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## A WARM WELCOME

New HSC hospital to transform women's healthcare thanks in part to facility management team

2017 CHES Award Winners  
A Green Alternative to Composting  
Hospital Garden Yields Fresh Food

# POWER OF DIGESTION

**Runnymede Healthcare Centre adopts alternative composting technology to 'eat' through waste**

By Roxanne Hathway-Baxter

**T**here is a long-standing commitment at Runnymede Healthcare Centre to improving sustainability. Proof of this is in the hospital's ambitious, five-year strategic plan, laid out in 2015. As Runnymede celebrated its 70th anniversary, it pledged to continue to implement strategies and technologies that will lessen the hospital's environmental impact, cut operating costs and improve the health of the community as a whole.

Runnymede soon made good on its promise when it invested in a green technology to more efficiently manage its organic waste production.

Last year, while using tools like the Ontario Hospital Association's green hospital scorecard, which tracks a hospital's environmental efficiencies and results from its annual waste audit, Runnymede discovered there were some gaps in its waste management process. Large amounts of organic waste were being sent to landfills because there was no viable green bin strategy in place to recycle these materials.

The hospital looked at several potential solutions to the food waste problem. After careful research and consideration, it settled on bio-digestion as the best option. A bio-digester is a fully enclosed machine that can be used as an alternative to

traditional composting. The device takes hundreds of pounds of solid food waste, including both raw and cooked leftover foods, from patients' plates each day and converts it into filtered wastewater in a totally chemical-free process.

The bio-digester essentially works like a large mechanical stomach, combining leftover food with water, plastic bio-chips and enzymes to break the waste down. The filtered waste water that is produced can then be safely sent down the drain.

The whole process, from collection of waste to environmentally-friendly output, takes approximately 24 hours, and is constantly monitored by the bio-digester. Statistics on the usage and amount of food being digested are recorded, allowing the hospital to see exactly how much waste is being recycled.

The environmental benefits provided by the bio-digester are huge and the impact can be seen as soon as six months after installation. Using this device for a year will divert nearly 50 metric tonnes of solid waste from landfills. Further, its operation only requires around the same amount of electricity needed to illuminate seven compact fluorescent light bulbs.

Cost benefits are evident, as well. Prior to its use, Runnymede was spending more than \$1,000 each year to send solid food

waste to landfills. Since its implementation in October 2016, this expense has been reduced by roughly half, with more cost savings expected to come. The money that is saved can be reinvested to better serve patients at the hospital and the community in general.

Additionally, because solid waste can be transferred directly from patients' plates into the bio-digester, less garbage disposal units are needed, which will bring down costs over time. Moreover, kitchen staff can focus their attention on other facets of their jobs, rather than having to devote time to taking food waste to outdoor containers.

The many benefits of the bio-digester are apparent, making it a perfect addition to the hospital. New technologies like this are enabling hospitals like Runnymede to improve their sustainability, which in turn is beneficial for the environment, as well as more cost-effective for the institutions themselves. ■

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