

Supplemental Helmet Education Activities

BRAIN DEMONSTRATION:

Purpose:

Add a hands-on and interactive element to your equine helmet education program! Create a life-like brain out of gelatin to demonstrate the fragility of the human brain and the importance of protecting it.

Activity:

1. Pass one gelatin brain (on plate) around the participants to allow them to touch, jiggle and experience the fragility of the human brain. You may keep the brain on a plate in a ziplock to prevent mess, or allow to be uncovered to allow the youth to touch it.
2. Use a second gelatin brain mold (in ziplock) to demonstrate helmet effectiveness. Place the brain in a demonstration helmet (astm/sei certified) and drop the helmet from 6-8ft high. This height demonstrates the average height off the ground a rider's head is when they riding a horse.
3. After dropping the helmet with the brain in it, pull the brain out and show the level of damage (more like the lack of damage) to the gelatin.
4. Next, drop the unprotected brain from the same height to demonstrate the damage that can occur without a helmet.
5. You can also demonstrate the helmets by dropping honeydew melons with and without a helmet.
6. Have the youth reflect on what they have seen and learned.

Supplies:

- Brain mold
- Spray vegetable oil
- 2(6 ounce) boxes gelatin, mix any flavor (peach or watermelon give the best color)
- 1 $\frac{3}{4}$ cups boiling water
- $\frac{3}{4}$ cup cold water
- 9ounces fat-free evaporated milk(must be fat-free or it will curdle)
- TO MAKE GRAY
 - 15drops red food coloring
 - 15drops green food coloring
 - 15drops blue food coloring

Directions:

1. Before each use, wash the mold with warm soapy water and a soft cloth or sponge.
2. Spray or smear the inside of the mold with a small amount of vegetable oil, then wipe out the excess.
3. Put the gelatin mix in a large bowl and add the boiling water.
4. Stir about two minutes until the mix is dissolved.
5. Stir in the cold water.
6. Stir in the evaporated milk and food coloring.
7. Adjust coloring until it is the perfect pinkish-gray and stir.
8. Pour the mixture in the brain mold, stopping about 1/4 inch from the top.
9. Place the brain mold in a shallow bowl so it will sit level, and refrigerate overnight.
10. To remove the brain, shake the mold gently until the gelatin loosens.
11. Place a flat plate upside down over the open side of the mold, then flip the mold and the plate together.
12. Lift the mold off, leaving the brain on the plate.

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EDUCATIONAL VIDEO: Every Time, Every Ride

Purpose:

This education video discusses the importance of using helmets when riding to prevent injury. The video utilizes interviews of people who have been affected by a head injury, either their own or someone they know. These interviewees range from surgeons, to parents, profession trainers, and Olympic riders.

Activity:

1. Show this video during your helmet safety program or discussion.

Supplies:

- Every Time, Every Ride video.
 - Every extension office should have a copy available, however if it cannot be found, a copy can be purchased from Washington State 4-H Foundation at <https://pubs.wsu.edu/ItemDetail.aspx?ProductID=15591&SeriesCode=&CategoryID=282&Keyword=>