

Title of Lesson or Unit: Boosting Immunity

Type *(Primary/Intermediate)*: Primary

Snack: Ginger Chive Broth

Know:

(Concepts & content)

Vocab, Basic barebones themes

What immune system is

- Part of your body
- Keeps you healthy

How immune system fights sickness

- Special defenses to prevent entry of germs (skin, stomach acid)
- Soldiers to fight (white blood cells)

Foods and activities that strengthen the immune system

- Water
- Whole foods
- Exercise, sleep
- Love, joy, healthy relationships

Foods and activities that weaken the immune system

- Processed and artificial foods
- Sugar, caffeine
- Sedentary lifestyle
- Isolation, anger, resentment

Vocab

- Immune system
- Immunity
- Broth
- Allium
- Pungent
- Steep

Understand:

(Big idea)

Our diet, lifestyle choices, and mindset, all play a role in either strengthening or weakening our immune system

When our immune system is strong, we get sick less and recover faster when sick

Knowing about our bodies and making healthy choices helps us look after ourselves

Good health comprises of physical, mental, and emotional well-being

Do:

(Core and curricular competencies)

Communicate, Critical & creative thinking, Personal & Social

Identify dietary and lifestyle factors that can strengthen or weaken our immune system.

Identify symptoms of sickness and realize when our bodies are needing a break

Recognize pungent smells in foods like ginger and allium vegetables (garlic, onion, chives)

Prepare healthy broth with recipe using immune-boosting ingredients

Safely work with boiling water and kitchen tools such as a cheese grater and scissors

Materials & Technologies

Students will use/require the following materials, tools, equipment

- EarthBites journal
- Pencil

Pre-Class Preparation

The facilitators will need to make the following preparations prior to class(es)

- Electric kettle
- Tea pot
- Small mesh strainer
- Plastic cups for serving
- Thumb of ginger
- Small bunch of chives
- Cheese grater
- Paring knife
- Cutting board
- Scissors to cut chives
- Tablespoon
- Hand towel

INSTRUCTIONAL MODEL (5E)

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

- What is the immune system and what does it do? What does “immunity” mean?
- Who has been sick before? How did you feel when you were sick? Discuss for older grades, act out for younger grades.
- What does it feel like to be healthy? Discuss or act out.
- How does our immune system keep us healthy?
- Now we will look at foods that boost our immune system so we will get sick less and recover faster when we do get sick
- Introduce chives and ginger as broth ingredients, pass around for students to see, smell, feel, etc.
- Discuss origins, preparation tips, and benefits of chives and ginger for the immune system
- Prepare broth with student volunteers (wash and cut chives, grate ginger) and allow to steep

Explore: *(inquiry-based activity)* – experiment ideas, anything that is hands on

- Hand out “Boosting Immunity Worksheet” to students
- Have students draw what a healthy person would look like based on their own experience
- Have students draw what they think a germ would look like that might make you sick
- Have students identify pictures on worksheet and guess whether they might “feed” the healthy person or the germ
- Have students draw lines to connect the immune strengthening pictures to the healthy person and the immune weakening pictures to the germ

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

- See “Core Competencies” above
- Have students fill in the “Today in EarthBites, I learned...” section on their Boosting Immunity Handout

Expand: *(transfer knowledge to other concepts)* – teach at same time or build onto other plans

- Harvest chives from the garden to make ginger miso soup as a class

- Create a T-chart sheet with “Immune Strengthening” on the left and “Immune Weakening” on the right. Have students go home and search their kitchens for food items that either strengthen or weaken the immune system, and share their findings with the class.
- Encourage students to talk to a grandparent or great-grandparent about how they used to fight sickness when they were growing up (could be foods, drinks, herbal remedies, activities/routines, etc.). Share findings with class.

Evaluate: *(assess student understanding)*

- What kind of a snack could you make yourself at home when you are sick that would help you recover faster?
- What else could you do to help your body recover?
- What other kinds of tea, broth, or soup could we make with ingredients that we know are healthy and that boost the immune system?

Ginger Garlic Broth Recipe

Serves: 4

Ingredients

- 2-3 tablespoons chopped chives
- 1 thumb sized piece of ginger, peeled and grated
- 4 cups water, boiled



Instructions

1. Add chopped chives and grated ginger to teapot and pour boiling water over.
2. Steep broth for 5-10 minutes or until desired flavour is reached.
3. Once steeped, pour broth through mesh strainer into mugs. Can add a sprinkle of sea salt or seaweed flakes if desired.

Ginger Miso Soup Recipe

Serves: 2-4

Ingredients

- 2-3 tablespoons chopped chives
- 1 thumb sized piece of ginger, peeled and grated
- 3-4 tablespoons miso paste
- 2 teaspoons dried dulse flakes (optional)
- ¼ cup diced tofu or tempeh (optional)
- 4 cups water, boiled



Instructions

1. Spoon miso into medium sized bowl. Add ½ cup of boiled water and whisk to blend, making sure to break up any clumps of miso.
2. Add remaining ingredients to bowl. Stir with whisk.
3. Ladle into mugs or soup bowls and enjoy!