

What happens to the green bin material?

A broad range of items are placed in the green bin collection. A complete list of acceptable items for the green bin program, also known as the green cart program, can be found on your municipality's website or at the end of this article. Generally, materials collected in the curbside green bin/green cart are the things you would expect, including food items such as:

- Fruits
- Vegetables
- Cheese
- Bones
- Animal skin
- Soiled napkins
- Kitty litter
- Soiled pizza boxes

Once collected, green material is combined with a small amount of yard waste material to create compost.

But, given the wide use of the compost, it may be unsettling to know that human sanitary items such as tampons and diapers as well as animal feces are acceptable green bin items in some jurisdictions.

How is the garbage turned into compost?

An aerobic composting system is used by many municipalities to transform green bin material into compost over a period of approximately seven months. The process begins by collected green bin materials being pre-screened to remove inappropriate items and combined with the small amount of yard waste materials to control moisture levels. After this the combined material is placed in a climate controlled environment to control smell and allow the compost process to begin. During this cycle, organic



Figure 1: Shown above is an example of green bin collection containers used in many municipalities, including for residents of Ottawa, Ontario.

Source: <http://www.ortlandstar.com/News/Local/2011-11-29/article-2819665/Biweekly-green-bin-collection/1>



Figure 2: Once collected, green bin material is taken to a designated location for pre-screening.

Source: http://www.toronto.ca/greenbin/organics_processing/processing_css_step2.htm

organisms begin to breakdown material and because of the heat produced during the aerobic composting process, pathogens and harmful bacteria are removed. The material is turned over periodically to maintain optimum temperature, oxygen and moisture levels. Due to the heat produced and use of organisms to break-down material, health experts confirm it is safe to include such items as sanitary products and fecal matter. In the final stage of compost production, the material is moved outside for a period of time and allowed to further break-down. At this stage, a final screening is done to remove plastic bags and other non-compostable materials. To maintain safety and quality, all compost must meet the requirements established by the appropriate provincial or territorial agency, which for example includes the Ontario Ministry of the Environment's *Organic Matter Recycling Regulation*.

Depending on your municipality or Region, the final compost material is either available directly or indirectly. For residents of the Toronto, Vancouver, Greater Moncton and Peel regions for example, compost is made publicly available at designated facilities. While for residents in York Region, Halton Region and the City of Calgary, compost material is indirectly through a third-party distribution process.



Figure 3: Depicted above is the final product, safe and ready to use compost.

Source: http://www.toronto.ca/greenbin/organics_processing/processing_css_step4.htm

Green Bin Acceptables:

- Fruits
- Vegetables
- Meat and fish products, including bones, fat, skin and shellfish
- Grain products, including pasta, bread, rice and cereal
- Baked goods and baking ingredients such as cake, cookies, flour, sugar, spices, eggs and egg shells
- Dairy products including milk, cheese and yogurt
- Food products including candy, confectionary, coffee grounds, coffee filters and tea bags



Figure 4: Depicted above, residents of many municipalities are encouraged to separate green bin acceptable materials from recycling and garbage collections.

Source: http://www.simcoe.ca/ws_cos/groups/public/@pub-cos-swm/documents/web_images/wscos_009991.gif

- Paper Products including paper towels, facial tissue, muffin paper, microwave popcorn bags, paper candy wrappers and heavily soiled paper products (paper plates, cups, boxboard, cardboard, pizza boxes, flour bags, sugar bags, moulded pulp trays, newspaper, poly coat containers (such as ice cream containers) and kraft paper.
- Personal Hygiene including diapers, sanitary products, incontinence products, nail clippings and hair**
- Pet waste including kitty litter, dog waste, pet bedding and fur, feathers, pet food and bird seed*
- House plants including soil
- Other includes small amounts of shredded paper, household plants, soil, dried and fresh-cut flowers, wood-sources sawdust
- Grass clippings and weeds
- Leaves and garden waste
- Tree fruit, berries and evergreen needles
- Branches, hedge clippings, bark chips
- Dryer/vacuum lint
- Topsoil and sod

*These items are not acceptable green bin material for Halton Region, City of Calgary and City of Vancouver.

** These items are not accepted in the green cart programs for Halton Region and Peel Region.