
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 11-K

(mark one)



ANNUAL REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended April 30, 2004

Or



TRANSITION REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Commission File No.: 1-7707

A. Full title of the plan and the address of the plan, if different from that of the issuer named below:

**The Medtronic Puerto Rico
Employees' Savings and Investment Plan**

B. Name of issuer of the securities held pursuant to the plan and the address of its principal executive office:

Medtronic, Inc.

**710 Medtronic Parkway
Minneapolis, MN 55432**

SIGNATURES

The Plan. Pursuant to the requirements of the Securities Exchange Act of 1934, the trustees (or other persons who administer the employee benefit plan) have duly caused this annual report to be signed on its behalf by the undersigned hereunto duly authorized.

The Medtronic Puerto Rico Employees' Savings and Investment Plan

Dated: October 25, 2004

By:

/s/ Janet S. Fiola

Janet S. Fiola
Senior Vice President, Human Resources

Medtronic, Inc.
Employee Stock Ownership
and Supplemental
Retirement Plan
Financial Statements and Supplemental Schedules
April 30, 2004 and 2003

**The Medtronic Puerto Rico Employees' Savings and Investment Plan
Index to Financial Statements**

Report of Independent Registered Public Accounting Firm

Financial Statements:

Statements of Net Assets Available for Benefits

Statement of Changes in Net Assets Available for Benefits

Notes to Financial Statements

Supplemental Schedule:

Schedule H, line 4i – Schedule of Assets (Held at End of Year)

Note: Other schedules required by 29 CFR Section 2520.103-10 of the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974 have been omitted because they are not applicable.

Report of Independent Registered Public Accounting Firm

To the Participants and Administrator of
The Medtronic Puerto Rico Employees' Savings and Investment Plan:

In our opinion, the accompanying statements of net assets available for benefits and the related statement of changes in net assets available for benefits present fairly, in all material respects, the net assets available for benefits of The Medtronic Puerto Rico Employees' Savings and Investment Plan (the "Plan") at April 30, 2004 and 2003, and the changes in net assets available for benefits for the year ended April 30, 2004 in conformity with accounting principles generally accepted in the United States of America. These financial statements are the responsibility of the Plan's management. Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these statements in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

Our audits were conducted for the purpose of forming an opinion on the basic financial statements taken as a whole. The supplemental Schedule of Assets (Held at End of Year) as of April 30, 2004 is presented for the purpose of additional analysis and is not a required part of the basic financial statements but is supplementary information required by the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974. The supplemental schedule is the responsibility of the Plan's management. The supplemental schedule has been subjected to the auditing procedures applied in the audits of the basic financial statements and, in our opinion, is fairly stated in all material respects in relation to the basic financial statements taken as a whole.

PricewaterhouseCoopers LLP
San Juan, Puerto Rico
October 15, 2004

The Medtronic Puerto Rico Employees' Savings and Investment Plan
Statements of Net Assets Available for Benefits

	April 30,	
	2004	2003
Assets		
Investments:		
Mutual funds	\$ 3,632,271	\$ 2,156,675
Medtronic Common Stock Fund	1,806,350	1,775,131
Participant loans receivable	672,069	602,786
Medtronic Interest Income Fund	5,588,375	5,677,947
Total investments	11,699,065	10,212,539
Receivables:		
Employer contributions	8,012	113,474
Participant contributions	19,421	71,770
Total receivables	27,433	185,244
Total assets	11,726,498	10,397,783
Liabilities		
Corrective distributions payable to highly compensated employees (Note 5)	—	245,273
Net assets available for benefits	\$ 11,726,498	\$ 10,152,510

See accompanying notes to the financial statements.

**The Medtronic Puerto Rico Employees' Savings and Investment Plan
Statement of Changes in Net Assets Available for Benefits**

**Year Ended
April 30, 2004**

Additions:	
Additions to assets attributed to:	
Investment income:	
Net appreciation in fair value of investments	\$ 464,519
Interest and dividends	357,331
Total investment income	821,850
Contributions:	
Participant	1,071,245
Employer	443,398
Rollover	28,829
Total contributions	1,543,472
Total additions	2,365,322
Deductions:	
Deductions from assets attributed to:	
Benefits paid to participants	(788,414)
Other deductions	(2,920)
Total deductions	(791,334)
Net increase	1,573,988
Net assets available for benefits:	
Beginning of year	10,152,510
End of year	\$ 11,726,498

See accompanying notes to the financial statements.

The Medtronic Puerto Rico Employees' Savings and Investment Plan
Notes to Financial Statements

1. Description of the Plan

The following description of The Medtronic Puerto Rico Employees' Savings and Investment Plan (the "Plan") provides only general information. Participants should refer to the Plan document for a complete description of the Plan's provisions.

General

The Plan is a contributory defined contribution plan created and administered by Medtronic, Inc. (the "Ultimate Parent Company"). The Plan covers substantially all the employees of Medtronic Puerto Rico Operations Company — Puerto Rico Branch (the "Company"). The Plan is subject to the provisions of the Employee Retirement Income Security Act of 1974, as amended ("ERISA").

Eligibility

Participants with at least three months of service are eligible to participate in the Plan.

Contributions

Participant contributions are made to the Plan through payroll deductions. Participants direct the investments of their contributions into eleven investment options offered by the Plan. The participants may change their investment decisions at any time by contacting Vanguard Trust. However, any funds exchanged out of the Medtronic Interest Income Fund must remain invested in another investment alternative for a period of at least three months before being moved to the Vanguard Total Bond Market Index Fund. Participants are also limited to two transfers a month in or out of the Medtronic Common Stock Fund.

The Plan provides for a regular savings program for the employees of the Company, whereby participants may contribute up to 10% of their qualified compensation. Participants also receive matching allocations based on each participant's contributions up to 6% of eligible compensation, and range from 50% to 75% of these contributions, depending upon the achievement of certain Company performance goals. Participants are allowed to immediately transfer matching allocated amounts to any of the participant-directed investment options.

Subject to prior discretionary approval of the Plan Administrator, an eligible employee or an employee who would be an eligible employee may transfer any sum of money to the Trust Fund as a rollover contribution, provided the employee certifies that such contribution meets certain criteria required by the Plan Document. For periods prior to January 1, 2000, participants were permitted to contribute a portion of their compensation as an after tax contribution. Effective January 1, 2000, the only after tax contributions permitted will be recharacterized excess pre-tax contributions.

Participant Accounts

Each participant account is credited with the participant's contribution and the Company's contribution, as well as earnings and losses thereon. The benefit to which a participant is entitled is the benefit that can be provided from the participant's vested account.

Vesting and Forfeitures

Participants are 100% vested in their contributions, including earnings and losses thereon, at all times. Active participants vest in the Company contributions, including earnings and losses thereon, at a rate of 20% per year and become fully vested in all Company contributions after five years. Participants also become fully vested on normal retirement date, death, total disability, termination of the Plan, or complete discontinuance of employer contributions. Participant forfeitures of nonvested amounts are used in the following order: (i) to reduce employer

contributions, (ii) to reduce any reasonable administrative expenses of the Plan, (iii) to make an additional matching contribution to active participants' accounts. The balance of unallocated forfeited nonvested accounts at April 30, 2004 and 2003 amounted to \$31,587 and \$19,961, respectively.

Distributions

Active participants can request a partial or total withdrawal of their after-tax contributions account, rollover contributions account and the vested portion of their employer contributions account by giving prior notice to the Plan Administrator.

Active participants may also take hardship withdrawals from their pre-tax contributions account if they incur immediate and severe financial needs that cannot be met through other available sources in the Plan, including available loan provisions. The amount of hardship withdrawal cannot exceed the amount of financial need.

Upon termination of employment, a participant's account will be paid in the form of an annuity. Upon retirement or upon incurring total disability, participants have the option to take a lump sum payment, an immediate annuity purchase from an insurance company or a combination of such methods of payment at the discretion of the participant.

Participant Loans

Participants are limited to one loan outstanding at a time and can borrow up to 50% of their vested fund account not to exceed the maximum loan amount of \$50,000. The minimum loan amount is \$1,000. Loans are repaid through payroll deductions in equal amounts, typically over one to ten years. The loans are collateralized by the balance in the participant's account and bear interest at a rate commensurate with local prevailing rates as determined by the Plan Administrator. At April 30, 2004, loans receivable were due at various dates through 2009, with interest rates ranging from 4.00% to 9.50%.

Plan Termination

The Plan provides that the Board of Directors of Medtronic, Inc. can terminate the Plan. Although it has not expressed any intent to do so, the Company has the right under the Plan to discontinue its contributions at any time and to terminate the Plan subject to the provisions of ERISA. In the event the Plan is terminated and there is not a successor plan, participants would become fully vested in their accounts. Benefits would be distributed at that time in accordance with the Plan provisions.

2. Summary of Significant Accounting Policies

Basis of Accounting

The accompanying financial statements are prepared on the accrual basis of accounting in accordance with accounting principles generally accepted in the United States of America.

Use of Estimates

The preparation of financial statements, in conformity with accounting principles generally accepted in the United States of America, requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates.

Investment Valuation and Investment Income

The Plan's investments are stated at fair value, except for its investment contracts held by the Medtronic Interest Income Fund, which are valued at contract value (Note 3). Shares of registered investment companies are valued at quoted market prices, which represent the net asset value of shares held by the Plan at year-end. The Medtronic Common Stock Fund is valued at its year-end unit closing market price (comprised of year-end market value of investments plus any uninvested cash position). The common shares of the Company are valued at the quoted market price. Participant loans receivable are valued at estimated fair value, consisting of outstanding principal and related unpaid interest.

Purchases and sales of investments are recorded on a trade-date basis. Interest income is accrued when earned. Dividend income is accrued on the ex-dividend date. Capital gain distributions are included in dividend income. The Plan presents in the Statement of Changes in Net Assets Available for Plan Benefits the net appreciation (depreciation) in the fair value of its investments, which consists of realized gains and losses and the unrealized appreciation (depreciation) on those investments.

Administrative Expenses

Administrative expenses are paid by the Company. Such expenses include any expenses incident to the functioning of the Plan Administrator, including, but not limited to, fees of accountants, counsel, and other costs of administering the Plan. Until paid, the expenses constitute a liability of the Trust Fund.

Payment of Benefits

Benefit payments are recorded upon distribution.

3. Investments

Individual investments representing 5 percent or more of the Plan's net assets are as follows:

	<u>April 30,</u>	
	<u>2004</u>	<u>2003</u>
Medtronic Interest Income Fund	\$ 5,588,375	\$ 5,677,947
Medtronic Common Stock Fund	1,806,350	1,775,131
Mutual funds:		
Vanguard 500 Index Fund Investors Shares	1,627,741	1,115,306
Vanguard Wellington Fund Investors Shares	795,530	589,103

The net appreciation (depreciation) in the fair value of the investments during fiscal year 2004, including gains and losses on investments purchased and sold as well as held during the year was as follows:

	<u>Year Ended</u> <u>April 30, 2004</u>
Mutual funds	\$ 358,900
Medtronic Common Stock Fund	105,619
Net appreciation in fair value of investments	<u>\$ 464,519</u>

The investments in the Medtronic Interest Income Fund consist of investment contracts issued by financial institutions and contracts backed by investment-grade, fixed-income securities and bond mutual funds. These investment contracts are valued at their contract values, which approximate fair value, as these investments have fully benefit-responsive features. There are no reserves against contract values for credit risk of contract issuers or otherwise.

The average yield of the Medtronic Interest Income Fund was 4.33% and 4.78% for fiscal years 2004 and 2003, respectively. The crediting interest rate of the Medtronic Interest Income Fund was 4.24% and 4.83% as of April 30, 2004 and 2003, respectively. The crediting interest rate is based on a formula agreed upon with the issuer, which cannot be less than zero. Such interest rates are reviewed on a quarterly basis for resetting.

4. Related Party Transactions

The Plan's investments consist of investment contracts and shares of mutual funds managed by Banco Popular de Puerto Rico. Banco Popular de Puerto Rico is the Plan's trustee. All investment transactions are managed by Banco Popular de Puerto Rico and qualify as party-in-interest transactions, which are exempt from the prohibited transactions rules.

During the years ended April 30, 2004 and 2003, the Plan had transactions with The Vanguard Group, the Plan's Recordkeeper, which are allowed by the Plan and Internal Revenue Code. These transactions qualify as party-in-interest transactions, which are exempt from the prohibited transactions rules.

Total purchases of investments under the control of The Vanguard Group for the years ended April 30, 2004 and 2003 were \$3,653,490 and \$2,980,364, respectively, and proceeds from sales were \$2,283,915 and \$1,233,809, respectively.

5. Tax Status

The Plan received a favorable determination letter from the Puerto Rico Treasury Department on May 23, 2001. The Puerto Rico Treasury Department has determined that the Plan and the related trust are designed in accordance with Section 1165 (a) of the Puerto Rico Internal Revenue Code of 1994 and are, therefore, exempt from Puerto Rico income taxes. Although the Plan has been amended since receiving the determination letter, the Plan Administrator and the Plan's tax counsel believe the Plan is currently designed and being operated in compliance with the applicable requirements of the Puerto Rico Internal Revenue Code. Therefore, no provision for income taxes has been included in the Plan's financial statements.

For fiscal year 2003, the Plan failed the results of the Actual Deferral Percentage test (ADP). This failure was remediated by making corrective distributions to highly compensated employees in the amount of \$245,273. Considering the remedial actions taken pursuant to the provisions of the Plan Document, management believes that this situation did not affect the tax-exempt status of the Plan.

6. Risks and Uncertainties

The Plan provides for investment in the Company's common stock and various participant investment options in funds which can invest in any combination of stocks, bonds, fixed income securities, mutual funds and other investment securities. Investment securities are exposed to various risks, such as interest rate, market and credit risks. Due to the level of risk and uncertainty, it is reasonably possible that changes in risks could materially affect participants' account balances and the amounts reported in the Statement of Net Assets Available for Benefits and the Statement of Changes in Net Assets Available for Benefits.

SUPPLEMENTAL SCHEDULE

The Medtronic Puerto Rico Employees' Savings and Investment Plan
Schedule H, line 4i - Schedule of Assets (Held at End of Year)
April 30, 2004

(a)	(b)	(c)	(d)	(e)
	Identity of Issue, Borrower, Lessor or Similar Party	Description of Investment, Including Maturity Date, Rate of Interest, Collateral, Par or Maturity Value	Cost	Current Value
*	Medtronic Interest Income Fund	Unallocated Insurance Contracts; interest at 3.07% - 7.35% due at various dates through 2009	**	\$ 5,588,375
*	Vanguard 500 Index Fund Investors Shares	Mutual Fund	**	1,627,741
*	Vanguard Explorer Fund	Mutual Fund	**	253,521
*	Vanguard Extended Market Index Fund Investors Shares	Mutual Fund	**	221,832
*	Vanguard International Growth Fund	Mutual Fund	**	43,826
*	Vanguard PRIMECAP Fund	Mutual Fund	**	159,026
*	Vanguard Total Bond Market Index Fund	Mutual Fund	**	503,527
*	Vanguard U.S. Growth Fund	Mutual Fund	**	18,030
*	Vanguard Wellington Fund Investors Shares	Mutual Fund	**	795,530
*	Vanguard Windsor II Fund Investors Shares	Mutual Fund	**	9,238
*	Medtronic Common Stock Fund	Medtronic Inc. Common Stock and Money Market Securities	**	1,806,350
*	Participant loans	Interest at 4.00%-9.50% due at various dates through 2009	**	672,069
				<u>\$ 11,699,065</u>

* Denotes party-in-interest.

** Cost information is excluded, as it is not required for participant-directed investments.

Consent of Independent Registered Public Accounting Firm

We hereby consent to the incorporation by reference in the Registration Statements on Form S-8 (Nos. 33-37529, 33-44230, and 333-106566) of Medtronic, Inc. of our report dated October 15, 2004 relating to the financial statements and supplemental schedule of the Medtronic Puerto Rico Employees' Savings and Investment Plan, which appears in this Form 11-K.

/s/ PricewaterhouseCoopers LLP

PricewaterhouseCoopers LLP

San Juan, Puerto Rico

October 25, 2004
