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## News Release

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### Medtronic Receives FDA Approval for World's First Insulin Pump with Real-Time Continuous Glucose Monitoring

#### ***MiniMed Paradigm® REAL-Time System Allows Patients to Make Immediate Diabetes Management Decisions; Marks Major Step Toward an Artificial Pancreas***

**MINNEAPOLIS — April 13, 2006 —** Medtronic, Inc. (NYSE: MDT) today announced FDA approval of the MiniMed Paradigm® REAL-Time Insulin Pump and Continuous Glucose Monitoring System, a progressive new therapy available for patients who use insulin to treat diabetes. For the first time in the history of diabetes management, an insulin pump integrates with REAL-Time continuous glucose monitoring (CGM). This new technology will help patients take immediate corrective or preventive action to maintain healthy glucose levels and delay or prevent diabetes-related complications, including coma, blindness, kidney failure, amputation, impotence, and heart disease.

The MiniMed Paradigm REAL-Time System is made up of two components, a REAL-Time Continuous Glucose Monitoring (CGM) System, and a MiniMed Paradigm insulin pump. The REAL-Time CGM System relays glucose readings every five minutes from a glucose sensor to the insulin pump, which displays to 288 readings a day – nearly 100 times more information than three daily fingersticks. REAL-Time glucose information displayed on the insulin pump allows patients to take immediate action to improve their glucose control after taking a confirmatory fingerstick. The REAL-Time CGM System component is indicated for any patient 18 years of age or older, and insulin pump therapy for all patients requiring insulin.

"The approval of the MiniMed Paradigm REAL-Time System opens the door to the next generation of diabetes management," said Robert Guezuraga, president, Medtronic Diabetes. "As this is the first integrated insulin pump and continuous glucose monitoring system ever approved, we feel this new therapy will revolutionize the way patients manage their diabetes and will improve their lives."

Integrating an insulin pump with REAL-Time CGM is a major step toward the development of a "closed-loop" insulin delivery system that may one day mimic some functions of the human pancreas. Medtronic is testing future systems that would employ advanced scientific algorithms to proactively recommend insulin dosages to patients. Through this process, Medtronic anticipates developing an external, closed-loop system designed to simplify and improve patient diabetes management.

The MiniMed Paradigm REAL-Time System's continuous glucose sensor is a tiny electrode that is inserted under the skin using the Sen-Serter®, a small device that patients or their caregivers can use at home to make sensor insertion easier. The sensor measures glucose in the interstitial fluid found between the body's cells, and is typically discarded and replaced after three days of use. Glucose measurements obtained by the sensor are relayed every five minutes from a transmitter to the insulin pump, which displays the glucose value, three-hour and 24-hour trend graphs, as well as arrows to indicate how quickly glucose is moving up or down. In addition, an alarm alerts patients when glucose levels become too high or too low.

The MiniMed Paradigm REAL-Time System includes a "smart" MiniMed Paradigm insulin pump, which has a powerful built-in Bolus Wizard® calculator to manage the complex diabetes math for patients. Smart insulin pumps recommend insulin dosages after considering the amount of insulin still "active" in the body, helping patients avoid dangerous hypoglycemic episodes caused when too much insulin is delivered.

Current standards for assessing glucose control include A1C tests and fingerstick measurements, yet both have limitations. An A1C test, which measures glucose control over a three-month period, is important for long-term management, but it is only an average and does not reveal day-to-day glucose fluctuations that can damage the body. In turn, fingerstick measurements only reveal a glucose value at a single moment in time. As a result, patients are unable to detect approximately 60 percent of low glucose (hypoglycemia) events, and have difficulty assessing glucose fluctuations while they

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sleep. In contrast, REAL-Time CGM allows patients to view glucose trends throughout the day and night, and understand how fast, and in what direction, their glucose levels are heading. By discovering how diet, exercise, medication and lifestyle affect their glucose levels, patients can make more informed self-management decisions and achieve a greater sense of confidence when managing their disease.

#### **About Insulin Pump Therapy**

An insulin pump is a small pager-size device that delivers insulin around the clock, much like a healthy pancreas. It is the most advanced method for precise and adjustable insulin delivery. Unlike injection therapy, insulin pump users can program their insulin pump to deliver insulin at varying rates to meet their changing insulin needs throughout the day and night. In addition, insulin can be delivered on demand at the touch of a few buttons. Many patients experience improved quality of life with insulin pump therapy, ridding themselves of multiple injections, strict meal schedules and rigid sleep patterns that are associated with injection therapy.

#### **Diabetes Statistics**

According to the American Diabetes Association, almost 21 million Americans (seven percent of the population) have the disease. Diabetes affects children and adults, costing the United States more than \$132 billion in direct and indirect costs.

#### **About Medtronic Diabetes**

Medtronic Diabetes ([www.minimed.com](http://www.minimed.com)) is the world leader in insulin pump therapy and continuous glucose monitoring. The company's products include external insulin pumps, continuous glucose monitoring systems and related disposable products.

#### **About Medtronic**

Medtronic, Inc. ([www.medtronic.com](http://www.medtronic.com)), headquartered in Minneapolis, is the global leader in medical technology, alleviating pain, restoring health and extending life for millions of people around the world.

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**Any forward-looking statements are subject to risks and uncertainties such as those described in Medtronic's Quarterly Report on Form 10-Q for the quarter ended January 27, 2006. Actual results may differ materially from anticipated results.**

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