

Brain Mold Activity

Objectives:

• To demonstrate how brain injuries can be prevented by wearing a helmet

Materials required:

- Brain mold (you can purchase one online)
- Large mixing bowl
- Whisk
- Tea towel
- Plastic wrap
- Large plate
- Helmet

Ingredients for the gelatin brain:

- 6 boxes (85g each) peach or watermelon flavored gelatin powder (e.g. Jello)
- 1 can (385 ml) evaporated skimmed milk (99.5% fat free)
- 2 teaspoons (10 ml) of vegetable oil or vegetable cooking spray (to lubricate the plastic mold)
- 3¹/₂ cups (875 ml) of water (2¹/₂ cups or 625 ml boiled, 1 cup or 250 ml cold)
- Green food coloring

Instructions:

1. Coat in the inside of the mold with 2 teaspoons (10 ml) of vegetable oil. Wipe off any excess oil.

2. Empty gelatin powder into a large mixing bowl.

3. Add 2 ½ cups (625 ml) of boiling water. Stir with a whisk until completely dissolved, about 3 minutes.

- 4. Add 1 cup (250 ml) cold water.
- 5. Add skimmed milk and stir for 2 minutes.
- 6. Add a few drops of green food coloring to enhance the 'flesh' tone. Stir again.

7. Pour gelatin mixture into the plastic mold.

Adapted from a resource (or publication) produced by the City of Hamilton Public Health Services. Translated and distributed by the Ontario Neurotrauma Foundation.

- 8. Leave approximately one inch space from the top of the mold.
- 9. Set brain mold into an empty bowl or wrap a tea towel around its base to keep it upright and level.
- 10. Allow to set in the refrigerator overnight.

Extracting the gelatin from the mold:

- 1. Carefully shake the mold until the gelatin loosens from the mold.
- 2. Using a plate that is larger than the mold, place the plate over the top of the mold and turn the mold over.
- 3. Shake the mold again.
- 4. Continue to carefully shake the mold until the gelatin brain releases onto the plate.
- 5. Cover the gelatin brain with a plastic food wrap and return it to the refrigerator until you are ready to put it on display.

Teaching Strategy(s):

- Place the brain on display for participants to see how susceptible the brain is to injury.
- Place the brain in a helmet and drop it on the floor. Do the same thing without the helmet and note the difference between wearing a helmet versus not wearing a helmet.