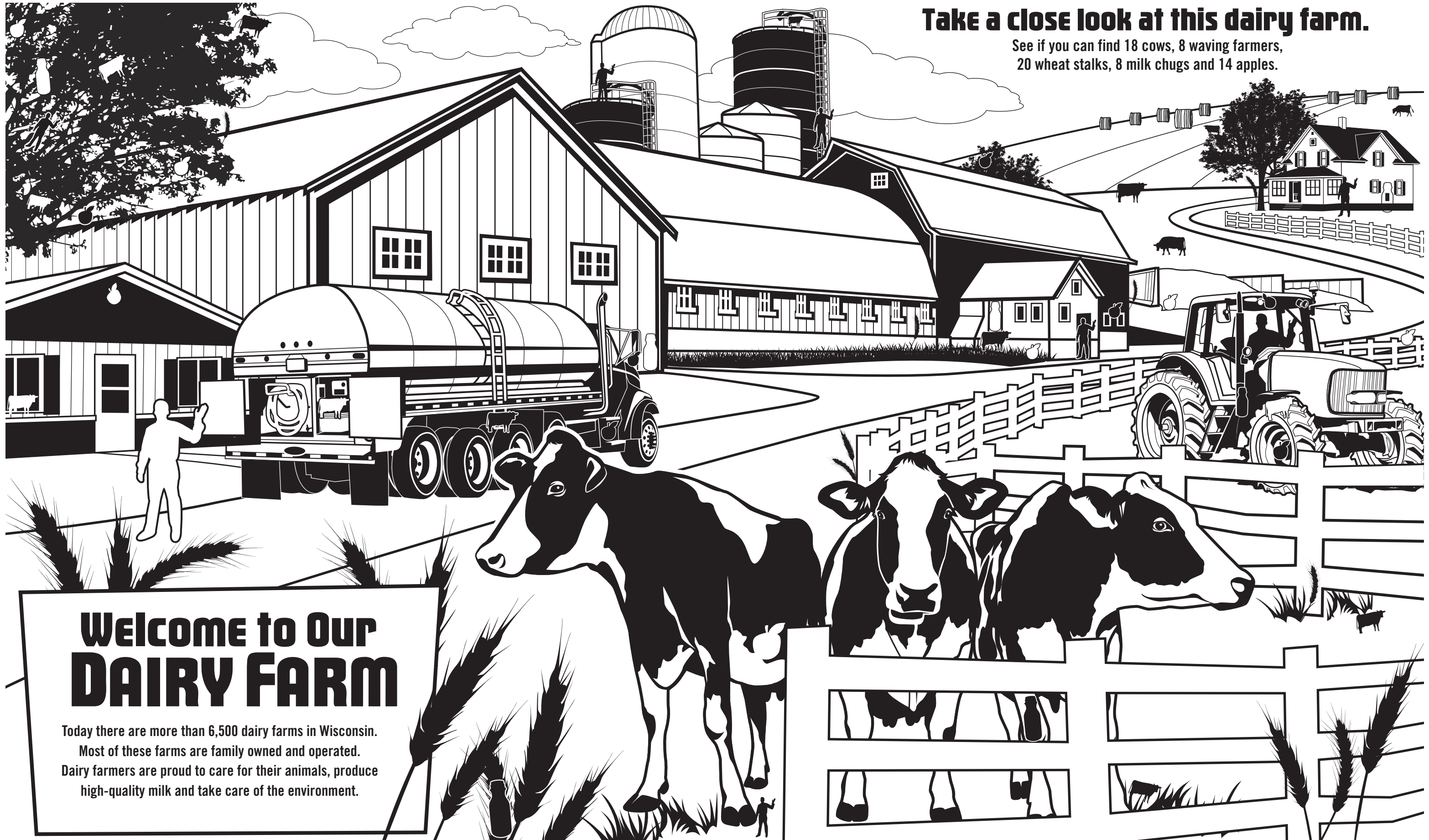


Wisconsin's Strong DAIRY HERITAGE



Take a close look at this dairy farm.

See if you can find 18 cows, 8 waving farmers,
20 wheat stalks, 8 milk chugs and 14 apples.



Welcome to Our DAIRY FARM

Today there are more than 6,500 dairy farms in Wisconsin.
Most of these farms are family owned and operated.
Dairy farmers are proud to care for their animals, produce
high-quality milk and take care of the environment.

Dairyland RIDDLES



zzzzzzzz



10. What is a pirate's favorite cheese?

11.
How fast is milk?

12. How did the cow get to Mars?

1. What game do cows play at parties?

5. What did the cow say to her best friend?

13. What does a cow watch?

2. Why did the cow cross the road?

6. Have you heard the joke about butter?

3. Why can't dairy cows dance?

7. How do you make a pancake smile?

4. How did the cow soccer team win the game?

8. What did the ghost put on his bagel?

9. What do you call cheese that isn't yours?

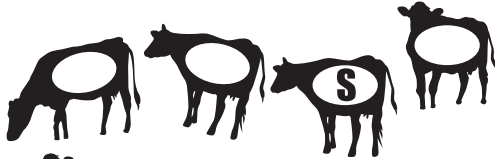


Wisconsin is home to more than 1.27 million dairy cows – that means there are more cows than school kids in Wisconsin! Dairy farmers give their cows plenty of good feed, clean water and a comfortable place to live. Cows are milked two or three times each day.

All About COWS



Choose a word from the word list to complete each sentence. Write the words in order from left to right along the cownga line, one letter in each cow. Then, write the numbered letters in order to solve the riddle.



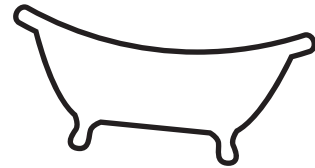
Word List drink milk eating weigh four pounds

Fill in the blank statements:

1. When full grown the average dairy cow will _____ about 1,400 pounds.



2. Dairy cows eat about 100 _____ of feed and _____ a bathtub full of water each day.



4

3. Cows have a stomach with _____ compartments to help them digest their food.



4. Wisconsin cows produce an average of nearly seven gallons of _____ each day. That's enough to fill about 112 eight-ounce glasses or cartons.



5. Dairy cows spend an average of six hours each day _____ and eight hours chewing their cud. (Cud is food that is regurgitated from the first stomach compartment to the mouth and chewed again.)



Finish

Start
The cownga line starts here!

What kind of milk is used to make Swiss cheese?

“ _____ ” milk

1 2 3 4

WISCONSIN DAIRY BREEDS

Holstein

black and white; came from Holland in 1621



Milk comes from dairy cows. In Wisconsin, there are seven main breeds of dairy cows. Most dairy cows in Wisconsin are Holsteins. One way to tell the breed of a dairy cow is by its color. Which breeds have you seen before?

Red & White Holstein

red and white; came from Holland



Brown Swiss

solid brown, varying from very light to dark; came from Switzerland in 1869



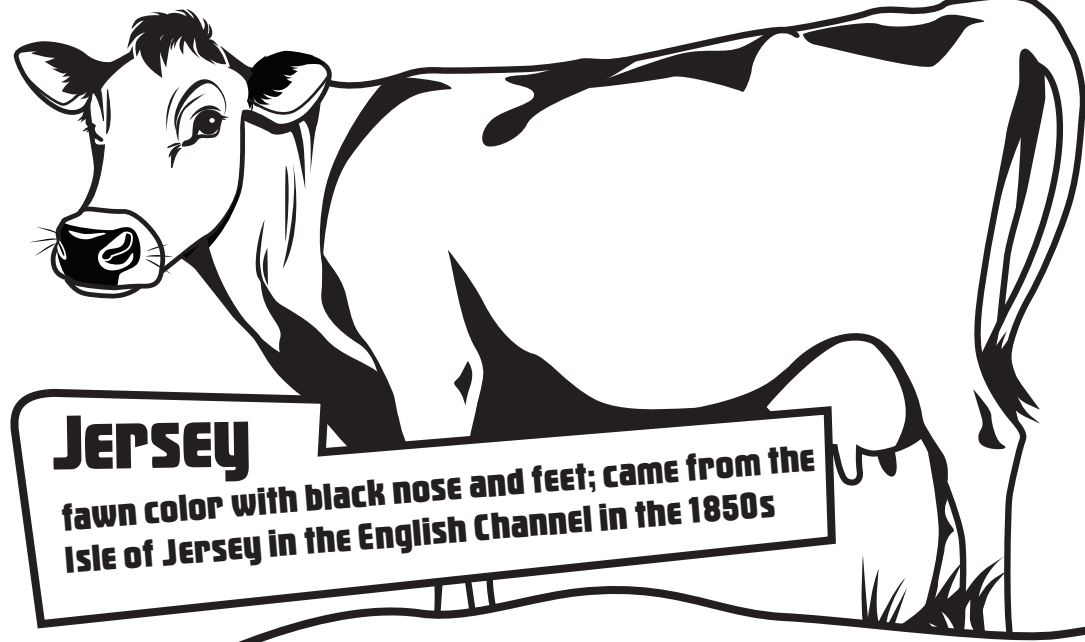
Milking Shorthorn

reddish-brown with small white spots; came from Northeastern England in 1783



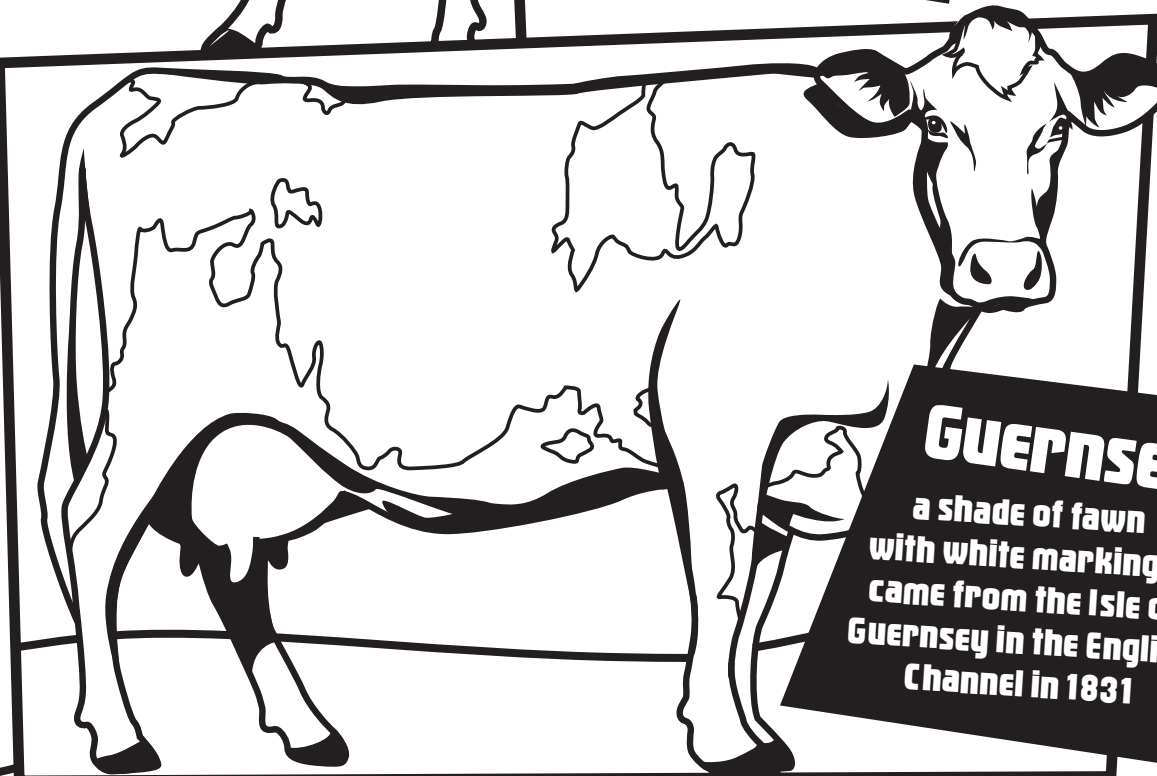
Jersey

fawn color with black nose and feet; came from the Isle of Jersey in the English Channel in the 1850s



GUERNSEY

a shade of fawn with white markings; came from the Isle of Guernsey in the English Channel in 1831

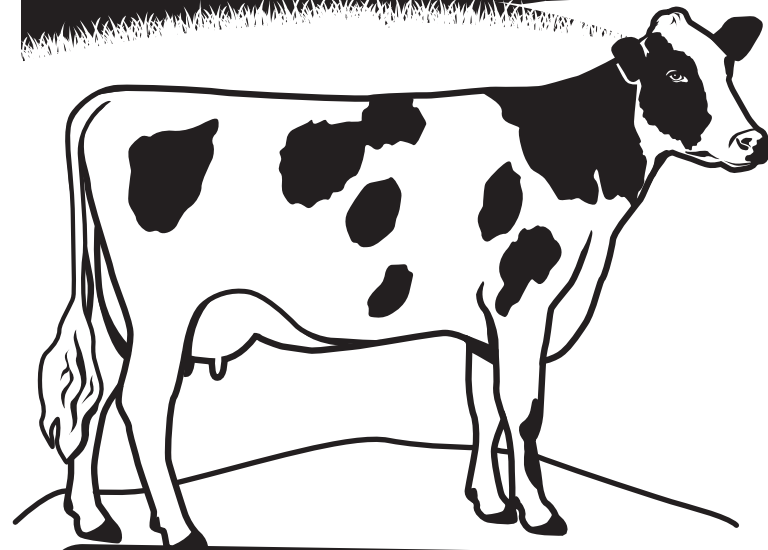


Ayrshire

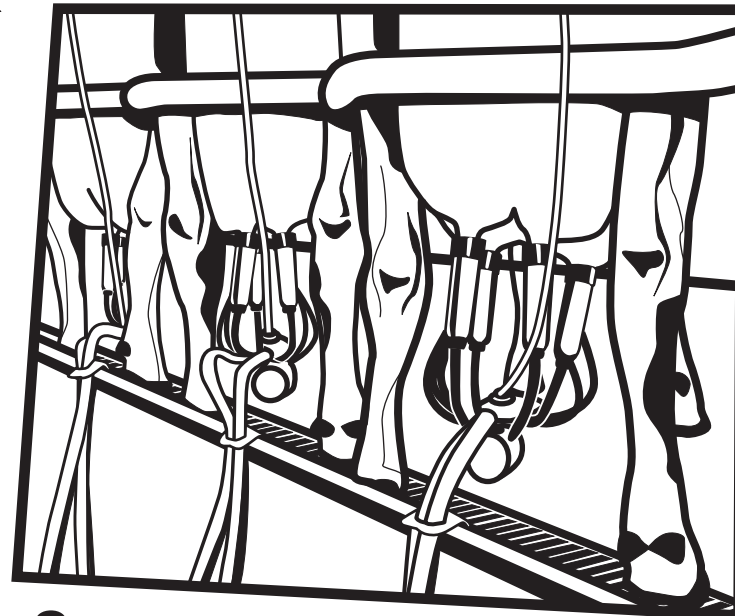
light to deep cherry red with white; came from the County of Ayr in Scotland in 1822



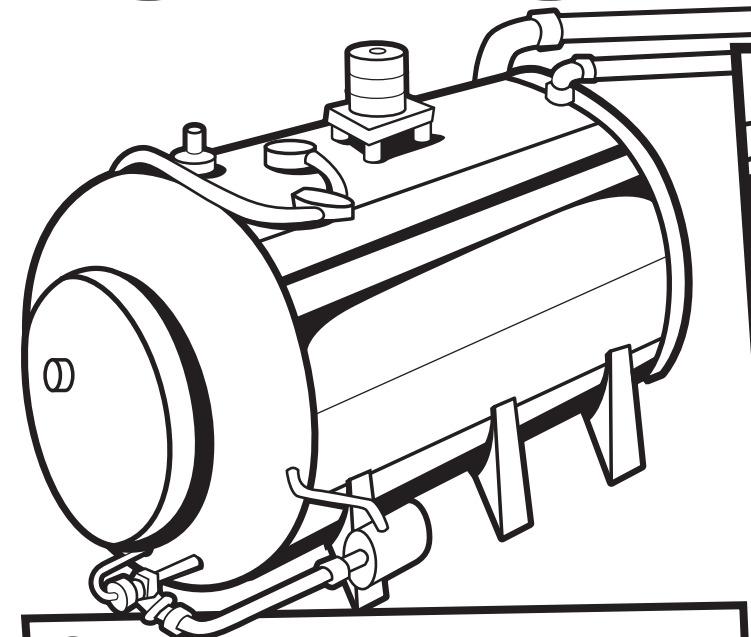
Milk from Cow to You!



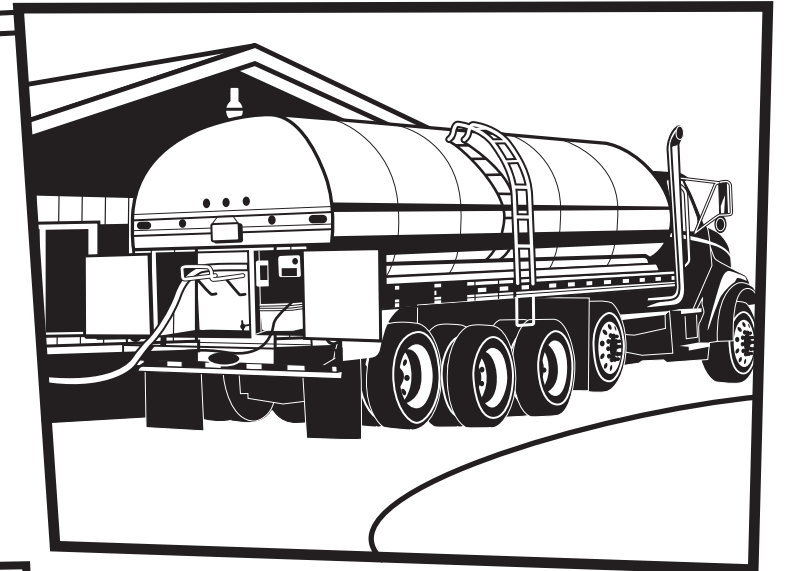
1. Milk comes from healthy, well-fed cows that are raised on dairy farms.



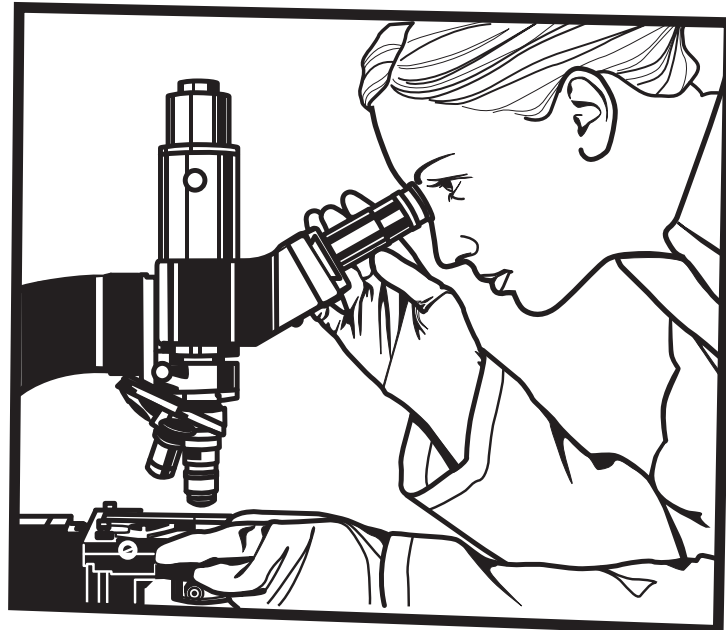
2. To begin milking, a cow's udder is washed before the milking machine is attached. This happens at least two times a day.



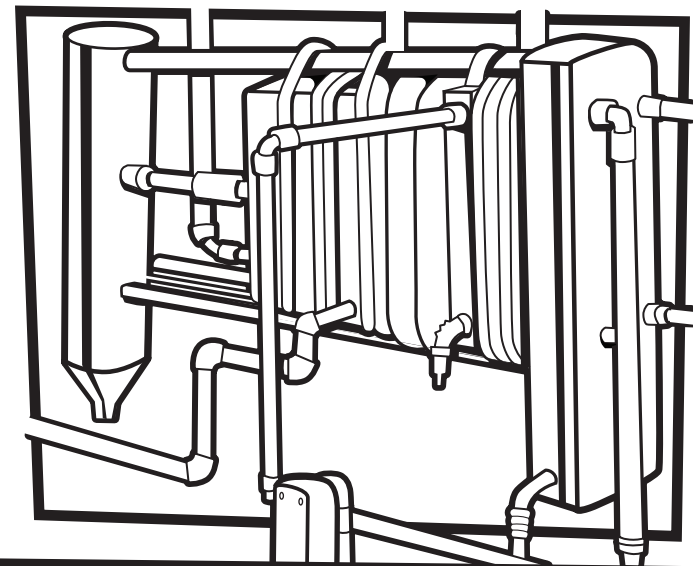
3. Fresh milk from the cow is pumped through a pipe and into an insulated tank, where it is cooled and kept fresh and safe.



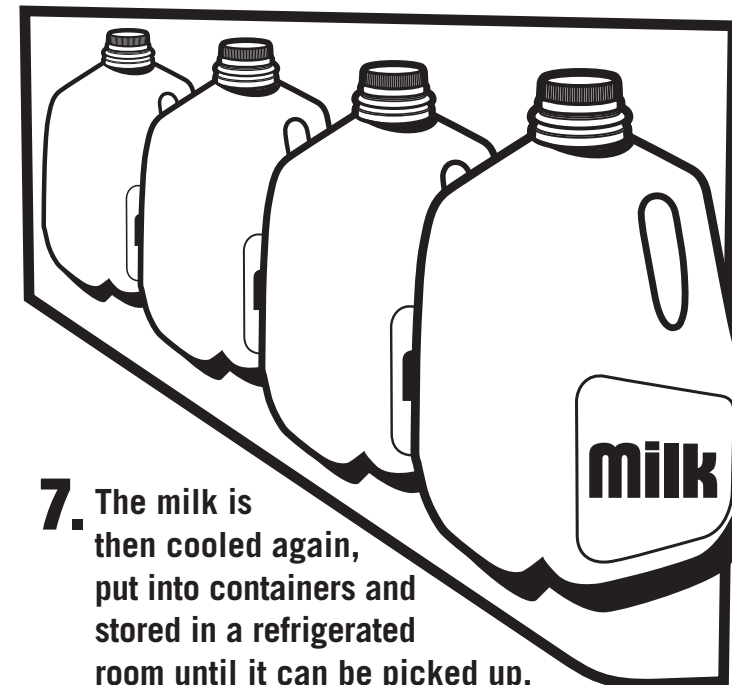
4. Each day, a special insulated tanker truck comes to the farm to pick up the cold milk and deliver it to the dairy plant.



5. At the dairy plant, the milk is kept cold and tested many times for quality.



6. Next, the milk is quickly heated, or pasteurized. This is an important step to ensure the milk is safe and wholesome.



7. The milk is then cooled again, put into containers and stored in a refrigerated room until it can be picked up.



8. Within two days after milking, the milk is loaded onto refrigerated trucks and delivered to schools, restaurants and supermarkets.

Calcium
for strong bones
and teeth

Vitamin A
for healthy
eyes and skin

Phosphorus
to strengthen bones

Vitamin B12
so red blood cells
can carry oxygen
to working muscles

Protein
for strong
muscles

Potassium
for fluid balance and to
help muscles contract

**Niacin and
Riboflavin**
to help cells
produce energy

Vitamin D
to deposit calcium
in bones and teeth

**Milk has calcium
and twelve other
nutrients for good
health. Cheese and
yogurt are also part
of the milk group.**

MILK GROUP

MILK

is a power drink that supplies your body with nutrients to grow tall, play hard and learn well. Calcium, along with twelve other essential nutrients in milk, will keep you healthy. Remember to drink 3 servings of milk each day for the nutrients you need.

WORD SCRAMBLE

H C I W D N A S Y L L E J D N A R E T T U B T U N A E P
 I M S T D J U S O L C E J C I A O E P T L B P I O A M O
 B B R S R K U I C F M R L H K B Z R T A U B T U N A E F
 H C I A D N A S Y L L E S R E G R U B E S E E H C A E P
 W Z R O S R F K S C U I R H K R M V H I F T A Z Z I P R
 F Z O T J R O O L R O R G D O E U R H E U V A R O L V K
 K I R T V C E R E A L O M R F R F Y G O R H L R O F R S
 O R B A S R J G G R H I K R D M F I H B L K R I K M V E
 H G R E L M B R N R G U R I W P I R J A W V M J M R U L
 Z I E H E R F Y U I E H V Y E R N K S R V Z E O R G L B
 L O R W G M L H B R F C I L N S S A R E D O L R J I R A
 F E R E A Y V L E U R N E J R E G R D R K R D R K H C T
 R I C L B C D J S Y I O E R D N K W E Y E A T O C Z U E
 L B R O R M J K E F U R O K A B L O Y K R B C I R E O G
 O W Y H K H R C E O R J D R C R O G I F O L H N U R G E
 H R B W Y K H U H R G Z R L R I Y J R H O Y E R A R L V
 E G R I L L E D O H E E S E S A H D W O C P J H B P F H
 Y E R E H C I W D N A S E S E E H C D E L L I R G J K W

Search for these foods that taste great with milk:

PANCAKES, CEREAL, CHEESEBURGERS, GRILLED CHEESE SANDWICH, LASAGNA, MUFFINS, BAGELS, COOKIES, PASTA, PEANUT BUTTER AND JELLY SANDWICH, WHOLE WHEAT TOAST, CHICKEN FINGERS, VEGETABLES, PIZZA, FRUIT

Good nutrition tastes great in all types of milk—low-fat, reduced-fat, fat-free, chocolate or strawberry. They all have the same nutrients. Choose the milk you like the best and drink 3 servings every day.

Unscramble the answers to learn more about the nutrients in milk and their functions in your body.

Which mineral helps build strong bones and teeth?
MIULACC

This nutrient keeps your body hydrated and cool and makes up 90% of milk's content. **TRAEW**

This mineral also helps build strong bones.
ROHPSHOUPS

Which vitamin helps red blood cells carry oxygen to your muscles? **TANBIIIV-12**

Name an important mineral needed to keep fluid balance in your body. **ATUOPSSIM**

Which two B vitamins found in milk help the body's cells produce energy? **CNIANI** and **LVFAIINROB**

This vitamin is needed to keep your skin and eyes healthy. **TMINAIVI**

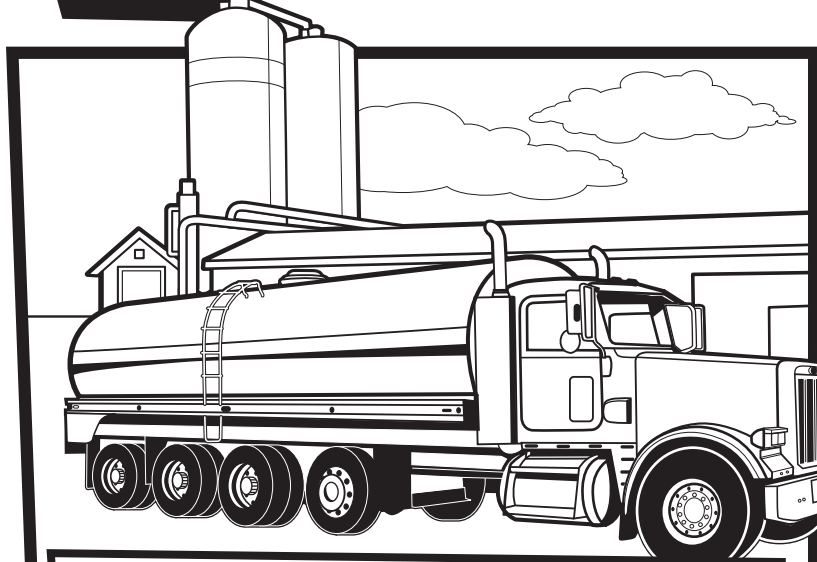
Name the major nutrient that helps build muscles for a strong body. **RITENOP**

Sometimes called the "Sunshine Vitamin," it is needed to help deposit calcium in your bones and teeth. **TMNIADVI**



How Milk Becomes CHEESE

The Art of Cheesemaking in Wisconsin



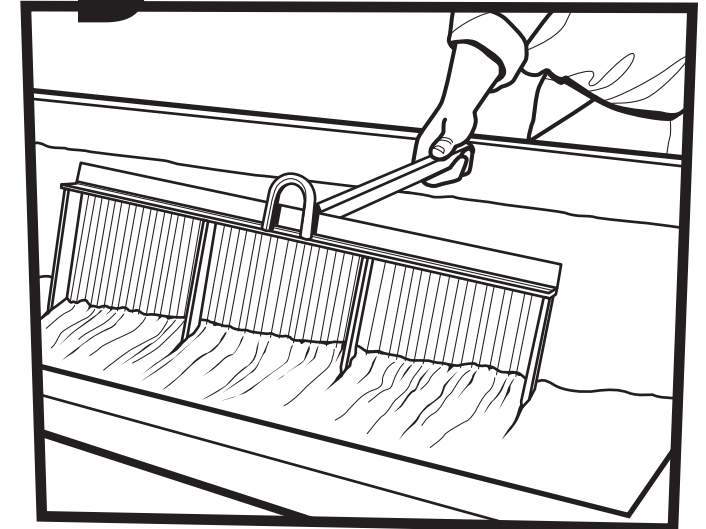
1. Each day insulated tanker trucks pick up top-quality milk from Wisconsin dairy farms and deliver it to cheese plants.



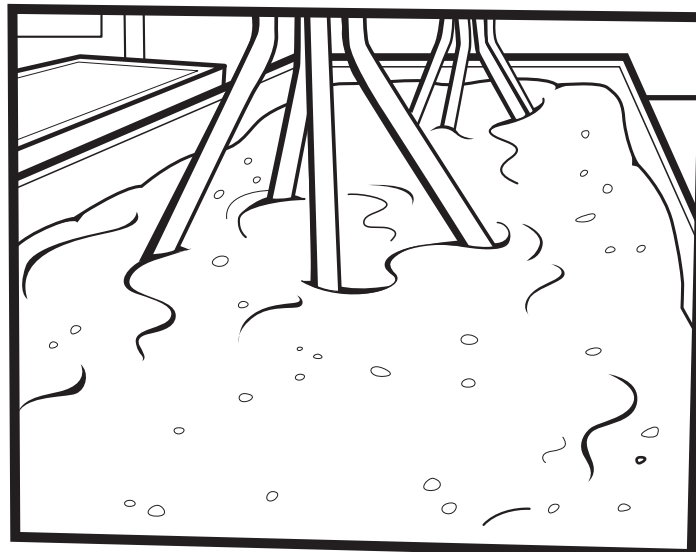
2. Before cheesemaking begins, the milk is carefully tested, weighed and heated, or pasteurized.



3. Milk is pumped into a large vat. Special ingredients, called starter cultures and enzymes, are added. They thicken the milk and give it the desired cheese flavor. Another enzyme, called rennet, is added to make the milk thicker – like custard.



4. Next, cheesemakers begin cutting the custard-like milk into tiny pieces. This separates the liquid, called whey, from the milk solids, called curd.



5. The curd and whey are stirred and cooked until the curd reaches just the right amount of firmness for the type of cheese to be made. The whey is drained and saved for other uses.



6. Depending upon the type of cheese to be made, the curd is salted and then specially handled by the cheesemaker.



7. The curds are pressed into forms and shapes. The cheese is then moved to a curing room where the temperature and humidity are just right to allow the cheese to age properly.

I ♥ WISCONSIN CHEESE



8. When the cheese has been cured for the desired length of time, it is ready to be wrapped and shipped to cheese lovers everywhere!

Many types
of **CHEESE**
contain little
or no lactose.

Vitamin A
to assist with normal
vision and help you
see in the dark.

Phosphorus
to strengthen bones
and help cells
make
energy.

Calcium
phosphorus and
other components
in cheese may help
prevent cavities.

Protein
to grow and build
muscles and other
tissues.

Sphingolipids
a healthy type of fat needed
to protect the body from
some types of cancer.

Calcium
for strong bones
and teeth.

Zinc
to grow and
repair tissues
and muscles.

Vitamin B-12
to help produce
red blood cells.

**Choose Wisconsin
cheese for good health.**

Wisconsin cheese supplies
calcium and other healthy
nutrients and can be part of
your three daily servings of
dairy foods. Eat cheese for a
healthy and hard-working body.



CHEESE GROUP

CHEESE

Wisconsin cheese and other dairy products are especially important for preteens and teenagers when the body is forming nearly half of all bone mass and about 15% of adult height is added.

Get a tape measure out and see how much you've grown lately.

How tall are you?

One and one-half ounces of natural cheese have the same calcium and protein as an 8 oz. glass of milk.

word scramble

Now that you have learned about the nutrients found in Wisconsin cheese, **UNSCRAMBLE** the answers to these questions about the nutrient functions in your body.

Which carbohydrate found in milk is not usually in cheese?

SOETCLA

Which fat found in cheese and other dairy products helps protect the body against some types of cancer?

SSPHGOLIIPNID

Which vitamin helps your body make red blood cells and is also needed to make DNA?

TANBMIIV-12

Name a B vitamin that helps the body's cells produce energy.

LVFAIINROB

What mineral helps grow and repair tissues and muscles?

NICZ

Which mineral helps build strong bones and teeth?

IUMCCLA

Working Words on a Dairy Farm



Wisconsin dairy farmers use many words which you may not know. Find the terms listed below in the Word Search box. If you don't know what some of these words mean, look them up to help you understand more about Wisconsin's dairy industry.

- Bovine
- Calcium
- Conservation
- Cream
- Cud
- Fertilizer
- Harvest
- Heifer
- Homogenize
- Lactation
- Nutrients
- Pasteurize
- Silage
- Tillage
- Udder
- Whey

N	M	N	C	C	E	H	P	R	L	R	O	P	J	E	S	Z	U	W	Z
L	O	T	S	E	V	R	A	H	P	E	N	E	V	N	F	M	D	X	U
W	A	I	S	I	L	A	G	E	Z	Z	O	X	S	I	E	Z	D	T	Z
N	G	C	T	H	M	F	J	O	Z	I	Y	W	H	V	E	I	E	X	S
U	T	N	T	A	B	M	Y	Q	N	L	R	W	S	O	G	A	R	Q	G
T	M	H	G	A	V	J	N	B	I	I	F	W	P	B	J	C	M	G	C
R	C	Z	F	J	T	R	F	T	X	T	L	P	Y	W	A	M	Y	P	T
I	J	R	G	G	E	I	E	J	I	R	F	D	V	L	X	V	J	V	U
E	P	B	E	G	F	G	O	S	K	E	P	Z	C	J	H	I	Y	E	E
N	X	M	N	A	K	Q	A	N	N	F	J	I	B	U	S	N	Z	R	T
T	Q	R	M	W	M	B	K	L	S	O	U	D	U	C	E	I	L	K	K
S	H	P	T	H	Y	V	S	U	L	M	C	T	V	L	N	H	G	R	J
V	D	T	P	A	S	T	E	U	R	I	Z	E	G	E	X	T	N	F	N
Z	C	G	M	B	C	Q	C	E	A	C	T	G	G	V	E	T	E	O	U
V	P	U	D	X	X	F	F	X	U	G	R	O	L	S	Y	B	T	I	P
W	L	L	B	L	Y	I	H	X	F	B	M	Y	B	W	L	S	F	R	R
B	I	H	J	P	E	G	G	P	T	O	E	G	H	I	T	G	I	L	J
J	Z	R	O	H	P	L	D	P	H	J	O	E	P	D	M	M	Q	B	T
U	L	T	N	A	K	U	U	I	K	L	Y	E	E	Y	X	V	P	X	K
K	S	G	W	W	B	D	O	Y	U	I	D	E	Q	P	Y	Z	K	S	O



Dairyland Code

Use the code below to answer these brain teasers!

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26

Who brought the first dairy cow to America?

3 8 18 9 19 20 15 16 8 5 18 3 15 12 21 13 2 21 19

What product uses approximately 90% of Wisconsin's milk?

3 8 5 5 19 5

What is milk mostly made of?

23 1 20 5 18

Which state is #1 in cheese production?

23 9 19 3 15 14 19 9 14

Cows spend an average of six hours each day doing what?

5 1 20 9 14 7

What is the most popular ice cream flavor?

3 8 15 3 15 12 1 20 5

90% of all dairy cattle in Wisconsin are what breed?

8 15 12 19 20 5 9 14

The average cow produces nearly
2,500 _____ of milk each year.

7 1 12 12 15 14 19



USDA Plate

Are you making good choices when it comes to eating?

One way to find out is to go to

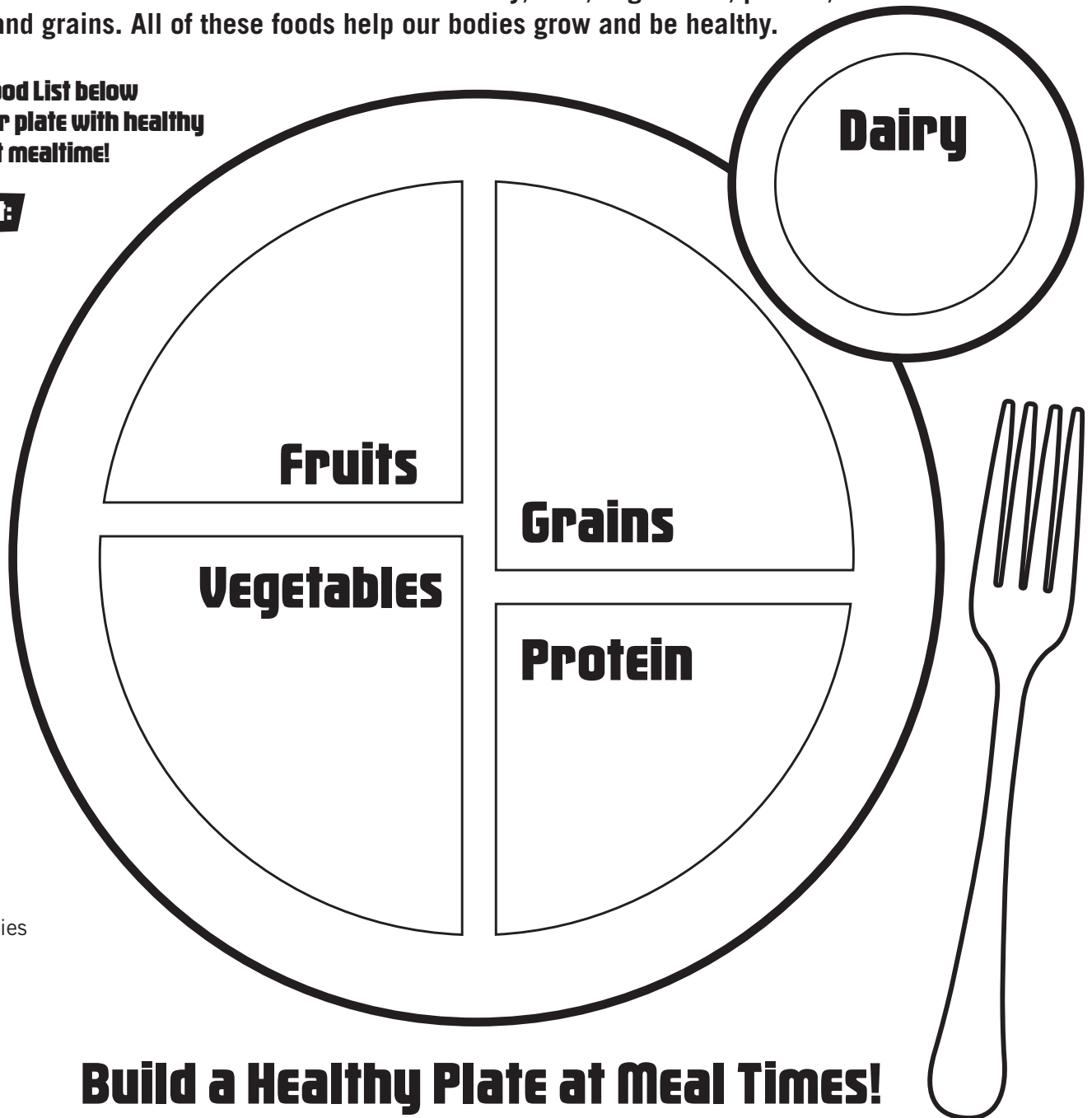
www.ChooseMyPlate.gov

This food icon helps us build a healthy plate at meal times and reminds us to include low-fat dairy, fruit, vegetables, protein, and grains. All of these foods help our bodies grow and be healthy.

Use the Food List below to fill your plate with healthy choices at mealtime!

Food List:

Apples
Steak
Carrots
Muffin
Grapes
Yogurt
Cherries
Pasta
Fish
Milk
Bread
Corn
Bagel
Cereal
Cheese
Broccoli
Beans
Chicken
Bananas
Strawberries



Build a Healthy Plate at Meal Times!

REFUEL with Chocolate Milk!

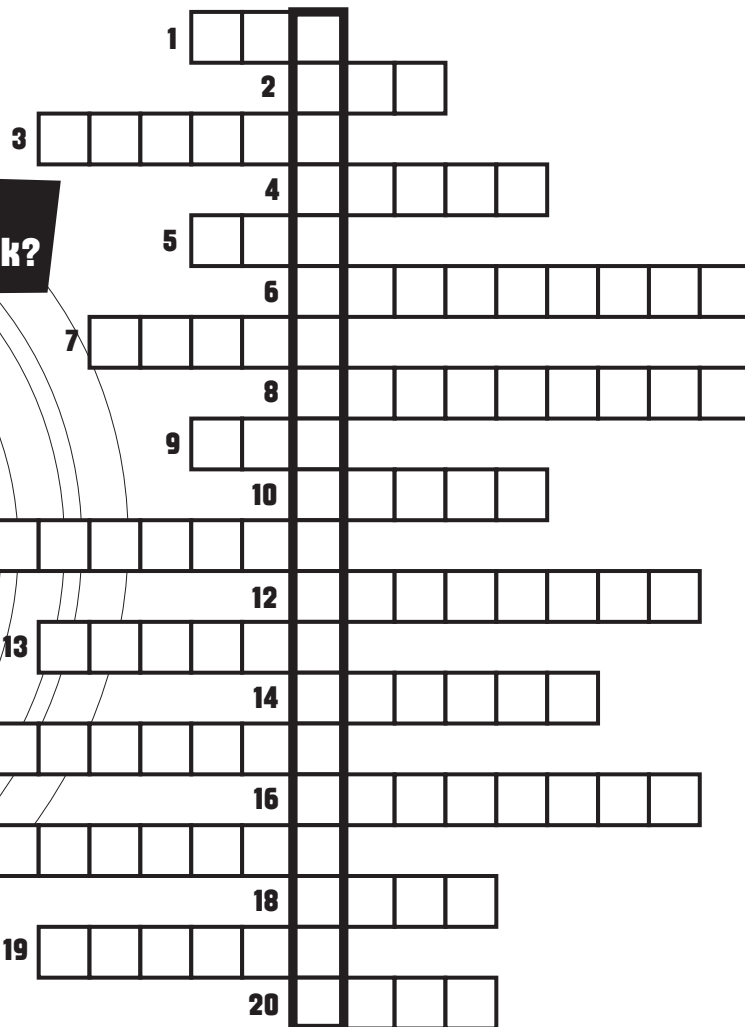
Low-fat chocolate milk has the right mix of nutrients to keep student athletes healthy - and tastes great, too!



Dairy Word Power Puzzle

Answer questions 1-20 "across" to reveal the highlighted "down" answer to the following question:

Who works in America's Dairyland, raising crops and cows, to produce milk?



- The average Wisconsin dairy _____ gives 112 glasses of milk each day.
- Drink milk _____ cold.
- Milk, cheese and yogurt are one of the Five Food _____.
- Top off a bowl of fruit with whipped _____.
- Guess _____ says "moo"?
- Calcium is one of the _____ found in milk.
- Calcium helps keep your _____ and teeth strong.
- The opposite of "REAL" is _____.
- It takes _____ pounds of milk to make one pound of cheese.
- Most children should _____ 3 glasses of milk each day.
- _____ cheese is used to make pizzas.
- Chocolate is America's favorite _____.
- _____ is a special ingredient in cookies.
- Creamy _____ is often flavored with fruit.
- Some people use _____ & _____ in their coffee.
- The _____ breed of cow is white with light to deep cherry red patches.
- _____ cheese is yellow and good in sandwiches.
- All dairy foods are made from _____.
- More than 600 varieties, types and styles of _____ are made in Wisconsin.
- The " _____ " means a food was made from "real" Wisconsin milk.

HELP WANTED!

You don't have to come from a farm to choose a career in the dairy industry. There are dairy-related jobs everywhere for anyone. With more than 300 different careers associated with Wisconsin's progressive dairy industry, the possibilities are numerous.

2 ACROSS

I am a scientist who studies microorganisms.

7 Down

I design and construct machines.

1 Down

I help you choose healthy foods to eat.

6 Down

I raise cows on a farm.

10 ACROSS

I make your food in a restaurant.

5 Down

I take care of animals.

3 ACROSS

I know how to grow plants and take care of the soil.

12 ACROSS

I make cheese from milk.

9 ACROSS

I know the law.

8 ACROSS

I'm good with numbers.

Word List

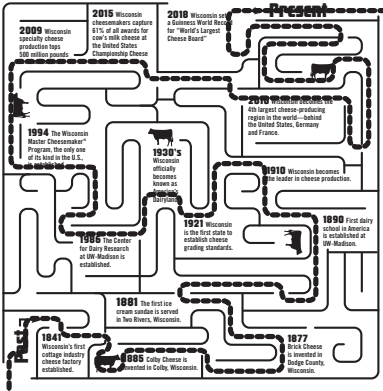
Accountant
Agronomist
Attorney
Cheesemaker
Chef
Dairy Farmer
Dietitian
Engineer
Microbiologist
Teacher
Veterinarian
Web Designer

11 ACROSS
I design pages on the internet.

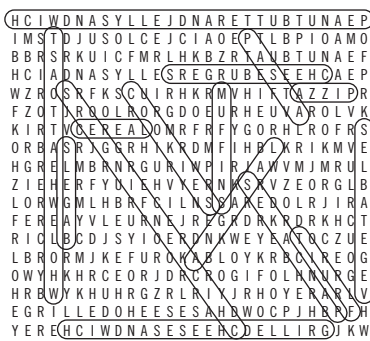
4 Down
I help you learn.

Answer Key

PAGE 3



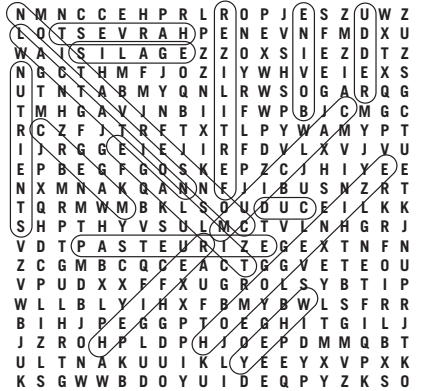
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word scramble

- CALCIUM
- WATER
- PHOSPHORUS
- VITAMIN B-12
- POTASSIUM
- NIACIN, RIBOFLAVIN
- VITAMIN A
- PROTEIN
- VITAMIN D

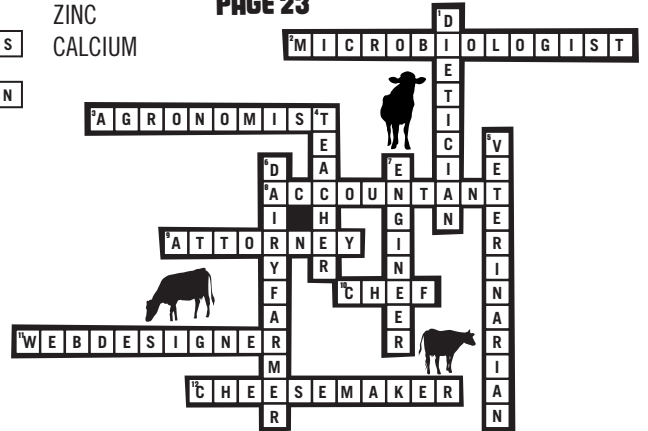
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PAGE 17

- LACTOSE
- SPHINGOLIPIDS
- VITAMIN B-12
- RIBOFLAVIN
- ZINC
- CALCIUM

PAGE 23



PAGE 6

- Moosical chairs!
- To get to the udder side.
- They have two left feet
- By milking the clock
- You're my butter half
- I better not tell you, it might spread
- Butter it up!
- SCREAM cheese
- Nacho cheese!
- Ched-arrgh!
- It's pasteurized before you know it
- It flew through udder space
- Moo Tube

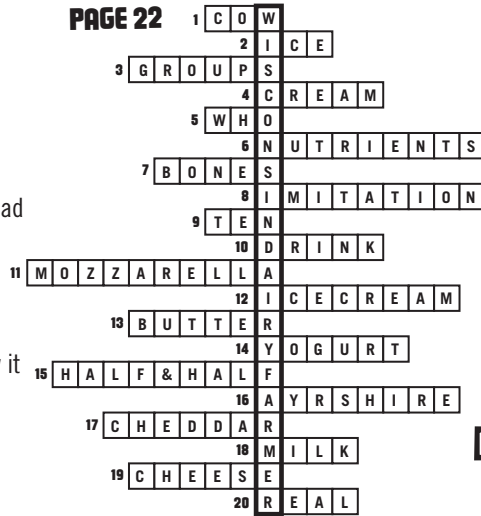
PAGE 7

- weigh
- pounds, drink
- four
- milk
- eating
- "HOLE" milk

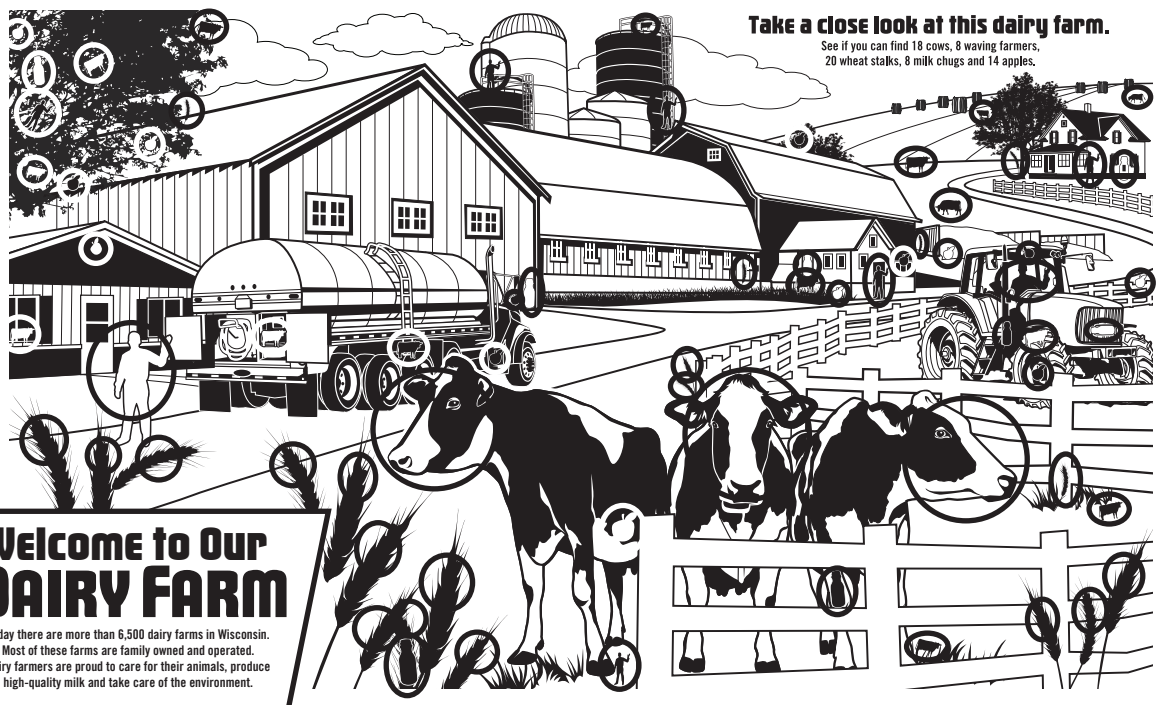
PAGE 19

- CHRISTOPHER COLUMBUS
- CHEESE
- WATER
- WISCONSIN
- EATING
- CHOCOLATE
- HOLSTEIN
- GALLONS
- JERSEY IS MY BREED

PAGE 22



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Take a close look at this dairy farm.

See if you can find 18 cows, 8 waving farmers, 20 wheat stalks, 8 milk chugs and 14 apples.

Welcome to Our DAIRY FARM

Today there are more than 6,500 dairy farms in Wisconsin. Most of these farms are family owned and operated. Dairy farmers are proud to care for their animals, produce high-quality milk and take care of the environment.