



[Entertainment & Culture](#) [Immigration & Education](#) [Politics, Growth & Transportation](#) [Food, Consumer Life & Sustainability](#)

Health & Environment

The Conscious Consumer

Changing How the Future is Packaged

BY SALLY GAO

A look at the benefits of biodegradable packaging and why so few companies use it.

- [A City Slicker's Guide to Eating Local](#)
- [More Than Just Water](#)
- [Eating to Save the World](#)
- [Our Use of Plastic Bags](#)
- [The Walmartization of Organic Food](#)



Micro Poll
Have environmental concerns improved your opinion of the Green Party at all?

- ☐ Yes
☐ No
☐ Undecided



Do you use plastic bags?

Canada is running out of places to dump its garbage in. The overflowing amount of waste produced by this country is overflowing to the U.S. at rapid rates in states like Michigan and it's causing a dilemma for landfill owners. According to Environment Canada, the city of Toronto produces around 975,000 tonnes of household waste per year. And about 50 to 70 per cent of that garbage is plastic waste. Plastic and paper garbage are the leading sources of tangible waste produced by Toronto residents recently. Although more than half of paper and plastic waste is recycled in some manner, there's still a small portion of it that ends up in landfill sights.

Luckily, with the recent development of biodegradable packaging, these kinds of material can dissolve over time and not create any leftover waste. Companies who use biodegradable material to package their products help eliminate waste without the recycling procedure. This is because biodegradation is a natural, biological process in which a kind of substance chemically breaks down into simpler structures by living organisms. This means there's no need to recycle biodegradable items 'C they can decompose under natural conditions. Therefore, biodegradability reduces the persistence of plastic and paper garbage in the environment, which leads to the longevity of the eco system.

Various stores and restaurants across Toronto use biodegradable packaging to assure garbage reduction when recycling is not an option. Stores like Costco and Dominion were the first grocery companies to utilize this recent method of packaging. However, just a slightly increase of companies are using it after them like T&T (a food supermarket), McDonalds restaurant and most recently Danone Yogurt Company. Costco and Dominion use biodegradable plastic on

grocery bags, T&T primarily uses it on bakery goods, McDonalds uses it on fresh salads, and Danone uses it to seal their yogurt. With its mainstream popularity, the number of companies using biodegradable plastic in Toronto is surprisingly small compared to other parts of the world. The reason for this case is largely a result of the tremendous expenses paid to afford such production. Besides the high cost of producing biodegradable material, there's also a little amount of promotion for this new scientific invention. Even though 100 per cent of the shopping bags are biodegradable in Toronto's Dominion Supermarket as plastic packaging expert and Dominion grocery clerk Hazel Luvass says, the store rarely make this usage known to the public, so not many people know it even exists.

According to Luvass, Dominion and Big Carrot are two of the few grocery stores in Toronto that are environmentally conscious and invest a lot in garbage reduction. For example, Dominion has a recycling program that collects plastic bags from consumers and converts them into biodegradable shopping bags as Luvass notes. It also uses biodegradable cardboard bins in the backroom without the public's knowledge. The lack of public exposure to biodegradability, in Dominion produce clerk Victor Kang's opinion, is due to the government's strict restrictions on promoting environmentally friendly methods of packaging. "The government and fossil fuel companies decide how much of biodegradable packaging is promoted because they care about making money," Kang says.

Because plastic packaging is labeled as one of the chief contributors to garbage accumulation, biodegradable packaging has derived from years of scientific experimentation to make some plastics chemically disappear after its use. Luvass says that 60 per cent of Toronto's packaging is biodegradable. This innovative packaging material comes from plant sources, mainly potato, corn and wheat. Thus, its texture is softer than regular plastics. According to Machine Design magazine, biodegradable material visibly disappears into the soil "without depositing synthetic materials or toxins." There's also a variety of different kind of biodegradable material used in the market. For example, biodegradable polymers like polyethylene terephthalate adipate and polylactic acid are now found in food packaging and paper-coated packaging.

Since this kind of packaging comes in the form of plastic or paper, biodegradable packages conveniently reduce about 50 per cent of the garbage produced locally. What's unique about biodegradable material is that it can reduce to a pile of compost where plastic material cannot. "Plastics are made of long polymer molecules which are too long and too tightly bonded together to be broken down during composting," states Guelph Food Technology Centre's Senior Research Scientist Carol Zweep on an online document posted by Guelph Food Technology Centre. As for the sustainability of biodegradable packaging, this eco-friendly material used to wrap food and other kinds of products comes from renewable resources and not petrochemical supplies, thus generating market opportunities for farmers, entrepreneurs and ultimately companies.

Although biodegradable packaging is a positive addition to the market because it helps the environment in so many ways, the majority of companies still don't implement it across Canada. And only a portion of stores in Toronto uses it. According to Zweep, the lack of advocacy for biodegradable package use in North America is greatly influenced by the cost factor. "The cost of biodegradable packaging is still higher than traditional options, so unless the use of eco-friendly alternatives is either legislated by the government, or demanded by consumers, or made cost-effective, the volumes aren't sufficient to cover the expense," says Zweep.

Countries outside North America have more incentive to use biodegradable packaging, however, because it's a growing global concern to save the environment nowadays. Many countries around the world are setting forth action to use eco-friendlier alternatives to product packaging, describes Environmental Plastics Inc. (EPI) Account Executive Louis Hartley on the online article by Guelph Food Technology Centre. The government of Ireland, for example, taxes 15 cents per plastic bag. Also, the government in the U.K. and Australia are considering banning plastic bags from supermarkets. China has banned carrier bags in major cities, as have Taiwan and different states in Bangladesh and India. It looks like the whole world is now stepping up for the sake of sustaining the environment either through biodegradable packaging or other means.

As like many customers, Stephanie Quail, a part-time Medical Device Researcher, is keen on the idea of biodegradable packaging but has never really seen it in the local spotlight. She says she usually doesn't see products identified as being packaged with biodegradable material even though some are. Despite the lack of package promotion, Quail says she thinks this new form of packaging is a step forward for the environment because being able to compost plastic helps the environment in a major way (since plastic takes a long time to degrade). She says the aspect of getting rid of plastic waste all together saves a lot of garbage problems because it saves on oil. "But if the use of energy is required to produce [biodegradable packaging], there's a problem," says Quail. "Oil may run out in six to eight years, so there should be a sustainable, biodegradability production method."

In summary, biodegradable packaging exists in Toronto, but not many people are aware of it. Although it's beneficial for the environment, the cost to produce this kind of packaging is a major issue in North America when companies consider using it. Thus, a few merchandisers use it across Toronto. As little as people know about the use of biodegradable packaging in grocery stores and product companies, it is still an important innovation for conserving the environment. Not only does it cut back on garbage, fossil fuel burning and pollution, it also saves trees and polymer because it's made of renewable natural resources, which biodegrades and reduces waste.

As Luvas addresses, "everybody has to do their part to help the planet" so less garbage ends up in landfills. Although it's uncertain how long biodegradable packaging will last because there's only a limited amount of natural resources to use, the one thing that is certain is that this form of packaging will continue to be implemented in years to come to reduce garbage. And it may ultimately force people to rethink their environmental ethics because the environment affects us all.

Published March 27, 2008