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

FORM 10-K

Mark one

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/X/ ANNUAL REPORT PURSUANT TO SECTION 13 or 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 (FEE REQUIRED)

For the fiscal year ended July 31, 1995

or

/ / TRANSITION REPORT PURSUANT TO SECTION 13 or 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 (NO FEE REQUIRED)

For the transition period from _____ to _____

Commission File Number 1-9974

ENZO BIOCHEM, INC.

(Exact name of registrant as specified in its charter)

New York	13-2866202
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
60 Executive Boulevard, Farmingdale, New York	11735
(Address of principal executive offices)	(Zip Code)

(516) 755-5500

(Registrant's telephone number, including area code)

SECURITIES REGISTERED PURSUANT TO SECTION 12(b) OF THE ACT:

Common Stock, $.01 par value	The American Stock Exchange
(Title of Class)	(Name of each Exchange on which registered)

SECURITIES REGISTERED PURSUANT TO SECTION 12(g) OF THE ACT:

NONE

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes X No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. [X]

As of October 19, 1995, the Registrant had 21,420,645 shares of Common Stock outstanding.

The aggregate market value of the Common Stock held by nonaffiliates as of October 19, 1995 was approximately $296,937,225.

DOCUMENTS INCORPORATED BY REFERENCE

Part III - Items 11, 12 and 13	To be included in the Company's Proxy Statement to be filed with the Securities and Exchange Commission no later than November 28, 1995.
Part IV - Certain exhibits listed in response to Item 14(a)(3)	Included in prior filings made by the Company under the Securities Act of 1933 and the Securities Exchange Act of 1934

PART I

ITEM 1. BUSINESS

INTRODUCTION

Enzo Biochem, Inc. (the "Company" or "Enzo") employing biotechnology, develops, manufactures and markets health care products, and also provides medical diagnostic services to the medical community. Each of the three business activities of the Company is performed by one of the Company's three wholly-owned subsidiaries--Enzo Diagnostics, Inc., Enzo Therapeutics, Inc., and Enzo Clinical Labs, Inc. ("Enzo Diagnostics", "Enzo Therapeutics" and "Enzo Clinical Labs", respectively). These activities are: (1) diagnostic and research product development, manufacture and marketing through Enzo Diagnostics, (2) therapeutic product research and development through Enzo Therapeutics, and (3) the operation of a clinical reference laboratory through Enzo Clinical Labs. For information relating to the Company's business segments, see Note 11 of the Notes to Consolidated Financial Statements.

For the fiscal year ended July 31, 1995 (fiscal 1995), approximately 30% of the Company's operating revenues was derived from product sales and approximately 70% was derived from clinical reference laboratory services. For the fiscal years ended July 31, 1994 and 1993 (fiscal 1994 and fiscal 1993, respectively), approximately 23% and 11%, respectively, of the Company's operating revenues were derived from product sales and approximately 77% and 89%, respectively, were derived from clinical reference laboratory services.

PRODUCT DEVELOPMENT ACTIVITIES

The Company's product development programs incorporate various scientific areas of expertise, including recombinant DNA, monoclonal antibody development, enzymology, microbiology, biochemistry, organic chemistry, and fermentation. The Company's activities in research and development are performed by the Company's professional and scientific staff. To a lesser extent, research and development is pursued in collaboration with outside consultants at research and academic institutions.

The primary focus of the Company's current research is the development of products based on gene labeling and gene regulation. The Company is funding its research programs through its operating cash flows and cash and cash equivalents, as well as seeking joint ventures and collaborative relationships.

Through Enzo Diagnostics, the Company has devoted a major portion of its research and development activities to develop simple and reliable test formats and protocols for the commercialization of nucleic acid-based diagnostics as well as other diagnostic products. A key system for Enzo is its non-radioactive BIOPROBE-Registered Trademark- nucleic acid probe system and the Company continued to introduce new products based on this technology into the research market during fiscal 1995.

The product development programs of the Company include developing BIOPROBE-Registered Trademark- nucleic acid probe products to detect sexually transmitted diseases, such as AIDS, herpes, chlamydia, gonorrhea, and other infectious diseases, such as tuberculosis, cytomegalovirus, hepatitis and Epstein-Barr virus (implicated in mononucleosis). The Company markets several product lines containing BIOPROBE-Registered Trademark- nucleic acid probe products.

The Company, through Enzo Therapeutics, is developing therapeutic applications of nucleic acids. In May 1987, the Company entered into an agreement with the Research Foundation of the State University of New York which grants the Company certain exclusive rights to a genetic engineering technology for generating antisense RNA repressors. As a result of the technology covered by such agreement, the Company has obtained three (3) patents. Although the Company has not derived revenues from any of the foregoing three antisense patents, the Company believes that these patents will be the basis for the Company to derive meaningful revenues in the future.

Whenever the Company complements its internal research and development activities with collaborative research arrangements with academic and private research institutions or consultants on specific projects, the Company typically supplies funds to cover salaries, materials, certain laboratory equipment and a portion of the overhead. In all such collaborative research arrangements, the Company reserves the commercial rights to any product or process developed, subject to a royalty payment to the institution or consultant involved over a period of years. The location of the Company in the greater New York area

affords the Company access to and interaction with a large number of research institutions and qualified scientists.

In the fiscal years ended July 31, 1995, 1994 and 1993, the Company incurred costs of approximately $2,366,000, $ 1,764,000 and $ 1,486,000 respectively, for research and development activities.

CLINICAL REFERENCE LABORATORY

The Company, through Enzo Clinical Labs, operates a clinical reference laboratory which offers full diagnostic services to the greater New York medical community. The services Enzo Clinical Labs provides include chemistry, blood tests, cytology studies, tissue pathology, hormone studies, and diagnostic procedures which seek to detect precancerous conditions, cancers in cervical specimens and sexually transmitted diseases. Enzo Clinical Labs provides these services primarily to physicians as well as to clinics, nursing homes and other clinical laboratories. The Company,

through Enzo Clinical Labs operates a regional clinical reference laboratory on Long Island and also operates twelve satellite patient service centers in the greater New York area. In addition, the Company utilizes its clinical reference laboratory to evaluate and demonstrate the benefits of the Company's diagnostic products (see Note 11 of the Notes to Consolidated Financial Statements for segment information and operating revenues and profits).

BUSINESS OBJECTIVES

The current business objectives of the Company are (1) to develop, manufacture and market on a worldwide basis diagnostic and therapeutic products based on the Company's research activities in biotechnology and molecular biology, and (2) to perform diagnostic tests for the U.S. health care community. The Company's research and development efforts are directed to both short and long-term projects. Diagnostic products require less time to commercialize than therapeutic products because the procedures required for attaining government clearance are less time consuming. Therapeutic products, once developed, require extensive clinical testing and compliance. This process can range from three to five years and, in some instances, longer.

At such time as the Company's initial self-funded research demonstrates technical feasibility and potential commercial importance, the Company will have the option to pursue the opportunity on its own or to associate with another entity for development and ultimate marketing of the product. Unless there is a business reason to license products or processes developed by the Company, the Company intends to retain ownership with respect to development and marketing of a product or process.

MARKETING STRATEGY

Enzo's initial commercialization program for the BIOPROBE-Registered Trademark- nucleic acid probe systems included filing major U.S. and foreign patent applications, clinical evaluation, and Food and Drug Administration (FDA) submissions. The Company has obtained clearance for a number of FDA approved diagnostics for sale to clinical reference laboratories and researchers through Enzo Diagnostics. BIOPROBE-Registered Trademark- nucleic acid probe products are also sold to the research market, where FDA clearance is not required. The Company has been successful in obtaining FDA clearance for four totally Enzo-developed DNA probe products. The Company believes that significant delays will not be encountered with any future probe product submissions to the FDA since products based on the BIOPROBE-Registered Trademark- nucleic acid probe system have been FDA cleared. However, there can be no assurance that delays will not be incurred.

Through Enzo Diagnostics, the Company manufactures and markets its BIOPROBE-Registered Trademark- nucleic acid probe products for research applications. These BIOPROBE-Registered Trademark- research products include products which allow researchers to make their own non-radioactive DNA probes as well as complete DNA probe kits which contain all reagents necessary for detecting various disease pathogens in clinical samples.

Enzo Diagnostics markets a variety of IN SITU hybridization kits. PATHOGENE-Registered Trademark- DNA probe kits detect specific pathogens including human papillomavirus (HPV), herpes simplex virus, cytomegalovirus, Epstein-Barr virus, adenovirus, hepatitis B virus and CHLAMYDIA TRACHOMATIS. Its BIOPAP-Registered Trademark- DNA probe kits detect certain types of HPV in Pap smear samples. An enhanced detection procedure that will enable the pathologist to identify the presence of fewer virus particles by increasing the sensitivity of the assay was developed by the Company. These products compete directly with products labeled with various radioactive isotopes. In addition to

the IN SITU hybridization kits, Enzo Diagnostics also markets kits based on its proprietary microplate hybridization format. Microplate Hybridization Assays have been developed for the detection of the AIDS-causing virus (HIV-1). Kits are also available to detect HIV-2, another strain of the AIDS virus, hepatitis virus, the bacteria causing tuberculosis (TB) and members of the MYCOBATERIUM TUBERCULOSIS (MTB) complex.

Enzo's HIV test was the first commercial DNA probe test for this pathogen in this format. Unlike most AIDS tests which detect antibodies for HIV, Enzo's HIV Microplate Hybridization Assay detects DNA unique to HIV. Since individuals can carry the HIV infection for up to 12 months before developing antibodies to it, a test directed at the virus can provide earlier detection. Because this product also can measure virus concentrations, it is easier for researchers to determine HIV levels in patients and look for relationships between these levels and other disease indicators such as antibody production or appearance of symptoms. This product is currently marketed to the research community. During fiscal 1995, an enhanced, version of the Microplate Hybridization Assay, was developed to detect the hepatitis virus directly in serum and is aimed at the blood bank market.

In early stages of infection, the pathogen may be present in very small amounts and may be difficult to detect. Samples, however, can be treated in a way that produces copies of targeted DNA, if it is present. This amplification process is one possible approach to detect very low levels of infection. All of Enzo's Microplate Assays can be used to detect these pathogens in amplified as well as unamplified samples. In order to fully integrate its technology, Enzo has developed a new simplified amplification process for multicopy production of nucleic acid. A patent application was filed in January 1994. During fiscal 1995, this proprietary amplification process was incorporated into the microplate assay format, thus providing a totally integrated assay system. This approach is being developed for use with the hepatitis assay system and will form the basis for all Enzo's microplate assays.

In addition to nucleic acid-based products, the Company also produces and sells other types of research products, such as monoclonal antibodies. The products are marketed through direct sales, an extensive product catalog, advertising in scientific and trade journals and U.S. and foreign distributors. In fiscal 1993, Enzo Diagnostics began to expand its non-exclusive distribution arrangements for its proprietary products in both the U.S. and foreign markets with various companies having worldwide distribution and with companies having local foreign distribution. In fiscal 1994, the Company continued

to expand these distribution arrangements and began a policy of using joint labels on all products marketed by its distributors. In April, 1994, the Company signed a non-exclusive worldwide distribution and supply agreement with Boehringer Mannheim Biochemicals. Under the terms of this agreement, Boehringer Mannheim distributes to the global medical research market, a broad range of biochemical products and reagents manufactured and supplied by Enzo. The agreement includes products based on nonradioactive DNA probe technology and includes products that were developed and marketed by Boehringer Mannheim prior to the agreement, as well as products developed by the Company, all of which are covered by Enzo patents. The agreement took effect in April 1994 and extends for the life of the last patent to expire for products involved.

During fiscal 1995, two additional distribution agreements were signed. In February 1995, a distribution agreement was signed with Amersham International and includes a broad group of products developed and marketed by Amersham, as well as products developed by Enzo Diagnostics. All products are based on nonradioactive DNA labeling technologies covered by Enzo patents. The second agreement, also covering the Company's line of proprietary DNA labeling products and reagents was concluded in May 1995 with Dako A/S, a privately-held international company with headquarters in Copenhagen, Denmark and subsidiaries worldwide, including the Dako Corporation based in the Carpinteria, California.

The Company had previously entered into distribution agreements with certain Johnson & Johnson, Inc. (J&J) subsidiaries in Europe, one of which continues to be in effect. Ortho Diagnostics continues to be the Company's distributor for marketing, distribution and sale in Italy for the Company's BIOPROBE-Registered Trademark- and other products.

The Company, because of its various proprietary diagnostic technologies, may enter into joint ventures with other biotechnology companies or other health care companies with marketing resources and/or complementary technology or products to more fully take advantage of market opportunities.

Enzo Clinical Labs is a major regional clinical reference laboratory offering full service diagnostic testing in the greater New York marketplace. Its services are marketed by a professional sales force who serve client physicians, clinics, nursing homes and other clinical laboratories in the area. A key marketing strategy has been the strategic placement of a network of patient service centers, where patients can go to have samples taken upon the request of their physicians. The Company operates a stat laboratory at its

Manhattan patient service center, affording its client physicians rapid test turnaround. The diagnostic service business provides Enzo Diagnostics with a practical application of its products, making it possible to more appropriately tailor diagnostic products to the end-user. The Company's BIOPROBE-Registered Trademark- nucleic acid probe products offer Enzo Clinical Labs a marketing tool by establishing it among the first to offer nucleic acid based tests.

TECHNOLOGY AND PRODUCT DEVELOPMENT

The major focus of the Company's product development program has been toward the commercialization of nucleic acid probe-based IN VITRO diagnostics for specific

pathogens. Initially, nucleic acid probes were radioactive and required complex protocols to perform. To develop them into useful commercial products required making such products easy-to-use, easy to interpret, readily automatable and sensitive enough to detect the presence of low levels of pathogen. As a result of this product development effort, the Company has developed a broad technology base for the labeling, detection, sensitivity enhancement, signal amplification and testing formats of nucleic acid probe products. Patent protection has been aggressively pursued for this technology base. At the end of fiscal 1995 some 198 patents issued worldwide had been granted to or licensed by the Company in this area of technology. In fiscal 1995 the Company began to receive significant revenues from the distribution agreements related to these patents and believes that the patents have positioned the Company to derive considerably more revenues in the future as the markets for these products continue to develop. These patents cover a variety of BIOPROBE-Registered Trademark- nucleic acid probe products, chelation technology for easy radioactive labeling, signal amplification methods, sensitivity enhancements, and automatable formats.

BIOPROBE-Registered Trademark-
Nucleic Acid Probe Labeling and Signal Generating Systems

Nucleic acid probes used traditionally in biomedical research and recombinant DNA technology have been radioactively labeled with isotopes of hydrogen, phosphorous, carbon or iodine. Radioactive materials have historically provided researchers with the most sensitive and, in many cases, the only means to perform many important experimental or analytical tests. However, limitations and drawbacks are associated with the use of radioactive compounds. For example, radioactive materials are often very unstable and have a limited shelf-life. Because of the potentially hazardous nature of radioactive materials, their use must be licensed and elaborate safety precautions must be maintained during the preparation, utilization and disposal of radioisotopes. In addition, radioactive nucleotides are extremely expensive and their instability increases usage cost.

To overcome the limitations of radioactively labeled probes, the Company, starting with basic technology licensed from Yale University ("Yale"), has developed a proprietary technology which allows DNA probes to be used effectively without the use of radioactivity. This development permits the application of genetic analysis in a clinical setting without the shelf-life, licensing and disposal problems associated with radioactively labeled probes.

In December 1987, a primary patent for the technology that is essential to the development of nonradioactive DNA probe diagnostics was issued to Yale. In July 1994 and in September 1995 additional patents, broadening the coverage of the primary patent were also issued to Yale. The Company has an exclusive license for both patents from Yale for the life of the patents. Pursuant to such license agreement, the Company is obligated to pay Yale royalties equal to a percentage of sales. The Company is obligated to pay Yale an annual minimum royalty fee of $200,000 which shall continue through the end of the term of the exclusive license.

The near term application of the BIOPROBE-Registered Trademark- nucleic acid probe system in the human health care area is in bacterial and viral diagnostics. Nucleic acid probe diagnostics can be developed for any organism. Advantages of the nucleic acid probes for the direct detection of pathogens in human diagnostics are speed (less than an hour for test results as compared to days), greater specificity, and the capability of diagnosing a disease in an early or latent stage of development.

Radioactive Labeling Systems

The Company has developed a new method for labeling molecules with radioisotopes that is safer, faster, simpler and more cost effective than traditional methods of radiolabeling. This method is to be used in those applications requiring more sensitivity than non-radioactive materials permit. This method permits radiolabeling of a wide range of molecules for use in a variety of applications, including IN VIVO imaging, therapeutics, and clinical

assays.

With this technology stable products are radiolabeled just prior to use, thereby overcoming inherent limitations of classical radiolabeling technologies. The Company's method for radiolabeling maximizes the sensitivity while minimizing radiation exposure and radioactive waste.

In November 1987, the Company received two U.S. patents protecting aspects of its versatile technology for linking radioactive ions or biotin to various biologically active molecules for diagnostic and therapeutic uses. Since that time additional patents covering aspects of this technology have been issued to the Company.

Automatable Test Formats

In February 1991, the Company was granted a U.S. patent for its nucleic acid probe testing technology that generates a signal in solution. This technology allows the development of nucleic acid probe-based tests that can be readily automated and measured or identified instrumentally. Using this technology, probes can be detected with either chemiluminescent, fluorescent or colorimetric methods. The Company is developing test kits employing this technology and launched two of them to the research market during fiscal 1992. These included a test for the HIV virus which causes AIDS, and a test for the bacteria causing tuberculosis. In fiscal 1993 tests for other viruses, including HIV-2, and hepatitis, were introduced to researchers. In fiscal 1994 a more sensitive assay that can detect hepatitis B virus directly in serum and geared to the blood banking market was developed and in fiscal 1995 the Company's amplification technology was integrated with the enhanced hepatitis assay. The Company is developing an instrument-based automatable system employing this and other proprietary Enzo technologies.

Rapid, On-Site Diagnostics

The Company also has developed a diagnostic test technology which makes possible accurate, rapid and one-step tests. The ease of performing and interpreting tests

using this proprietary gel technology suits them well for at-home and doctor office use. Using the gel technology, the Company has developed a fecal occult blood test used to screen for colorectal cancer. The Company has received FDA clearance to market this occult blood test to physician offices and plans to develop other tests utilizing the gel technology for aiding consumer health maintenance.

Monoclonal Antibodies

The Company markets a panel of monoclonal antibodies that are being used in pathology laboratories to help identify the original source of a metastatic cancer and the type of cancer in undifferentiated cancer cells. The ability to identify the origin and type of cancer aids in the diagnosis of cancer and assists physicians in prescribing therapy. In order to offer a full line of state-of-the-art research products, the Company is actively engaged in expanding its line of monoclonal antibodies.

Therapeutic Technology and Product Development

Through Enzo Therapeutics, the Company is applying its technological capabilities for manipulating genetic material towards the development of therapeutic treatments for a variety of cancers and infections. Enzo is exploring applications of antisense nucleic acids employing various proprietary technologies. Also, the Company has developed techniques for stably attaching drugs and radioisotopes to proteins and DNA. The Company is working towards, INTER ALIA, the development of products relating to HIV, certain cancers and hepatitis, however, no products have been finalized.

In May 1987, Enzo entered into an agreement with The Research Foundation of the State of New York (SUNY) granting the Company certain exclusive rights to a genetic antisense technology. Because this antisense technology offers a way to control the expression of any gene in any organism, the Company believes it has broad therapeutic and agricultural applications. For example, this technology should make possible a new approach to controlling viral diseases and cancers in humans. It may also be used to control viral diseases in animals and agriculturally important plants and may lead to a variety of other desirable traits in agricultural crops and animals. This technology has been proven to be effective in a variety of organisms, including plants, animals and bacteria. For example, researchers have developed transgenic mice that are resistant to murine leukemia virus and tomato plants which produce tomatoes that do not spoil upon ripening. However, to date the Company has not developed any commercial products utilizing this technology. Because this technology has such broad application, the Company is exploring collaborative business relationships of

various types with other companies to develop the applications which Enzo is not interested in retaining for its own activities. Three U.S. patent applications were subsequently issued as patents by the U.S. Patent and Trademark Office. The first patent issued in March 1993; a second patent issued in May 1993; the third patent issued in December 1993.

In January 1995, the Company signed a collaborative research agreement with Cornell University on behalf of its Medical College, aimed at evaluating the Company's genetic antisense technology for use in managing the treatment of HIV, the AIDS-causing virus. Research results at Enzo indicate on a preliminary basis, that this technology could be applied to inhibiting the function of genes necessary for the HIV virus to grow. Upon completion of this research, the Company plans to move into human clinical studies.

MANUFACTURING

The Company's BIOPROBE-Registered Trademark- nucleic acid probe products contained in its PATHOGENE-Registered Trademark- and BIOPAP-TM- product lines are manufactured by using recombinant DNA techniques and traditional chemical synthesis methods. The DNA sequence which codes for a specific infectious agent or particular trait is isolated by cloning. The sequence is then introduced into a plasmid, commonly one that grows in E.COLI bacteria, and the bacteria serves as a reproduction vehicle with the application of standard fermentation procedures. The reproduced quantities of the specific DNA sequences are purified from the bacteria and then labeled so they can be detected. The detection system usually employs a non-radioactive visualization molecule, such as a color-changing enzyme-substrate or a fluorescent substance. The production of DNA probes does not require large manufacturing facilities because the yields from the bacteria are high and only small quantities of nucleic acids are required.

Monoclonal antibodies specific to certain substances are produced by fusing a type of mouse cancer cell with certain antibody-producing white blood cells from the spleens of mice that had been immunized with the targeted substance. The hybrid cells which make antibodies with the desired characteristics are then cultured to produce large quantities of that one discrete type of antibody. Monoclonal antibody production does not require extensive facilities.

The Company's manufacturing operation uses exempt quantities of tritium (3H) in its research and development activities and manufacturing operations. For the fiscal year ended July 31, 1995 the Company had accumulated two (2) millicuries of tritium. This was disposed of in the regular course of the Company's business at a cost of $1,200 during the 1995 fiscal year by a licensed carrier (Radiac Research Corporation, Brooklyn, New York). The Company has not historically had any problems disposing of such quantities and does not anticipate any such problems in the future.

REGULATION

The Company's present and proposed activities are regulated by the federal government to a significant extent. This regulation applies not only to research and development and manufacturing, but also to the marketing of products, particularly those involving diagnostic or therapeutic applications.

In order to test clinically, manufacture and market diagnostic or therapeutic products, the Company (and/or its marketer) must obtain the approval and comply with the standards of the FDA in the United States and comparable agencies in other countries. The FDA has established mandatory procedures and safety standards which apply to the clinical testing, manufacture and marketing of all diagnostic and therapeutic products. FDA approval is not required for the sale of certain products for research use only.

The process of seeking and obtaining FDA approval of a new therapeutic product generally takes a number of years and may require substantial funding. The process of seeking FDA clearance and corresponding foreign approvals is significantly less for IN VITRO diagnostic tests.

The Company has in-house personnel to expedite the preparation and filing of documentation necessary for FDA clearances and approvals, patent issuances and licensing agreements. The Company has received clearance from the FDA to market five of its diagnostic products. The Company also has several products in various stages of clinical trial evaluation which, if successful, are expected to be submitted to the FDA for clearance.

The Company's clinical reference laboratories are subject to various federal, state and local licensing, permits and regulatory certifications.

In addition to the foregoing, the Company's present and future business may

be subject to regulation under the Occupational Safety and Health Act, Environmental Protection Act, Resource Conservation and Recovery Act and other present or possible future legislation, as well as by governmental agencies with regulatory authority relating to the Company's business. From time to time, legislation has been introduced to regulate various aspects of the technology, but the Company is unaware of any proposed actions by federal, state or local authorities which might materially impair its ability to conduct its business.

PROPRIETARY TECHNOLOGY - PATENTS

As novel techniques, processes, products or microorganisms are developed during the course of its research and development activities, the Company will seek U.S. and, if deemed necessary, foreign patents. At the end of fiscal 1995 the Company owned or licensed 32 U.S. and some 145 foreign patents and had filed approximately 169 U.S. and foreign patent applications covering products, methods and procedures resulting from the Company's research projects. In fiscal 1995 the Company began to receive significant revenues from the distribution agreements related to these patents and believes that the patents have positioned the Company to derive considerably more revenues in the future as the markets for these products continue to develop. Patents relating to the BIOPROBE-Registered Trademark- nucleic acid probe system have issued in the U.S. and Europe. Management believes that additional patents will issue shortly and over the next several years with respect to the Company's pending applications. There can be no assurance, however, that patents will issue on pending applications or that any issued patents will have commercial benefit. The Company does not intend to rely on patent protection as the sole basis for protecting

its proprietary technology. It also relies on its trade secrets and continuing technological innovation. All employees involved in the clinical reference division and the manufacturing operations sign a confidentiality agreement prohibiting the employee from disclosing any confidential information about the Company, including the Company's technology or trade secrets.

In some instances, the Company may enter into royalty agreements with collaborating research parties in consideration for the commercial use by the Company of the developments of their joint research. In other instances a patent may be obtained by the collaborating party with the Company receiving a license to use the patented subject matter. In such cases, the Company will seek to secure exclusive licenses.

In other instances, the Company may have an obligation to pay royalties to, or reach a royalty arrangement with, a third party in consideration of the Company's use of developments of such third party. The Company has an exclusive licensing agreement with Yale for the technology used in the BIOPROBE-Registered Trademark- nucleic acid probe products. The agreement covers licensed patents owned by Yale and licensed to the Company for the life of the patents which expire not earlier than 2004.

In fiscal 1987, the Company entered into an agreement with The Research Foundation of the State University of New York giving the Company exclusive rights to a genetic engineering technology using antisense nucleic acid control methodologies. This technology is covered by three U.S. patents applications subsequently issued as patents by the U.S. Patent and Trademark Office. The first patent issued in March 1993; a second patent issued in May 1993; the third patent issued in December 1993. (See "Therapeutic Technology and Product Development" section, page 10). The term of the license agreement extends through the life of such patents as may issue therefrom.

HUMAN RESOURCES

As of July 31, 1995, the Company employed 184 full-time and 35 part-time employees. Of the full-time employees, 30 were engaged in research, development, manufacturing and marketing of research products and 154 at the clinical reference laboratories. The scientific staff of the Company possesses a wide range of experience and expertise in the areas of recombinant DNA, nucleic acid chemistry, molecular biology and immunology. The Company believes that relations with its employees are good.

COMPETITION

The Company's biotechnology activities compete with pharmaceutical, chemical, energy, and food companies which are diversifying into biotechnology, and with specialized biotechnology firms in the United States and elsewhere. Competition from existing companies and from newly formed private enterprises is expected to increase.

Most of the Company's competitors in the biotechnology industry are performing research in many of the same areas as the Company. Many of these competitors are larger and have greater financial and other resources than the Company. The primary competitive factors in the biotechnology field are the ability to create and maintain scientifically advanced technology during a period of rapid technological development, to attract and retain a breadth and depth of human resources, to develop proprietary products or processes and to have available adequate financial resources for bridging the often substantial time lag between technical concept and commercial implementation.

The Company's clinical reference laboratories activity, which is conducted in the New York metropolitan area, competes with numerous national and local entities, some of which are larger and have greater financial resources than the Company. The laboratories compete based on the specialized nature of the services performed, as well as on the reliability and speed in which they perform the diagnostic tests.

ITEM 2. PROPERTIES

The following are the principal facilities of the Company:

<TABLE>
<CAPTION>

Location	Principal Operations	Approximate Floor Area (sq. ft.)	Approximate Annual Base Rent	Approximate Expiration Date
<S>	<C>	<C>	<C>	<C>
60 Executive Blvd. Farmingdale, NY	Company and subsidiary corporate headquarters and other facilities (a building which is owned by certain officers of the Company)	40,000	$684,000	November 2004
575 Fifth Ave. New York, NY	Executive offices	2,000	$45,000	August 1996

</TABLE>

Effective December 1, 1985, the Company entered into a lease with the City of New York and the New York City Health and Hospitals Corporation for the Company to lease, over a fifty-year term, a building containing approximately 146,000 square feet of rentable space. The building, which has landmark designation, is located in the Bellevue Hospital Center Campus, First Avenue and East 29th Street, in Manhattan. The Company has recorded the fair value of the real property in the amount of $3,000,000 as a capital lease obligation due in installment payments through 2036. The construction was financed through Company funds.

The Company has negotiated with the City of New York to restructure past and future leasehold commitments. The renegotiated lease provides that payments for the period from March 1, 1991 through December 31, 1992 be deferred for a period of eight years. In addition, the annual rental was reduced by $260,000 per annum for the period from January 1, 1993 through December 31, 1997. The Company's carrying value of the leasehold asset is recorded at its estimated fair market value as of July 31, 1995 which resulted in a writedown of approximately $11,400,000 for the fourth quarter of fiscal 1995 due to management's decision to seek alternative uses for the property.

ITEM 3. LEGAL PROCEEDINGS

In March 1993, the Company filed suit in the United States District Court for the District of Delaware charging patent infringement and acts of unfair competition against Calgene, Inc. and seeking a declaratory judgment of invalidity concerning Calgene, Inc.'s plant antisense patent. On February 9, 1994 the Company filed a second suit in the United States District Court for the District of Delaware charging Calgene with infringement of a second antisense patent owned by the Company. Calgene has filed a counterclaim in the second Delaware action seeking a declaration that a third patent belonging to the Company is invalid. The two Delaware actions have been consolidated and were tried to the Court in April 1995. The parties are awaiting the Court's decision. In addition, the Company filed suit on March 22, 1994 in the United States District Court for the Western District of Washington against Calgene and the Fred Hutchinson Cancer Research Center, alleging that the defendants had conspired to issue a false and misleading press release regarding a supposed "patent license" from Hutchinson to Calgene, and conspired to damage the

Company's antisense patents by improperly using confidential information to challenge them in the Patent Office. The Complaint further charges that Hutchinson is infringing and inducing Calgene to infringe the Company's antisense patents. There can be no assurance that the Company will be successful in any of the foregoing matters or that Calgene, Inc. and/or Hutchinson will not be successful. However, even if the Company is not successful management does not believe there will be a significant monetary impact.

ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS

No matters were brought to a vote of the Company's stockholders in the fourth fiscal quarter ended July 31, 1995.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY AND RELATED STOCKHOLDER MATTERS

The common stock of the Company is traded on the American Stock Exchange (Symbol:ENZ). The following table sets forth the high and low price of the Company's Common Stock for the periods indicated as reported on the American Stock Exchange.

	High	Low
1994 Fiscal Year (August 1, 1993 to July 31, 1994):		
1st Quarter	$21 3/4	$ 9 3/8
2nd Quarter	$19 3/8	$15
3rd Quarter	$19 7/8	$10 1/4
4th Quarter	$12 1/8	$ 7 5/8
1995 Fiscal Year (August 1, 1994 to July 31, 1995):		
1st Quarter	$15 3/8	$ 9 1/8
2nd Quarter	$13 7/8	$10
3rd Quarter	$11 3/8	$ 9 1/2
4th Quarter	$17 1/8	$ 9 1/2

On October 19, 1995, the last sale price of the Common Stock of the Company as reported on the American Stock Exchange was $17 1/8.

On October 19, 1995, the Company had approximately 1,526 shareholders of record.

The Company has not paid a cash dividend on its Common Stock and intends to continue to follow a policy of retaining future earnings to finance its operations. Accordingly, the Company does not anticipate the payment of cash dividends to holders of Common Stock in the foreseeable future.

The Company declared a 5% stock dividend in June 1995 payable July 31, 1995 to shareholders of record as of July 3, 1995. The stock price on the date of declaration was $10.125.

ITEM 6.

SELECTED FINANCIAL DATA
(IN THOUSANDS, EXCEPT PER SHARE DATA)
FOR THE YEARS ENDED JULY 31,

<TABLE>
<CAPTION>

	1995	1994	1993	1992	1991
<S>	<C>	<C>	<C>	<C>	<C>
Operating revenues	$31,700	$22,799	$20,025	$20,535	$19,801

Litigation settlement, net of legal fees	21,860	--	--	--
--				
Writedown of leasehold interest to estimated fair market value and related building costs	11,400	600	3,000	401
4,500				
Interest income (expense) net	941	87	(230)	(1,420)
(3,109)				
Income (loss) before provision (benefit) for taxes on income and extraordinary items	9,749	2,156	(6,324)	(1,103)
(10,764)				
Provision (benefit) for taxes on income	4,131	(2,945)	52	115
45				
Income (loss) before extraordinary items	5,613	5,101	(6,376)	(1,218)
(10,809)				
Extraordinary items:				
Gain on extinguishment of debt	--	150	--	--
--				
Write off of deferred financing costs		--	--	--
(790)				
Gain (loss) on debt conversion	--	--	(466)	572
--				
	-------	-------	-------	-------

Net income (loss)	$5,618	$5,251	$(6,842)	$(646)
$(11,599)				
Per common and common equivalent share (1):				
Income (loss) before extraordinary items	$.26	$.23	($.34)	($.08)
($.90)				
Extraordinary items	--	.01	(.03)	.04
(.07)				
	----	----	----	----

Net income (loss)	$.26	$.24	($.37)	($.04)
($.97)				
	----	----	----	----

	----	----	----	----

Average common and dilutive common equivalent (1)	21,921	21,509	18,483	15,016
11,927				
Ratio of earnings to cover fixed charges	20.00	5.77	--	--
--				
Deficiency of earnings to cover fixed charges (2)	--	--	$(6,790)	$(981)
$(13,152)				

Selected Financial Data
(in thousands, except per share data and ratios)
As at July 31,

<CAPTION>

	1995	1994	1993	1992	1991
<S>	<C>	<C>	<C>	<C>	<C>
Working capital (Deficit)	$24,449	$17,153	$(2,411)	$(2,642)	$(33,734)
Total assets	72,458	65,043	47,569	49,793	49,333
Long-term debt and obligation under capital lease	4,698	4,379	4,168	4,186	4,529
Stockholders' equity	61,113	51,245	32,396	32,993	

1,110

</TABLE>

- - ----------

(1) In fiscal years 1991 through 1993, common stock equivalents have not been included because the effect of their inclusion would have been anti-dilutive.
(2) For the purpose of calculating the ratio of earnings to fixed charges and deficiency of earnings to cover fixed charges, earnings consist of income (loss) before provision for taxes plus extraordinary items and fixed charges (interest expense, amortization of deferred financing costs, and one-third of rental expense).

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

LIQUIDITY AND CAPITAL RESOURCES

Net cash provided by operating activities increased by approximately $12.3 million over the previous fiscal year principally as the result of a non cash writedown of the Company's leasehold of approximately $11.4 million and deferred income tax provision of $2.8 million offset by the increase in note receivable litigation settlement of $17.6 million in fiscal 1995 in addition to changes in other operating assets and liabilities.

Net cash used by investing activities decreased by approximately $136,000 as a result of a decrease in capital expenditures related to the Company's clinical reference laboratory operations.

Net cash provided by financing activities decreased by $9.1 million primarily from the proceeds of approximately $7.5 million from the issuance of stock in fiscal 1994.

In fiscal 1995, the Company exchanged approximately $2.9 million of legal fees and patent costs for approximately 286,000 shares of the Company's Common Stock.

On October 19, 1994 the Company executed a settlement agreement with Johnson & Johnson, Inc. (J&J) pursuant to which the Company received $15.0 million and a promissory note requiring J&J and its subsidiary, Ortho Diagnostics, Inc., to pay $5.0 million a year for each of the four successive anniversaries of said date. These future payments are recorded at net present value discounted using an interest rate of 5.25%. The litigation settlement amounted to approximately $21,860,000, net of legal fees. Pursuant to the terms of the settlement, all of the Company's grants, licenses and intellectual property have been returned to the Company in totality.

The Company's internal source of cash generated by operations and equity financing was sufficient to meet the Company's cash needs for investing and other financing activities.

As of July 31, 1995, the Company has a working capital of approximately $24,449,000.

Effective December 1, 1985, the Company entered into an agreement with the City of New York to lease, over a fifty-year term, a six-story building located in New York City. During 1992 this lease was renegotiated. (See Item 2.) The Company has recorded the fair market value of the real property in the amount of $3,000,000 as a capital lease obligation due in installments through 2036. Financing for the renovation and equipping of such facility came principally from the Company's own funds. The Company is carrying the capital leasehold interest at its estimated fair market value as of July 31, 1995. During the fourth quarter of fiscal 1995, the Company wrote down the leasehold property by approximately $11,400,000 due to management's decision to seek alternative uses for the property.

The Company will use its remaining net operating loss of $19,244,000 to partially offset its taxable income for fiscal 1995.

RESULTS OF OPERATIONS

FISCAL 1995 COMPARED TO FISCAL 1994

Revenues from operations for the fiscal year ended July 31, 1995 ("fiscal 1995") increased by $8,901,000 over revenues from operations for the fiscal year ended July 31, 1994 ("fiscal 1994"). This increase was due to increases of $4,365,000 in revenues from research product sales over revenue for the similar

activity in fiscal 1994 and by a $4,536,000 increase in revenues for the clinical reference laboratory operations. The increase in revenues from the clinical laboratory operations resulted primarily from an increase in volume of screening tests. The increase in research product sales resulted primarily from the Company's non-exclusive contract with Boehringer Mannheim and Amersham to distribute the Company's products.

R&D expenses increased by approximately $602,000 as a result of an increase in research programs and the amortization of patent costs. Cost of sales increased by approximately $3,099,000 as a result of increased revenue from the sale of research products and from the clinical reference laboratory. This increase resulted primarily from the Company's non- exclusive contract with Boehringer Mannheim and Amersham to distribute products. Included in the general and administrative expenses are legal fees of $2,977,000 and $1,663,000 for fiscal years 1995 and 1994, respectively.

The provision for uncollectable accounts receivable increased by $341,000 primarily from an increase in operating revenues at the clinical reference laboratory operations. Selling expenses increased by approximately $701,000 due to an increase in marketing programs and personnel costs for the clinical reference laboratory operations.

On October 19, 1994, the Company executed a settlement agreement with J&J pursuant to which the Company received $15.0 million in cash and a promissory note requiring J&J to pay a total of $5.0 million a year for each of the four successive anniversaries of said date. These future payments are recorded at net present value discounted using an interest rate of 5.25%. The litigation settlement amounted to approximately $21,860,000, net of legal fees.

The Company has recorded a writedown of the leasehold in the amount of $11,400,000 against earnings to its estimated fair market value in the fourth quarter of fiscal 1995 due to management's decision to seek alternative uses for the property.

The operating profit from the research and development activities and related costs amounted to $479,000 in fiscal 1995 as compared to an operating loss of $493,000 in fiscal 1994. The increase in this profit is principally related to the Company's nonexclusive agreement with Boehringer Mannheim and Amersham to distribute products. The operating profit from the clinical reference laboratories activities amounted to a profit of $2,146,000 as compared to an operating loss of $659,000 in fiscal 1994. This increase resulted principally from an increase in the volume of screening tests.

The provision for income taxes of $4,131,000 results from current income taxes due and utilization of net operating loss carryforwards related to taxable income recognized in connection with the J&J lawsuit.

Net income for the fiscal year ended July 31, 1995 increased to approximately $5,618,000 compared with approximately $5,251,000 for the fiscal year ended July 31, 1994.

RESULTS OF OPERATIONS

FISCAL 1994 COMPARED TO FISCAL 1993

Revenues from operations for the fiscal year ended July 31, 1994 ("fiscal 1994") increased by $2,773,000 over revenues from operations for the fiscal year ended July 31, 1993 ("fiscal 1993"). This increase was due to increases of $2,906,000 in revenues from research product sales over revenue for the similar activity in fiscal 1993 and by a $133,000 decrease in revenues for the clinical reference laboratory operations. The decrease in revenues from the clinical laboratory operations resulted primarily from a decrease in volume of higher priced screening tests. The increase in research product sales resulted primarily from the Company's non-exclusive contract with Boehringer Mannheim to distribute the Company's products.

R&D expenses increased by approximately $278,000 as a result of an increase in research programs and the amortization of patent costs. Cost of sales increased by approximately $2,626,000 as a result of increased revenue from the sale of research products. This increase resulted primarily from the Company's non-exclusive contract with Boehringer Mannheim to distribute products. Included in the general and administrative expenses are legal fees of $1,663,000 and $1,357,000 for fiscal years 1994 and 1993, respectively.

The provision for uncollectable accounts receivable increased by $365,000 primarily from a decrease in reimbursement rates from third party insurance carriers and a decline in collections from third parties. Other than through its normal collection procedures, the Company has no control over the percentage of bills that are reimbursable. In the fourth quarter of fiscal 1994, the Company

recorded a recovery of a previously reserved research contract receivable of $6,500,000 due from Johnson and Johnson, Inc. Selling expenses increased by approximately $218,000 due to an increase in marketing programs and personnel costs for the clinical reference laboratory operations.

The Company has expensed certain costs in the amount of $600,000 against earnings for the writedown of the leasehold to its estimated fair market value.

The operating loss on the research and development activities and related costs amounted to $493,000 in fiscal 1994 as compared to an operating loss of $610,000 in fiscal 1993. The decrease in this loss is principally related to an increase in research product sales. The operating loss from the clinical reference laboratories activities increased to an operating loss of $659,000 as compared to an operating loss of $319,000 in fiscal 1993. This increase resulted principally from a decrease in reimbursement rates from third party insurance carriers and a decline in collections from third parties

The benefit for taxes on income of $2,945,000 in fiscal 1994 is primarily due to the decrease in the valuation allowance for deferred tax assets of $4,084,000 related to the expected tax utilization of deferred tax assets from the Johnson & Johnson, Inc. settlement, net of a deferred income tax provision of $1,035,000 in fiscal 1994.

Net income (loss) for the fiscal year ended July 31, 1994 increased to approximately $5,251,000 compared with approximately $(6,842,000) for the fiscal year ended July 31, 1993.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The response to this item is submitted in a separate section of this report.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

Not applicable.

PART III

ITEM 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT

(a) DIRECTORS - The following sets forth certain information regarding directors of the Company who are not executive officers of the Company. Information with respect to directors of the Company who are also executive officers of the Company appears below under the subcaption "Executive Officers." The Company has a classified Board of Directors consisting of three classes.

JOHN B. SIAS (age 68) has been Director of the Company since January 1982. Mr. Sias has been President and Chief Executive Officer of Chronicle Publishing Company since April 1993. From January 1986 until April 1993, Mr. Sias was President of ABC Network Division, Capital Cities/ABC, Inc. From 1977 until January 1986 he was the Executive Vice President, President of the Publishing Division (which includes Fairchild Publications) of Capital Cities Communications, Inc.

JOHN J. DELUCCA (age 52) has been a Director of the Company since January 1982. Since October 1993 Mr. Delucca has been Senior Vice President and Treasurer of RJR Nabisco, Inc. From January 1992 until October 1993 he was managing director and Chief Financial Officer of Hascoe Associates, Inc. From October 1, 1990 to January 1992 he was President of The Lexington Group. From September 1989 until September 1990 he was Senior Vice President-Finance of the Trump Group. From May 1986 until August 1989, he was senior Vice President-Finance at International Controls Corp. From February 1985 until May 1986, he was a Vice President and Treasurer of Textron, Inc. Prior to that he was a Vice President and Treasurer of the Avco Corporation, which was acquired by Textron.

During the fiscal year ended July 31, 1995, there were four (4) formal meetings of the Board of Directors, several actions by unanimous consent and several informal meetings. The Board of Directors has an Audit Committee and Stock Option Committee. The Audit Committee had one (1) formal meeting and the Stock Option Committee had three (3) formal meetings in fiscal 1995.

The Audit Committee is authorized to review proposals of the Company's auditors regarding annual audits, recommend the engagement or discharge of the auditors, review recommendations of such auditors concerning accounting

principles and the adequacy of internal controls and accounting procedures and practices, to review the scope of the annual audit, to approve or disapprove each professional service or type of service other than standard auditing services to be provided by the auditors, and to review and discuss the audited financial statements with the auditors. Its members are Shahram K. Rabbani and Messrs. Sias and Delucca.

The Stock Option Committee has the plenary authority in its discretion to determine the purchase price of the Common Stock issuable upon the exercise of each option, to

determine the employees to whom, and the time or times at which, options shall be granted and the number of shares to be issuable upon the exercise of each option, to interpret the plans, to prescribe, amend and rescind rules and regulations relating to them, to determine the term and provisions of the respective option agreements and to make all other determinations deemed necessary or advisable for the administration of the plans. Its members are Messrs. Sias and Delucca.

The Company does not have a formal Executive Committee or Nominating Committee of the Board of Directors.

(b) EXECUTIVE OFFICERS - The following table sets forth the names and positions of all of the current executive officers of the Company:

NAME	POSITION
Elazar Rabbani, Ph.D.	President, Chairman of the Board of Directors and Chief Executive Officer
Shahram K. Rabbani	Executive Vice President, Treasurer, Director
Barry W. Weiner	Executive Vice President, Secretary and Director
Norman E. Kelker, Ph.D.	Senior Vice President
Dean Engelhardt, Ph.D.	Senior Vice President
Herbert B. Bass	Vice President of Finance
Barbara E. Thalenfeld, Ph.D.	Vice President, Corporate Development
David C. Goldberg	Vice President, Business Development

DR. ELAZAR RABBANI (age 51) has served as President and a Director of the Company since its organization in 1976. Dr. Rabbani received his B.A. degree from New York University in Chemistry and his Ph.D. degree in Biochemistry from Columbia University. He is a member of the American Society for Microbiology.

SHAHRAM K. RABBANI (age 43) has been an Executive Vice President of the Company since September 1981 and a Vice President, Treasurer and a Director of the Company since its organization. Mr. Rabbani received a B.A. degree in chemistry from Adelphi University.

BARRY W. WEINER (age 45) has been an Executive Vice President since September 1981, a Vice President and Director of the Company since its organization and Secretary since March 1980. He was employed by Colgate-Palmolive Company, New York, New York from August 1974 until March 1980, when he joined the Company on a full-time basis. Mr. Weiner received his B.S. degree in Economics from New York University and a M.B.A. from Boston University.

DR. NORMAN E. KELKER (age 56) has been a Vice President of the Company since September 1981. Effective January 1, 1989, he was promoted to Senior Vice President. From 1975 until he joined the Company, Dr. Kelker was an Associate Professor in the Department of Microbiology of the New York University School of Medicine. He holds a Ph.D. from Michigan State University.

DR. DEAN ENGELHARDT (age 55) has been Vice President since September 1981. Effective January 1, 1989, he was promoted to Senior Vice President. Prior to joining the Company he was Associate Professor of Microbiology at Columbia University College of Physicians and Surgeons. He obtained his Ph.D. from Rockefeller University.

HERBERT B. BASS (age 47) is Vice President of Finance of the Company. Prior to his promotion, Mr. Bass was the Corporate Controller of Enzo. Before joining Enzo in 1988, Mr. Bass held various positions at Danziger & Friedman, Certified Public Accountants, from 1979 to 1986, the most recent of which was audit manager. For the preceding seven years he held various positions at Berenson & Berenson, C.P.A.'s. Mr. Bass holds a Bachelor degree in Business Administration from Baruch College.

DR. BARBARA E. THALENFELD (age 55) is Vice President of Corporate Development and has been with Enzo since 1982. Prior to joining the Company she held an NIH research fellowship at Columbia University. She received a Ph.D.

from Hebrew University-Hadassah Medical Center and an MS from Yale University.

DAVID C. GOLDBERG (age 38) is Vice President of Business Development. Prior to joining Enzo in 1985, he was employed at DuPont NEN Products. He received an MS from Rutgers University and an MBA from New York University.

Dr. Elazar Rabbani and Shahram K. Rabbani are brothers and Barry W. Weiner is their brother-in-law.

ITEM 11. EXECUTIVE COMPENSATION

The information required under this item will be set forth in the Company's proxy statement to be filed with the Securities and Exchange Commission on or before November 28, 1995 and is incorporated herein by reference.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The information required under this item will be set forth in the Company's proxy statement to filed with the Securities and Exchange Commission on or before November 28, 1995 and is incorporated herein by reference.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

The information required under this item will be set forth in the Company's proxy statement to be filed with the Securities and Exchange Commission on or before November 28, 1995 and is incorporated herein by reference.

PART IV

ITEM 14. EXHIBITS, FINANCIAL STATEMENT SCHEDULES, AND REPORTS ON FORM 8-K

(a) (1) Consolidated Financial Statements
Consolidated Balance Sheet - July 31, 1995 and 1994
Consolidated Statement of Operations-
Years ended July 31, 1995, 1994 and 1993
Consolidated Statement of Stockholders' Equity-
Years ended July 31, 1995, 1994 and 1993
Consolidated Statement of Cash Flows-
Years ended July 31, 1995, 1994 and 1993
Notes to Consolidated Financial Statements.

(2) Financial Statement Schedule
Schedule II - Valuation and Qualifying Accounts

All other schedules have been omitted because the required information is included in the consolidated financial statements or the notes thereto or because they are not required.

(3) Exhibits

The following documents are filed as Exhibits to this Annual Report on Form 10-K:

EXHIBIT NO	DESCRIPTION
3(a)	Certificate of Incorporation, as amended March 17, 1980. (1)
3(b)	June 16, 1981 Certificate of Amendment of the Certificate of Incorporation. (2)
3(c)	Certificate of Amendment to the Certificate of Incorporation. (11)

3(d)	Bylaws. (1)
4(a)	Indenture dated as of March 15, 1986, between registrant and The First National Bank of Boston, as Trustee. (3)
4(b)	Form of Purchase Agreement dated as of March 24, 1986, between registrant and the Purchasers. (3)

4(c)	Form of Registration Rights Agreement made and entered into as of March 24, 1986 by and among registrant and the Purchasers. (3)
4(d)	Form of Note Indenture. (3)
10(a)	1980 Stock Option Plan. (1)
10(b)	Investment Agreement between the registrant and Johnson & Johnson Development Corp., dated June 25, 1982. (4)
10(c)	Agreement between the registrant and Ortho Diagnostic System, Inc. dated June 25, 1982. (5)
10(d)	1983 Incentive Stock Option Plan. (6)
10(e)	Letter Agreement between the Company and Ortho Diagnostic Systems, Inc. dated as of January 1, 1985. (7)
10(f)	Lease Agreement dated as of December 1, 1985. (8)
10(g)	Indenture of Mortgage and Trust dated as of December 1, 1985. (8)
10(h)	Letter of Credit Agreement dated as of December 1, 1985. (8)
10(i)	Leasehold Mortgage and Security Agreement dated as of February 5, 1986. (8)
10(j)	Loan Agreement dated as of December 31, 1985. (8)
10(k)	Restricted Stock Plan. (8)
10(l)	Letter Agreement dated October 27, 1987 between the registrant and the First National Bank of Boston. (9)
10(m)	Supplemental Collateral Security Agreement between the registrant and The First National Bank of Boston. (12)
10(n)	Bio Health Laboratories Inc. Stock Purchase Agreement. (10)
10(o)	Extension Agreement dated October 31, 1990 between the registrant and The First National Bank of Boston filed herewith. (13)
10(p)	Agreement with First New York Bank for Business filed herewith. (14)
10(q)	Agreement with BioHealth Laboratories, Inc. shareholders filed herewith. (15)
10(r)	Agreement with Johnson & Johnson, Inc. filed herewith. (16)
10(s)	1993 Incentive Stock Option Plan. (16)
10(t)	Employment Agreement with Elazar Rabbani. (16)
10(u)	Employment Agreement with Shahram Rabbani. (16)
10(v)	Employment Agreement with Barry Weiner. (16)
10(w)	1994 Stock Option Plan filed herewith.

11	Computation of per-share earnings filed herewith.
12	Computation of ratio of earnings to fixed charges filed herewith.
21	Subsidiaries of the registrant: Enzo Clinical Labs, Inc., a New York corporation. Enzo Diagnostics, Inc., a New York corporation. Enzo Therapeutics, Inc., a New York corporation.
23	Consent of Independent Auditors filed herewith.

- - ---------- NOTES TO (a)(3)

(1) The exhibits were filed as exhibits to the Company's Registration Statement on Form S-18 (File No. 2-67359) and are incorporated herein by reference.

(2) This exhibit was filed as an exhibit to the Company's Form 10-K for the year ended July 31, 1981 and is incorporated herein by reference.

(3) These exhibits were filed as exhibits to the Company's Current Report on Form 8-K dated April 4, 1986 and are incorporated herein by reference.

(4) This exhibit was filed as an exhibit to the Company's Current Report on Form 8-K dated June 29, 1982 and is incorporated herein by reference.

(5) This exhibit was filed as an exhibit to the Company's Annual Report on Form 10-K for the year ended July 31, 1983 and is incorporated herein by reference.

(6) This exhibit was filed with the Company's definitive proxy statement dated February 4, 1983 and is incorporated herein by reference.

(7) This exhibit was filed with the Company's Annual Report on Form 10-K for the year ended July 31, 1985 and is incorporated herein by reference.

(8) These exhibits were filed as exhibits to the Company's Quarterly Report on Form 10-Q for the quarter ended January 31, 1986 and are incorporated herein by reference.

(9) This exhibit was filed as an exhibit to the Company's Registration Statement on Form S-2(33-7657) and is incorporated herein by reference.

(10) This exhibit was filed as an exhibit to the Company's Current Report on Form 8-K dated July 12, 1990 and is incorporated herein by reference.

(11) This exhibit was filed with the Company's Annual Report on Form 10-K for the year ended July 31, 1989 and is incorporated herein by reference.

(12) This exhibit was filed with the Company's Annual Report on Form 10-K for the year ended July 31, 1990 and is incorporated herein by reference.

(13) This exhibit was filed with the Company's Annual Report on Form 10-K for the year ended July 31, 1991 and is incorporated herein by reference.

(14) This exhibit was filed with the Company's Annual Report on Form 10-K for the year ended July 31, 1992 and is incorporated herein by reference.

(15) This exhibit was filed as an exhibit to the Company's Registration Statement on Form S-3 (33-72170) and is incorporated herein by reference.

(16) This exhibit was filed with the Company's Annual Report on Form 10-K for the year ended July 31, 1994 and is incorporated herein by reference.

- - ---------------

(b) The Company's Current Reports on Form 8-K filed during the quarter ended July 31, 1995 -- none

(c) See Item 14(a)(3), above.

(d) See Item 14(a)(2), above.

****

S I G N A T U R E S

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

ENZO BIOCHEM, INC.

Date: October 25, 1995 By: /s/ Elazar Rabbani

President

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

/s/ Elazar Rabbani October 25, 1995
- - ---
Elazar Rabbani, President
and Chairman of Board of Directors
(Principal Executive Officer)

/s/ Shahram K. Rabbani October 25, 1995
- - ---
Shahram K. Rabbani, Executive
Vice President, Treasurer and

Director (Principal Financial and
Accounting Officer)

/s/ Barry W. Weiner October 25, 1995
- - ----------
Barry W. Weiner, Executive
Vice President, Secretary
and Director

- - ----------
John B. Sias, Director

- - ----------
John J. Delucca, Director

FORM 10-K, ITEM 14(a) (1) AND (2)
ENZO BIOCHEM, INC.

LIST OF CONSOLIDATED FINANCIAL STATEMENTS AND
FINANCIAL STATEMENT SCHEDULES

The following consolidated financial statements and financial statement schedules of Enzo Biochem, Inc. are included in Item 14(a):

All other schedules for which provision is made in the applicable accounting regulation of the Securities and Exchange Commission are not required under the related instructions or are inapplicable, and therefore have been omitted.

Report of Independent Auditors

Board of Directors and Stockholders
Enzo Biochem, Inc.

We have audited the accompanying consolidated balance sheets of Enzo Biochem, Inc. (the "Company") as of July 31, 1995 and 1994, and the related consolidated statements of operations, stockholders' equity, and cash flows for each of the three years in the period ended July 31,1995. Our audits also included the financial statement schedule listed in the Index at Item 14(a). These financial statements and schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements and schedule based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. 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 consolidated financial statements present fairly, in all material respects, the consolidated financial position of Enzo Biochem, Inc. at July 31, 1995 and 1994 and the consolidated results of its operations and its cash flows for each of the three years in the period ended July 31, 1995, in conformity with generally accepted accounting principles. Also, in our opinion, the related financial statement schedule, when considered in relation to the basic consolidated financial statements taken as a whole, presents fairly in all material respects the information set forth herein.

Ernst & Young LLP

Melville, New York
October 12, 1995

ENZO BIOCHEM, INC.
CONSOLIDATED BALANCE SHEET
July 31, 1995 and 1994

<TABLE>
<CAPTION>

ASSETS	1995	1994
<S>	<C>	<C>
Current assets:		
Cash and cash equivalents	$11,067,900	$4,150,900
Accounts receivable, less allowance for doubtful accounts of $2,126,900 in 1995 and $1,956,000 in 1994	10,915,200	9,271,900
Research contract receivable (Note 7)	--	6,500,000
Current portion of note receivable -- litigation settlement (Note 7)	5,000,000	--
Inventories (Note 3)	2,197,500	2,102,700
Deferred income taxes (Note 8)	--	3,000,000
Other	1,076,500	723,800
Total current assets	30,257,100	25,749,300
Property and equipment, at cost less accumulated depreciation and amortization (Notes 4 and 6)	13,892,200	23,616,300
Long term portion of note receivable -- litigation settlement (Note 7)	13,121,000	--
Cost in excess of fair value of net tangible assets acquired, less accumulated amortization of $2,757,600 in 1995 and $2,388,000 in 1994	10,045,700	10,391,300
Deferred patent costs, less accumulated amortization of $1,628,300 in 1995 and $1,144,000 in 1994.	4,971,000	5,062,700
Other	171,300	223,700
	$72,458,300	$65,043,300

LIABILITIES AND STOCKHOLDERS' EQUITY	1995	1994
<S>	<C>	<C>
Current liabilities:		
Loan payable to bank (Note 5)	$ --	$2,000,000
Trade accounts payable	1,579,900	4,447,100
Accrued interest payable	--	30,000
Accrued legal fees (Note 7)	921,900	318,100
Income taxes payable	1,074,000	--
Other accrued expenses	2,147,200	1,647,600

Current portion of long-term debt (Note 5)	31,700	95,800
Current portion of obligations under capital leases (Note 6)	53,000	58,100
Total current liabilities	5,807,700	8,596,700
Long-term debt (Note 5)	81,200	135,600
Obligations under capital leases (Note 6)	4,617,000	4,242,900
Deferred income taxes (Note 8)	--	150,700
Other deferred liabilities	839,800	672,500
Commitments and contingencies (Notes 6, 7 and 10)		
Stockholders' equity (Notes 5, and 9):		
Preferred Stock, $.01 par value; authorized 25,000,000 shares; no shares issued or outstanding		
Common Stock, $.01 par value; authorized 75,000,000 shares; shares issued and outstanding: 21,334,600 in 1995 and 19,822,200 in 1994	213,500	198,200
Additional paid-in capital	81,605,000	71,752,600
Accumulated deficit	(20,705,900)	(20,705,900)
Total stockholders' equity	61,112,600	51,244,900
	$72,458,300	$65,043,300

</TABLE>

See accompanying notes

ENZO BIOCHEM, INC.
CONSOLIDATED STATEMENT OF OPERATIONS
Years ended July 31, 1995, 1994 and 1993

<TABLE>
<CAPTION>

	1995	1994	1993
<S>	<C>	<C>	<C>
Revenues:			
Operating revenues (Note 11)	$31,699,900	$22,798,600	$20,025,200
Costs and expenses:			
Cost of sales and diagnostic services	13,876,500	10,778,000	8,152,300
Research and development expense	2,366,400	1,764,000	1,486,400
Selling expense	2,754,200	2,053,200	1,834,800
Provision for uncollectable accounts receivable	3,845,600	3,504,300	3,139,200
General and administrative expense	10,508,300	8,530,100	8,506,400
Recovery of research contract receivable (Note 7)	--	(6,500,000)	--
Litigation settlement net of legal fees (Note 7)	(21,859,700)	--	--
Writedown of leasehold interest to estimated fair market value and related building costs (Note 4)	11,400,000	600,000	3,000,000
	22,891,300	20,729,600	26,119,100
Income (loss) before interest expense, provision (benefit) for taxes and extraordinary items	8,808,600	2,069,000	(6,093,900)
Interest income (expense), net (Note 2)	940,700	87,200	(229,800)
Income (loss) before provision (benefit) for taxes on income and extraordinary items	9,749,300	2,156,200	(6,323,700)
Provision (benefit) for taxes on income (Note 8)	4,131,200	(2,945,000)	52,400
Income (loss) before extraordinary items	5,618,100	5,101,200	(6,376,100)

Extraordinary items (Note 5)			
(Loss) on debt conversion	--	--	(465,600)
Gain on extinguishment of debt	--	150,000	--
Net income (loss)	$5,618,100	$5,251,200	$(6,841,700)
Per common and common equivalent share (Note 13)			
Income (loss) before extraordinary items	$.26	$.23	$(.34)
Extraordinary items	--	.01	(.03)
Net income (loss)	$.26	$.24	$(.37)
Weighted average common shares	21,920,800	21,508,600	18,483,400

</TABLE>

See accompanying notes

ENZO BIOCHEM, INC.
CONSOLIDATED STATEMENT OF STOCKHOLDERS' EQUITY
Years ended July 31, 1995, 1994 and 1993

<TABLE>
<CAPTION>

	Common Stock		Additional paid-in		Total Shareholders' equity
	Shares	Amount	Capital	deficit	
<S>	<C>	<C>	<C>	<C>	<C>
Balance at July 31, 1992	17,474,303	$174,700	$51,933,500	$(19,115,400)	$32,992,800
Net loss for the year ended July 31, 1993				(6,841,700)	(6,841,700)
Increase in common stock and paid-in capital due to debenture conversion (Note 5)	167,600	1,700	1,178,300		1,180,000
Increase in common stock and paid-in capital due to exercise of stock options (Note 9)	46,900	500	116,100		116,600
Increase in common stock and paid-in capital due to exchange of stock for debt, net of expenses of $167,500	598,297	6,000	4,941,800		4,947,800
Balance at July 31, 1993	18,287,100	182,900	58,169,700	(25,957,100)	32,395,500
Net income for the year ended July 31, 1994				5,251,200	5,251,200
Increase in common stock and paid-in capital due to debenture conversion (Note 5)	50,000	500	261,800		262,300
Increase in common stock and paid-in capital due to exercise of stock options (Note 9)	150,500	1,500	449,600		451,100
Increase in common stock due to investment from investor, net of expenses of approximately $17,000	940,000	9,400	7,493,500		7,502,900

Increase in common stock and paid-in capital due to exchange of stock for debt, net of expenses of approximately $205,000 (Note 2)	394,600	3,900	5,378,000		5,381,900
Balance at July 31, 1994	19,822,200	$198,200	$71,752,600	$(20,705,900)	$51,244,900
Net income for the year ended July 31, 1995				5,618,100	5,618,100
Increase in common stock and paid-in capital due to exercise of stock options (Note 9)	210,800	2,200	1,393,400		1,395,600
Increase in common stock and paid-in capital due to exchange of stock for debt (Note 2)	285,600	2,900	2,851,100		2,854,000
Increase in common stock and paid-in capital due to 5% stock dividend (Note 14)	1,016,000	10,200	5,607,900	(5,618,100)	--
Balance at July 31, 1995	21,334,600	$213,500	$81,605,000	$(20,705,900)	$61,112,600

</TABLE>

See accompanying notes

ENZO BIOCHEM, INC.
CONSOLIDATED STATEMENT OF CASH FLOWS
Years ended July 31, 1995, 1994 and 1993
(Note 2)

<TABLE>
<CAPTION>

	1995	1994	1993
<S>	<C>	<C>	<C>
Cash flows from operating activities:			
Net income (loss)	$5,618,100	$5,251,200	$(6,841,700)
Adjustments to reconcile net income (loss) to net cash provided (used) by operating activities:			
Depreciation and amortization of property and equipment	862,600	736,400	781,400
Amortization of costs in excess of fair value of net tangible assets acquired	369,600	368,800	381,900
Amortization of deferred financing costs	--	--	2,400
Amortization of deferred patent costs	484,300	439,700	329,400
Provision for uncollectible accounts receivable and reimbursable costs on research contracts	3,845,600	3,504,300	3,139,200
Write down of leasehold interest and related building costs to estimated fair market value	11,400,000	600,000	3,000,000
Deferred income tax provision (benefit)	2,849,300	(3,049,300)	--
Loss on disposal of assets	--	10,100	265,000
Legal expenses converted into stock	1,455,700	246,000	458,700
Recovery of research contract receivable	--	(6,500,000)	--
Accretion of interest on note receivable	(494,000)	--	

Gain on extinguishment of debt	--	(150,000)	--
Extraordinary loss on debenture conversion	--	--	465,600
Deferred rent	167,300	168,000	168,200
Changes in operating assets and liabilities:			
Note receivable - litigation settlement	(17,627,000)	--	--
Accounts receivable before provision for uncollectable amounts	(5,488,900)	(7,812,100)	(1,703,500)
Research contract receivable	6,500,000	--	-
Inventories	(94,800)	(447,800)	(83,100)
Other assets	(184,900)	(105,800)	53,300
Trade accounts payable and other accrued expenses	(3,449,400)	2,759,800	(173,700)
Income taxes payable	1,074,000	--	-
Accrued legal fees	1,834,300	785,400	434,600
Accrued interest payable	(30,000)	(51,300)	104,100
Total adjustments	3,473,700	(8,497,800)	7,623,500
Net cash provided (used) by operating activities	9,091,800	(3,246,600)	781,800

(Continued on following page)

ENZO BIOCHEM, INC.
CONSOLIDATED STATEMENT OF CASH FLOWS
Years ended July 31, 1995, 1994 and 1993
(Note 2)

<CAPTION>

	1995	1994	1993
<S>	<C>	<C>	<C>
Cash flows from investing activities:			
Capital expenditures	$(1,033,300)	$(1,174,700)	$(869,800)
Interest income on funds held in escrow	--	--	(100)
Patent costs deferred	(392,600)	(286,800)	(210,800)
(Increase) decrease in security deposits	52,400	(48,500)	1,800
Net cash used by investing activities	(1,373,500)	(1,510,000)	(1,078,900)
Cash flows from financing activities:			
Payments of amounts due to former owners of companies acquired	--	--	(94,800)
Payments of obligations under capital leases	(78,400)	(240,700)	(296,600)
Proceeds from long and short term borrowings	--	2,162,800	500,000
Proceeds from the exercise of stock options	1,395,600	451,100	116,600
Payment of loans payable to bank and long term debt	(2,118,500)	(1,416,700)	

(50,000)			
Proceeds from issuance of stock	--	7,520,000	
--			
Payment for registration filing fees	--	(222,800)	
(17,500)			
Net cash (used) provided by financing activities	(801,300)	8,253,700	
157,700			
Net increase (decrease) in cash and cash equivalents	6,917,000	3,497,100	
(139,400)			
Cash and cash equivalents at the beginning of the year	4,150,900	653,800	
793,200			
Cash and cash equivalents at the end of the year	$11,067,900	$4,150,900	
$653,800			

</TABLE>

See accompanying notes

Note 1 - BUSINESS AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

BUSINESS

Enzo Biochem, Inc. (the "Company") is engaged in research, development, manufacturing and marketing of diagnostic and research products based on genetic engineering, biotechnology and molecular biology. These diagnostic products will allow for the diagnosis of and/or screening for infectious diseases, cancers, genetic defects and other medically pertinent diagnostic information. The Company operates a clinical reference laboratory which offers and provides diagnostic medical testing services to the health care community. The Company also is conducting research and development activities in the development of therapeutic products.

SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

PRINCIPLES OF CONSOLIDATION

The accompanying consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries. All intercompany transactions and balances have been eliminated.

CASH AND CASH EQUIVALENTS

The Company considers all highly liquid debt instruments purchased with maturities of three months or less to be cash equivalents.

Cash equivalents consist of short-term debt securities of the U.S. government that the Company intends to hold to maturity. The market values of these securities approximated cost at July 31, 1995.

Note 1 - BUSINESS AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONT'D)

CONCENTRATION OF CREDIT RISK

Approximately 85% and 60% at July 31, 1995 and 1994, respectively, of the Company's net accounts receivable relate to its clinical reference laboratory business which operates in the New York Metropolitan area. The accounts receivable are primarily from public and private insurance carriers and individuals. The Company recorded an additional provision for uncollectable accounts receivable of $400,000 in the fourth quarter of fiscal 1995 based on its evaluation of accounts receivable at the clinical reference laboratory. Management believes that collectability of the accounts receivable will be within its expectations. At July 31, 1995, 13% of the Company's net accounts receivable relate to amounts due under nonexclusive distribution agreements with Boehringer Mannheim and Amersham. At July 31, 1994, 35% of the Company's net accounts receivable related to amounts due from Boehringer Mannheim. In fiscal 1995 sales to Boehringer Mannheim represented approximately 22% of consolidated operating revenues.

INVENTORIES

Inventories are stated at the lower of cost (first-in, first-out method) or market.

PROPERTY AND EQUIPMENT

Equipment is being depreciated on the straight-line and accelerated methods over the estimated useful lives of the assets. Leasehold improvements are amortized over the term of the related leases or estimated useful lives of the assets, whichever is shorter.

AMORTIZATION OF INTANGIBLE ASSETS

The cost in excess of fair value of net tangible assets acquired is being amortized on the straight-line method over periods of twenty or forty years.

PATENT COSTS

The Company has filed applications for United States and foreign patents covering certain aspects of its technology. The costs incurred in filing such applications have been deferred and are amortized over the estimated useful lives of the patents beginning upon issue. Costs related to unsuccessful patent applications are expensed.

Note 1 - BUSINESS AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONT'D)

REVENUE RECOGNITION

Revenues from services from the clinical reference laboratory are recognized when services are provided. Revenues from research product sales are recognized when the merchandise is shipped.

NET INCOME (LOSS) PER SHARE

Net income (loss) per share has been computed based upon the weighted average number of common shares and dilutive common stock equivalents outstanding during the year. The net income (loss) per share amounts for fiscal 1994 and 1993 have been retroactively adjusted to reflect the 5% stock dividend declared in fiscal 1995 (see Note 14).

Common stock equivalents which result from employee stock options and common stock purchase warrants have not been included in the calculation of net loss per share in fiscal 1993 because the effect would be antidilutive. Shares issuable upon conversion of the 9% convertible subordinated debentures are not common stock equivalents, are antidilutive and, therefore, are also excluded from the computation of net loss per share.

Note 2 - SUPPLEMENTAL DISCLOSURE FOR STATEMENT OF CASH FLOWS

Cash paid for interest reconciled to interest expense for the years ended July 31, 1995, 1994 and 1993 is as follows:

<TABLE>
<CAPTION>

	1995	1994	1993
<S>	<C>	<C>	<C>
Cash paid for interest	$166,400	$165,700	$142,600
Plus non cash items:			
Amortization of deferred financing costs	--	--	2,400
Increase (decrease) in accrued interest payable, net of conversion of $122,900 of debenture bonds in 1993.	(30,000)	(51,300)	110,700
Interest expense	$136,400	$114,400	$255,700

</TABLE>

In the years ended July 31, 1995, 1994 and 1993, the Company paid cash for income taxes of approximately $232,000, $94,000 and $63,000, respectively, and received refunds of income taxes previously paid of approximately $27,000 in fiscal 1994.

NOTE 2 - SUPPLEMENTAL DISCLOSURE FOR STATEMENT OF CASH FLOWS (CONT'D)

OTHER NONCASH ITEMS:

During fiscal 1995, 1994 and 1993, the Company acquired property and equipment in the amount of $129,300, $76,400 and $63,900, respectively, which was financed through capital lease obligations.

During fiscal 1995, 1994 and 1993, approximately $1,082,000, $282,000 and $1,334,000, respectively, has been accrued for construction costs, rent and legal fees related to the New York City leasehold. Interest accretion on the capital lease obligation for the New York City leasehold was approximately $318,000, $331,000 and $360,000 for fiscal 1995, 1994 and 1993, respectively.

The conversion of the Debentures during 1993 included accrued interest of $122,900 and accretion of redemption premium of $43,500, offset by deferred financing costs of $26,000 associated with the issuance of the Debentures, and net of conversion costs of $75,000, all of which were written off and included in the extraordinary loss. The extraordinary loss on the conversion of the Debentures to 167,600 shares of the Company's Common Stock was based upon the Company's stock price, as quoted on the American Stock Exchange, of $7.00 - $8.50 per share for the period from December 23, 1992 to July 31, 1993. During fiscal 1994, Debentures of $262,000 were converted into 50,000 shares of the Company's Common Stock. On January 13, 1995, the Company paid in full the outstanding balance of the Debentures.

In fiscal 1993, the Company accrued approximately $10,000 of deferred patent costs and $150,000 of legal and professional fees for registration filing fees.

In fiscal 1993, the Company exchanged approximately $5.1 million of accrued legal fees, construction costs and other expenses for approximately 600,000 shares of the Company's Common Stock. In fiscal 1994, the Company exchanged approximately $2.6 million of accrued legal fees, construction costs and patent costs for approximately 205,000 shares of the Company's Common Stock. The Company also settled a lawsuit against the former owners of its subsidiary, Enzo Clinical Labs, Inc., by issuing approximately 190,000 shares with a market value of approximately $3,000,000. In fiscal 1995, the Company issued approximately 286,000 shares of common stock in exchange for approximately $2.9 million in legal fees of which approximately $1,456,000 related to legal fees incurred in

fiscal 1995.

NOTE 3 - INVENTORIES

At July 31, 1995 and 1994 inventories consist of:

	1995	1994
Raw materials	$ 60,800	$ 68,600
Work in process	1,508,200	1,349,700
Finished products	628,500	684,400
	$2,197,500	$2,102,700

NOTE 4 - PROPERTY AND EQUIPMENT

At July 31, 1995 and 1994 property and equipment consist of:

	1995	1994
Laboratory machinery and equipment	$ 1,941,500	$ 1,664,900
Leasehold improvements	2,146,200	2,162,800
Office furniture and equipment	3,422,400	2,856,000
	7,510,100	6,683,700
Accumulated depreciation and amortization	3,893,800	3,234,800
	3,616,300	3,448,900
Building under capital lease and related construction costs, including capitalized interest of $4,364,700 in 1995 and 1994 and net of cumulative writedown to estimated fair market value of $19,901,000 in 1995 and $8,501,000 in 1994.	10,275,900	20,167,400
	$13,892,200	$23,616,300

In fiscal 1995, 1994 and 1993 the Company wrote down the capital lease asset by $11,400,000, $600,000 and $3,000,000, respectively to its estimated fair market value. In the fourth quarter of fiscal 1995 management decided to seek alternative uses for the building under the capital lease.

NOTE 5 - LOANS PAYABLE AND LONG-TERM DEBT

At July 31, 1995 and 1994, long-term debt consists of the following:

	1995	1994
9% Convertible Subordinated Debentures due March 15, 2001	$ --	$ 68,600
8.75% loan payable to bank at $3,360 per month through 1998	112,900	162,800
	112,900	231,400
Less current portion	31,700	95,800

Total long-term debt	$ 81,200	$135,600

In 1993, the Company converted $649,000 in principal of the Company's outstanding Debentures into 167,600 shares of Common Stock which resulted in an extraordinary loss of $466,000. During fiscal 1994, the Company converted an additional $37,300 in principal into 5,000 shares of Common Stock. On January 13, 1995, the Company paid in full the outstanding balance of the Debentures.

During fiscal 1994, the 9% convertible debentures of $225,000 were converted into 45,000 shares of common stock.

On September 17, 1991, the Company entered into a financing agreement from The First New York Bank for Business. In fiscal 1994, the outstanding principal on the line of credit was paid and the Company negotiated a 10% reduction in the outstanding balance on the term loan which also was paid and resulted in an extraordinary gain of $150,000 on the extinguishment of bank debt.

In March 1994, the Company entered into a $2 million line of credit with a bank. Interest was being charged at a rate of 1% above bank's prime rate (8.1% at July 31, 1994). In October 1994, the Company paid in full the line of credit.

As of July 31, 1995, the Company has a $2,000,000 line of credit available with a bank.

NOTE 6 - LEASE OBLIGATIONS

CAPITAL LEASES

Effective December 1, 1985, the Company entered into an agreement with the City of New York to lease, over a fifty-year term, a six-story building located in New York City. The cost of the renovation was financed principally through the use of Company funds.

The Company recorded the fair value of the real property in the amount of $3,000,000 as a capital lease obligation due in installments through 2036. The minimum lease payments began in fiscal 1987, increasing (and in some years decreasing) through the twentieth year, when the payment is $825,000. The payments from the twenty-first through fiftieth years will be based on an appraisal of the fair market value of the property, excluding the value of improvements made by the Company, but will not be less than $579,000 per annum. Through 1998, payments will be applied to interest only which accrues at 12.05% per annum. The capital lease obligation will increase to approximately $5,525,000 before payments begin to be applied to both principal and interest in 1999.

In January 1992, the City of New York amended the lease payment schedule by deferring current payments and reducing future rentals for a period of five years. This amendment was in consideration of excess renovation costs incurred by the Company. The overall reduction in the capital lease obligation of $770,000 has been offset against the carrying value of the building under capital lease in the accompanying consolidated balance sheet. In connection with the amended lease payment schedule, the Company began to make monthly payments of $12,150 beginning January 1993. The Company incurred $1,400,000 in related building costs in fiscal 1995, but did not make these payments of rent or payment in lieu of taxes pending discussions with the City of New York concerning certain leasehold issues.

The cost and accumulated amortization of assets acquired under capitalized leases is approximately $3,529,000 and $94,000 at July 31, 1995 and $3,824,000 and $650,000 at July 31, 1994, respectively.

NOTE 6 - LEASE OBLIGATIONS (CONT'D)

Minimum annual rentals under capital lease obligations for fiscal years ending July 31 are as follows:

	Real property leases	Equipment leases	Total
1996	$ 258,000	$ 53,000	$ 311,000
1997	280,000	29,000	309,000
1998	445,000	27,000	472,000
1999	568,000	31,000	599,000
2000	582,000	8,000	590,000
Thereafter	21,525,000	--	21,525,000
Total of future annual minimum lease payments	$23,658,000	$148,000	$23,806,000
Less amount representing interest			19,136,000
Present value of minimum lease payments			$ 4,670,000

OPERATING LEASES

Enzo Clinical Labs, Inc., ("Enzo Clinical Labs"), a wholly-owned subsidiary of the Company, leases its office and laboratory space under several leases which expire between September 1, 1994 and November 30, 2004. Certain officers of the Company own the building which Enzo Clinical Labs uses as its main facility. In addition to the minimum annual rentals of space, this lease is subject to an escalation clause. Rent expense under this lease approximated $684,000, $683,000 and $648,000 in fiscal 1995, 1994 and 1993, respectively.

NOTE 6 - LEASE OBLIGATIONS (CONT'D)

Total consolidated rent expense incurred by the Company during fiscal 1995, 1994 and 1993 was approximately $1,132,000, $1,108,000 and $1,038,000, respectively. Minimum annual rentals under operating lease commitments for fiscal years ending July 31 are as follows:

1996	882,000
1997	1,021,000
1998	1,129,000
1999	1,092,000
2000	1,094,000
Thereafter	2,478,000
	$7,696,000

NOTE 7 - LITIGATION

ORTHO DIAGNOSTIC SYSTEMS, INC.

On January 1, 1985, the Company entered into a follow-on agreement with Ortho Diagnostic Systems, Inc. ("Ortho"), a subsidiary of Johnson and Johnson, Inc. ("J&J") pursuant to the 1982 agreement, whereby Ortho agreed to pay the Company $11,000,000 over a four and one-half year period on a cost recovery basis in support of research and development projects. Ortho paid $4,500,000 to the Company under this agreement up to January 1987 at which time Ortho indicated its intention to suspend future scheduled payments under the agreements pending resolution of certain matters. At July 31, 1994, the Company had a receivable from Ortho of approximately $6,500,000. Even though the Company continued to perform its obligations under the agreements, it provided a total of $6,500,000 in prior years for the potentially uncollectable receivable from Ortho pending resolution of the disputed items and the outcome of the civil suit filed by the

Company against Ortho and J&J. This allowance for uncollectable receivable of $6,500,000 was reversed in the fourth quarter of fiscal 1994 due to the resolution of this matter, as discussed below.

NOTE 7 - LITIGATION (CONT'D)

During 1992, the outside legal counsel went on a contingency basis and, therefore, no fees were incurred. In fiscal 1993 and 1994, the Company exchanged 22,736 and 6,121 shares of its common stock for reimbursable legal expenses, approximating $200,000 and $101,800, respectively. During fiscal 1995, the Company issued approximately 110,000 shares in exchange for $1.1 million in accrued legal fees.

On October 19, 1994, the Company executed a settlement agreement with J&J pursuant to which the Company received $15.0 million in cash, of which $6.5 million related to amounts due under the agreements referred to above, and a promissory note requiring J&J Ortho to pay a total of $5.0 million a year for each of the four successive anniversaries of said date. Pursuant to the terms of the settlement, all of the Company's grants, licenses and intellectual property have been returned to the Company in totality. These future payments are recorded at their net present value of $18,121,000 at July 31, 1995 in the accompanying consolidated balance sheet, using a discount rate of 5.25%.

CALGENE, INC.

In March 1993, the Company filed suit in the United States District Court for the District of Delaware charging patent infringement and acts of unfair competition against Calgene, Inc. and seeking a declaratory judgment of invalidity concerning Calgene, Inc.'s plant antisense patent. On February 9, 1994 the Company filed a second suit in the United States District Court for the District of Delaware charging Calgene with infringement of a second antisense patent owned by the Company. Calgene has filed a counterclaim in the second Delaware action seeking a declaration that a third patent belonging to the Company is invalid. The two Delaware actions have been consolidated and were tried to the Court in April 1995. The parties are awaiting the Court's decision. In addition, the Company filed suit on March 22, 1994 in the United States District Court for the Western District of Washington against Calgene and the Fred Hutchinson Cancer Research Center, alleging that the defendants had conspired to issue a false and misleading press release regarding a supposed "patent license" from Hutchinson to Calgene, and conspired to damage the Company's antisense patents by improperly using confidential information to challenge them in the Patent Office. The Complaint further charges that Hutchinson is infringing and inducing Calgene to infringe the Company's antisense patents. There can be no assurance that the Company will be successful in any of the foregoing matters or that Calgene, Inc. and/or Hutchinson will not be successful. However, even if the Company is not successful management does not believe there will be a significant monetary impact.

NOTE 8 - INCOME TAXES

The tax provision (benefit) is calculated under the provisions in Statement of Financial Accounting Standards (SFAS) No. 109 "Accounting for Income Taxes".

	1995	1994	1993
Current			
Federal	$ 400,000	--	--
State and local	881,900	$104,300	$52,400
Deferred			
Federal	5,650,000	--	--
State and local	1,799,300	(49,300)	--
Change in deferred tax			

asset valuation reserve related to net operating losses	(4,600,000)	(3,000,000)	--
Provision (benefit) for income taxes	$4,131,200	$(2,945,000)	$52,400

NOTE 8 - INCOME TAXES (CONT'D)

Deferred income taxes arise from temporary differences between the tax basis of assets and liabilities and their reported amounts in the financial statements. The components of deferred income taxes are as follows:

	1995	1994	1993
Deferred tax liability:			
Deferred patent costs	$(2,076,000)	$(2,110,000)	$(2,136,000)
Other	(310,000)	(310,000)	--
Total deferred tax liabilities	(2,386,000)	(2,420,000)	(2,136,000)
Deferred tax assets:			
Writedown of leasehold interest	7,573,000	3,390,000	3,138,000
Provision for uncollectable accounts receivable and research contract	574,000	490,000	3,240,000
Net operating loss carryforwards	36,000	8,199,000	6,447,000
Alternative minimum tax	600,000	--	--
Other	352,000	282,000	287,000
	9,135,000	12,361,000	13,112,000
Valuation allowance for deferred tax assets	(6,749,000)	(7,092,000)	(11,176,000)
Net deferred tax asset (liability)	$ 0	$ 2,849,000	$ (200,000)

Current income taxes of approximately $1.3 million provided for in the fourth quarter of fiscal 1995 are primarily calculated on the alternative minimum tax method. The decrease in the valuation allowance for deferred tax assets of $4,084,000 in fiscal 1994 relates primarily to the expected utilization of net operating loss carryforwards and deferred tax assets related to the Johnson & Johnson, Inc. settlement (see Note 7).

NOTE 8 - INCOME TAXES (CONT'D)

The provision (benefit) for income taxes were at rates different from U.S. federal statutory rates for the following reasons:

	1995	1994	1993
Federal statutory rate	34%	34%	(34%)
Expenses not deductible for income			

tax return purposes	2%	7%	2%
State income taxes, net of federal	10%	2%	1%
No benefit for operating losses	44%	(41%)	32%
Change in valuation reserve related to benefits from operating losses	(48%)	(139%)	--
	42%	(137%)	1%

NOTE 9 - STOCK OPTIONS AND WARRANTS

The Company has a nonqualified stock option plan, an incentive stock option plan and a restricted stock incentive plan and has issued other options and warrants, as described below. All share information has been adjusted to reflect the 5% stock dividend declared in fiscal 1995.

NONQUALIFIED STOCK OPTION PLAN

The Company has a nonqualified stock option plan (the "Plan") under which options for up to 756,000 shares of Common Stock may be issued. No additional options may be granted under such plan. The exercise price of options granted under the terms of the Plan will be determined by the Board of Directors.

NOTE 9 - STOCK OPTIONS AND WARRANTS (CONT'D)

A summary of nonqualified stock option transactions for the three years ended July 31, 1995 is as follows:

	Number of shares	Exercise price
Outstanding - July 31, 1992	161,784	$3.22
Exercised	(1,418)	$3.22
Outstanding - July 31, 1993	160,366	$3.22
Exercised	(13,230)	$3.22
Outstanding - July 31, 1995 and 1994	147,136	$3.22

The options granted are generally exercisable at 25% per year after one year and expire ten years after the date of grant and, at July 31, 1995 all nonqualified options were exercisable.

INCENTIVE STOCK OPTION PLAN

The Company has an incentive stock option plan ("1983 plan") under which the Company may grant options for up to 945,000 shares of common stock. No additional options may be granted under the 1983 plan. The exercise price of options granted under such plan is equal to or greater than fair market value of the common stock on the date of grant. The Company has stock option plans ("1993 plan" and "1994 plan") under which the Company may grant options for up to 1,575,000 shares (1993 plan) and for up to 997,500 shares (1994 plan) of common stock. The options granted pursuant to the plans may be either incentive stock options or nonstatutory options. To date, the Company has only granted incentive stock

NOTE 9 - STOCK OPTIONS AND WARRANTS (CONT'D)

options under these plans. A summary of incentive stock option transactions for the three years ended July 31, 1995 is as follows:

	Number of shares	Exercise price
Outstanding July 31, 1992	755,589	$1.43 - 3.54
Exercised	(43,969)	$1.43 - 3.22
Canceled	(56,831)	$1.43 - 6.19
Issued	410,025	$4.29 - 7.38
Outstanding July 31, 1993	1,064,814	$1.43 - 7.38
Exercised	(40,530)	$1.43 - 4.29
Canceled	(133,409)	$1.43 - 7.38
Issued	722,459	$9.41 - 15.25
Outstanding July 31, 1994	1,613,334	$1.43 - 15.25
Exercised	(110,417)	$1.43 - 7.38
Canceled	(2,625)	$3.22
Issued	284,550	$9.17 - 10.83
Outstanding July 31, 1995	1,784,842	$1.43 - 15.25

Incentive stock options generally become exercisable at 25% per year after one year and expire ten years after the date of grant. At July 31, 1995, under the incentive stock option plans 827,175 options were exercisable.

RESTRICTED STOCK INCENTIVE PLAN

The Company has a restricted stock incentive plan whereby the Company may award up to 210,000 shares of its common stock. Under the terms of the plan, any shares issued are restricted in regard to sales and transfers for a period of five years after award. Such restrictions begin to expire at 25% per year after the second year of ownership. As of July 31, 1995, the Company has not awarded any shares of common stock under this plan.

NOTE 9 - STOCK OPTIONS AND WARRANTS (CONT'D)

OTHER OPTIONS AND WARRANTS

In fiscal 1982, the Company issued 32,130 warrants in connection with the sale of stock. These warrants were exercisable at $8.73 per share through June 1994 of which 16,065 warrants were exercised in fiscal 1994 and the remaining 16,065 warrants expired in fiscal 1995. As part of the restructuring of the Debenture in November 1991, the Company issued additional warrants to purchase 269,850 shares of common stock with an exercise price of $1.90 per share expiring ten years after the date of issue. In fiscal 1995 and 1994, 4,200 and 87,675 of these warrants were exercised, respectively. In connection with the issuance of newly issued shares of the Company's Common Stock to a private investor in fiscal 1994, the Company issued warrants to purchase 262,500 shares of common stock with an exercise price ranging from $7.62 to $11.43 per share. In fiscal 1995 and 1994, 105,000 and 42,000 of these warrants were exercised, respectively.

* * * * *

As of July 31, 1995, the Company has reserved 4,331,485 shares under the arrangements described above and shares issuable upon conversion of debt as described in Note 5.

NOTE 10 - COMMITMENTS

The Company has an exclusive licensing agreement to an invention covered by licensed patents. Under this agreement, the Company is required to make certain minimum royalty payments of $200,000 per year through the life of the patents.

NOTE 11 - LINES OF BUSINESS

The Company operates two lines of business: (i) conducting research and development activity and selling products derived from such research and (ii) operating clinical reference laboratories which provide diagnostic services to the health care community. The following financial information (in thousands) with respect to such lines of business (industry segments) is based on the guidelines contained in Statement of Financial Accounting Standards No. 14.

<TABLE>
<CAPTION>

	At July 31, 1995 and for the year then ended		
	Research and development	Clinical Reference laboratories	Total
<S>	<C>	<C>	<C>
Operating revenues:			
Sales and diagnostic services	$9,548	$22,152	$31,700
	------	-------	-------
	------	-------	-------
Operating profit (loss)	$479	$2,146	$2,625
	----	------	
	----	------	
Investment income			1,077
Corporate expenses			(4,413)
Writedown of leasehold interest to appraised value			(11,400)
Recovery of research contract receivable			--
Litigation settlement, net of legal fees of $4,266			21,860
Income (loss) before provision (benefit) for taxes on income and extraordinary items			$9,749

Identifiable assets	$27,196	$23,867	(a)
$51,063			
Corporate assets, principally cash and cash equivalents short-term investments deferred financing costs, building under capital leases and funds held in escrow			
$21,395			
$72,458			
Depreciation and amortization	$514	$1,202	
$1,716			
Property and equipment expenditures	$41	$989	
$1,030			
Corporate property and equipment expenditures			
132			
$1,162			

<CAPTION>

	At July 31, 1994 and for the year then ended		
	Research and development	Clinical Reference laboratories	Total
<S>	<C>	<C>	<C>
Operating revenues:			
Sales and diagnostic services	$5,183	$17,616	$22,799
Operating profit (loss)	($493)	($659)	($1,152)
Investment income			202
Corporate expenses			(2,794)
Writedown of leasehold interest to appraised value			(600)
Recovery of research contract receivable			6,500
Litigation settlement, net of legal fees of $4,266			
Income (loss) before provision (benefit) for taxes on income and extraordinary items			$2,156
Identifiable assets	$17,261	$20,393	(a)
$37,654			

Corporate assets, principally cash and cash equivalents short-term investments deferred financing costs, building under capital leases and funds held in escrow		
$27,389		
$65,043		
Depreciation and amortization	$484	$1,061
$1,545		
Property and equipment expenditures	$16	$839
$855		
Corporate property and equipment expenditures		
930		
$1,785		

<CAPTION>

	At July 31, 1993 and for the year then ended	
	Research and development	Clinical Reference laboratories
Total		
<S>	<C>	<C>
Operating revenues:		
Sales and diagnostic services	$2,277	$17,748
$20,025		
Operating profit (loss)	($610)	($319)
($929)		
Investment income		
26		
Corporate expenses		
(2,421)		
Writedown of leasehold interest to appraised value		
(3,000)		
Recovery of research contract receivable		
Litigation settlement, net of legal fees of $4,266		
Income (loss) before provision (benefit) for taxes on income and extraordinary items		
($6,324)		
Identifiable assets	$7,235	$19,805 (a)
$27,040		
Corporate assets, principally cash and cash equivalents short-term investments deferred financing costs,		

building under capital leases and funds held in escrow		
$20,529		

$47,569		

Depreciation and amortization	$395	$1,098
$,1493		
	----	-----

	----	-----

Property and equipment expenditures	$45	$594
$639		
	---	----
	---	----
Corporate property and equipment expenditures		
2,903		

$3,542		

</TABLE>

(a) Includes cost in excess of fair value of net tangible assets acquired of $10,046 in 1995, $10,391 in 1994 and $11,210 in 1993.

NOTE 12 - EMPLOYEE BENEFIT PLAN

The Company has a qualified Salary Reduction Profit Sharing Plan (the "Plan") for eligible employees under Section 401(k) of the Internal Revenue Code. The Plan provides for voluntary employee contributions through salary reduction and voluntary employer contributions at the discretion of the Company. For the years ended July 31, 1995 and 1994, the Company has authorized employer contributions of 25% of the employees' contribution up to 6% of the employees' compensation in Enzo Biochem, Inc. common stock and such contribution was not material in fiscal 1995 and 1994.

NOTE 13 - SUPPLEMENTARY EARNINGS PER SHARE

The Company converted $649,000 and $262,000 in principal of the Company's outstanding Debentures into 167,600 and 50,000 shares of Common Stock in 1993 and 1994, respectively. Pro forma earnings per share information as if the conversion had occurred at the beginning of the period would be as follows:

	1994	1993
	----	----
Income (loss) before extraordinary items	$.23	($.34)
Extraordinary items	.01	--
	----	-----
Net income (loss)	$.24	($.34)
	----	-----
	----	-----
Weighted average common shares	21,513,535	18,651,400
	----------	----------
	----------	----------

NOTE 14 - STOCK DIVIDEND

The Company declared a 5% stock dividend on July 3, 1995 to shareholders of record as of July 3, 1995. The stock price on the date of declaration was $10.125. The dividend has been charged against accumulated deficit to the

extent of net income in fiscal 1995.

ENZO BIOCHEM, INC.
SCHEDULE II - VALUATION
AND QUALIFYING ACCOUNTS

Years ended July 31, 1995, 1994 and 1993

<TABLE>
<CAPTION>

Description	Balance at beginning of period	Additions: Charged to costs and expenses	Additions: Charged to other accounts	Deductions	Balance at end of period
<S>	<C>	<C>	<C>	<C>	<C>
1995					
Allowance for doubtful accounts receivable	$1,956,000	$3,845,600		$3,674,700 (1)	$2,126,900
Allowance for deferred tax valuation	$7,092,000			$343,000	$6,749,000
1994					
Allowance for doubtful accounts receivable	$2,016,000	$3,504,300	--	$3,564,300 (1)	$1,956,000
Allowance for deferred tax valuation	$11,176,000	--	--	$4,084,000	$7,092,000
Allowance for doubtful research contract	$6,500,000	--	--	$6,500,000 (3)	--
1993					
Allowance for doubtful accounts receivable	$1,242,800	$3,139,200	--	$2,366,000 (1)	$2,016,000
Allowance for deferred tax valuation	$8,637,000	$2,539,000(2)	--	--	$11,176,000
Allowance for doubtful research contract	$6,500,000	--	--	--	$6,500,000

</TABLE>

(1) Write-off of uncollectable accounts receivable.
(2) Offset by increase in net deferred tax assets.
(3) Recovery of research contract receivable

INDEX

OF

EXHIBITS FILED WITH

FORM 10-K FOR FISCAL YEAR ENDED

JULY 31, 1995

OF

ENZO BIOCHEM, INC.

ENZO BIOCHEM, INC.

1994 STOCK OPTION PLAN

1. PURPOSE.

The purpose of this plan (the "Plan") is to secure for Enzo Biochem, Inc. (the "Company") and its shareholders the benefits arising from capital stock ownership by employees, officers and directors of, and consultants or advisors to, the Company and its subsidiary corporations who are expected to contribute to the Company's future growth and success. Those provisions of the Plan which make express reference to Section 422 shall apply only to Incentive Stock Options (as that term is defined in the Plan).

2. TYPE OF OPTIONS AND ADMINISTRATION.

(a) TYPES OF OPTIONS. Options granted pursuant to the Plan shall be authorized by action of the Board of Directors of the Company (or a Committee designated by the Board of Directors) and may be either incentive stock options ("Incentive Stock Options") meeting the requirements of Section 422 of the Internal Revenue Code of 1986, as amended or replaced from time to time (the "Code") or non-statutory options which are not intended to meet the requirements of Section 422 of the Code.

(b) ADMINISTRATION. The Plan will be administered by a committee (the "Committee") appointed by the Board of Directors of the Company, whose construction and interpretation of the terms and provisions of the Plan shall be final and conclusive. The delegation of powers to the Committee shall be consistent with applicable laws or regulations (including, without limitation, applicable state law and Rule 16b-3 promulgated under the Securities Exchange Act of 1934 (the "Exchange Act"), or any successor rule ("Rule 16b-3")). The Committee may in its sole discretion grant options to purchase shares of the Company's Common Stock, $.01 par value per share ("Common Stock") and issue shares upon exercise of such options as provided in the Plan. The Committee shall have authority, subject to the express provisions of the Plan, to construe the respective option agreements and the Plan, to prescribe, amend and rescind rules and regulations relating to the Plan, to determine the terms and provisions of the respective option agreements, which need not be identical, and to make all other determinations in the judgment of the Committee necessary or desirable for the administration of the Plan. The Committee may correct any defect or supply any omission or reconcile any inconsistency in the Plan or in any option agreement in the manner and to the extent it shall deem expedient to carry the Plan into effect and it shall be the sole and final judge of such expediency. No director or person acting pursuant to authority delegated by the Board of Directors shall be liable for any action or determination under the Plan made in good faith. Subject to adjustment as provided in Section 15 below, the aggregate number of shares of Common Stock that may be subject to options granted to any person in a calendar year shall not exceed 20% of the maximum

number of shares which may be issued and sold under the Plan, as set forth in Section 4 hereof, as such section may be amended from time to time.

(c) APPLICABILITY OF RULE 16B-3. Those provisions of the Plan which make express reference to Rule 16b-3 shall apply to the Company only at such time as the Company's Common Stock is registered under the Exchange Act, subject to the last sentence of Section 3(b), and then only to such persons as are required to file reports under Section 16(a) of the Exchange Act (a "Reporting Person").

3. ELIGIBILITY.

(a) GENERAL. Options may be granted to persons who are, at the time of grant, employees, officers or directors of, or consultants or advisors to, the Company or any subsidiaries of the Company as defined in Sections 424(e) and 424(f) of the Code ("Participants") PROVIDED, that Incentive Stock Options may only be granted to individuals who are employees of the Company (within the meaning of Section 3401(c) of the Code). A person who has been granted an option may, if he or she is otherwise eligible, be granted additional options if the Committee shall so determine.

(b) GRANT OF OPTIONS TO REPORTING PERSONS. The selection of a director or an officer who is a Reporting Person (as the terms "director" and "officer" are defined for purposes of Rule 16b-3) as a recipient of an option, the timing of the option grant, the exercise price of the option and the number of shares subject to the option shall be determined either (i) by the Board of Directors, of which all members shall be "disinterested persons" (as hereinafter defined), (ii) by a committee consisting of two or more directors having full authority to act in the matter, each of whom shall be a "disinterested person" or (iii) pursuant to provisions for automatic grants set forth in Section 3(c) below. For the purposes of the Plan, a director shall be deemed to be a "disinterested person" only if such person qualifies as a "disinterested person" within the meaning of Rule 16b-3, as such term is interpreted from time to time.

If at least two of the members of the Board of Directors do not qualify as a "disinterested person" within the meaning of Rule 16b-3, as such term is interpreted from time to time, then the granting of options to officers and directors who are Reporting Persons under the Plan shall not be determined in accordance with this Section 3(b) but shall be determined in accordance with the other provisions of the Plan.

(c) DIRECTORS' OPTIONS. Commencing on June 30, 1995, directors of the Company who are not employees or principal stockholders of the Company ("Eligible Directors") will receive an option ("Director Option") to purchase 7,500 shares of Common Stock. Commencing July 19, 1995, future Eligible Directors of the Company will be granted a Director Option to purchase 15,000 shares of Common Stock on the date that such person is first elected or appointed a director ("Initial Director Option"). Commencing on the day immediately following the date of the annual meeting of stockholders for the Company's fiscal year ending July 31, 1995, each Eligible Director will receive an automatic grant

("Automatic Grant") of a Director Option to purchase 7,500 shares of Common Stock, other than Eligible Directors who received an Initial Director Option since the most recent Automatic Grant, on the day immediately following the date of each annual meeting of stockholders, as long as such director is a member of the Board of Directors. The exercise price for each share subject to a Director Option shall be equal to the fair market value of the Common Stock on the date of grant. Director Options shall become exercisable in four equal annual installments commencing one year from the date the option is granted and will expire the earlier of 10 years after the date of grant or 90 days after the termination of the director's service on the Board unless such Director Option is an Incentive Stock Option in which case such Director Option shall be subject to the additional terms and conditions set forth in Section 11.

4. STOCK SUBJECT TO PLAN.

The stock subject to options granted under the Plan shall be shares of authorized but unissued or reacquired Common Stock. Subject to adjustment as provided in Section 15 below, the maximum number of shares of Common Stock of the Company which may be issued and sold under the Plan is 950,000 shares. If an option granted under the Plan shall expire, terminate or is cancelled for any reason without having been exercised in full, the unpurchased shares subject to such option shall again be available for subsequent option grants under the Plan.

5. FORMS OF OPTION AGREEMENTS.

As a condition to the grant of an option under the Plan, each recipient of an option shall execute an option agreement in such form not inconsistent with the Plan as may be approved by the Board of Directors. Such option agreements may differ among recipients.

6. PURCHASE PRICE.

(a) GENERAL. The purchase price per share of stock deliverable upon the exercise of an option shall be determined by the Board of Directors at the time of grant of such option; PROVIDED, HOWEVER, that in the case of an Incentive Stock Option, the exercise price shall not be less than 100% of the Fair Market Value (as hereinafter defined) of such stock, at the time of grant of such option, or less than 110% of such Fair Market Value in the case of options described in Section 11(b). "Fair Market Value" of a share of Common Stock of the Company as of a specified date for the purposes of the Plan shall mean the closing price of a share of the Common Stock on the principal securities exchange (including the Nasdaq National Market) on which such shares are traded on the day immediately preceding the date as of which Fair Market Value is being determined, or on the next preceding date on which such shares are traded if no shares were traded on such immediately preceding day, or if the shares are not traded on a securities exchange, Fair Market Value

shall be deemed to be the average of the high bid and low asked prices of the shares in the over-the-counter market on the day immediately preceding the date as of which Fair Market Value is being determined or on the next preceding date on which such high bid and low asked prices were recorded. If the shares are not publicly traded, Fair Market Value of a share of Common Stock (including, in the case of any repurchase of shares, any distributions with respect thereto which would be repurchased with the shares) shall be determined in good faith by the Board of Directors. In no case shall Fair Market Value be determined with regard to restrictions other than restrictions which, by their terms, will never lapse.

(b) PAYMENT OF PURCHASE PRICE. Options granted under the Plan may provide for the payment of the exercise price by delivery of cash or a check to

the order of the Company in an amount equal to the exercise price of such options, or by any other means which the Board of Directors determines are consistent with the purpose of the Plan and with applicable laws and regulations (including, without limitation, the provisions of Rule 16b-3 and Regulation T promulgated by the Federal Reserve Board).

7. OPTION PERIOD.

Subject to earlier termination as provided in the Plan, each option and all rights thereunder shall expire on such date as determined by the Board of Directors and set forth in the applicable option agreement, PROVIDED, that such date shall not be later than (10) ten years after the date on which the option is granted.

8. EXERCISE OF OPTIONS.

Each option granted under the Plan shall be exercisable either in full or in installments at such time or times and during such period as shall be set forth in the option agreement evidencing such option, subject to the provisions of the Plan. No option granted to a Reporting Person for purposes of the Exchange Act, however, shall be exercisable during the first six months after the date of grant. Subject to the requirements in the immediately preceding sentence, if an option is not at the time of grant immediately exercisable, the Board of Directors may (i) in the agreement evidencing such option, provide for the acceleration of the exercise date or dates of the subject option upon the occurrence of specified events, and/or (ii) at any time prior to the complete termination of an option, accelerate the exercise date or dates of such option.

9. NONTRANSFERABILITY OF OPTIONS.

No option granted under this Plan shall be assignable or otherwise transferable by the optionee except by will or by the laws of descent and distribution or pursuant to a qualified domestic relations order as defined in the Code or Title I of the Employee Retirement Income Security Act, or the rules thereunder. An option may be exercised during the lifetime of the optionee only by the optionee. In the event an optionee dies during

his employment by the Company or any of its subsidiaries, or during the three-month period following the date of termination of such employment, his option shall thereafter be exercisable, during the period specified in the option agreement, by his executors or administrators to the full extent to which such option was exercisable by the optionee at the time of his death during the periods set forth in Section 10 or 11(d).

10. EFFECT OF TERMINATION OF EMPLOYMENT OR OTHER RELATIONSHIP.

Except as provided in Section 11(d) with respect to Incentive Stock Options and except as otherwise determined by the Committee at the date of grant of an option, and subject to the provisions of the Plan, an optionee may exercise an option at any time within three (3) months following the termination of the optionee's employment or other relationship with the Company or within three (3) months if such termination was due to the death or disability of the optionee or within one (1) year if such termination was due to the disability of the optionee but, except in the case of the optionee's death, in no event later than the expiration date of the option. If the termination of the optionee's employment is for cause or is otherwise attributable to a breach by the optionee of an employment or confidentiality or non-disclosure agreement, the option shall expire immediately upon such termination. The Board of Directors shall have the power to determine what constitutes a termination for cause or a breach of an employment or confidentiality or non-disclosure agreement, whether an optionee has been terminated for cause or has breached such an agreement, and the date upon which such termination for cause or breach occurs. Any such determinations shall be final and conclusive and binding upon the optionee.

11. INCENTIVE STOCK OPTIONS.

Options granted under the Plan which are intended to be Incentive Stock Options shall be subject to the following additional terms and conditions:

(a) EXPRESS DESIGNATION. All Incentive Stock Options granted under the Plan shall, at the time of grant, be specifically designated as such in the option agreement covering such Incentive Stock Options.

(b) 10% SHAREHOLDER. If any employee to whom an Incentive Stock Option is to be granted under the Plan is, at the time of the grant of such option, the owner of stock possessing more than 10% of the total combined voting power of all classes of stock of the Company (after taking into account the attribution of stock ownership rules of Section 424(d) of the Code), then the following special provisions shall be applicable to the Incentive Stock Option granted to such individual:

(i) The purchase price per share of the Common Stock subject to

such Incentive Stock Option shall not be less than 110% of the Fair Market Value of one share of Common Stock at the time of grant; and

(ii) the option exercise period shall not exceed five years from the date of grant.

(c) DOLLAR LIMITATION. For so long as the Code shall so provide, options granted to any employee under the Plan (and any other incentive stock option plans of the Company) which are intended to constitute Incentive Stock Options shall not constitute Incentive Stock Options to the extent that such options, in the aggregate, become exercisable for the first time in any one calendar year for shares of Common Stock with an aggregate Fair Market Value, as of the respective date or dates of grant, of more than $100,000.

(d) TERMINATION OF EMPLOYMENT, DEATH OR DISABILITY. No Incentive Stock Option may be exercised unless, at the time of such exercise, the optionee is, and has been continuously since the date of grant of his or her option, employed by the Company, except that:

(i) an Incentive Stock Option may be exercised within the period of ninety (90) days after the date the optionee ceases to be an employee of the Company (or within such lesser period as may be specified in the applicable option agreement), PROVIDED, that the agreement with respect to such option may designate a longer exercise period and that the exercise after such ninety (90) day period shall be treated as the exercise of a non-statutory option under the Plan;

(ii) if the optionee dies while in the employ of the Company, or within three months after the optionee ceases to be such an employee, the Incentive Stock Option may be exercised by the person to whom it is transferred by will or the laws of descent and distribution within the period of three (3) months after the date of death (or within such lesser period as may be specified in the applicable option agreement); and

(iii) if the optionee becomes disabled (within the meaning of Section 22(e)(3) of the Code or any successor provisions thereto) while in the employ of the Company, the Incentive Stock Option may be exercised within the period of one (1) year after the date the optionee ceases to be such an employee because of such disability (or within such lesser period as may be specified in the applicable option agreement).

For all purposes of the Plan and any option granted hereunder, "employment" shall be defined in accordance with the provisions of Section 1.421-7(h) of the Income Tax Regulations (or any successor regulations). Notwithstanding the foregoing provisions, no Incentive Stock Option may be exercised after its expiration date.

12. ADDITIONAL PROVISIONS.

(a) ADDITIONAL OPTION PROVISIONS. The Board of Directors may, in its sole discretion, include additional provisions in option agreements covering options granted under the Plan, including without limitation restrictions on transfer, repurchase rights, rights of first refusal, commitments to pay cash bonuses, to make, arrange for or guaranty loans or to transfer other property to optionees upon exercise of options, or such other provisions as shall be determined by the Board of Directors; PROVIDED, that such additional provisions shall not be inconsistent with any other term or condition of the Plan and such additional provisions shall not cause any Incentive Stock Option granted under the Plan to fail to qualify as an Incentive Stock Option within the meaning of Section 422 of the Code.

(b) ACCELERATION, EXTENSION, ETC. The Board of Directors may, in its sole discretion, (i) accelerate the date or dates on which all or any particular option or options granted under the Plan may be exercised or (ii) extend the dates during which all, or any particular, option or options granted under the Plan may be exercised; PROVIDED, HOWEVER, that no such extension shall be permitted if it would cause the Plan to fail to comply with Section 422 of the Code or with Rule 16b-3 (if applicable).

13. GENERAL RESTRICTIONS.

(a) INVESTMENT REPRESENTATIONS. The Company may require any person to whom an option is granted, as a condition of exercising such option, to give written assurances in substance and form satisfactory to the Company to the effect that such person is acquiring the Common Stock subject to the option, for his or her own account for investment and not with any present intention of selling or otherwise distributing the same, and to such other effects as the

Company deems necessary or appropriate in order to comply with federal and applicable state securities laws, or with covenants or representations made by the Company in connection with any public offering of its Common Stock, including any "lock-up" or other restriction on transferability.

(b) COMPLIANCE WITH SECURITIES LAW. Each option shall be subject to the requirement that if, at any time, counsel to the Company shall determine that the listing, registration or qualification of the shares subject to such option upon any securities exchange or automated quotation system or under any state or federal law, or the consent or approval of any governmental or regulatory body, or that the disclosure of non-public information or the satisfaction of any other condition is necessary as a condition of, or in connection with the issuance or purchase of shares thereunder, such option may not be exercised, in whole or in part, unless such listing, registration, qualification, consent or approval, or satisfaction of such condition shall have been effected or obtained on conditions acceptable to the Board of Directors. Nothing herein shall be deemed to require the Company to apply for or to obtain such listing, registration or qualification, or to satisfy such condition.

14. RIGHTS AS A SHAREHOLDER.

The holder of an option shall have no rights as a shareholder with respect to any shares covered by the option (including, without limitation, any rights to receive dividends or non-cash distributions with respect to such shares) until the date of issue of a stock certificate to him or her for such shares. No adjustment shall be made for dividends or other rights for which the record date is prior to the date such stock certificate is issued.

15. ADJUSTMENT PROVISIONS FOR RECAPITALIZATIONS, REORGANIZATIONS AND RELATED TRANSACTIONS.

(a) RECAPITALIZATIONS AND RELATED TRANSACTIONS. If, through or as a result of any recapitalization, reclassification, stock dividend, stock split, reverse stock split or other similar transaction, (i) the outstanding shares of Common Stock are increased, decreased or exchanged for a different number or kind of shares or other securities of the Company, or (ii) additional shares or new or different shares or other non-cash assets are distributed with respect to such shares of Common Stock or other securities, an appropriate and proportionate adjustment shall be made in (x) the maximum number and kind of shares reserved for issuance under or otherwise referred to in the Plan, (y) the number and kind of shares or other securities subject to any then outstanding options under the Plan, and (z) the price for each share subject to any then outstanding options under the Plan, without changing the aggregate purchase price as to which such options remain exercisable. Notwithstanding the foregoing, no adjustment shall be made pursuant to this Section 15 if such adjustment (i) would cause the Plan to fail to comply with Section 422 of the Code or with Rule 16b-3 or (ii) would be considered as the adoption of a new plan requiring stockholder approval.

(b) REORGANIZATION, MERGER AND RELATED TRANSACTIONS. All outstanding options under the Plan shall become fully exercisable for a period of sixty (60) days following the occurrence of any Trigger Event, whether or not such options are then exercisable under the provisions of the applicable agreements relating thereto. For purposes of the Plan, a "Trigger Event" is any one of the following events:

(i) the date on which shares of Common Stock are first purchased pursuant to a tender offer or exchange offer (other than such an offer by the Company, any Subsidiary, any employee benefit plan of the Company or of any Subsidiary or any entity holding shares or other securities of the Company for or pursuant to the terms of such plan), whether or not such offer is approved or opposed by the Company and regardless of the number of shares purchased pursuant to such offer;

(ii) the date the Company acquires knowledge that any person or group deemed a person under Section 13(d)-3 of the Exchange Act (other than the Company, any Subsidiary, any employee benefit plan of the Company or of any

Subsidiary or any entity holding shares of Common Stock or other securities of the Company for or pursuant to the terms of any such plan or any individual or entity or group or affiliate thereof which acquired its beneficial ownership interest prior to the date the Plan was adopted by the Board), in a transaction or series of transactions, has become the beneficial owner, directly or indirectly (with beneficial ownership determined as provided in Rule 13d-3, or any successor rule, under the Exchange Act), of securities of the Company entitling the person or group to 30% or more of all votes (without consideration of the rights of any class or stock to elect directors by a separate class vote) to which all

shareholders of the Company would be entitled in the election of the Board of Directors were an election held on such date;

(iii) the date, during any period of two consecutive years, when individuals who at the beginning of such period constitute the Board of Directors of the Company cease for any reason to constitute at least a majority thereof, unless the election, or the nomination for election by the shareholders of the Company, of each new director was approved by a vote of at least two-thirds of the directors then still in office who were directors at the beginning of such period; and

(iv) the date of approval by the shareholders of the Company of an agreement (a "reorganization agreement") providing for:

(A) The merger or consolidation of the Company with another corporation where the shareholders of the Company, immediately prior to the merger or consolidation, do not beneficially own, immediately after the merger or consolidation, shares of the corporation issuing cash or securities in the merger or consolidation entitling such shareholders to 80% or more of all votes (without consideration of the rights of any class of stock to elect directors by a separate class vote) to which all shareholders of such corporation would be entitled in the election of directors or where the members of the Board of Directors of the Company, immediately prior to the merger or consolidation, do not, immediately after the merger or consolidation, constitute a majority of the Board of Directors of the corporation issuing cash or securities in the merger or consolidation; or

(B) The sale or other disposition of all or substantially all the assets of the Company.

(c) BOARD AUTHORITY TO MAKE ADJUSTMENTS. Any adjustments under this Section 15 will be made by the Board of Directors, whose determination as to what adjustments, if any, will be made and the extent thereof will be final, binding and conclusive. No fractional shares will be issued under the Plan on account of any such adjustments.

16. MERGER, CONSOLIDATION, ASSET SALE, LIQUIDATION, ETC.

(a) GENERAL. In the event of any sale, merger, transfer or acquisition of the Company or substantially all of the assets of the Company in which the Company is not the surviving corporation, and provided that after the Company shall have requested the acquiring or succeeding corporation (or an affiliate thereof), that equivalent options shall be substituted and such successor corporation shall have refused or failed to assume all options outstanding under the Plan or issue substantially equivalent options, then any or all outstanding options under the Plan shall accelerate and become exercisable in full immediately prior to such event. The Committee will notify holders of options under the Plan that any such options shall be fully exercisable for a period of fifteen (15) days from the date of such notice, and the options will terminate upon expiration of such notice.

(b) SUBSTITUTE OPTIONS. The Company may grant options under the Plan in substitution for options held by employees of another corporation who become employees of the Company, or a subsidiary of the Company, as the result of a merger or consolidation of the employing corporation with the Company or a subsidiary of the Company, or as a result of the acquisition by the Company, or one of its subsidiaries, of property or stock of the employing corporation. The Company may direct that substitute options be granted on such terms and conditions as the Board of Directors considers appropriate in the circumstances.

17. NO SPECIAL EMPLOYMENT RIGHTS.

Nothing contained in the Plan or in any option shall confer upon any optionee any right with respect to the continuation of his or her employment by the Company or interfere in any way with the right of the Company at any time to terminate such employment or to increase or decrease the compensation of the optionee.

18. OTHER EMPLOYEE BENEFITS.

Except as to plans which by their terms include such amounts as compensation, the amount of any compensation deemed to be received by an employee as a result of the exercise of an option or the sale of shares received upon such exercise will not constitute compensation with respect to which any other employee benefits of such employee are determined, including, without limitation, benefits under any bonus, pension, profit-sharing, life insurance or salary continuation plan, except as otherwise specifically determined by the Board of Directors.

19. AMENDMENT OF THE PLAN.

(a) The Board of Directors may at any time, and from time to time, modify or amend the Plan in any respect; provided, however, that if at any time the approval of the shareholders of the Company is required under Section 422 of the Code or any

successor provision with respect to Incentive Stock Options, or under Rule 16b-3, the Board of Directors may not effect such modification or amendment without such approval; and provided, further, that the provisions of Section 3(c) hereof shall not be amended more than once every six months, other than to comport with changes in the Code, the Employer Retirement Income Security Act of 1974, as amended, or the rules thereunder.

(b) The modification or amendment of the Plan shall not, without the consent of an optionee, affect his or her rights under an option previously granted to him or her. With the consent of the optionee affected, the Board of Directors may amend outstanding option agreements in a manner not inconsistent with the Plan. The Board of Directors shall have the right to amend or modify (i) the terms and provisions of the Plan and of any outstanding Incentive Stock Options granted under the Plan to the extent necessary to qualify any or all such options for such favorable federal income tax treatment (including deferral of taxation upon exercise) as may be afforded incentive stock options under Section 422 of the Code and (ii) the terms and provisions of the Plan and of any outstanding option to the extent necessary to ensure the qualification of the Plan under Rule 16b-3.

20. WITHHOLDING.

(a) The Company shall have the right to deduct from payments of any kind otherwise due to the optionee any federal, state or local taxes of any kind required by law to be withheld with respect to any shares issued upon exercise of options under the Plan. Subject to the prior approval of the Company, which may be withheld by the Company in its sole discretion, the optionee may elect to satisfy such obligations, in whole or in part, (i) by causing the Company to withhold shares of Common Stock otherwise issuable pursuant to the exercise of an option or (ii) by delivering to the Company shares of Common Stock already owned by the optionee. The shares so delivered or withheld shall have a Fair Market Value equal to such withholding obligation as of the date that the amount of tax to be withheld is to be determined. An optionee who has made an election pursuant to this Section 20(a) may only satisfy his or her withholding obligation with shares of Common Stock which are not subject to any repurchase, forfeiture, unfulfilled vesting or other similar requirements.

(b) The acceptance of shares of Common Stock upon exercise of an Incentive Stock Option shall constitute an agreement by the optionee (i) to notify the Company if any or all of such shares are disposed of by the optionee within two years from the date the option was granted or within one year from the date the shares were issued to the optionee pursuant to the exercise of the option, and (ii) if required by law, to remit to the Company, at the time of and in the case of any such disposition, an amount sufficient to satisfy the Company's federal, state and local withholding tax obligations with respect to such disposition, whether or not, as to both (i) and (ii), the optionee is in the employ of the Company at the time of such disposition.

(c) Notwithstanding the foregoing, in the case of a Reporting Person whose options have been granted in accordance with the provisions of Section 3(b) herein, no election to use shares for the payment of withholding taxes shall be effective unless made in compliance with any applicable requirements of Rule 16b-3.

21. CANCELLATION AND NEW GRANT OF OPTIONS, ETC.

The Board of Directors shall have the authority to effect, at any time and from time to time, with the consent of the affected optionees, (i) the cancellation of any or all outstanding options under the Plan and the grant in substitution therefor of new options under the Plan covering the same or different numbers of shares of Common Stock and having an option exercise price per share which may be lower or higher than the exercise price per share of the cancelled options or (ii) the amendment of the terms of any and all outstanding options under the Plan to provide an option exercise price per share which is higher or lower than the then-current exercise price per share of such outstanding options.

22. EFFECTIVE DATE AND DURATION OF THE PLAN.

(a) EFFECTIVE DATE. The Plan shall become effective when adopted by the Board of Directors, but no Incentive Stock Option granted under the Plan shall become exercisable unless and until the Plan shall have been approved by the Company's shareholders. If such shareholder approval is not obtained within twelve months after the date of the Board's adoption of the Plan, no options

previously granted under the Plan shall be deemed to be Incentive Stock Options and no Incentive Stock Options shall be granted thereafter. Amendments to the Plan not requiring shareholder approval shall become effective when adopted by the Board of Directors; amendments requiring shareholder approval (as provided in Section 21) shall become effective when adopted by the Board of Directors, but no Incentive Stock Option granted after the date of such amendment shall become exercisable (to the extent that such amendment to the Plan was required to enable the Company to grant such Incentive Stock Option to a particular optionee) unless and until such amendment shall have been approved by the Company's shareholders. If such shareholder approval is not obtained within twelve months of the Board's adoption of such amendment, any Incentive Stock Options granted on or after the date of such amendment shall terminate to the extent that such amendment to the Plan was required to enable the Company to grant such option to a particular optionee. Subject to this limitation, options may be granted under the Plan at any time after the effective date and before the date fixed for termination of the Plan.

(b) TERMINATION. Unless sooner terminated in accordance with Section 16, the Plan shall terminate upon the earlier of (i) the close of business on the day next preceding the tenth anniversary of the date of its adoption by the Board of Directors, or (ii) the date on which all shares available for issuance under the Plan shall have been issued pursuant to the exercise or cancellation of options granted under the Plan. If the date of termination is

determined under (i) above, then options outstanding on such date shall continue to have force and effect in accordance with the provisions of the instruments evidencing such options.

23. PROVISION FOR FOREIGN PARTICIPANTS.

The Board of Directors may, without amending the Plan, modify awards or options granted to participants who are foreign nationals or employed outside the United States to recognize differences in laws, rules, regulations or customs of such foreign jurisdictions with respect to tax, securities, currency, employee benefit or other matters.

24. GOVERNING LAW.

The provisions of this Plan shall be governed and construed in accordance with the laws of the State of New York without regard to the principles of conflicts of laws.

Adopted by the Board of Directors on November 8, 1994

EXHIBIT 11

ENZO BIOCHEM, INC.
COMPUTATION OF PER-SHARE EARNINGS
Years ended July 31, 1995, 1994 and 1993

<TABLE>
<CAPTION>

	1995	1994*	1993*
<S>	<C>	<C>	<C>
Primary			
Average shares outstanding	20,957,300	20,446,900	18,483,400
Net effect of dilutive stock options and warrants -- based on the treasury stock method using average market price	963,500	1,061,700	--
Total	21,920,800	21,508,600	18,483,400
Income (loss) before extraordinary items	$5,618,100	$5,101,200	$(6,376,100)
Extraordinary gain (loss)	--	150,000	(465,600)
Net income (loss)	$5,618,100	$5,251,200	$(6,841,700)
Per common and common equivalent share			
Income (loss) before extraordinary items	$.26	$.23	$(.34)
Extraordinary gain (loss)	--	.01	(.03)
Net income (loss)	$.26	$.24	$(.37)

</TABLE>

* Shares and per share amounts have been adjusted for the 5% stock dividend declared in fiscal 1995.

EXHIBIT 12

ENZO BIOCHEM, INC.
COMPUTATION OF RATIO OF EARNINGS
TO FIXED CHARGES
Years ended July 31, 1995, 1994, 1993, 1992 and 1991

<TABLE>
<CAPTION>

	1995	1994	1993	1992	1991
<S>	<C>	<C>	<C>	<C>	<C>
Fixed charges:					
Interest (including capitalized interest and amortization of deferred financing costs of $0 and $0 in 1995, $0 and $0 in 1994, $0 and $2,400 in 1993, $450,000 and $69,000 in 1992, and $1,598,000 and $167,000 in 1991, respectively)	$136,000	$114,000	$256,000	$2,273,000	$5,154,000
Portion of rental expense representative of interest	377,000	369,000	346,000	353,000	438,000
Total fixed charges	$513,000	$483,000	$602,000	$2,626,000	$5,592,000
Earnings					
Income (loss) before provision (benefit) for taxes on income and extraordinary items	$9,749,000	$2,156,000	$(6,324,000)	$(1,103,000)	$(10,764,000)
Extraordinary items	--	150,000	(466,000)	572,000	(790,000)
	9,749,000	2,306,000	(6,790,000)	(531,000)	(11,554,000)
Total fixed charges	513,000	483,000	602,000	2,626,000	5,592,000
Less capitalized interest	--	--	--	(450,000)	(1,598,000)
Total earnings (loss)	$10,262,000	$2,789,000	$(6,188,000)	$1,645,000	$(7,560,000)
Deficiency of earnings to cover fixed charges	--	--	$(6,790,000)	$(981,000)	$(13,152,000)
Ratio of earnings to cover fixed charges	20.00	5.77	--	--	--

</TABLE>

Exhibit 23

Consent of Independent Auditors

We consent to the incorporation by reference in the Registration Statements (Forms S-3, No. 33-58736, 33-60229, 33-78760, 33-72170, 33-68542 and Forms S-8 No. 33-45348, 33-75466 and 33-88826) of Enzo Biochem, Inc. and in the related Prospectus of our report dated October 12, 1995, with respect to the consolidated financial statements and schedule of Enzo Biochem, Inc., included in this Annual Report (Form 10-K) for the fiscal year ended July 31, 1995.

Ernst & Young LLP

Melville, New York
October 24, 1995

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is qualified in its entirety by reference to such financial statements.
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