

# Trina Health Artificial Pancreas Treatment: A New Approach to Diabetes?

By Mark Pound

When I first heard about the Artificial Pancreas Treatment® (APT) I was skeptical. A treatment that slows, halts, or even reverses the complications of diabetes? It sounded too good to be true. But now that I've seen it with my own eyes, I'm a believer.

Let me give you three quick patient examples I've experienced myself.

- A male patient came into the Trina Health of Missouri clinic in Chesterfield with a necrotic toe—a condition that, unfortunately, is not rare with diabetes. He had heard of APT and thought what did he have to lose? After just a couple of treatments the necrotic tissue began to slough off and healthy skin appeared.
- A female patient suffering from neuropathy underwent just two treatments before exclaiming, “Wow! I can feel my shoes.”
- Another female patient who was afraid she would lose her job due to being unable to think clearly due to chronic diabetic fog not only had her fog disappear but was also full of energy after a couple of treatments.

Incidentally, these three cases (and more) are all documented.

## **Diabetes isn't a blood sugar problem, it's a metabolism problem**

Until now, the focus on diabetes has been controlling blood sugar, either through medication or via insulin injections. However, this didn't treat the core problem: the body's inability to metabolize carbohydrates.

In a healthy individual, in the presence of a meal, the pancreas secretes bursts of insulin every four to six minutes at a specific pressure. This signals the liver to produce enzymes necessary for proper carbohydrate metabolism. Diabetes occurs when this metabolic communication breaks down, and the liver no longer receives the signals to function properly. The result is an increase in lipid metabolism leading to oxidative stress and inflammation followed by common diabetic complications such as neuropathy, retinopathy, nephropathy, cardiovascular disease, fatigue, erectile dysfunction—all resulting in early mortality.

## **How the Artificial Pancreas Treatment works**

There are other devices on the market that call themselves Artificial Pancreas, but the Artificial Pancreas Treatment, available only at Trina Health, is the only FDA-approved process that normalizes carbohydrate metabolism in Pre-Diabetes, Type 1 and Type 2 diabetics.

After an IV line in the arm is started, the patented, FDA-approved Bionica Microdose Pump is attached. This small mobile device (about the same size as a smartphone) plugs into a neonatal IV needle that's virtually painless.

The pump's IV infusion mimics the insulin pulses of a healthy pancreas, which stimulates the liver to produce the enzymes necessary for carbohydrate metabolism. Not only does this produce more cellular energy, APT also calms inflammatory cytokines, reduces cellular oxygen requirements, helps normalize blood flow and allows cells and organs to heal themselves through our own DNA encoding.

## **Individualized treatments**

On a patient's first visit, a baseline is established determined by their history, vitals, condition and current diagnosis of pre-diabetic, Type 1 or Type 2. The medical team then programs the Bionica Microdose Pump to meet those specific parameters.

A normal treatment takes about four hours. During that period patients are free to sit, walk around, and go outside, work, read or whatever they choose. They're not confined to a chair.

Initially, patients receive weekly treatments until their metabolism is stabilized. Once the patient is able to maintain normal carbohydrate metabolism, treatments are then extended so that, eventually, patients come in only once every, two, three, or four weeks.

## **If APT is so wonderful, how come I've never heard of it?**

I hear this from doctors and patients all the time.

Although treatment clinics are fairly new, the actual infusion device was invented over 20 years ago by G. Ford Gilbert who sought a treatment for his two-year-old daughter with Type 1 diabetes. As you would expect, it took years of development including 16 top-level university trials, 16 peer reviewed papers, over 53 publications and 23 Medicare studies as well as the lengthy FDA approval process.

To make his invention available to the widest number of people, Dr. Gilbert entered into a marketing partnership with Trina Health, which in turn licenses the Bionica Microdose Pump to companies like Animo Health so they can open clinics worldwide.

To date there have been no reported side effects of APT, no adverse events, no recalls and no failures.

And Dr. Gilbert's daughter? Thirty years later she's the mother of five healthy children.

## **Why can't I simply buy the Trina Health Bionica Microdose Pump in a drug store?**

Even though it's small and mobile, the pump isn't like a blood pressure monitor.

It is an FDA-approved medical device that must adhere to certain protocols. For that reason, only personnel licensed to administer and manage an IV can supervise the infusion pump's use. They must also undergo training on the treatment calculations used to program the device and calibrate it to match each patient's condition. That's why our staff, for example, includes a nurse practitioner, a licensed practical nurse, and a physician medical director.

## **Artificial Pancreas Treatment is not a cure**

Although the Artificial Pancreas System has been proven to be successful in slowing, stopping and even reversing the ravages of diabetes, it is NOT a cure.

We're still waiting for that miracle.

To find out more, contact the clinic staff of Trina Health of Missouri at 314-628-1607.

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Mark Pound is the president and CEO of Amino Health, Inc. which is licensed to do business as Trina Health of Missouri.