The first chapter, concerning biology as a science, is presented so that even the instructor, who has read hundreds of introductory chapters, will find it interesting and informative. The entire text follows this pattern.

Some of the factors that make this an above-average textbook are: "boxes" within each chapter containing interesting and related topics, and questions and problems at the end of each chapter with answers at the end of the book. Finally, there is an appendix of tables that covers a number of pertinent topics (metric system, exponentials, antiquity of cultivated plants, etc.).

The only bad point about the book is that the quality of the illustrations is very poor and nothing like the colorful cover of the book. All in all, it is a very good textbook.

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BOOK 10, NERVES AND MUSCLES, BASIC BIOLOGY COURSE: UNIT 4: COMMUNICATION BETWEEN CELLS

by Michael A. Tribe and Michael R. Eraut. Cambridge University Press (32 East 57th Street, New York 10022). 189 p. $17.95 hardback; $5.95 softback.

Nerves and Muscles is the tenth book in a series of the *Basic Biology Course*, in unit 4, "Communication between cells." This volume forms a unit with the eleventh book in the same series which deals with communication by hormones.

In this programmed text the student examines how nerve impulses bring about coordination and control of muscular movements. The ideas are presented by a series of questions. This method permits the student to analyze data given. At the beginning of the reading, the objectives of the text are clearly outlined.

There are two main parts in the text. Part I is the study of nerves; Part II is the study of muscles. In the beginning Part I (section 1), there is a detailed explanation of the structure and function of the nervous system. Clear and carefully labeled diagrams accompany the text. Herein is contained the basic information to be used as the student progresses through the questions which follow in section 2.

A masking card and slides are additional material and a part of the text's program. The student places the masking card on the page at the end of the question or questions. In this way the printed answers are covered and are not to be referred to until s/he has written the answers as s/he perceives them. By removing the card s/he may check his/her answers, go on with the material or refer to the introductory material and try again. Part II is planned for the same procedure. However, there is no introductory material before this section on muscles. The student begins with the questions and goes ahead.

The text is well written, interesting, and current. The authors' questions will stimulate thinking and demand a working knowledge of the anatomy and physiology of nerves and muscles. Learning will occur for the student as s/he studies the diagrams, refers back to previous solutions, and prepares answers to the questions. At the end of the text there is a comprehensive test entitled self-assessment questions and a glossary. With a group of students all moving at different paces this program should produce many provocative discussions and a lively course.

There is no index in the text. This presents a problem for direct reference to any specific topic.

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Genetics

AN INTRODUCTION TO GENETICS AND EVOLUTION

by James L. Mariner. 1977. Independent School Press (51 River Street, Wellesley Hills, Massachusetts 02181). 158 p. $3.75.

This book is appropriately titled an introduction to genetics because it is no more than the barest introduction. It is not as advanced as the high school textbook, but it is short and can be read very quickly. However, with all the fascinating new developments in this field it seems to be a waste of time to repeat the same old material. Recently, an entire issue of the *BSCS Journal* was devoted to the need for high school students to become aware of the advances and problems in the areas of genetic engineering, genetic counseling, cloning, hereditary diseases and other pertinent issues. This book does little to meet these needs.

The main thrust of the book is in the area of evolution, which admittedly receives sketchy coverage in the average high school curriculum. Though Mariner's book provides better coverage of this topic than is usually found in the genetics section of most textbooks, I would only hesitantly recommend it as supplemental reading and not as a major text.

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Physiology

THE WONDERFUL WORLD WITHIN YOU: YOUR INNER NUTRITIONAL ENVIRONMENT

by Roger J. Williams. 1977. Bantam Books, Inc. (666 Fifth Avenue, New York 10019). 239 p. $1.95.

Wonderful World is a book about nutrition, written for readers with a scant background in biology or human physiology, by the man who discovered pantothenic acid and wrote *Nutrition Against Disease*. It is an effort to "foster a grassroots movement to abolish nutritional illiteracy." Williams explains how the quality of the food we eat affects our bodies. Some foods provide only energy, whereas others provide a variety of the amino acids, vitamins, and minerals that our bodies do not produce but that are essential for the growth and maintenance of healthy bodies. He emphasizes the physical and chemical differences within a population, and explains that we must strive to find our optimal diet. As others before him have said, the safest approach to sound nutrition is to consume a diverse diet composed of natural foods, both plant and animal. In so doing, we are protected from gross imbalances because the metabolic machinery of the different species used for food have many similarities to our own.

In this book written during his mid-80s, Williams reflects over his life, using memories as well as experimental data to illustrate many of the points he makes. Occasionally shades of the "Adelle Davis syndrome" flavor the book, especially in his treatment of folic acid and nutritional supplements. The book is inconsistent in places; many aspects of human physiology are explained in simple terms, yet nine pages are devoted to the structural formulas of amino acids and vitamins. The amino acid, vitamin, and mineral content of various foods are evaluated in forty illustrations presented on forty different pages, making it inconvenient for the reader to compare the foods. A simple chart would have more effectively presented these data.

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ESSENTIAL HUMAN ANATOMY AND PHYSIOLOGY

by Barbara R. Landau. 1976. Scott, Foresman and Company (1900 East Lake Avenue, Glenview, Illinois 60025). 606 p. Price not given.

Unlike most anatomy and physiology texts, this one adequately emphasizes physiology. It is suitable for beginning