**Foodprint**

**Understanding Connections Between Food Choices and the Environment**

**Prof. Jennifer Jay**

**Session 7**

**Chemical Pollution and Food Systems**

**Class Plan**

**Class Overview:**

1. Introductions (5 min)
2. Discuss case of glyphosate. (5 min)
3. Brainstorm topics in chemical pollution and agriculture—Think Pair Share (10 min)
4. Small group work (20 min)
5. Reporting out of small groups (10 min)

**Glyphosate:**

RoundUp (trade name for glyphosate), made by Monsanto, is a weedkiller that can be added in higher amounts to genetically modified “RoundUp Ready” crops.

Residues of glyphosate have been found in foods. The Environmental Working Group did a study and presented a brand by brand listing of the levels of glyphosate measured.

<https://www.ewg.org/childrenshealth/glyphosateincereal/>

Residues were found less frequently and in lesser amounts in organic oat products.

Glyphosate exposure is a huge issue for people working directly w the chemical. In fact, while Monsanto is arguing against the evidence showing carcinogenicity, three separate juries have found that the glyphosate exposure was a factor in the development of cancer, and further, Monsanto was liable b/c it didn't warn people of the cancer risk.

**Brainstorm**

**Think-Pair-Share.** Ask students to first think to themselves about an interesting topic they may have heard of that involves chemicals in the environment and agriculture. They can use the internet. They can discuss with the person next to them.

Some examples could be:

* + Impacts of chemicals on bee colonies
  + Chlorpyrifos use—petition for ban was denied by current administration’s EPA
  + Effects of DDT on egg shells
  + Differences between chemical levels in organic versus conventional produce

Next, go around the room or ask for volunteers so people can share the ideas with the whole group.

**Active learning small group work**. Create small groups of people with common interests and research the topic for 20 min. Groups may be able to make a few slides. (20 min)

Groups can report out. (10 min)

**Optional for bee colony collapse disorder:**

You can read this article and either talk about in class or assign it as reading.

<https://www.sciencenewsforstudents.org/article/why-are-bees-vanishing-pesticides-disease-other-threats>

Or, you can just see if one of the groups chooses this topic, and you can suggest this article as one potential starting place.