



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

Mail Stop 6010

February 29, 2008

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

Gary L. Ellis
Chief Financial Officer
Medtronic, Inc.
710 Medtronic Parkway
Minneapolis, Minnesota 55432

Re: Medtronic, Inc.
Form 10-K for the fiscal year ended April 27, 2007
Filed June 25, 2007
Form 10-Q for the fiscal quarter ended October 26, 2007
Filed December 4, 2007
File No. 001-07707

Dear Mr. Ellis:

We have reviewed your filings and have the following comments. Where indicated, we think you should revise your documents 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 filings. We look forward to working with you in these respects. We welcome any questions you may have about our comments or on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Form 10-K for the year ended April 27, 2007

Consolidated Balance Sheets, page 39

1. We note that you do not include separate captions in your balance sheet or shareholders' equity statement for additional paid-in capital. Please tell us why that is appropriate and note the guidance at Rule 5-02 (31) of Regulation S-X when preparing future filings.

5. Financial Instruments and Investments, page 54

2. We see on page 54 you disclose the difference in fair values of your debt and equity securities between fiscal years 2007 and 2006. We are not able to reconcile the changes outlined herein to your investment related other comprehensive income disclosures on page 45. Please explain to us how the change in the fair value of your marketable securities agrees with the related changes in your comprehensive income. Please reconcile changes in your marketable securities during 2007 to your related other comprehensive income disclosures. Note our concerns when preparing future filings.
3. We see from disclosures in this note that you have a significant amount of investments in debt securities.
 - Please provide us with, and revise the note in future filings to disclose, a schedule showing your investments in debt securities by type of securities, including any invests in auction rate securities, collateralized debt obligations, or other asset-backed securities, and the fair value of these securities at both April 27, 2007 and October 26, 2007 as well as any related unrealized losses recorded at those dates. See paragraph 19 of SFAS 115.
 - Tell us and revise the note in future filings to disclose the contractual maturities of your investments in debt securities by type of securities. See paragraph 20 of SFAS 115.
 - Tell us and revise the liquidity section of MD&A in future filings to discuss whether any of the securities you hold are reasonably likely to affect your financial condition in a material way, expanding your discussion and analysis in applicable future filings to provide your investors with information necessary for a clear understanding of the trend or uncertainty. Refer to Item 303(a) of Regulation S-K. In addition, provide all appropriate disclosure required by Item 305 of Regulation S-K.
4. Based on your cash flow statements on page 41, we note you spent \$11,837 million to purchase marketable securities and received \$10,894 million from the sale and maturities of marketable securities in fiscal year 2007. And as such, your investment activities do not appear to be insignificant, yet, we note you only disclosed the net realized gain/loss. Refer to paragraph 21 of SFAS 115 and provide us with, and revise your disclosure in

future filings to include, the gross unrealized gains and gross unrealized losses for each reported period.

Senior Convertible Notes, page 57

5. We note that you modified the conversion price of your senior convertible notes from \$56.14 to \$56.08. Please explain to us how you account for the change in the conversion feature and how you considered the impact of EITF 96-19 and EITF 06-06.

Valuation Assumptions, page 61

6. We note that you changed the method of determining expected volatility in fiscal year 2007. Note that the change in the method of determining assumptions used in a valuation technique is a change in accounting estimate under SFAS 154, refer to paragraph C13 (b) of SFAS 154. Disclose all required information under paragraph 22 of SFAS 154 in your future filings. Otherwise, explain to us why such disclosure is not necessary.
7. We also note that you recorded \$129 million and \$225 million in tax benefits in fiscal years 2007 and 2006, respectively, and those benefits are associated with the reversal of excess tax accruals. Explain to us in greater detail the facts and circumstances behind these reversals, including the timing thereof. Also in this regard, explain to us the significant assumptions and judgment that you used to estimate the tax accruals and why those estimates differ from the actual results. Finally, your tax related critical accounting policy disclosures are too general to be helpful to the readers of your financial statements. Please include more information about the methods, significant assumptions and judgment behind each significant estimate in your critical accounting policies in future filings.

Form 10-Q for the quarter ended October 26, 2007

Item 4. Controls and Procedures, page 39

Evaluation of disclosure controls and procedures, page 39

8. We note that you and your Chief Executive Officer have evaluated the effectiveness of your disclosure controls and procedures and changes in the Company's internal control over financial reporting (as defined in Rule 13a-15(f) under the Exchange Act). Please confirm that you and your Chief Executive Officer have concluded that your disclosure controls and procedures (*as defined in Rules 13a-15(e) or 15d-15(e) of the Exchange Act*) were effective and revise these disclosures in future filings to clearly indicate your conclusions are based on the referenced definition of controls and procedures. Refer to Item 307 of Regulation S-K.

Gary L. Ellis
Medtronic, Inc.
February 28, 2008
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As appropriate, please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a cover letter that keys your responses to our comments and provides any requested supplemental information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your 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 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 Andri Boerman at (202) 551-3645 or me at (202) 551-3603 if you have questions regarding comments on the financial statements and related matters. In this regard, do not hesitate to contact Angela Crane, Branch Chief, at (202) 551-3554.

Sincerely,

Jay Webb
Reviewing Accountant