SEVENTH EDITION

LEARNING MEDICAL TERMINOLOGY

A worktext

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LEARNING MEDICAL TERMINOLOGY

To
Sarah, Benjamin, and Brian

PREFACE

In this seventh edition of LEARNING MEDICAL TERMINOLOGY we have maintained the basic structure of the previous editions. The division of the book into four sections has been very well received, and generally found conducive to effective learning.

This edition has retained its extensive lists of prefixes, suffixes, roots, and combining forms. Users have found the breakdown of the roots and their combining forms into categories (external and internal anatomy in Chapter 3), and groupings (verbal and adjectival separation, body fluids, substances, chemicals, and colors in Chapter 4) particularly helpful. Since medical language is inexorably linked to the body, we have continued to use the system approach, which ties basic explanations of the anatomy of each system to relevant language.

Revisions include a short overview, at the beginning of each chapter, of the material to be presented. The review questions and the exercises in the chapters of Sections II and III have been rearranged for improved learning. The glossaries of each chapter still retain their phonetic pronunciation guides, but have been updated, with obsolete material deleted. In addition, each glossary contains an oncolory listing relating to the system reviewed by that chapter. The response to the crossword puzzle feature has been so enthusiastic that we have added a puzzle for Chapter 1, and also introduced hidden word puzzles as a new feature.

Chapter 16 now includes the Immune System in addition to the Multiple-System diseases. Many diseases relating to more than one system frequently involve an immune system problem. Many medical authorities believe that in the 90's and the coming 21st century the immune system and its diseases will be of major concern, and this revision reflects that belief.

Over 1,500 review questions and answers are included in the text to assist the student in learning the content of the chapters. For the first time, this edition will contain 16 anatomical full color plates at the front of the book to further enhance learning.

As in the previous edition, Section I (the first four chapters) is devoted to introducing the student to the basics of medical language. Included in these chapters are listings of word parts in easily read chart form. Instructors have informed us that this format has allowed some schools to utilize these four chapters alone as the basis for a short course in medical terminology, using the additional chapters as an enrichment resource.

An instructor's manual and an audio tape pronunciation guide are available from the publisher. The instructor's manual contains tips on teaching, including setting up courses of different lengths ranging from 3

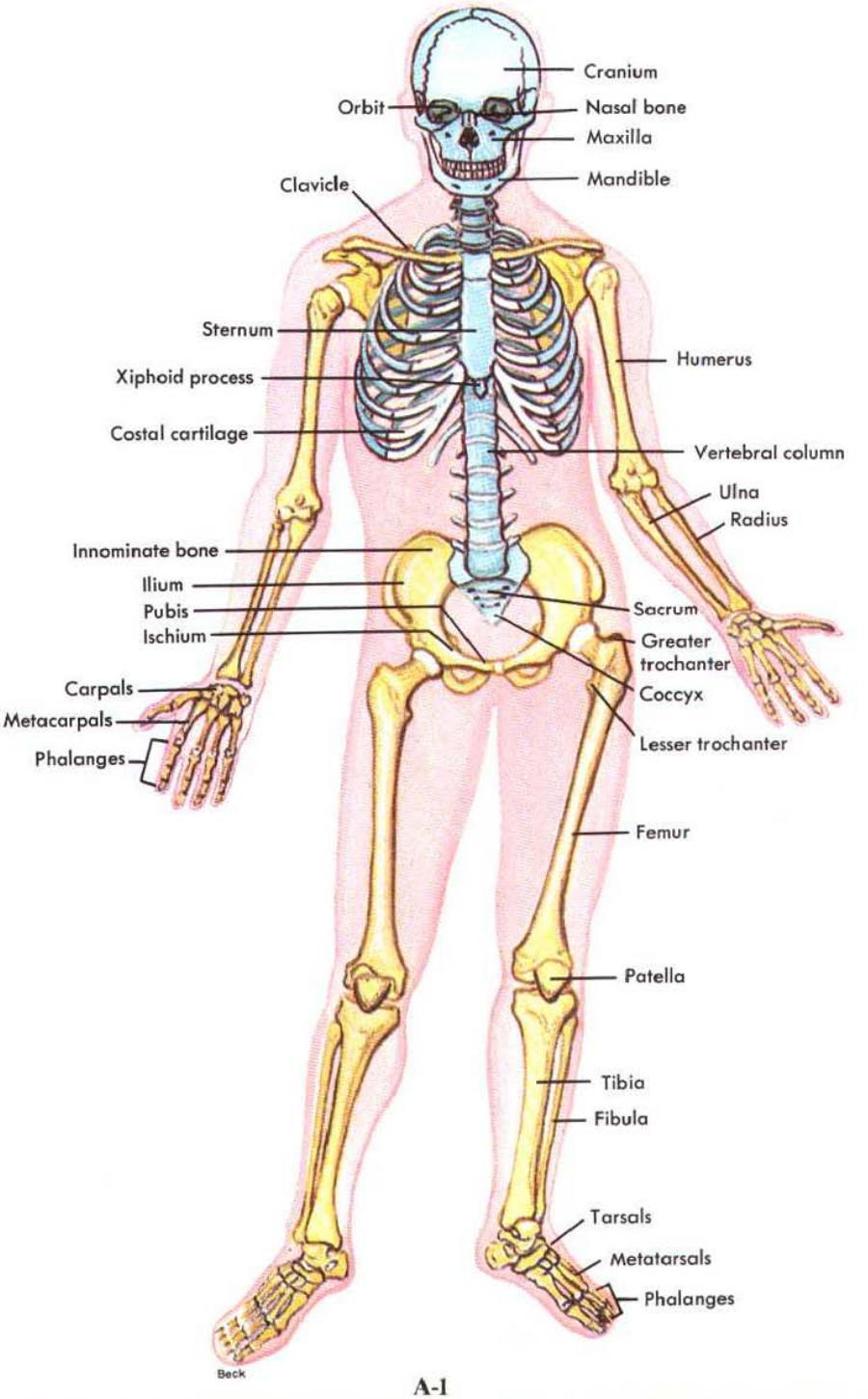
months to 9 months (2 semesters). Additionally, the manual includes some medical historical background and folklore, and an extensive chapter by chapter test file of approximately 1000 questions.

Our appreciation and very special thanks to Richard Weimer, Senior Editor of Mosby–Year Book, Inc., for his many suggestions and continuous help and guidance, Adrianne Williams, Assistant Editor, for her patience and many contributions in producing the final product, and to Jolynn Gower, Gail Morey Hudson, and Pete Hausler for their energy and creativity. Last, but by no means least, we would like to express our gratitude to those instructors and students who generously provided us with constructive criticism and suggestions.

Miriam G. Austrin
Harvey R. Austrin

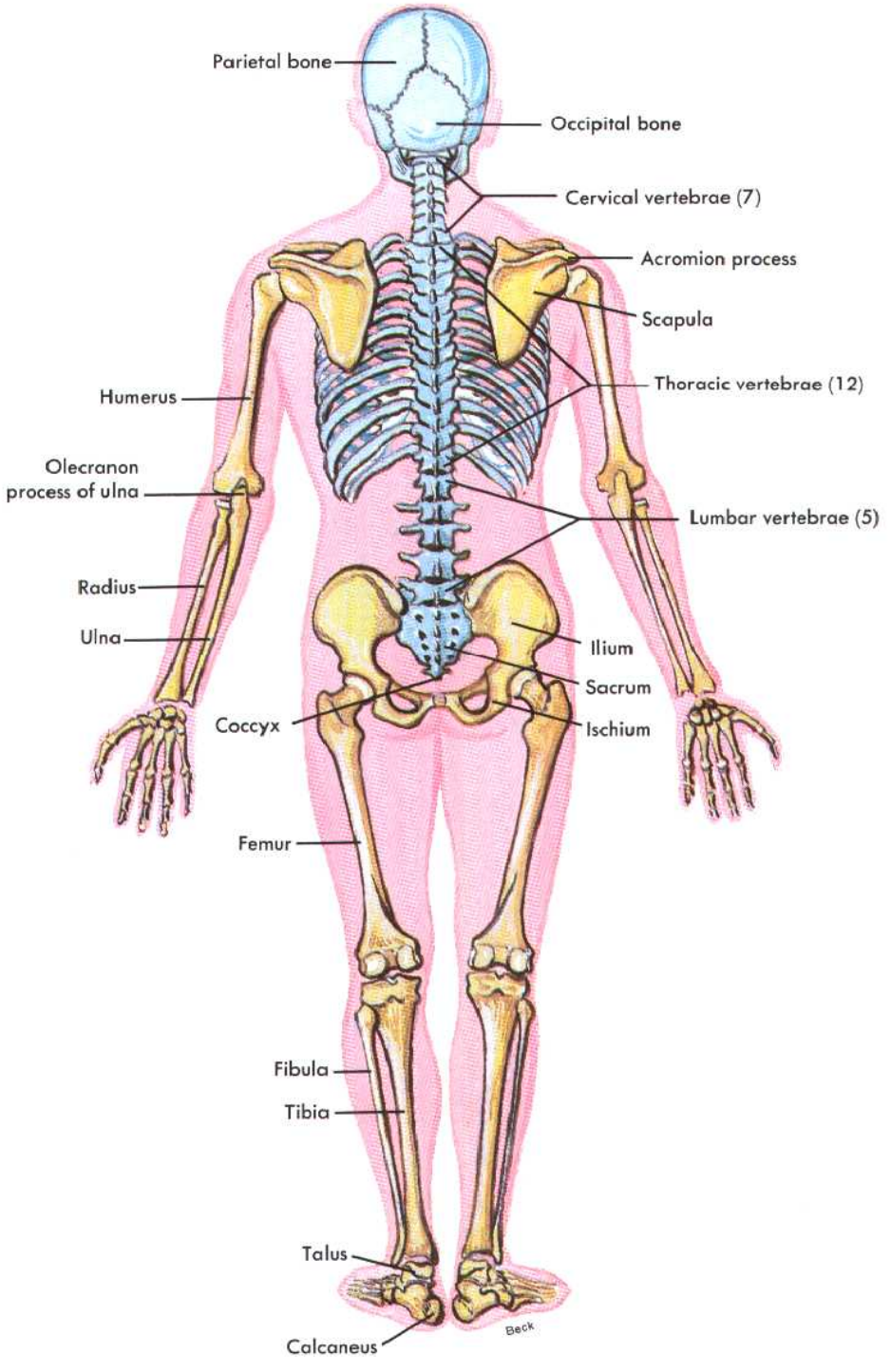
ANTERIOR VIEW OF SKELETON

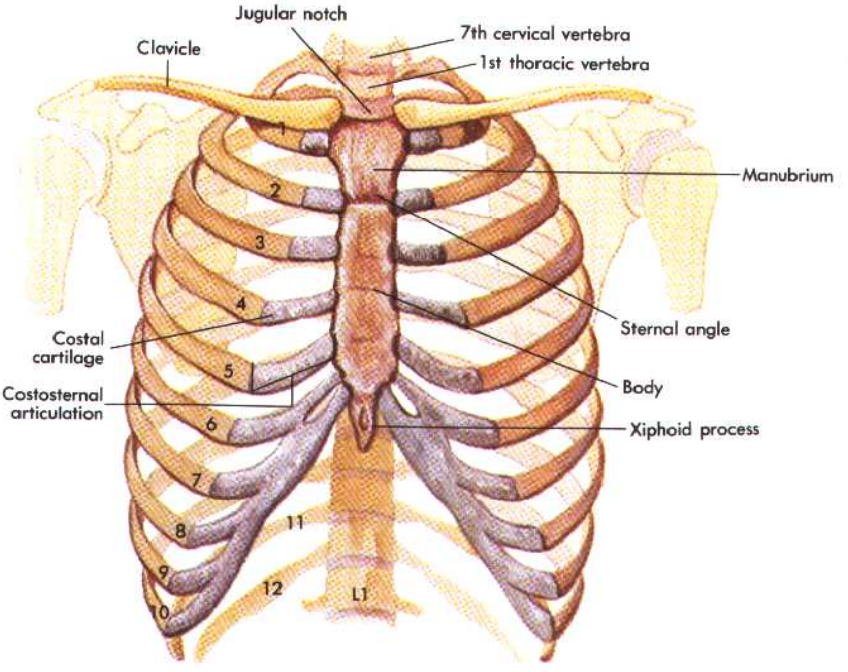
Axial skeleton is shown in blue. Appendicular system is bone colored.



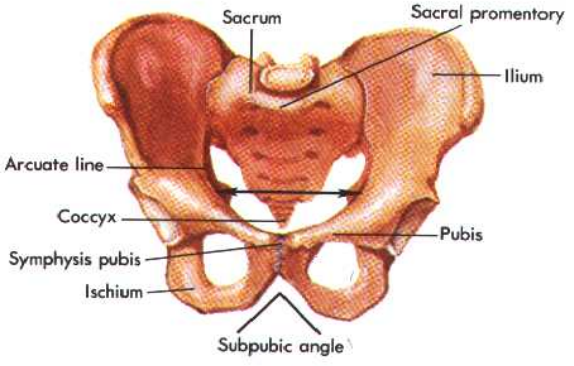
POSTERIOR VIEW OF SKELETON

Axial skeleton is shown in blue. Appendicular system is bone colored.

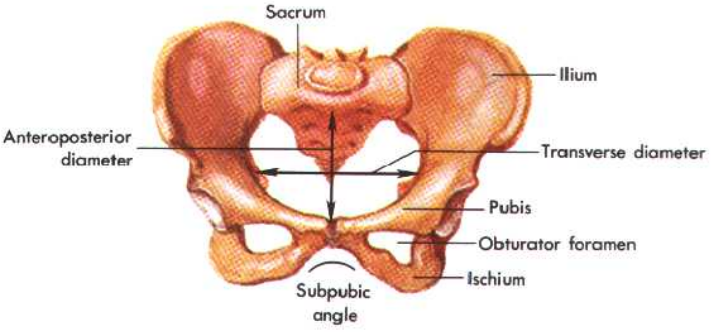




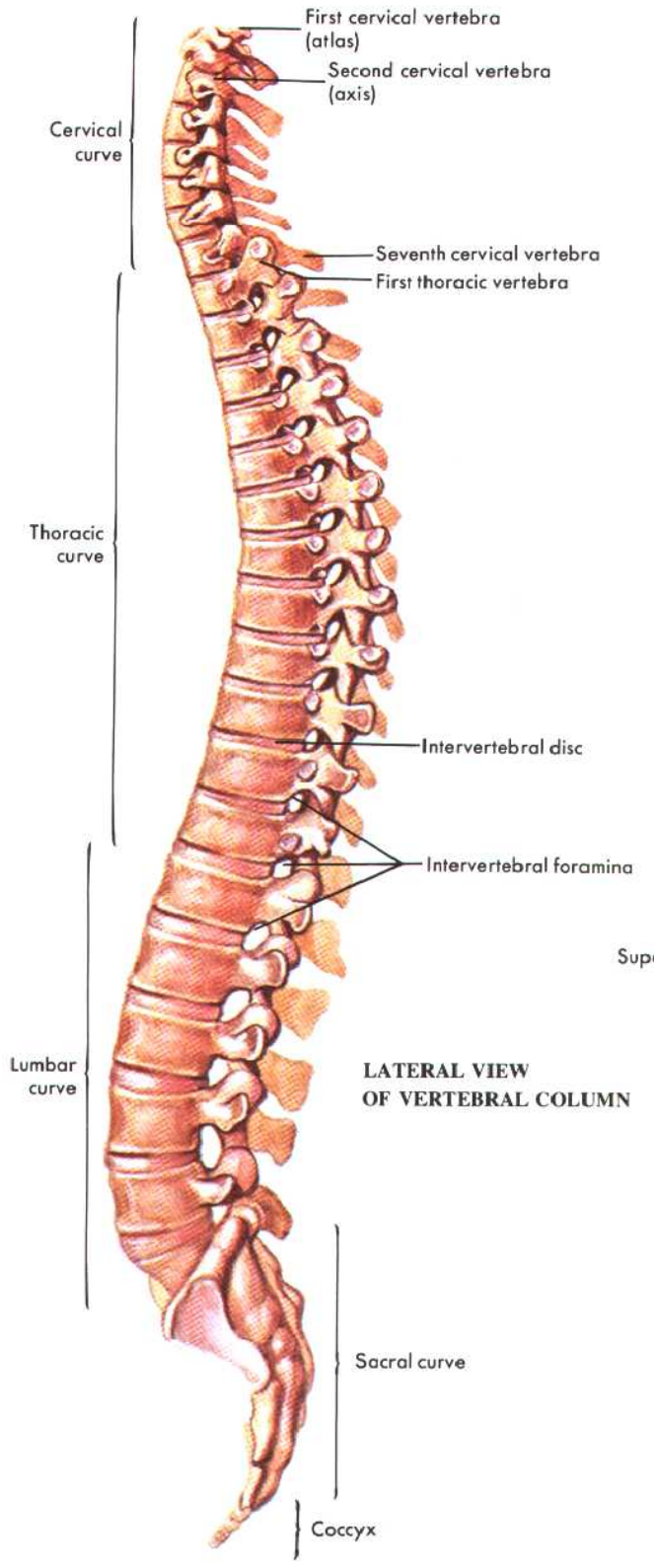
THORAX AND RIBS



MALE PELVIS



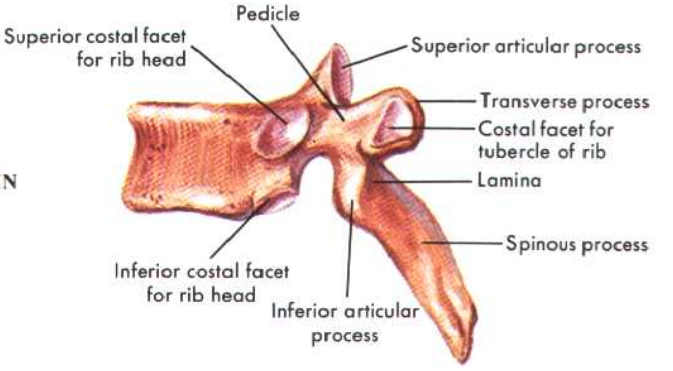
FEMALE PELVIS



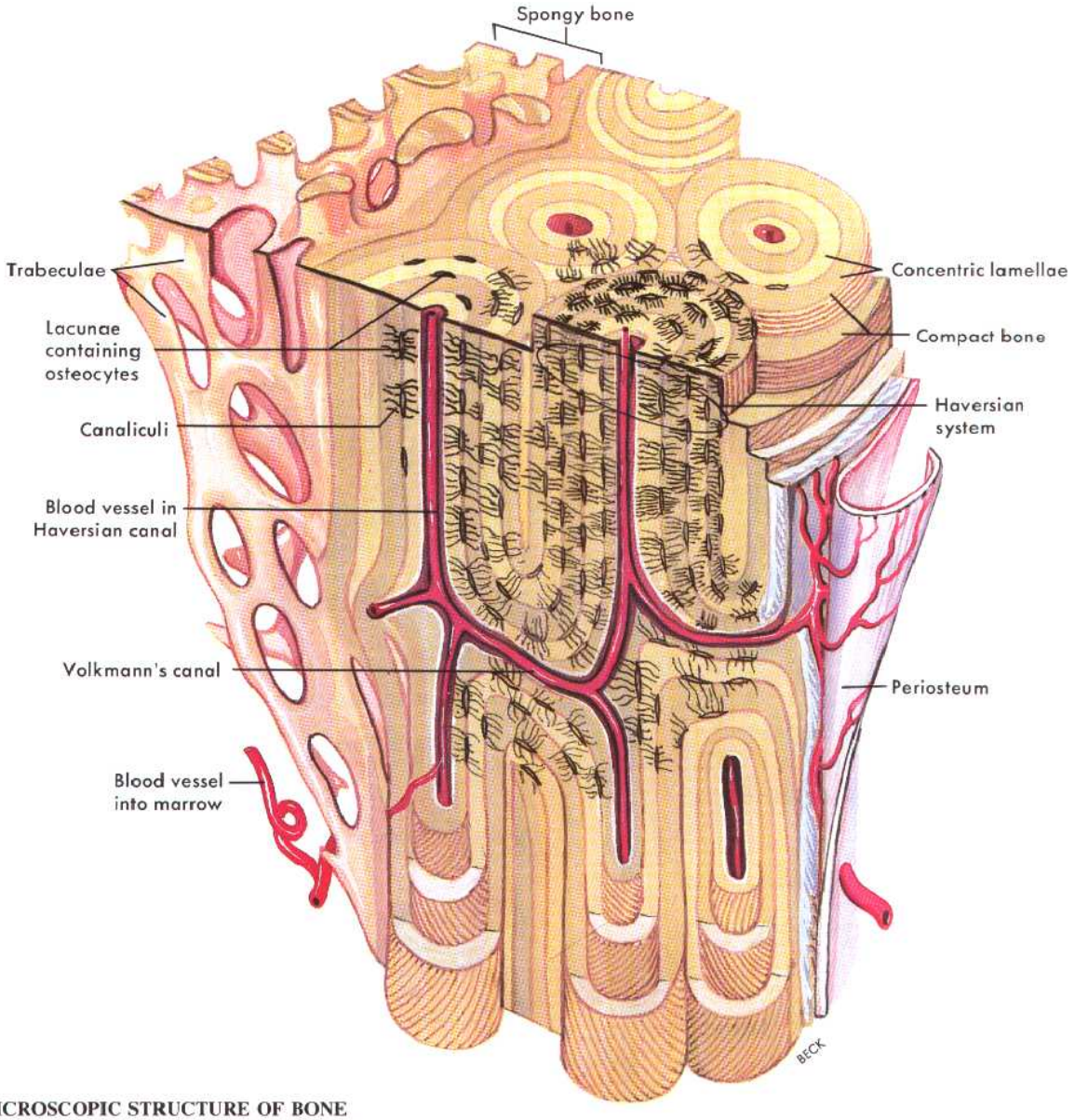
LATERAL VIEW OF VERTEBRAL COLUMN

CLINICAL NOTE: The skeletal system

X-rays used in studying the diseases of bones and joints, whether localized or more widespread disorders, can cause problems. At a certain total dosage (the amount depending on individual patient variation) there is a risk of developing radiation-induced diseases such as leukemia. Although radioisotopes also emit radiation in clinical use, the amounts involved are very small because of their short half-life and the high sensitivity of detectors such as the gamma camera and the crystal scintillator.

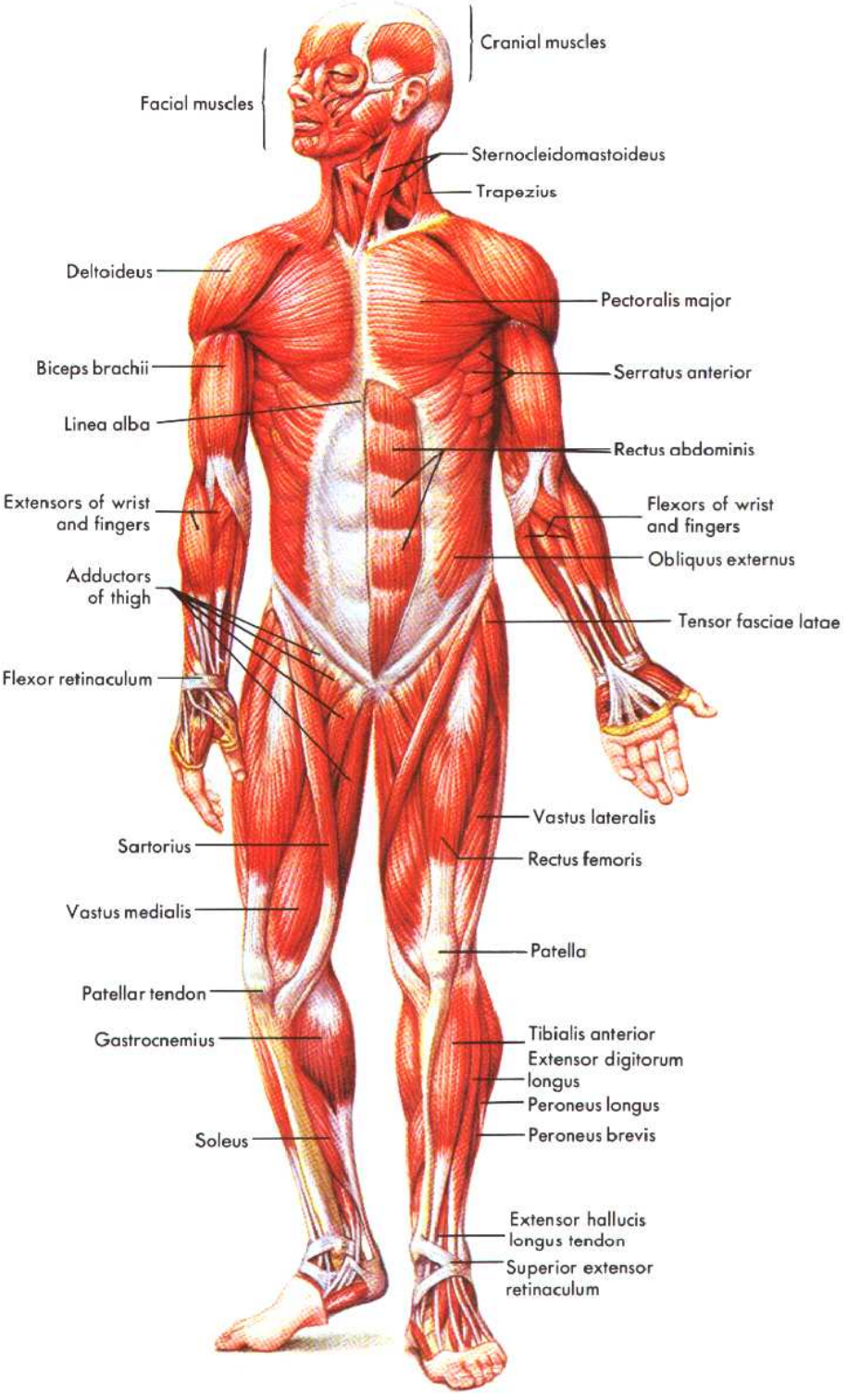


INDIVIDUAL VERTEBRA

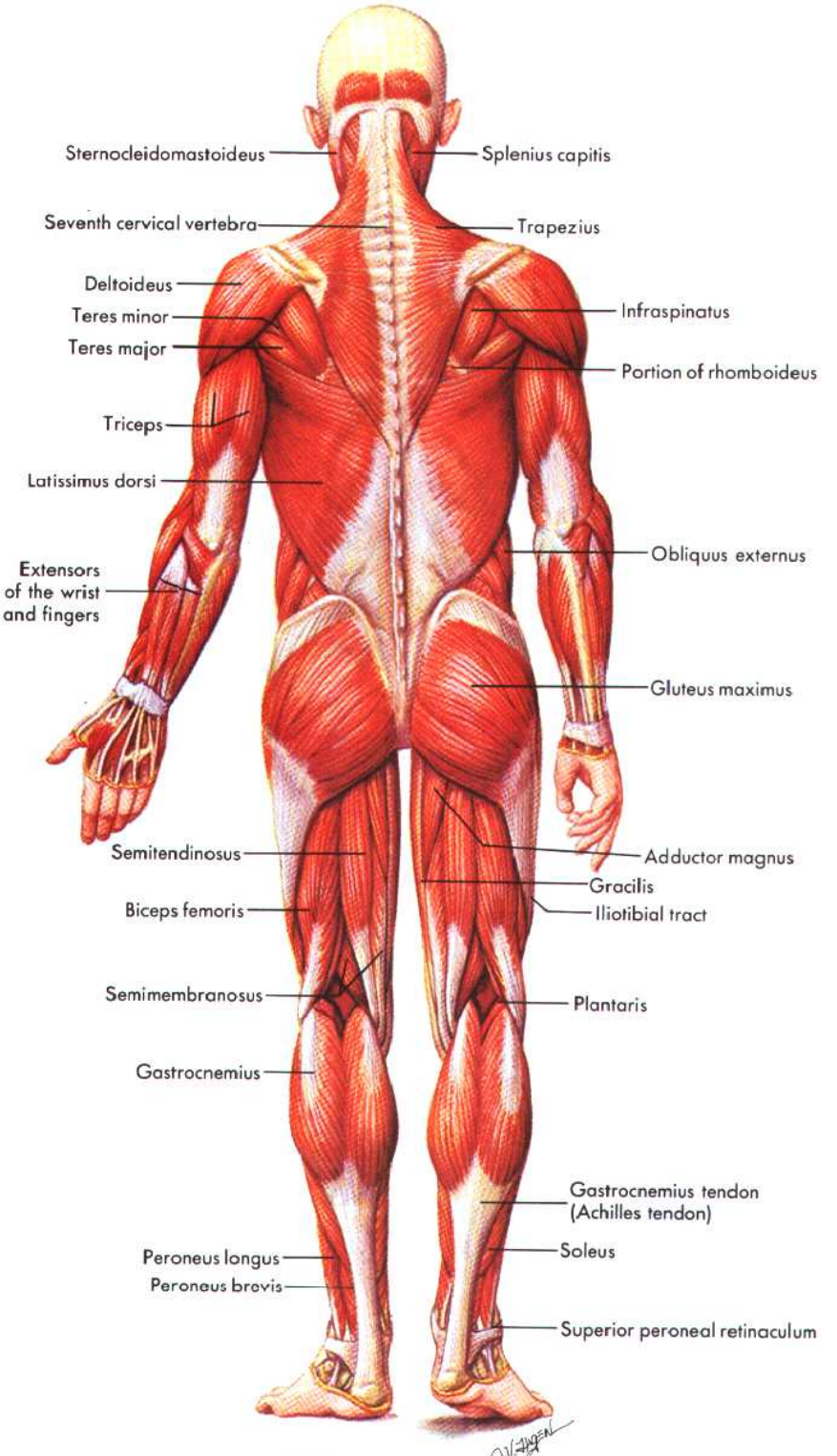


MICROSCOPIC STRUCTURE OF BONE

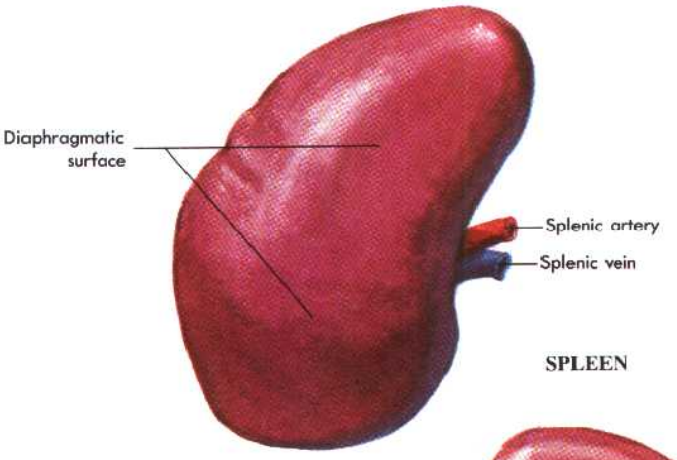
Haversian systems, several of which are shown here, compose compact bone. Note the structures that make up one haversian system: concentric lamellae, lacunae, canaliculi, and a haversian canal. Shown bordering the compact bone on the left is spongy bone, a name descriptive of the many open spaces that characterize it.



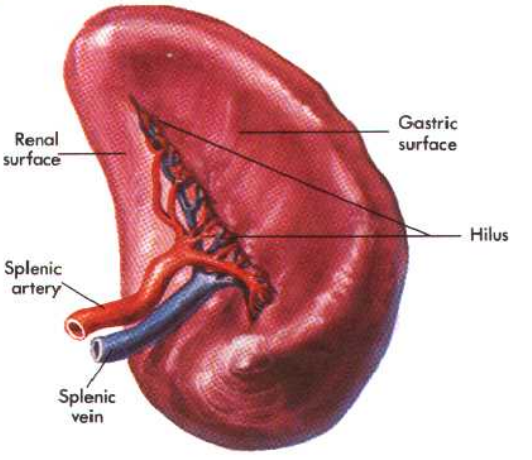
ANTERIOR VIEW



POSTERIOR VIEW

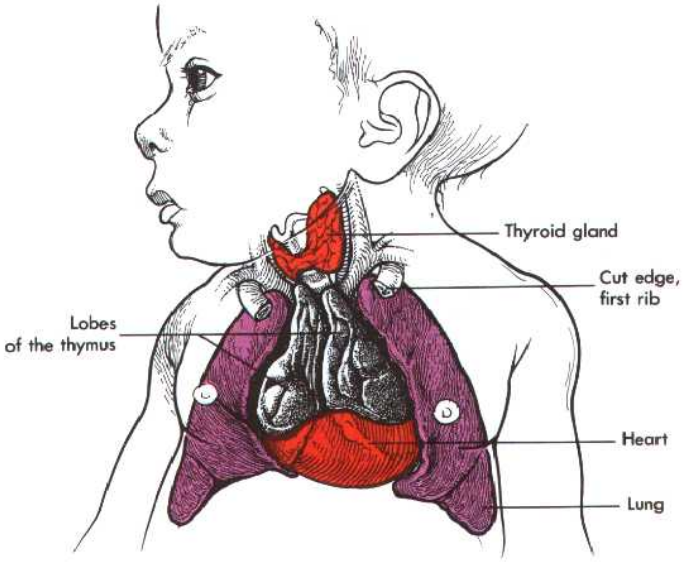


SPLEEN

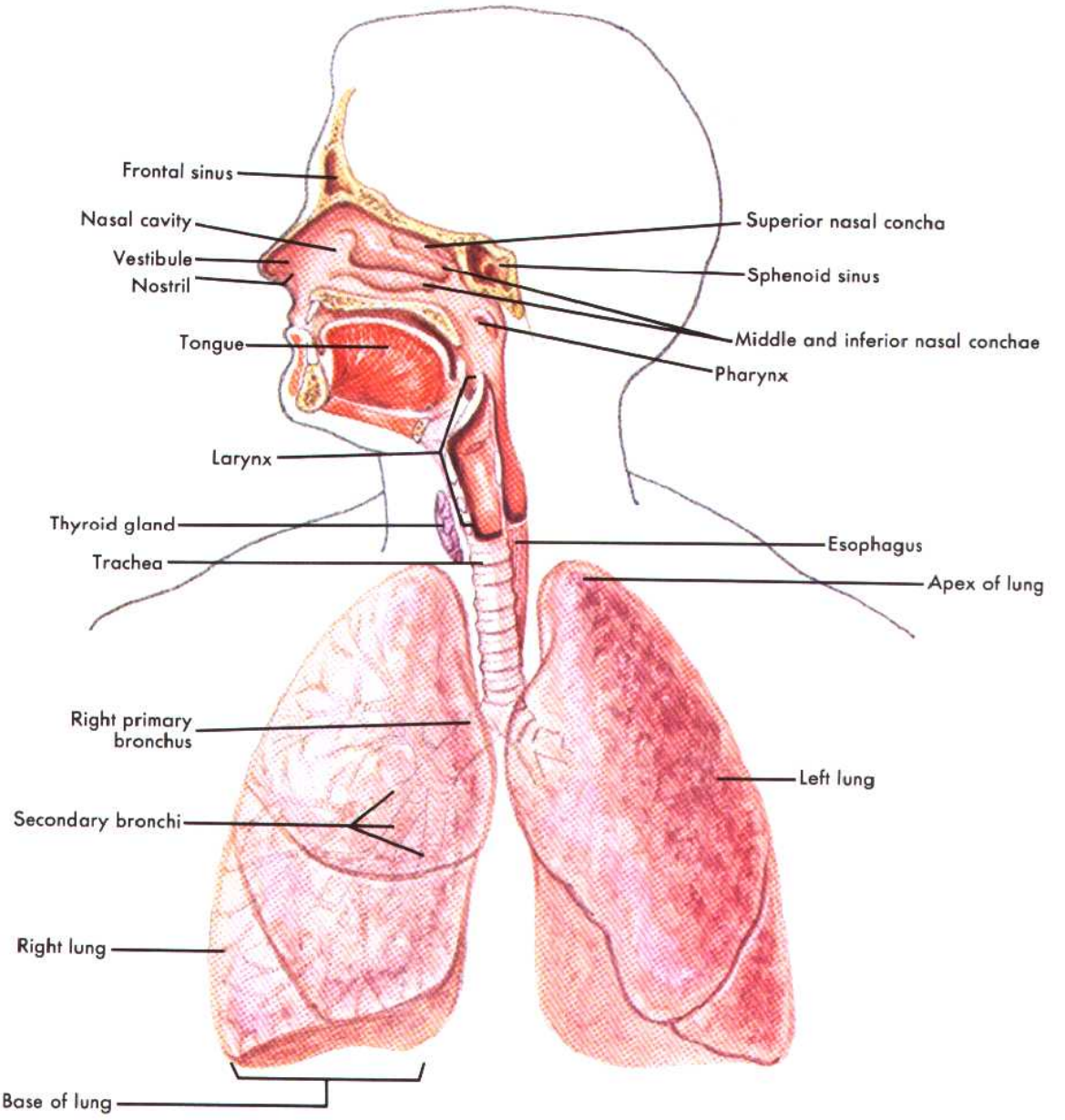


CLINICAL NOTE: The spleen

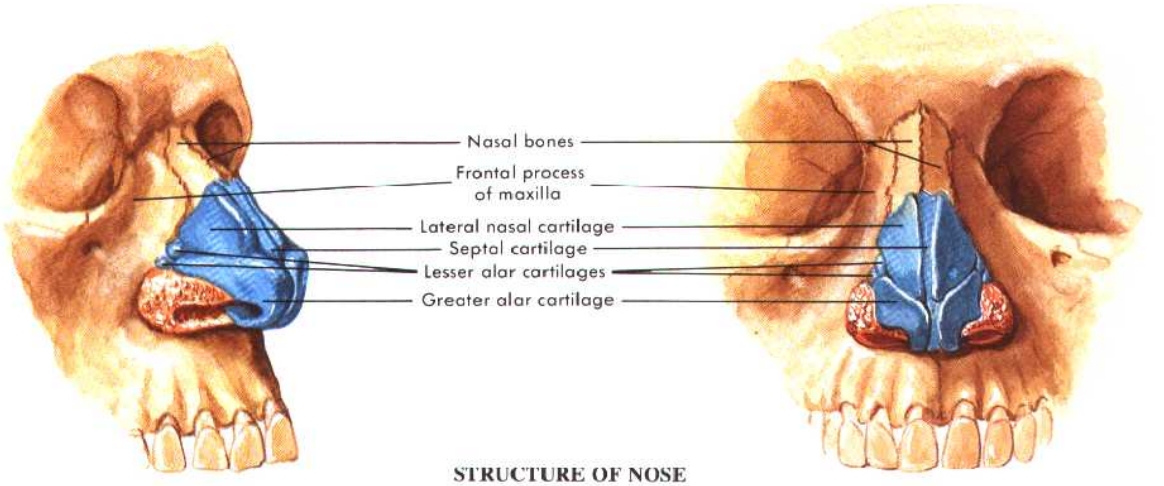
The spleen is located high in the abdomen under the left hemidiaphragm. It is involved in the creation, conservation, and destruction of various blood elements, especially erythrocytes. Arterial blood circulates through the red splenic pulp, which is rich in erythrocytes. Lymphatic tissue surrounding the smallest vessels forms a white pulp material.



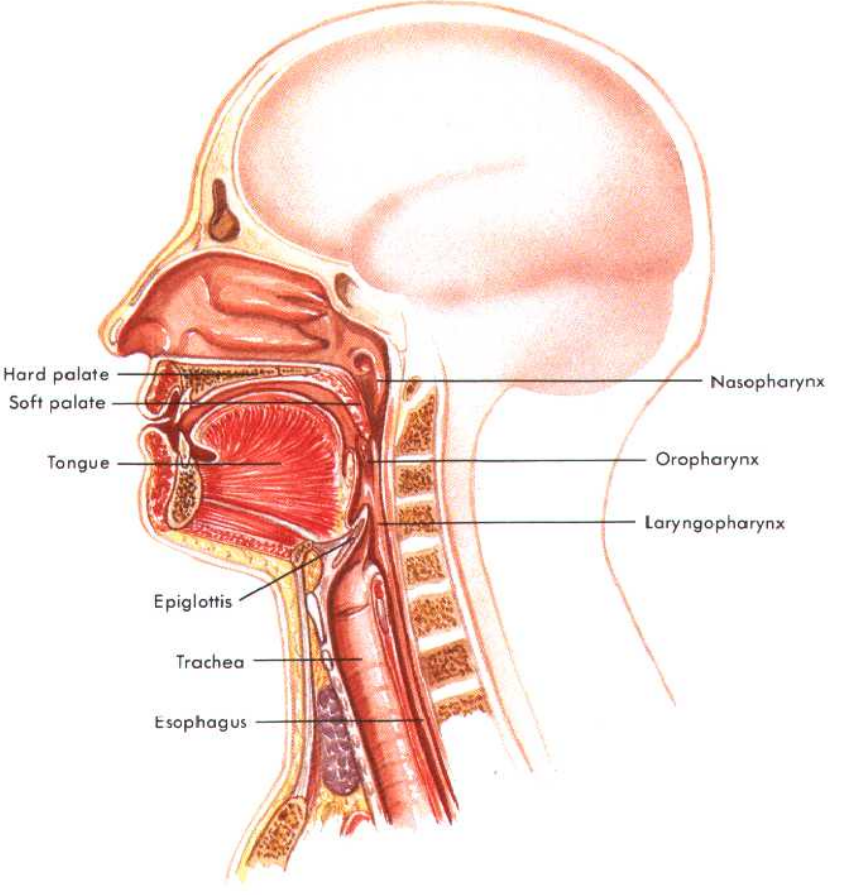
LOCATION AND GROSS ANATOMY OF THYMUS



ORGANS OF RESPIRATORY SYSTEM AND ASSOCIATED STRUCTURES



STRUCTURE OF NOSE



STRUCTURES OF NASAL PASSAGES AND THROAT