## Invention offers hope to diabetics

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Engineer and scientist John Saringer set out to create a portable device that would increase blood flow from the calf back up to the heart.

What the Whitchurch-Stouffville resident discovered is his device, the Venowave, not only does that but also helps heal diabetic foot ulcers.

"It keeps surprising me. It's better than I ever thought," he said.

So far, anecdotal evidence over the past year-and-a-half has been 100-per-cent positive, according to Mr. Saringer.

"Even 50 per cent would be good," he said. "I don't know if we really got lucky."

Prior to the Venowave, drugs such as blood thinners and Band-Aids were "the gold standard of care with almost 90-per-cent failure rate," said Dayna Switzer, general manager of Stouffville-based Saringer Life Science Technologies.

Mr. Saringer, who is also CEO of the company, said 1,000 diabetic-related lower limb amputations take place every year within the GTA.

"Once tissue doesn't heal anymore, you can't walk and you end up with an amputation," Mr. Saringer told The Sun-Tribune. "We're trying to intervene before the situation gets hopeless."

Mr. Saringer has been working on the mobile device for about 15 years. He wanted to provide people who suffer from Economy Class Syndrome, or deep vein thrombosis/blood clotting in the legs, relief.

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The machine weighs about 250 grams and straps onto the calf. When turned on, the battery-operated Venowave mimics the body's venus system, preventing blood from remaining still and clotting, according to the company's web site.

"People don't move enough and have enough circulation in their bodies," Mr. Saringer said. "Our bodies are meant to move and if they don't tissue dies."

Since 1959, Helene Johnson has been suffering from excessive swelling in her left leg following a car accident that broke her leg at the ankle and below the knee.

Ms Johnson, who is a former executive director of the Whitchurch-Stouffville Chamber of Commerce, had a number of surgeries to help alleviate the pressure, but they haven't worked, she said.

Saringer Laboratories is donating a Venowave to Ms Johnson. She'll be the first person in York Region to receive the device, according to Mr. Saringer.

In an effort to help secure funding for clinical trials on diabetic foot ulcers, the company is also giving units away to diabetics, with permission from their doctors, who will also monitor the testers.

The trials cost between \$2- and \$3-million and "for a small company, that is a hefty bill," Ms Switzer said.

"It's the ultimate test of the technology," Mr. Saringer said.

"Not everybody may benefit (from the unit) and we need to know that, too," he said.

The Venowave costs \$499 and is not covered by OHIP, but may be covered by private insurance companies, Ms Switzer said.

To be a part of the diabetic foot ulcer trial, go to http://venowave.com



STAFF PHOTO/MIKE BARRETT

Whitchurch-Stouffville's John Saringer discovered his device, the Venowave, helps heal diabetic foot ulcers. Diabetics are being sought to take part in trials for the device.

