

Grade 1: Food Transformers



Developed by AHS, Nutrition Services in consultation with the Body Image Research Lab at the University of Calgary's Werklund School of Education – April 2025



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Let's Look!



Speaker Notes:

Many foods change before we eat them.

Think about your favourite foods. Do you like them soft, crunchy, or smooth? The way food is changed can make a difference in how we enjoy it. This is called processing – which we will learn more about today.

Now, let's take a trip around the grocery store and find some examples!

Teacher background:

A more thorough explanation of processing is found in the Guide for Educators under Instructions -> Step 2

Image sources:

Microsoft 365 Stock Images

Fresh Cranberries



[Edaville Cranberry Bog 3](#). By [AndWat](#). CC BY 2.0

Speaker Notes:

Did you know? Canada is the second largest grower (producer) of cranberries in the world

Ask: Who has tried a fresh cranberry before? How does it taste? Sour and tart – like the tangy taste of a lemon.

Cranberries are a great example of a food that often is processed before we eat them.

References:

Agriculture and Agri-Food Canada. Canadian Cranberries. 2011. Available from: https://publications.gc.ca/collections/collection_2011/agr/A15-11516-2011-eng.pdf

Image sources:

"[Edaville Cranberry Bog 3](#)" by [AndWat](#) is licensed under [CC BY 2.0](#).

<https://www.flickr.com/photos/61685594@N00/2940005608>

Cranberry (photo on right): Microsoft 365 Stock Images

Cooked Cranberries



Speaker Notes:

Cranberries can be cooked and transformed into cranberry sauce or cooked into other foods, like muffins.

Canned Cranberries



Speaker Notes:

You might see cranberries in the canned food aisle, where you can buy cranberry sauce in cans.

Frozen Cranberries



Speaker Notes:

You can also find cranberries with other frozen fruit in the freezer. This is one way of processing that lets us eat cranberries all year long.

Dried Cranberries



Speaker Notes:

Dried cranberries can be eaten on their own, mixed into a trail mix or salad, or used in baking.

Ask: Have you tried dried cranberries before? Are there other types of dried fruit you like?

Sample Answers: raisins, dried apricots, dried mango, dried blueberries, etc.

Let's Look!



Speaker Notes:

Great work! We've learned that cranberries can be eaten many different ways. Trying foods in new ways can help you find more foods you enjoy. Maybe you don't like soft cranberry sauce, but you love chewy dried cranberries. Or maybe you've never tried cranberries before, but you like muffins – so a cranberry muffin could be a fun way to try them.

Think about how foods taste, smell, and feel. This can help you decide what new foods you'd like to try.

Now, let's explore another food.

Image sources:

Microsoft 365 Stock Images

Fresh Peaches



Speaker Notes:

Peaches are a fruit that grow in Canada, although they don't grow well in Alberta because our winters get too cold!

Ask: Who has had a fresh peach before? What does the outside feel like?

Sample Answer: Fuzzy. Another fruit very similar to a peach is a nectarine, but they are smooth on the outside.

References:

Agriculture and Agri-Food Canada. Crop Profile for Peach in Canada, 2019. 2021. Available from: https://publications.gc.ca/collections/collection_2021/aac-aafc/A118-10-20-2019-eng.pdf

Image sources:

Microsoft 365 Stock Images

Cooked Peaches



Speaker Notes:

Like apples, peaches can be cooked into a soft sauce – maybe you’ve had it in your lunch or as a snack. Peaches are cooked into sweet foods like cakes and pies, and also taste great when paired with foods like meat and vegetables.

Canned Peaches



Speaker Notes:

You can also find peaches in cans or fruit cups, either diced or sliced.

Ask: If you had to choose, do you like foods that are smooth and creamy (like applesauce) or foods that still have some shape and feel soft and juicy (like sliced or diced peaches?)

Answers may vary.

Key Message: The way food looks and feels after it's prepared can affect whether you want to eat it. Everyone has their own preferences (likes and dislikes).

Frozen Peaches



Speaker Notes:

You can find peaches in the freezer too. You can eat frozen peaches as a snack once they thaw, blend them into a smoothie, or even enjoy them in a frozen fruit bar.

References:

Health Canada. Eat vegetables and fruit. September 9, 2023. Available from: <https://food-guide.canada.ca/en/healthy-eating-recommendations/make-it-a-habit-to-eat-vegetables-fruit-whole-grains-and-protein-foods/eat-vegetables-and-fruits/>

Dried Peaches



Speaker Notes:

Just like cranberries, peaches can be dried too! These may be eaten as a snack or you may find them in your breakfast, like in peaches and cream flavoured oatmeal.

Ask: What is your favourite way to eat peaches?

Answers may vary.

Now You Try!



Speaker Notes:

You are really showing me that you understand how food is processed and transformed into other forms. Do you want to give it a try now?

Instructions for educator:

- The following slides show an example of how milk can be processed by cooking, canning, freezing, and drying.
- For each example, the image first shows a blank line in place of the process that has taken place to prompt students to demonstrate their ability to distinguish between the different processes (e.g., _____ Milk). The slide following has the process filled in (e.g., Cooked Milk).
- You may choose to have students practice writing the food processes down to practice their letters and spelling. They will have an additional chance to practice spelling with the handout that accompanies this lesson.

Image sources:

Microsoft 365 Stock Images

Milk



Speaker Notes:

Ask: What kind of milk products are we seeing here?

If needed, provide prompts such as: dried, frozen, canned, cooked, fresh.

Example images: fluid milk, yogurt, cheese, paneer

Image sources:

Cow - Microsoft 365 Stock Images

Fresh Milk



Speaker Notes:

Answer: Fresh milk. The milk is processed to make it safe to eat (a process called pasteurization heats the milk to kill the germs). The milk is transformed into different products like yogurt, hard cheese, or soft cheese like paneer.

Reference:

Health Canada. Raw or unpasteurized milk. May 6, 2024. Available from: <https://www.canada.ca/en/health-canada/services/milk-infant-formula/raw-or-unpasteurized-milk.html>

Image sources:

Cow - Microsoft 365 Stock Images

Milk



Speaker Notes:

Ask: How has milk been transformed to give us these foods?

Example images: broccoli chowder/milk-based soup, whole wheat pancakes, grilled cheese sandwich, pudding cup

Cooked Milk



Speaker Notes:

Answer: This milk has been cooked. Sometimes, it still looks like milk after it's processed, like in soups or creamy sauces. Other times, it changes a lot. Cheese can be melted into a sandwich or milk can be mixed into other ingredients to become something new – like pancakes, waffles, muffins, or pudding.

Milk



Speaker Notes:

Ask: How has this milk been processed?

Canned Milk



Speaker Notes:

It has been canned. Evaporated milk can be found on the shelf at room temperature. It is made by removing some of the water from it and then heating to kill germs. It can be used directly from the can as a thicker, creamier milk – often used in cooking like casseroles, omelets, soups, and sauces. You can also add an equal part of water (so if using $\frac{1}{2}$ cup (125 mL) of evaporated milk, add $\frac{1}{2}$ cup (125 mL) of water) to use like fresh milk.

A similar product is sweetened condensed milk. It also has water removed from it and is heated. Unlike evaporated milk, extra sugar is added to make it sweet and syrupy. It is used in baked goods.

References:

Unlock Food. All About Evaporated Milk. June 10, 2020. Available from:
<https://www.unlockfood.ca/en/Articles/Cooking-And-Food/Milk,-Yogurt-and-Cheese/All-About-Evaporated-Milk.aspx>

Milk



Speaker Notes:

Ask: These foods are an example of milk being – what?

Frozen Milk



Speaker Notes:

Frozen. Milk can be mixed with other ingredients and frozen to make foods like ice cream, gelato, frozen yogurt, and sherbet.

Ask: Can you think of other ways we might see frozen milk at the grocery store or your home?

Sample Answers: Frozen casseroles, frozen pizza, frozen pasta with creamy sauce.

Milk



Speaker Notes:

Okay, this is our last example for milk.

Ask: How has this milk been processed?

Dried Milk



Speaker Notes:

This milk has been dried. Dry or powdered milk has the same nutrients as fresh, liquid milk, but it can keep for longer and can cost less than buying cartons of milk. This is another type of milk that does not have to be kept in the fridge until it is mixed up and ready to be used. It can be used in baking, cooking, or for drinking.

Some people do not drink milk from cows. They may drink milk from other animals, like goats, or from a plant source, like almond, rice, soy, or oats. Many of these other types of milk can be found processed in different ways too.

Ask: Out of these examples we went through, are there any types of milk you have not tried before? Are there ones that you enjoy?

Reference:

Unlock Food. All about skim milk powder. April 28, 2020. Available from:
<https://www.unlockfood.ca/en/Articles/Cooking-Food-Preparation/All-about-skim-milk-powder.aspx>