

CAREER TREK'S GUIDE TO BECOMING A:

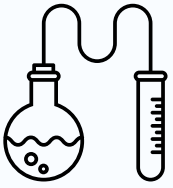


Food Development Specialist!

Do you sometimes wonder how certain flavours taste the way they do? Odds are, a food development specialist helped make it happen. Food development specialists apply their knowledge of science, technology, and engineering to the business of food processing and production. They use chemistry, microbiology, and engineering to maintain flavour, nutrition, convenience and quality standard.

You like: food, science, technology and creativity.

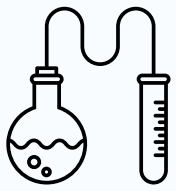
Skills: problem solving, innovation, organization and chemistry.



SUPPLIES NEEDED:

- Large resealable bag (1L)
- Small resealable bag (250ml)
- Ice cubes (1 cup)
- Table salt (1/4 cup)
- Milk or milk alternative (rice milk, soy milk, coconut milk) (1/4 cup)
- Sugar (1/2 tbsp)
- Whisk
- Measuring cups
- Extracts (vanilla, mint, maple, lemon, etc.)
- Optional toppings: chocolate chips, sprinkles, etc.





WELCOME TO YOUR NEW JOB!:

What do you think a food development specialist does?

- They help design new flavours or types of food.
- They develop food storage techniques.
- They determine the fat, sugar, vitamin or mineral content of products.

History of ice cream

- 1600s: sweet cream or fruit juices were frozen to create "frozen desserts"
- 1800s: the first hand cranked freezer
- 1900s: ice cream started to become more popular and sold in some diners
- Now: ice cream is wildly popular and industrial size machines allow for mass production

Congratulations! You have been hired as a Food Development Specialist by the Food Development Centre. They would like you to come up with a new ice cream flavour, but you need to make it the old-fashioned way with milk (or a milk substitute).

ACTIVITY INSTRUCTIONS:

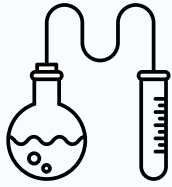
Old-fashioned ice cream:

- Fill large ziplock bag half full with ice (1 cup)
- Add 1/4 cup of salt to the ice and mix it well
- Mix 1/4 cup of milk/cream/substitute with 1/2 tbsp sugar and 1/4 tsp vanilla or other flavouring into the small ziplock bag.
- SEAL THE BAG WELL!
- Place the small ziplock bag into the large bag and seal tightly
- Put on winter gloves (if you have)
- Hold the large bag by its corners and gently shake, roll and turn over. Continue this for about 10-15 minutes to allow for the ice cream mixture to freeze
- When you have solid ice cream, remove the inner bag and transfer ice cream into a bowl
- Discard the bag along with ice and salt mixture into the garbage.
Do not pour ice mixture down the sink, as it will corrode old pipes.

OTHER IDEAS:

- Brainstorm what kind of flavour you want to make? Do you want a combo of two different flavours (extracts)?
- Add toppings to make your ice cream creation even more flavourful!





QUESTIONS TO THINK ABOUT:

What is the purpose of this occupation? What do they contribute to their community and are they necessary?

They ensure food safety is being implemented into everyday life. They also develop new foods for people to try and keep people interested in trying new things.

What other occupations could someone do if they were interested in some parts of this occupation but not all?

Chef, Lab Technician, Food Scientist, or Food Inspector.

CAREER TREK ROAD MAP:

Current School Subjects:

English Language Arts

Math

Science

High School Subjects:

English 40S

Math 40S

Chemistry 40S

Biology 40S

Food and Nutrition (recommended)

Post-Secondary Institutions:

University of Manitoba - Bachelor of Science in Food Sciences

Assiniboine Community College - Diploma in Sustainable Food Systems



Career Trek is an award-winning not-for-profit organization that provides education and career development programming for young people in realistic settings. Participants are engaged in hands-on learning experiences that are designed to ignite their passion, grow their confidence and increase their understanding of the important role that education and career planning can play in their lives.



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