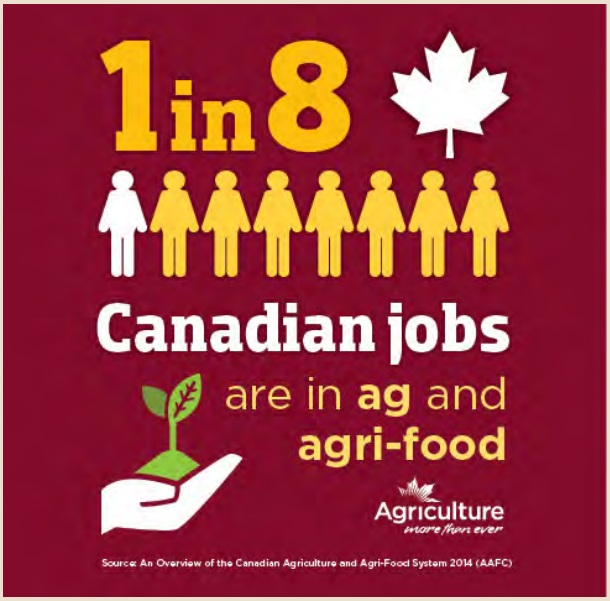
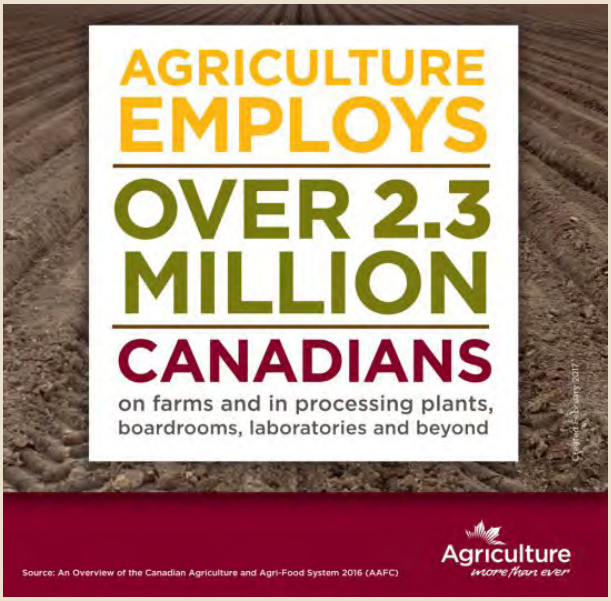
making A GLASS OF milk

When you drink a glass of milk, do you think about who made it and how it got into your fridge at home? Every product that we use or eat comes from somewhere and is made by someone.

The food we eat is one important way we are connected to our communities. A glass of milk connects you to people who live in rural and urban communities. You might be surprised to learn how many people it takes to get dairy products from a farm to your fridge.

Job Facts





Over 10 000 Albertans rely on milk to make a living. These people include veterinarians, nutritionists, researchers, professors, salesmen, milk haulers, store employees and processing plant workers.

Many communities also rely on milk. Dairy farmers hire people from nearby communities to work on their farms. Farmers buy food and other products from stores in the community. They may also buy seed, fertilizers and machines in the community to plant crops that feed their cows.

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The journey of milk starts on the farm, as it has for hundreds of years, with a farmer and a cow. Early dairy farmers had a close connection with the people who used their products, and often delivered those products directly to their neighbours.

Home Delivery

Delivery trucks such as this one were a familiar sight many years ago, delivering milk and other dairy products directly to homes.

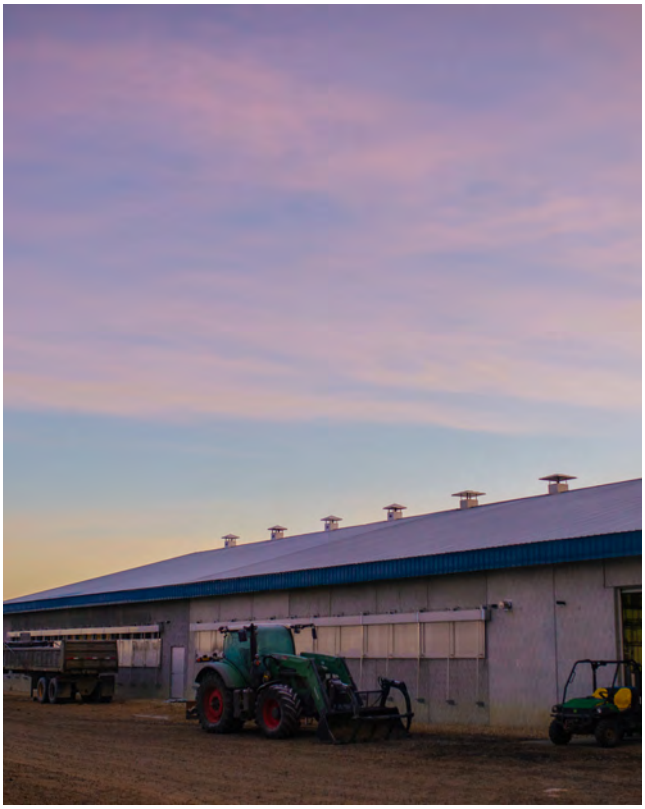
How do you think the job of the farmer has changed over the past 100 years? Why do you think this?

Today, dairy farmers rely on **milk haulers**, or people who are licensed and certified to transport milk, to pick up their milk from their farms and deliver it to the processing plant to be pasteurized and packaged.

When it's time for milking, cows are moved into a **milking parlour**, a part of the barn where farmers keep the milking machines. Modern milking systems use technology, like computer programs and robotics, to milk each cow two to three times a day.

The people who have jobs designing and building these specialized systems must know about computers, as well as have a good understanding of how a cow is milked or work with farmers who have this knowledge!

The proper care of dairy cows includes feeding, watering, providing bedding and shelter and monitoring health and safety. Dairy farmers work with dairy nutritionists to make sure the cows get all the nutrients the need for the best health and milk production. Most dairy farmers grow some of the feed that they use for the cows on their farms. Cows that are comfortable and well cared for grow better, are healthier and produce more milk.



How is the environment affected by the journey of milk? Dairy farmers and others who work in the dairy industry care about the environment. Farmers today have to be concerned with issues like:

- Protecting the soil so it keeps its nutrients.
- Managing manure. **Manure** refers to animal excrement that is used for fertilizer. It is a valuable by-product from dairy farms. Applying manure to cropland as a fertilizer is a sustainable agricultural practice because nutrients can be effectively recycled. Manure is a source of plant nutrients and improves the structure and water-holding ability of soil.
- Protecting the quality of the water. Agriculture uses water to irrigate crops and feed animals.
- Reducing greenhouse gases. **Greenhouse gases** are gaseous substances that can trap and hold heat in the atmosphere. Greenhouse gases can include the methane that cows produce when they digest their food. Manure emits **methane**, the main component of natural gas, and nitrous oxide. If methane leaks into the air, it absorbs the sun's heat. This warms the atmosphere and contributes to climate change.

Check out these examples of ways in which dairy farmers are finding ways to care for the environment:

- Many farms across Canada rotate the types of crops they grow on a field. This is called **crop rotation**. These farmers also make adjustments to their farm machinery to improve soil quality.
- Lakeside Dairy in Alberta uses ground up drywall with wood shavings for cow bedding. The bedding is composted and used with manure to make a fertilizer for the soil. This reduces construction waste that would have gone to a landfill.
- Greenhouse gases are reduced with improved feeding practices and management of manure.
- Many farms across Canada have invested in solar panels and windmills.

How many different jobs that are involved in making a glass of milk can you list? Identify as many jobs as you can.