

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 11-K

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

(MARK ONE)

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

FOR THE FISCAL YEAR ENDED DECEMBER 31, 2003

OR

TRANSITION REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES
EXCHANGE ACT OF 1934 [NO FEE REQUIRED].

FOR THE TRANSITION PERIOD FROM TO

COMMISSION FILE NUMBER 001-09974

Enzo Biochem, Inc. Salary Reduction Profit Sharing Plan

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

ENZO BIOCHEM, INC., 60 EXECUTIVE BOULEVARD, FARMINGDALE, NY 11735

(Name of issuer of the securities held pursuant to the plan and the address
of its principal executive office)

ENZO BIOCHEM, INC.
SALARY REDUCTION PROFIT SHARING PLAN

TABLE OF CONTENTS

REPORT OF WATSON RICE LLP INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM	F-1
FINANCIAL STATEMENTS FOR THE YEARS ENDED DECEMBER 31, 2003 AND 2002:	
Statements of Net Assets Available for Benefits	F-2
Statement of Changes in Net Assets Available for Benefits.....	F-3
Notes to Financial Statements	F-4
SUPPLEMENTAL SCHEDULE FOR THE YEAR ENDED DECEMBER 31, 2003:	
Schedule H, Item 4i -- Schedule of Assets Held at End of Year	F-8
REPORT OF AUDREY WALLACH, CPA, INDEPENDENT AUDITORS	F-10
FINANCIAL STATEMENTS FOR THE YEAR ENDED DECEMBER 31, 2002	
STATEMENT OF NET ASSETS AVAILABLE FOR BENEFITS	F-11
STATEMENT OF CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS	F-12
NOTES TO FINANCIAL STATEMENTS	F-13

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Trustees of
 Enzo Biochem, Inc. Salary Reduction Profit Sharing Plan

We have audited the accompanying statement of net assets available for benefits of Enzo Biochem, Inc. Salary Reduction Profit Sharing Plan (the "Plan") as of December 31, 2003, and the related statement of changes in net assets available for benefits for the year ended December 31, 2003. 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 audit. The financial statements of Enzo Biochem, Inc. Salary Reduction Profit Sharing Plan as of December 31, 2002 were audited by other auditors whose report dated September 20, 2003 expresses an unqualified opinion on those statements.

We conducted our audit 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. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the net assets available for benefits of the Plan as of December 31, 2003 and the changes in net assets available for benefits for the year ended December 31, 2003 in conformity with accounting principles generally accepted in the United States of America.

Our audit was conducted for the purpose of forming an opinion on the basic financial statements taken as a whole. The supplemental schedule of assets held for investment purposes at the end of the year, 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 audit 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.

WATSON RICE LLP

New York, New York
 July 9, 2004

F-1

ENZO BIOCHEM, INC.
 SALARY REDUCTION PROFIT SHARING PLAN

Statements of Net Assets Available for Benefits

December 31,

	2003	2002
	-----	-----
ASSETS		
Investments at Fair Value:		
Mutual funds	\$6,213,531	\$4,409,225
Common stock	1,685,349	1,031,265
	-----	-----
	7,898,880	5,440,490
	-----	-----
Receivables:		
Employer's contributions	282,239	257,450
Participants' contributions	480	-
	-----	-----

	282,719	257,450
	-----	-----
Loans receivable -- participants	235,312	174,741
	-----	-----
TOTAL ASSETS	8,416,911	5,872,681
	-----	-----
NET ASSETS AVAILABLE FOR BENEFITS	\$8,416,911	\$5,872,681
	=====	=====

See notes to financial statements

F-2

ENZO BIOCHEM, INC.
SALARY REDUCTION PROFIT SHARING PLAN
STATEMENT OF CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS
FOR THE YEAR ENDED DECEMBER 31, 2003

Additions to Net Assets Attributed to:		
Participants' contributions		\$ 704,353
Employer's contributions		284,609
Rollovers		24,698
Interest on loans to participants		9,471
Net appreciation in fair value of investments:		
Mutual funds	1,242,258	
Common stock	439,811	1,682,069
	-----	-----
Total Additions		2,705,200

Deductions from Net Assets Attributed to:		
Benefits paid to participants		130,683
Administrative expenses		30,287

Total Deductions		160,970

Net increase in net assets		2,544,230
Net Assets Available for Benefits, Beginning of Year		5,872,681

Net Assets Available for Benefits, End of Year		\$8,416,911
		=====

See notes to financial statements.

F-3

ENZO BIOCHEM, INC.
SALARY REDUCTION PROFIT SHARING PLAN

NOTES TO FINANCIAL STATEMENTS

DECEMBER 31, 2003 AND 2002

NOTE 1. PLAN DESCRIPTION

The following description of the Enzo Biochem, Inc., Salary Reduction Profit-Sharing Plan (the "Plan") provides only general information. Participants should refer to the Plan Agreement, as amended, for a more complete description of the Plan's provisions.

GENERAL

The Plan is a defined contribution plan covering all eligible full time employees of Enzo Biochem, Inc., Enzo Clinical Labs, Inc., Enzo Therapeutics, Inc. and Enzo Life Sciences (the "Companies") who have completed three months of service and have attained age twenty-one.

The Plan is subject to the provisions of the Employment Retirement Income Security Act of 1974 (ERISA).

CONTRIBUTIONS

Eligible employees can elect to defer up to 17% of their compensation, as defined by the Plan, limited to the maximum for each year (\$12,000 in 2003) permitted by the Internal Revenue Code. In addition, the Companies will contribute to the plan a discretionary matching contribution equal to 50% of the employees' 401(k) contribution, not to exceed 10% of the employee's annual compensation. Participants who have completed a year of service during the plan year and are actively employed as of the last day of the plan year shall be deemed eligible to share in the matching contribution for the year. In 2003 and 2002 the total matching contributions were \$282,239 and \$257,450, respectively, in the form of Enzo Biochem Inc. company stock.

F-4

ENZO BIOCHEM, INC.
SALARY REDUCTION PROFIT SHARING PLAN

NOTES TO FINANCIAL STATEMENTS - CONTINUED

NOTE 1. PLAN DESCRIPTION - CONTINUED

PARTICIPANTS' ACCOUNTS

Contributions are invested in a choice of sixteen mutual funds and the common stock of Enzo Biochem, Inc. (see Note 7). Contribution selections are designated by the participants. Each participant's account is credited with the participant's contribution and allocations of (a) the Companies contributions and (b) Plan earnings, and charged with an allocation of administrative expenses. Allocations are based on participant compensation or account balances, as defined. The benefit to which a participant is entitled is the benefit that can be provided from the participant's vested account.

VESTING

Participants' contributed funds arising from salary reductions and the earnings thereon, are fully vested at all times. Vesting in the Companies' matching contribution and earnings thereon, is ratable over four years of service. Forfeitures are allocated among participants eligible to share for a plan year.

LOANS TO PARTICIPANTS

Participants may borrow from their 401(k) accounts a minimum of \$1,000 up to a maximum of 50% of their vested account balance or \$50,000. Participants are entitled to borrow from their account for a maximum loan term of five years unless the proceeds are used to acquire a principal residence in which case it may exceed 5 years. The loans are secured by the participant's vested account balance and bear a reasonable rate of interest. Principal and interest is paid ratably through payroll deductions.

PAYMENT OF BENEFITS

On termination of service due to death, disability or retirement, participants may elect to receive an amount equal to the value of the participants' vested interest in their account in either a lump sum amount or in various annuity options. For termination of service due to other reasons, a participant may receive the value of the vested interest in their account as a lump sum distribution. Benefits are payable in the form of cash or property.

F-5

ENZO BIOCHEM, INC.
SALARY REDUCTION PROFIT SHARING PLAN

NOTES TO FINANCIAL STATEMENTS - CONTINUED

NOTE 1. PLAN DESCRIPTION - CONTINUED

OPERATING EXPENSES

Certain operating expenses of the Plan are absorbed by the Plan Sponsor.

NOTE 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The Plan's financial statements have been prepared in conformity with

accounting principles generally accepted in the United States of America and under the accrual basis method of accounting.

The Plan's investments are stated at fair value except for its benefit responsive investment contract which is valued at contract value (Note 4). Investment earnings are reinvested in the respective funds. Investment earnings include the Plan's proportionate share of interest, dividends, realized gains and losses on the disposal of investments, and appreciation or depreciation in the fair value of the underlying investments comprising the respective mutual funds. All purchases and sales are recorded on a trade date basis.

The Plan presents in the statement of changes in net asset available for benefits, the net appreciation in fair value of its investments, which consists of the realized gains or losses and the unrealized appreciation (depreciation) on those investments.

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

F-6

ENZO BIOCHEM, INC.
SALARY REDUCTION PROFIT SHARING PLAN

NOTES TO FINANCIAL STATEMENTS - CONTINUED

NOTE 3. INVESTMENTS

The Plan's investments are held by Counsel Trust Company. The following table presents the fair values, as determined by quoted market price, of the investments except for the Metropolitan Life Insurance contract which is presented at contract value:

	2003

Enzo Biochem, Inc.*	\$ 1,685,349
American Funds American Balanced Fund CL A*	1,115,300
American Century Income & Growth	33,501
Babson Value Fund*	425,814
American Funds Europacific Growth CL A*	911,523
Federated Kaufmann Fund Cl K	327,550
Fidelity Concord Str Spartan US Eqidx	64,696
Fidelity Contrafund Inc. Common*	477,631
Aim Invesco Dynamics Fund	37,061
Aim Invesco Small Company Growth Fund	13,967
Aim Invesco Technology Fund Investor CL	66,829
Janus Invt Fd Sh Ben Int*	571,213
Neuberger & Berman Genesis Fund Trust	202,482
Putnam New Opportunities Fd Sh Ben Int A	10,498
American Funds Washington Mutual	
Investors Fund CL A*	1,401,057
American Funds US Gov't Securities Fund CL A	167,211
Metropolitan Life Ins Co - Ins Prods	387,198

* Denotes investments representing 5% or more of net assets available for benefits at December 31, 2003.

F-7

ENZO BIOCHEM, INC.
SALARY REDUCTION PROFIT SHARING PLAN

NOTES TO FINANCIAL STATEMENTS - CONTINUED

NOTE 4. INVESTMENT CONTRACT WITH INSURANCE COMPANY

The Plan has a benefit-responsive investment contract with MetLife Trust Company, National Association (MetLife). MetLife maintains the contributions in separate accounts. The accounts are credited with earnings on the underlying investments and charged for participant withdrawals and administrative expenses. The contract is included in the financial statements at contract value as reported to the Plan by Counsel Trust Company. Contract value represents contributions made under the contract, plus earnings, less participant withdrawals and administrative expenses. Participants may ordinarily direct the withdrawal or transfer of all or a portion of their investment at contract value.

There are no reserves against contract value for credit risk of the contract issuer or otherwise. The average yield and crediting interest rates were approximately 3.7% for 2003.

NOTE 5. PLAN TERMINATION

Although it has not expressed any intent to do so, the Companies have the right under the Plan to discontinue their contributions at any time and to terminate the Plan subject to the provisions of ERISA.

NOTE 6. TAX STATUS

The Plan obtained its latest determination letter in February 2002 in which the Internal Revenue Service stated that the Plan was in compliance with the applicable requirements of the Internal Revenue Code.

NOTE 7. RELATED PARTY TRANSACTIONS

During 2003, the plan purchased shares of stock in Enzo Biochem, Inc., the parent company of the plan sponsor, at market prices totaling approximately \$353,696. In addition, shares were sold, at market prices totaling approximately \$139,423. At December 31, 2003 and 2002 the Plan held Enzo Biochem, Inc. stock at market prices totaling \$1,685,349 and \$1,031,265, respectively.

Fees paid by the Plan to the Plan administrators amounted to \$30,287 for the year ended December 31, 2003.

F-8

ENZO BIOCHEM, INC.
SALARY REDUCTIONS PLAN

SCHEDULE H, ITEM 4I
SCHEDULE OF ASSETS HELD AT END OF YEAR

E.I.N. # 13-2869332
PLAN # 001

YEAR ENDED DECEMBER 31, 2003

<TABLE>
<CAPTION>

(a)	IDENTITY OF ISSUE, BORROWER, LESSOR OR SIMILAR PARTY (b)	DESCRIPTION OF INVESTMENT INCLUDING MATURITY DATE, RATE OF INTEREST, COLLATERAL, PAR OR MATURITY VALUE (c)	COST (d)	CURRENT VALUE (e)
<S>	<C>	<C>	<C>	<C>
*	Enzo Biochem, Inc.	Common Stock	**	\$1,685,349
	American Funds American Balanced Fund CL A	Mutual Fund	**	1,115,300
	American Century Income & Growth	Mutual Fund	**	33,501
	Babson Value Fund	Mutual Fund	**	425,814
	American Funds Europacific Growth CL A	Mutual Fund	**	911,523
	Federated Kaufmann Fund Cl K	Mutual Fund	**	327,550
	Fidelity Concord Str Spartan US Eqidx	Mutual Fund	**	64,696
	Fidelity Contrafund Inc. Common	Mutual Fund	**	477,631
	Aim Invesco Dynamics Fund	Mutual Fund	**	37,061
	Aim Invesco Small Company Growth Fund	Mutual Fund	**	13,967
	Aim Invesco Technology Fund Investor CL	Mutual Fund	**	66,829
	Janus Invt Fd Sh Ben Int	Mutual Fund	**	571,213
	Neuberger & Berman Genesis Fund Trust	Mutual Fund	**	202,482
	Putnam New Opportunities Fd Sh Ben Int A	Mutual Fund	**	10,498
	American Funds Washington Mutual Investors Fund CL A	Mutual Fund	**	1,401,057
	American Fund US Gov't Securities Fund CL A	Mutual Fund	**	167,211
	Metropolitan Life Ins Co - Ins Prods	Mutual Fund	**	387,198
	Participant Loans	5.00% - 9.50%	**	235,312

</TABLE>

* Party-in-interest.
** Cost information is not required.

See Independent Auditors' Report.

F-9

AUDREY WALLACH, CPA
Certified Public Accountant

780 CYNTHIA DRIVE
EAST MEADOW, NY 11554
Telephone: (516) 565-6441
E-mail: EMHAWK@aol.com

REPORT OF INDEPENDENT AUDITORS

To the Sponsor of the
Enzo Biochem, Inc.
Salary Reduction Profit Sharing Plan

We have audited the accompanying statements of net assets available for benefits of the Enzo Biochem, Inc. Salary Reduction Profit Sharing Plan (the "Plan") as of December 31, 2002 and 2001, and the related statements of changes in net assets available for benefits for the year ended December 31, 2002. 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 in accordance with auditing standards generally accepted in the United States of America. 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. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the net assets available for benefits of the Plan as of December 31, 2002 and 2001, and the changes in net assets available for benefits for the year ended December 31, 2002, in conformity with accounting principles generally accepted in the United States of America.

Our audits were performed for the purpose of forming an opinion on the basic financial statements taken as a whole. The supplemental schedules of (1) assets held for investment purposes as of December 31, 2002 and (2) reportable transaction for the year ended December 31, 2002, are presented for the purpose of additional analysis and are not a required part of the basic financial statements but are 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. These supplemental schedules are the responsibility of the Plan's management. The supplemental schedules have been subjected to the auditing procedures applied in the audit of the basic financial statements and, in our opinion, are fairly stated in all material respects when in relation to the basic financial statements taken as a whole.

Audrey Wallach, CPA

East Meadow, New York
September 30, 2003

F-10

Audrey Wallach, CPA

ENZO BIOCHEM, INC.
SALARY REDUCTION PROFIT SHARING PLAN
STATEMENT OF NET ASSETS AVAILABLE FOR BENEFITS
DECEMBER 31, 2002 AND 2001

	2002	2001
	-----	-----
Assets:		

Investments: (Note 8)	\$ 5,615,231	\$ 6,385,787
Receivables:		
Employer contributions	257,450	246,923
	-----	-----
Total receivables	257,450	246,923
	-----	-----
 Total assets	 5,872,681	 6,632,710
	=====	=====
Liabilities:		
Total liabilities	--	--
	-----	-----
Net assets available for benefits	\$ 5,872,681	\$ 6,632,710
	=====	=====

See accompanying notes to financial statements

F-11

Audrey Wallach, CPA

ENZO BIOCHEM, INC.
SALARY REDUCTION PROFIT SHARING PLAN
STATEMENT OF CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS
YEAR ENDED DECEMBER 31, 2002

Additions to net assets attributed to:		
Investment income:		
Interest	\$	7,319
Net appreciation (depreciation) in fair value of investments		(1,282,647)

		(1,275,328)
 Contributions:		
Participant		634,148
Employer		257,450

		891,598

 Total additions		 (383,730)

Deductions from net assets attributed to:		
Benefits paid to participants		337,032
Administration expenses		39,267

Total deductions		376,299

 Net (decrease)		 (760,029)
Net assets available for benefits:		
Beginning of the year		6,632,710

 End of the year		 \$ 5,872,681
		=====

See accompanying notes to financial statements

F-12

Audrey Wallach, CPA

ENZO BIOCHEM, INC.
SALARY REDUCTION PROFIT SHARING PLAN
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2002

1. Description of the Plan

The following description of the Enzo Biochem, Inc. ("Company") Salary Reduction Profit Sharing Plan ("Plan") provides only general information. Participants should refer to the Plan agreement for a more complete description of the Plan's provisions.

Effective January 1, 1997, Enzo Labs, Inc. amended the Enzo Biochem, Inc. Salary Reduction Profit Sharing Plan. The Plan was further amended, effective January 1, 2002, to comply with recent legislation and to ensure continued tax-favored treatment. The Plan operates under the favorable determination letter issued by the Internal Revenue Service dated February 14, 2002. Additional employers which have adopted the provisions of the Plan are Enzo clinical Labs, Inc. (formerly Enzo Labs, Inc.), Enzo Therapeutics, Inc. and Enzo Diagnostics, Inc.

The Plan is a defined contribution plan covering substantially all full-time employees who have completed three months of service and attained age 21, who are not covered under a collective bargaining agreement. It is subject to the provisions of the Employee Retirement Income Security Act (ERISA).

2. Summary of Significant Accounting Policies

- a. The Plan's financial statements are prepared on the accrual basis of accounting, except for cash basis of recording of benefits paid.
- b. The Plan's investments are stated at fair value. Quoted market prices are used to value investments. Shares of mutual funds are valued at the net asset value of shares held by the Plan at year end.
- c. The preparation of the financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly actual results may differ from those estimates.

3. Contributions

Each year, participants may contribute up to 17% of the participant's annual compensation, as defined in the Plan. Employee contributions vest immediately. Participants direct the investment of their contributions into various investment options offered by the Plan.

F-13

Audrey Wallach, CPA

In addition the Company makes discretionary matching contributions equal to 50% of participant contributions to the extent of amounts not exceeding 10% of participants' annual compensation. In 2002 and 2001 the totals of the matching contributions were \$257,450 and \$246,923 respectively, in the form of Enzo Biochem, Inc. Company stock.

Employer contributions vest ratably over four years of service.

Forfeitures attributable to Company contribution accounts are allocated among participants eligible to share for a Plan year.

4. PAYMENT OF BENEFITS

Participants' benefits under the Plan are payable to participants, their beneficiaries or their estates upon the termination of employment, normal retirement, late retirement, disability, death or hardship. Benefits are payable in the form of lump-sum distributions of cash or property.

5. LOANS TO PARTICIPANTS

The Plan provides for loans to participants, which may be repaid through payroll deductions. Loans (i) bear a reasonable rate of interest, (ii) are secured by the participant's account, (iii) are available to all participants on a uniform and non-discriminatory basis, (iv) are limited to 50% of the participant's vested account balance or \$50,000 less the highest outstanding loan balance in the previous twelve months, (v) provide for repayment over a period not to exceed five years unless such loan is used to purchase a primary residence.

A loan will not be issued for an amount less than \$1,000.00.

6. TERMINATION

Although it has not expressed any intent to do so, the Company reserves the right to terminate the Plan at any time. Termination of the Plan shall result in immediate vesting of the entire amount credited to each participant. Upon termination of the Plan, the trustees shall retain sufficient assets to complete all scheduled payments due to former participants or their beneficiaries and estates.

7. TAX STATUS

The trust established under the plan to hold the Plan's assets is qualified pursuant to the appropriate section of the Internal Revenue Code, and accordingly, the Plan's net investment income is exempt from income taxes. The Plan has a favorable determination letter from the Internal Revenue Service. The Plan sponsor believes that the Plan qualifies and operates as designed.

F-14

Audrey Wallach, CPA

8 INVESTMENTS

The Company has adopted and implemented a daily valuation multi-fund family program for eligible employees. Under the daily valuation program participants are able to invest their accounts under a menu of mutual funds. A participant may (i) access his or her account value at any time and (ii) direct the investment of his or her existing account and future contributions by a toll-free number or via the internet at any time among the mutual funds offered under the Plan. Under the program the automated voice response system is electronically linked to IBG to effect fund transfers. IBG provides trade confirmations for any and all buys, sells and exchanges (i.e., deposits, transfers, distributions) of funds under the daily valuation program.

FORM 5500 SCHEDULE H PART IV LINE 4i

Schedule of Assets (Held at End of Year)

Description -----	Current Value -----
Spartan US Equity Index Fund	32,836
American Century Income & Growth Fund	16,252
American Balanced Fund Class A	784,501*
American US Government Securities Fund	143,439
Invesco Dynamics Fund	24,794
Invesco Small Company Growth Fund	7,858
Invesco Technology Class II Fund	40,098
Babson Value Fund	304,432*
American EuroPacific Growth Fund	625,071*
Janus Fund	412,893*
Federal Kaufmann Fund Class K	209,195
Neuberger Berman Genesis Trust	135,767
Putnam New Opportunities Fund	7,086
American Washington Mutual Investors Fund Class A	1,059,846*
Fidelity FMMT Retirement Money Market Fund	272,559
Fidelity Contrafund	331,444*
Enzo Biochem, Inc. Common Stock	1,031,265*
Participant Loans	174,741
Cash	1,154

	5,615,231
	=====

* Represents more than 5% of total assets.

F-15

Audrey Wallach, CPA

9. NON-EXEMPT TRANSACTIONS

It was noted that there were unintentional delays by the Company in remitting employee deferrals to the trust in amounts totaling \$88,234. Accordingly, the Plan should be reimbursed for the \$137 in lost earnings.

F-16

Audrey Wallach, CPA

SALARY REDUCTION PROFIT SHARING PLAN

SCHEDULE G, PART III FORM 5500
NONEXEMPT TRANSACTIONS
FOR THE YEAR ENDED DECEMBER 31, 2002

- (a) Identity of party involved
Enzo Biochem, Inc.
- (b) Relationship to plan
Plan Sponsor
- (c) Description of transactions including maturity date, rate of interest
Employee deferral and loan payments not deposited with the Plan in a timely manner. Interest at 6%.
- (h) Cost of asset
\$137

See accompanying notes to financial statements

F-17

SIGNATURES

THE PLAN. Pursuant to the requirements of the Securities Exchange Act of 1934, a trustee of the below named employee benefit plan has duly caused this annual report to be signed on its behalf by the undersigned hereunto duly authorized.

Enzo Biochem, Inc.
Salary Reduction Profit Sharing Plan

Date: June 25, 2004

/s/ Herbert Bass

By: Herbert Bass
Trustee

=====