Environmental Education: **3Rs (Reduce, Reuse, Recycle)** Make Your Own Beeswax Food Wraps

Background Information

We all have an important role to play in reducing and diverting waste from the landfill. Reducing the amount of waste created and finding ways to repurpose and reuse eliminates the need to dispose of items later.

There are choices we can make to reduce waste and often times simple changes will create a larger impact down the line. With some advanced planning and thinking we can reduce our need and consumption of many products.

For example, beeswax food wraps can



replace many common single-use plastics such as cling wrap and zipper lock bags. Beeswax wraps can be used to package food, cover leftovers or turned into pouches to carry snacks.

Make your own beeswax food wraps!

There are many different methods for making your own beeswax wraps. The materials and methods listed below are examples of simple ways to make your own wraps at home. Feel free to search online for different options, videos and pick the one that works best for you.

Materials

- Beeswax (pellets or grated from a block)
- Pine resin (optional provides cling/tackiness)
- Jojoba oil or coconut oil (optional provides flexibility)
- Cotton fabric (thin, cut into desired size)
- Parchment paper
- Paint brush or sponge brush
- Slow cooker and iron or oven and cookie sheet

Notes

- 1. Materials required will depend on which methods you choose to use to make your wraps. Read through instructions first and then gather necessary supplies.
- 2. The wax can be very sticky. Protect any surfaces you are working on. If you get wax on your work area, wait until it cools, gently scrap off what you can, put a piece of paper towel over the spot and use the iron to warm the wax. The paper towel will soak up the wax.
- 3. Use materials you don't mind potentially getting ruined. It is possible to clean off the wax from the slow cooker and cookies sheets but it takes a lot of work.

Method

Slow Cooker and Iron

- 1. Melt all ingredients together in a slow cooker (or double broiler) and stir until combined.
 - Pine resin has a higher melting temperature than beeswax. Be patient, the wax will melt first. To help the resin along, use small (dust or crumb) sized pieces and spread it out so it will melt quicker.
- 2. Place a piece of parchment paper on your work surface.
- 3. Take one piece of fabric and place on top of parchment paper.
- 4. Dip a brush into the melted wax and paint the top side of your fabric.
 - The wax will most likely dry before you are done painting this is okay.
 - Less is more! Do not paint a thick layer, start very thin, you can go back later if needed.
- 5. Take a second piece of fabric and lay on top of the waxy fabric.
- 6. Place a piece of parchment paper on top of both pieces of fabric.
 - You now have layers of: parchment, waxy fabric, clean fabric, parchment.
- 7. Use the iron and smooth it over the parchment paper.
 - The iron will remelt the painted wax and cause the second piece of fabric to soak up excess wax. Periodically peel the fabric apart and check for dry spots. If you see spots missing wax, use your brush to add a little wax, cover everything back up and iron again. You do not want your fabric to be covered in a thick layer of wax as it will peel and flake.
- 8. Peel fabric apart to reveal your two beeswax wraps leave to dry for about one hour.

Iron only

- 1. Place parchment paper down to cover the surface you will be working on.
- 2. Place your fabric on top of the parchment paper.
- 3. Evenly and thinly sprinkle beeswax and resin (if using) over the fabric .
- 4. Place another piece of parchment paper on top and iron until everything melts and is absorbed by the fabric.
- 5. Leave your wrap to dry.

Oven only

- 1. Heat your oven to approximately 180°C.
 - Watch the oven and temperature some of the ingredients are flammable.
- 2. Place your fabric on a cookie sheet.
 - Do not use a cookie sheet you will want to use for cooking later.
- 3. Evenly and thinly sprinkle beeswax and resin over the fabric.
- 4. As soon as the wax melts pull it out of the oven and spread around with a paint brush, reheat as needed to spread and cover the fabric with wax.





Using Your Wraps

- Wrap leftovers portions of fruits and vegetables to store in the fridge
- Wrap sandwiches for lunches
- Use to cover bowls or containers
- Fold into pouches for snacks
- Wrap cheese once removed from plastic packaging

Cleaning and Care

- Rinse in cool water, use mild soap if necessary, let dry
- Store rolled up or folded
- Not recommend for use with raw meat
- If you find your wrap is cracking, you can try using an iron (with parchment paper) to melt and redistribute the wax

<u>Expand</u>

Look for items at home to reuse to make your wraps (cotton t-shirts, handkerchief, sewing scraps).

Design an experiment to test your beeswax wraps. Compare different foods stored with the wraps vs with plastic wrap vs with nothing. (If doing this please keep in mind that we want to limit food waste so consider using the 'end' time for each food to be when it must be eaten instead of when it goes stale or rotten).

Brainstorm other ideas to reduce waste. Pick one and try it for a few months.

Find something in your house that comes with a lot of packaging. Research ways to either reduce the amount of packaging (e.g., buy in bulk), ways to reuse the packaging (e.g., keep bread bags and use again) or how you would recycle that type of packaging.

Still Curious?

CRD Waste and Recycling

Love Food Hate Waste Canada — Love Food Hate Waste is here to help us all make the most of the food we love.

<u>Recycle BC</u> — Recycle BC is responsible for residential packaging and paper recycling in BC. They are the stewardship group responsible for collecting your household packaging and paper recycling and getting it to processing facilities and markets.

If you have any questions about this activity, waste or recycling in the region, or are looking for ideas on how to connect this topic with other learning opportunities, please contact us at education@crd.bc.ca.

