



Trendy source of waste

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There's a plastic explosion going on in the United States. In 1990, Americans bought 1.1 billion pounds of plastic in the form of bottles, according to the Container Recycling Institute. In 2002, they bought more than three times that - 4 billion pounds.

America's population has increased only slightly since 1990. And the amount of plastic used in the average beverage container has actually decreased. Why are today's consumers using so much more plastic?

"That increase is not coming from shampoo bottles," says Jenny Gitlitz, a spokeswoman for the Container Recycling Institute. "It's coming primarily from water bottles."

The sale of custom containers - an industry category including shampoo, ketchup, mayonnaise, and noncarbonated beverage containers - increased more than fivefold between 1990 and 2002.

"There is a new class of beverages that were introduced that didn't exist 10 years ago - all these single-serving water bottles, and sports drinks, and energy drinks," Ms. Gitlitz says. "But it's not just that they exist. It's also that people are buying them and drinking them away from home."

As a result, Gitlitz explains, more beverages are now sold in single-serving bottles.

The single-serving bottles are convenient, and the choice of higher-quality drinking water as a snack beverage appeals to consumers as a healthful option.

But most probably don't think about the problems created by that growing source of plastic waste.

Plastic certainly has some "green" appeal as a packaging material.

It has supplanted other bottling materials because it is efficient economically and ecologically, says Robert Krebs, communications director for the American Plastics Council.

"It's a very, very efficient packaging material and very responsible in terms of a choice for the environment," Mr. Krebs says.

Where glass and aluminum must be heated to very high temperatures to be shaped, plastics become molten at much lower temperatures. So making plastic bottles uses less fuel.

The nature of the plastic also allows for "source reduction" - using less material for the same product, in this case the same number of bottles.

Glass bottles can be only so thin. But plastic bottles use about 27 percent less plastic than they did 10 years ago, Mr. Krebs says. Manufacturers have achieved source reduction by making bottle walls thinner, preserving their strength with corrugation, a technique not possible with less malleable materials.

But plastic does have costs. All bottles end up incinerated, in landfills, or recycled. And plastics recycling is not as prevalent as environmental and industry advocates would like.

Aluminum, glass, or plastic containers are recycled only if consumers toss them in the right bin. The American Plastics Council estimates that only 50 percent of plastic bottles now go into a recycling bin.

Even after bottles are collected, features of the market for plastic recyclables dictate that many are never reincarnated.

Ideally, bottles are claimed at recycling centers by entrepreneurs who plan to use them. These second users pay little or nothing for bottles besides the cost of hauling them away.

But at current collection rates, they may have to visit many sites to amass enough bottles for their purposes. The cost of new plastic is often lower.

The supply of new plastic is also more reliable. "You can't call up and order more [recycled plastic]," Krebs explains. "If I make binders or parking bumpers from recycled plastic ... I'm at the mercy of people putting things in their recycling bins."

Whether collected bottles are recycled depends on how many are amassed.

One means of increasing bottle collection rates are so-called "bottle-bill" programs - administered by industry - which give consumers 5 or 10 cents for every empty bottle they return to a supermarket. But only 10 states have passed bottle bills since the early 1970s.

Most environmental groups want to bring bottle bills to more states and to expand existing programs, many of which collect only carbonated-beverage bottles.

But such programs are not popular with the beverage industry because "there is an immense infrastructure that must be set up," Krebs says.

Ultimately, she says, the programs are a cost passed on to the consumer.