2016 November 1

Chapter 8 Discussion Question: Page 232 #7

One obstacle that will be faced in redesigning the bottles is that the cost to do so would be very significant. Lots of the machinery that is used to make the current bottles would have to be replaced or adapted to fit the needs of manufacturing the safer bottles. The cost of the bottles themselves would likely be higher, as the current materials used for bottles are likely the cheapest choice available. One reason for all of the questionable materials currently in bottles is so that the bottles are reliable and last. You could leave a case of water bottles in storage for many years and they would still be fine to drink out of. On the other hand, biodegradable packaging is often weaker and less resilient to temperature changes. For example, my family owns a candy company and we sometimes sell ice cream at farmer's markets or fairs. One festival we attended required the use of biodegradable cups and plates, and it was midsummer. My father left the cups in his car, and the dramatic heat change caused all of the cups to melt together, rendering them all useless. This would turn people away from biodegradable water bottles as the melting of the bottles would ruin the bottles and cover whatever the bottles were in with water.

Some of these issues are easier to overcome than others. The problem with the cost of the water bottles could be solved via a change from a focus on getting people to recycle by the government. Many states have a couple cent cost per bottle that the consumer gets back when the bottle is recycled. Instead of this, the government could cover part of the cost of the more environmentally friendly bottle. The problem with the weakness of the packaging is a bit more difficult. The bottles may have to be made thicker than normal or an new type of environmentally friendly packaging may need to be developed.