

[In-class Assignments](#) >

Investigative Report & Media Analysis

You are doing an investigative report on plastic bottles and recycling: what types of food, which brands of food, use which kind of plastics?

Some plastics are now considered to be unhealthy--especially if the plastics are heated or cleaned with boiling water (such as baby bottles or bottles that are washed in a dishwasher). For example, the general public should avoid plastic food and beverage containers made with bisphenol A or containers which are made with nonylphenol.

Both of those chemicals are endocrine disruptors – they disturb the body's hormonal messaging. Synthetic xenoestrogens, such as BPA, have been linked to a variety of health problems (obesity, attention deficit hyperactivity disorder, breast cancer, decreased testosterone levels and a wide range of developmental problems), often at surprisingly low levels of exposure.

This is a THREE-PART assignment:

- **Research the 7 main types of recycled plastics (see the list below), and on the separate blog pages record your findings.** Make sure to include the URLs/citations from where you got your information. Look for information on websites from credible organizations: major academic, medical, scientific associations, etc.. (In class each person will be given one or two of the seven types of recycled plastics to research.)
- **In a supermarket that in your area, record the recycling symbols on specific foods on a Google spreadsheet** (linked here to this site). In class you will be divided into groups. Each group will look at one of the following foods types:

1. dairy (milk, yogurt, cheese, etc.),
2. pet food
3. baby food
4. condiment/sandwich spread (ketchup, mayonnaise, jelly, peanut butter, etc.)
5. prepared food (prepacked cold cuts, pasta, etc.)
6. drinks (water, soda, juice, etc.).

You will record in a spreadsheet the numbers of plastic recycling symbols for your type of food, and for food brands. You need to find 25 different products in your food category. Please try to find at least two brands of each kind of food: (so **CONDIMENTS**: Heinz ketchup #5; Hunts ketchup #2; Grey Poupon mustard #2, French's mustard # 4, etc.)

Once the spreadsheets are created we will use IBM's ManyEyes to evaluate our data. You can check out that site for data visualizations here:

http://manyeyes.alphaworks.ibm.com/manyeyes/page/Stack_Graph_for_Categories.html .

- **Research how mainstream news outlets cover plastics – find AT LEAST five stories in five different news outlets. Do you think media do a good job at educating the public about recycling? Do you think media do a good job at educating the public about plastic hazards? Why or why not?** What are the consequences of that coverage? You might want to consider questions such as whether the stories were written as health or environment or science or business stories.

Please post your analysis (in the field below) by adding a 200+ word comment and the links (URLs) to the five news stories you've found. Unless you are the first person to analyze the coverage, you must analyze the coverage, but also do so in part by reading and responding to

the comments of all those above you.

Plastic Recycling Symbols Revisited

By: [Michael Arms](#)

... Plastic recycling symbols show the types of resin used to create the plastic. These representations are established following the international **Plastic Coding System**, and are customarily illustrated as a number (from 1 through 7) enclosed by a triangle or a simplified triangular loop (also known as the Mobius loop), with an acronym of the specific resin used, right under the triangle....

Plastic recycling symbols are conceptualized chiefly to aid the personnel in recycling facilities in appropriately grouping materials for disposal.... Here are summarized explanations of all of the 7 recycling symbols universally used, today:

1 - PET or PETE (Polyethylene Terephthalate Ethylene)

Light weight, low-cost, and easy to make, PET is the most prevalent plastic material in use today. PET is mostly used in softdrink bottles, food containers, and microwaveable food trays. It can be remade into paneling, fiber, carpet, etc. The necessity for this material among recyclers is quite strong, but until today, the recycling rate for this material has remained low at 20%.

2 - HDPE (High Density Polyethylene)

HDPE is sturdier and susceptible to chemical corrosion, this plastic poses a fairly meager risk of spreading chemicals when used as receptacle for food and drinks. It is chiefly used as containers for common household chemicals (shampoos, detergents, etc.), garbage bags, tubs for short shelf life food products like yogurt, [milk jugs], etc. This can be remade into dog houses, chairs, plastic lumber, pipes, etc. [Nonylphenol (NP) is used as an antioxidant and plasticizer in some HDPE plastic products. After the discovery of its endocrine-disrupting potential, concern over human exposure to this chemical has increased.]

3 - PVC (Polyvinyl Chloride)

Polyvinyl Chloride has been known as a health hazard - it has been established to frequently leach chemicals when used as containers. PVC is commonly used for piping, jewelry cleaner bottles, siding, etc. It has chlorine and will emit toxins if ignited. PVC should be avoided in food preparation or food packaging. It can be reconstituted into mudflaps, speed humps, flooring, etc. [Most household plastic wrap is made from polyethylene, PVC, or PVDC.] [Nonylphenol (NP) is used as an antioxidant and plasticizer in some PVC plastic products. After the discovery of its endocrine-disrupting potential, concern over human exposure to this chemical has increased.]

4 - LDPE (Low Density Polyethylene)

Low Density Polyethylene is the material present in bread wrapping, sheets, film packaging, etc. Tough and elastic, it is ideal for packaging, insulation, and sealing. LDPE, through many curbside recycling programs, can be recycled into trash can liners, plastic lumber, and plastic lumber.

5 - PP (Polypropylene)

PP is most suited for boiling liquid containers and is likewise used in brooms, straws, ketchup bottles, etc. PP can be reprocessed into signal lights, brushes, trays, etc.

6 - PS (Polystyrene)

PS is an excellent component for insulation and is used in foam products like expanded polystyrene (EPS), generically known as styrofoam. It is manufactured into disposable food containers, egg cartons, disposable cups. PS contains benzene, a cancer-causing chemical and should not be incinerated. It is recycled into insulation, hobby rail road objects, water buoys, etc.

7 - OTHER (Polycarbonate)

Recycling symbol 7 - OTHER lumps materials not belonging to any of the other 6 resin classifications. OTHER may also signify a hybrid resin made up of a mix of those materials. It is commonly present in baby feeding containers, flak vests, camping jugs, computer cases, etc. It can be remade into plastic planks and other custom-made objects. Not all number 7 plastics are polycarbonate, some are even plant-based. Polycarbonate has become the center of controversy in recent years, as it is discovered to discharge **BPA (bisphenol A)**, a hormonal disruptor that may severely alter child-bearing and fetal growth.