

BIG IDEA

Immunity- Intermediate

<p>Know: <i>(content)</i></p> <p>Vocab <i>Basic barebones themes</i></p> <p>Immune System</p> <ul style="list-style-type: none"> - Keeps us healthy - Symptoms when healthy - Symptoms when unwell - How it's everywhere in the body <p>Know what a toxin is</p> <ul style="list-style-type: none"> - chemicals - emotional/stress - germs/viruses <p>Know which vitamins/foods/ strengthen the immune system</p> <ul style="list-style-type: none"> - Vitamin C - Honey - Ginger - Lemon - Greens <p>Know some simple parts of the body contain the immune system</p> <ul style="list-style-type: none"> - Skin - Organs - White blood cells 	<p>Understand: <i>(big idea)</i></p> <p><i>How do we strengthen our immunity</i></p> <p>Certain foods and behaviours strengthen and weaken our immune system</p> <p>The role toxins play in weakening our immune system</p> <p>The role sunshine, fresh air, water, happiness, food and sleep strengthen our immune system</p> <p>Liken the immune system to an army, with the soldiers (white blood cells, skin, organs, etc) fighting off the enemies (germs, viruses, toxins, etc)</p>	<p>Do: <i>(core and curricular competencies)</i></p> <p><i>Communicate</i> <i>Critical & creative thinking</i> <i>Personal & Social</i></p> <p>Identify what foods they may be eating or lifestyle habits they have that can make them feel unwell</p> <p>Make a plan to involve more activities and foods into daily living to strengthen the immune system (washing hands, eating coloured fruit, drinking water, fresh air)</p> <p>Prepare a tea that will strengthen the immune system, including cooking skills (using knives, measuring spoons, boiling water)</p> <p>Explain the specific ways nettle helps to build immunity</p> <p>Extend - have the ability to make cough drops with immune strengthening foods</p>
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MATERIALS & PREPARATION

<p>Materials: Tea Ingredients (Wild nettle, honey, ginger) Cups Grater Cutting board Knife for peeling and chopping ginger Kettle Serving canteen (coffee pot, bodum) Strainer Measuring spoons</p>	<p>Preparation: Gather ingredients and cooking equipment Create flashcards Create instructions for different groups (ginger chopping, grating, nettle measuring, honey, water pouring/boiling) Notify volunteers of supervision needed while cooking (especially with knife and hot water use)</p>
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INSTRUCTIONAL MODEL (5E)

Engage: (*interest piqued, prior knowledge assessed*)

- Does anyone know what our immune system is?
- Has anyone been sick before? What were the symptoms you felt?
- Do you know of any foods that make you feel ill?
- Start making the tea right away so it has time to steep
- Observe: pass a picture of fresh nettle around with the bad of dried

Explore: (*inquiry-based activity*) – Assess if the children are aware of the immune system being like a army, protecting the body from invaders - ask if they know what those invaders are and then tell them if they left any out

Flashcards - Split class into two groups and pass out cards, draw two titles on the board: Immune Building and Immune Weakening - ask them to make a line under the heading of what cards build immunity and which cards weaken them (example pictures are sunshine, car exhaust, fruit, fast food, etc)

Following the recipe to make the tea, serve it to the class

Explain: *(students communicate what they have learned)*

Identify the foods that build our immune system, as well as non physical items like sunshine, fresh air, happiness/positive thinking

Tell the first nations story about foraging stinging nettle, warn them about proper picking methods, and explain how it's valuable for the immune system

Write the recipe down, make it at home

Extend: *(transfer knowledge to other concepts)*

Kitchen observation - go home in fridges and cupboards and compare the immune strengthening vs. weakening foods

Experiment with different tea blends

- Make a list of different immune building herbs, give tea bags for them to go home and make their own blends

Make homemade cough drops (recipe attached)

Evaluate: *(assess student understanding)*

Observe if students incorporate immune strengthening techniques in the class - proper hand washing, sneezing, fruit and veggie snacks

Ask the class to make tea when there are many people away absent

Ask them to draw pictures of anything that may build or deplete immune systems

Ask them to write a story about the immune army and the offending invaders



Nettle Tea

1 rounded tbsp nettles
1/2 thumbs length ginger
1 tbsp honey
4 cups water

- 1) Bring the water to a boil, add ginger. Turn the heat down and simmer for 10-20 minutes.
- 2) Remove from heat, stir in nettle and honey
- 3) Let steep for 5 minutes.
- 4) Pour through a strainer into a tea pot, or pour into a bodum. Serve.

Homemade Cough Drops

1/2 cup honey
2 tbsp lemon juice
1 tsp fresh grated ginger root
Optional - vitamin C powder for dusting.

Equipment needed - Stainless steel pot, candy thermometer, measuring cups and spoons, candy mold or cookie sheet with oiled parchment paper.



- 1) Measure honey into a pot.
- 2) Grate ginger, juice lemon, and add to honey
- 3) Heat on medium high heat and stir continually
- 4) Once bubbles start to rise, take of heat and stir until foam reduces.
- 5) Alternate the process until the heat reaches 300 degrees on the candy thermometer
- 6) Pour into a mold or parchment paper, let cool on the counter
- 7) Pop out of the mold or break it into piece, coat with Vit C if using.
- 8) Store in a container in the fridge

