OmniPod Insulin Management System

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Diabetes is when your body cannot produce enough insulin or use the insulin effectively. Insulin is a chemical your body produces to regulate the metabolism of fats, carbohydrates, and aid in the conversion of glucose to glycogen.

There are 3 different kinds of Diabetes In Type 1 diabetes, the immune system kills the insulin producing cells in the pancreas resulting in little or no insulin production. This type needs insulin injections daily to live. In Type 2 Diabetes, the pancreas produces sufficient insulin, but the body cannot use it productively. People with Type 2 diabetes need to diet, exercise, and sometimes take an oral drug or dose of insulin to lower their blood glucose levels. Pregnant women are the only ones who can get or have gestational diabetes.

There are a few ways to treat Type 1 Diabetes. The main treatment for diabetes Type 1 is daily insulin shots. A trained professional teaches the patient how to inject, how much to inject, where to inject, and when to inject insulin. New types of insulin pumps such as the beeper attachment and the Omni Pod management system insert insulin directly into the fatty tissue where insulin is best absorbed and delivered.

Many people who have diabetes, as you may know have to give themselves a shot of insulin daily, or before and after they eat depending on the seriousness of their condition. You also may have seen people with a beeper sized apparatus clipped on their pants connected to a tube, which is also a way of delivering insulin to the body.

The newest diabetes device is called the Omni Pod. This device is a small and very light (I mean 1.1 oz and 1.6 x 2.4 in. about the size of a strawberry). It is worn on the abdomen and is very inconspicuous.

The Personal Diabetes Manager (PDM) is pre-programmed with your personal basal rates (once again that's the insulin delivered continuously during the day) and bolus doses (given according to what you eat). The PDM is basically a palm pilot with pre-programmed to constantly monitor blood glucose levels, deliver insulin, and keep record of all of the patient's information.

When it is time for an insulin dose to be given, with the push of a button the Omni Pod automatically inserts the cannula (a small and flexible tube with a needle at one end) into the subcutaneous layer of skin. Because it is an automatic setting, the error is reduced significantly. The needle insertion is painless, fast, and accurate. It eliminates the risk of patient error and uneasiness when administering themselves with insulin doses. The PDM beams the information to the Omni Pod and it does as directed by the user.

Benefits of the Omni Pod include no hassle with tubing between the PDM and the actual Omni Pod worn on the body. Because of this feature, patients don't have to worry about showering, exercising, sleeping, or any activity because the Omni Pod will stay on without any problems.

The Omni Pod is now available by



prescription. It received 510(k) clearance from the U.S. Food and Drug Administration (FDA) on February 1,

2005.

The initial cost of the OmniPod Insulin Managament System is only \$1000 to \$1500. Though the cost of the OmniPod will eventually equal the cost of the other systems (\$5000-6000) since all the insulin filled OmniPods are not given at once.

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