

Mail Stop 6010

February 7, 2007

VIA U.S. MAIL AND FAX (763) 572-5474

Mr. Gary L. Ellis  
Senior Vice President and Chief Financial Officer  
Medtronic, Inc.  
710 Medtronic Parkway  
Minneapolis, Minnesota 55432

**Re: Medtronic, Inc.  
Form 10-K for the year ended April 28, 2006  
Filed September 28, 2006  
File No. 001-07707**

Dear Mr. Ellis:

We have reviewed your filing and have the following comments. We have limited our review to matters related to the issues raised in our comments. Where indicated, we think you should revise your documents in future filings in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may or may not raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comment or on any other aspects of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

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Form 10-K for the year ended April 28, 2006

Financial Statements, page 32

Note 1. Summary of Significant Accounting Policies, page 38

Revenue Recognition, page 40

1. We noted from your disclosure that you estimate certain revenues. Tell us how you are able to reliably estimate these revenues, the amounts of related revenues and the accounting literature that supports your stated policy. Revise future filings as necessary based on our comment.

Note 5. Financing Arrangements, page 55

Senior Convertible Notes, page 55

2. We note that you have issued 2,200 of 1.5 percent Senior Convertible Notes due 2011 and \$2,200 of 1.625 percent Senior Convertible Notes due 2013.
  - Describe clearly how you have accounted for the Senior Convertible Notes, including the beneficial conversion feature pursuant to EITF 98-5 or any embedded derivatives requiring bifurcation pursuant to SFAS 133 and EITF 00-19.
  - Provide a similar discussion of your accounting for the warrants and the purchased call options.

In this regard, note the guidance provided in the Division of Corporation Finance's Current Accounting and Disclosure Issues Outline at <http://www.sec.gov/divisions/corpfin/acctdis120105.pdf> when preparing your response. Revise future filings as necessary to clarify your accounting for these Notes.

Form 8-K dated November 20, 2006

3. We noted your discussion of non-GAAP amounts on page 1 and the related reconciliation of consolidated GAAP earnings to consolidated adjusted net earnings presented elsewhere in the earnings release. Please revise your discussion and the table in future filings to clearly label all “non-GAAP” amounts as non-GAAP. We refer you to Item 10(e)(1)(ii)(E) of Regulation S-K.

As appropriate, please amend your filing and respond to these comments within 10 business days or tell us when you will provide us with a response. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your response that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes all information required under the Securities and Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. Since the company and its management are in possession of all facts relating to a company’s disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In connection with responding to our comments, please provide, in writing, a statement from the company acknowledging that

- The company is responsible for the adequacy and accuracy of the disclosure in the filings;
- Staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- The company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filing or in response to our comments on your filing.

You may contact Julie Sherman, Staff Accountant, at (202) 551-3640 or me at (202) 551-3603 if you have any questions regarding these comments. In this regard, do not hesitate to contact Angela Crane, Accounting Branch Chief, at (202) 551-3554.

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Sincerely,

Jay Webb  
Reviewing Accountant