

Medical Terminology

An Illustrated Guide

SIXTH EDITION

Barbara Janson Cohen, MEd



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Preface

Every career in health care begins with learning the vast and challenging language of medical terminology. Without adequate learning and teaching resources, it can be an overwhelming challenge for students and faculty. This sixth edition of *Medical Terminology: An Illustrated Guide* meets that challenge with clear organization, many full-color illustrations with a strong clinical focus, a wide array of effective pedagogical features, a variety of activities, and useful ancillaries to make teaching and learning more effective. Because the content is so accessible and logically organized, the text can be used as part of classroom instruction, for independent study, or for distance learning.

Organization and Approach

Medical Terminology: An Illustrated Guide, 6th Edition, takes a stepwise approach to learning the language of medical terminology. Part I describes how medical terms are built from separate word parts and gives an overview of body structure. Part II introduces concepts of disease and treatment. Students should study these chapters before proceeding to Part III, which describes each of the body systems. While using the systems approach common to anatomy and physiology texts, this book alters the typical sequence to present systems of the most general medical importance first, the cardiovascular and respiratory systems, for example, followed by chapters on the more focused medical specialties. Individual chapters build on knowledge in stages. The Key Terms sections list the terms most commonly used; more specialized terms are included in a later section entitled “Supplementary Terms.” Students may study the latter terms according to the time available and their needs.

Each chapter opens with an indexed chapter outline, a list of student objectives—goals to be accomplished by the completion of the chapter—and a chapter pretest, testing a student’s previous knowledge to measure progress. In Part III, the chapters begin with an overview of the normal structure and function of the system under study, followed by a list of key terms with definitions and mention of some roots. Word parts related to each topic are then presented and illustrated, along with exercises on the new material. Next, there is an overview of clinical information pertaining to the system, also followed by a list of key terms with definitions. Most chapters contain reference boxes that unify and simplify material on specific topics. There are also special interest boxes on health care professions, clinical topics, and word derivations and usage.

Pedagogical Features

Features of *Medical Terminology: An Illustrated Guide*, 6th Edition, have been designed to bring the content alive and to aid in understanding and retention (also see the User’s Guide).

- **Illustrations**—Detailed, full-color drawings and photographs illuminate the chapters. These include clinical photographs and tissue micrographs. The many figures amplify and clarify the text and are particularly helpful for visual learners.
- **Pronunciations**—This text places great emphasis on pronunciation, and phonetic pronunciations are included with all new terms. It is important to practice saying these words and to be able to recognize them when they are heard.
- **Pretests**—Short quizzes to test previous knowledge begin each chapter. Students should take each quiz before starting the chapter and again after completing the chapter in order to measure progress.
- **Exercises**—Exercises accompany the introduction of all material, and review exercises conclude each chapter. Many of the illustrations have corresponding labeling exercises accompanied by helpful alphabetical word lists. All answers are included in the Answer Key at the end of the book. Students are actively involved in the learning process by answering questions on new material, checking answers with the answer keys, correcting mistakes, and keeping track of progress with review exercises.
- **Use of Dictionaries**—Word exercises that may require dictionary use are included in chapter review exercises. Some information on medical dictionaries is given in Chapter 1. Appendix 9 provides a sample page from a medical dictionary with information on how it is used.
- **Case Studies**—Case studies that present terminology in the context of a medical report are included in all chapters, followed by related questions. Professionals in a variety of health occupations figure in these scenarios to represent the diverse work settings students may encounter. Because they may include information learned in a previous chapter, the case studies also serve as an excellent review. Understanding these cases, especially those in the early parts of the book, may seem challenging for students, but much of the information needed to answer the questions is given in the histories, and students should make their best efforts to figure out the answers. These can be verified with the Answer Key.

- **Glossaries of Word Parts**—In working through the exercises, students can refer to complementary lists at the end of the text. Appendix 3 lists word parts and their meanings, and Appendix 4 lists meanings with corresponding word parts. Appendices 5 through 7 have lists of roots, suffixes, and prefixes alone. The remaining appendices include symbols, abbreviations, and units of the metric system.
- **Flashcards**—Because flashcards offer an excellent way to learn this new vocabulary, a section with more than 100 flashcards is included at the back of the text. Flashcard content is presented in chapter order so that the cards can be removed in sequence as students progress through the book. Students can make additional cards to match the cards in the book by cutting 3 × 5 cards in half. The Student Resources website provides printable flashcards and the capacity to make unlimited additional cards.

Students are also encouraged to create their own learning aids, such as devising a practice test by covering lists of words and testing themselves on the definitions, or by covering definitions and testing themselves on the words. The same can be done with the charts on word parts and their definitions. It is also helpful for students to keep a personal list of words that they find difficult to spell or pronounce.

PASSport to Success® for Students



Look for this icon throughout the book for pertinent supplementary material on the companion website.

The PASSport to Success® is a practical system that lets students learn faster, remember more, and achieve success. Students discover their unique learning style—visual, auditory, or kinesthetic—with a simple online assessment; they choose from a wealth of resources for each learning style including animations, 16 different types of online learning activities, an audio glossary, an online dictionary application (including audio pronunciations of terms), a flashcard application (including a flashcard generator, which allows you to build your

own unique set of flashcards), and other supplemental materials. Throughout the textbook, the graphic icon shown above alerts students to pertinent supplementary material.

The PASSport to Success® is available from the book's companion website at <http://thePoint.lww.com/CohenMedTerm6e>. See the inside cover of this text for the passcode you will need to gain access to the website, and refer to the User's Guide for all details about the PASSport to Success® and a complete listing of student resources.

Instructor Ancillary Package

A strong package of ancillary materials is available to instructors with this edition. All resources are available to approved adopting instructors online at <http://thePoint.lww.com/CohenMedTerm6e>. These resources include the following:

- **PowerPoint slides** for each chapter organized by learning objectives
- **Lesson plans** for each chapter, organized around the learning objectives, and include lecture notes and in-class activities and assignments
- **Word search activities**
- **Fill-in-the-blank tables**
- **Image bank** of all images from the text
- **Instructor's Test Generator** with more than 500 questions in different formats (multiple choice, true–false, fill-in-the-blank, and matching)
- **WebCT and Blackboard-ready Cartridge**, which allows you to integrate the ancillary materials, by exercise type, into learning management systems

Summary

An understanding of medical terminology provides an essential foundation for any career in health care. *Medical Terminology: An Illustrated Guide*, 6th Edition, both the textbook and its ancillaries, makes learning and teaching medical terminology a rewarding and exciting process.

Acknowledgments

In preparing this 6th edition of *Medical Terminology: An Illustrated Guide*, my thanks go, once again, to the talented and dedicated staff at Lippincott Williams & Wilkins. Senior Publisher, Julie Stegman, and Product Director, Eric Branger, were at the helm of this project. Erin Cosyn, Associate Product Manager, Amy Rowland, Editorial Assistant, and Heather Rybacki, Senior Production Manager, handled the innumerable daily tasks required for publication of a textbook. Production Manager, Richard Rosenberg, took charge of the electronic ancillaries and their placement on *thePoint*. Allison Noplock was in charge of marketing.

Thanks once more to my able contributor, Jason James Taylor, who wrote many of the special interest boxes that appear in the text and also created all of the original student and instructor resource materials.

I truly appreciate the efforts of the many reviewers who have evaluated past editions of the book as well as this new edition. Their suggestions have greatly improved this text over the years.

For perennially needed advice and assistance, I thank my husband, Matthew, an instructor of anatomy and physiology.

Barbara Janson Cohen

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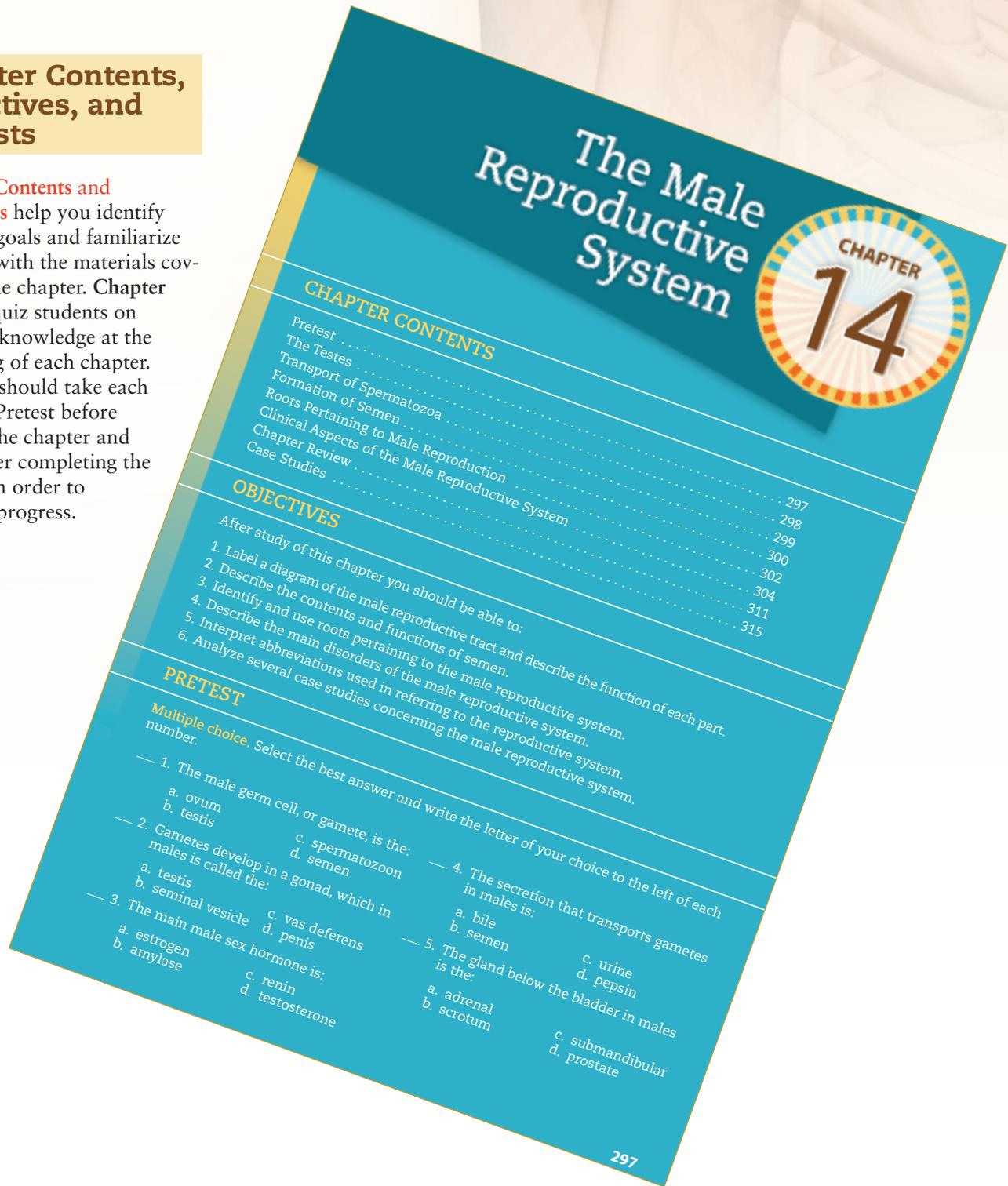
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User's Guide

Medical Terminology: An Illustrated Guide, 6th Edition, was created and developed to help you master the language of medicine. The tools and features in the text will help you work through the material presented. Please take a few moments to look through this User's Guide, which will introduce you to the features that will enhance your learning experience.

Chapter Contents, Objectives, and Pretests

Chapter Contents and **Objectives** help you identify learning goals and familiarize yourself with the materials covered in the chapter. **Chapter Pretests** quiz students on previous knowledge at the beginning of each chapter. Students should take each Chapter Pretest before starting the chapter and again after completing the chapter in order to measure progress.



Detailed Illustrations

Illustrations: Detailed, full-color drawings and photographs illuminate the chapters. These include clinical photographs and tissue micrographs. The many figures amplify and clarify the text and are particularly helpful for visual learners.

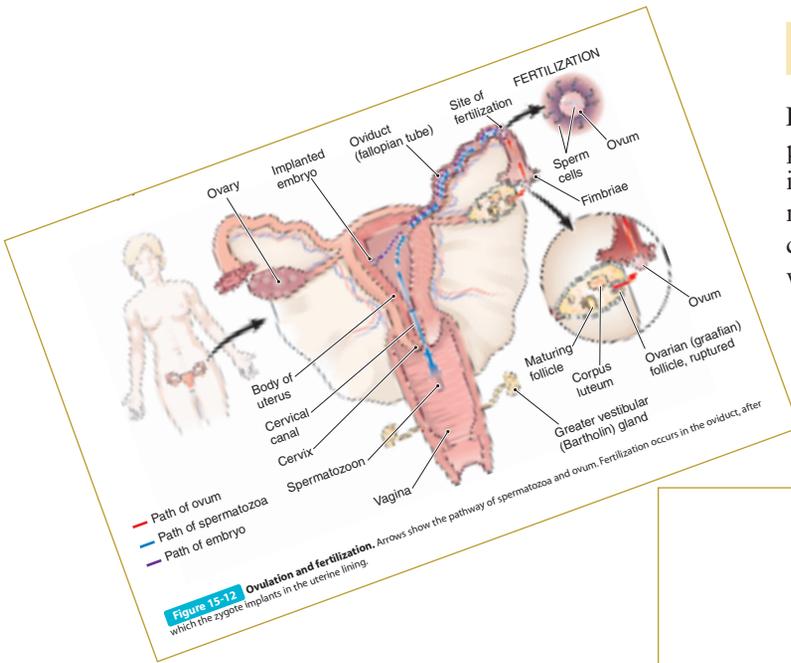


Figure 15-12 Ovarulation and fertilization. Arrows show the pathway of spermatozoa and ovum. Fertilization occurs in the oviduct, after which the zygote implants in the uterine lining.

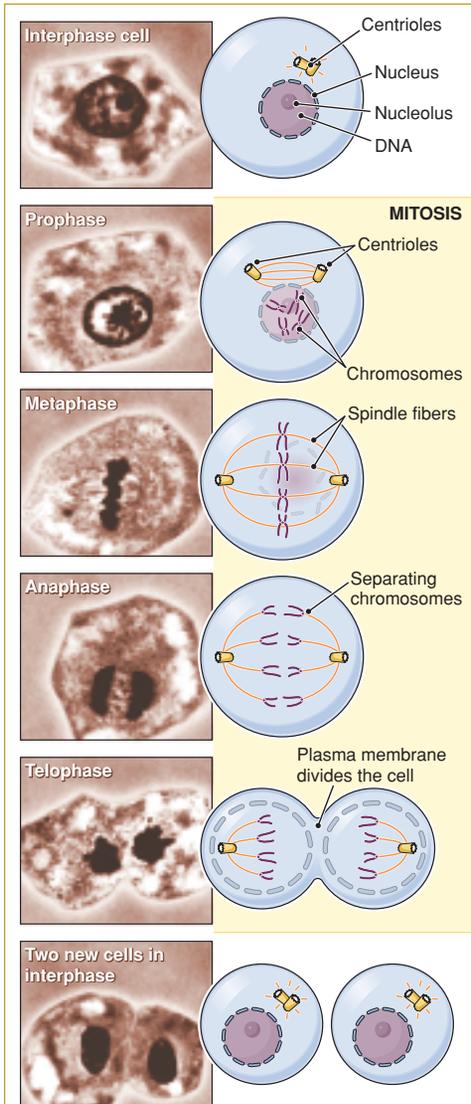


Figure 4-4 The stages in cell division (mitosis). When it is not undergoing mitosis, the cell is in interphase. The cell shown is for illustration only. It is not a human cell, which has 46 chromosomes.

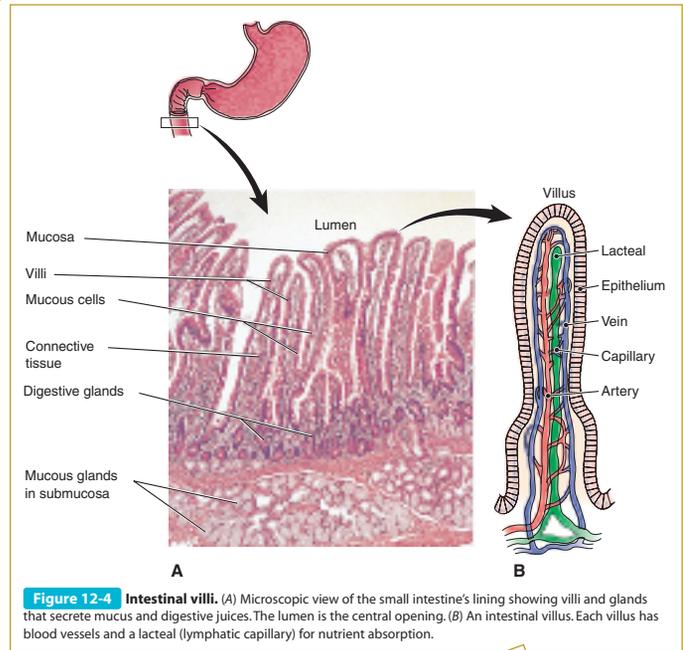


Figure 12-4 Intestinal villi. (A) Microscopic view of the small intestine's lining showing villi and glands that secrete mucus and digestive juices. The lumen is the central opening. (B) An intestinal villus. Each villus has blood vessels and a lacteal (lymphatic capillary) for nutrient absorption.

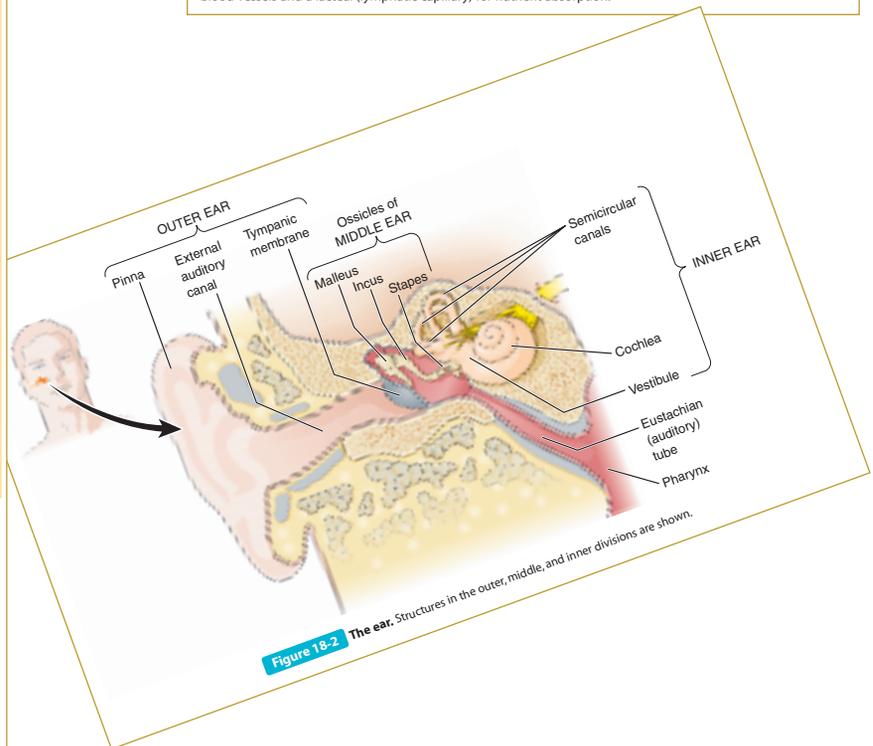


Figure 18-2 The ear. Structures in the outer, middle, and inner divisions are shown.

Feature Boxes

Feature Boxes Call Out Important Information

Focus on Words provide historical or other interesting information on select terms within a chapter.

Clinical Perspectives focus on body processing as well as techniques used in clinical settings.

Health Professions focus on a variety of health careers, showing how the knowledge of medical terminology is applied in real-world careers.

For Your Reference provide supplemental information for terms within a chapter.

Box 12-3 Focus on Words

Homonyms

Homonyms are words that sound alike but have different meanings. One must know the context in which they are used in order to understand the intended meaning. For example, the ilium is the upper portion of the pelvis, but the ileum is the last portion of the small intestine. Different adjectives are preferred for each, iliac for the first and ileal for the second.

The word *meiosis* refers to the type of cell division that halves the chromosomes to form the gametes, but *miosis* means abnormal contraction of the pupil. Both words come from the Greek word that means a decrease.

Similar-sounding names lead to some funny misspellings. The large bone of the upper arm is the humerus, but this bone is often written as humorous. The vagus nerve (cranial nerve X) is named with a root that means "wander," as in the words vague and vagabond, because this nerve branches to many of the internal organs. Students often write the name as if it had some relation to the famous gambling city in Nevada.

Homonyms may have a more serious side as well. Drug names may sound or look so similar that clinicians could confuse them, leading to dangerous situations.

Box 12-5

Clinical Perspectives

Endoscopy

Modern medicine has made great strides toward looking into the body without resorting to surgery. The endoscope, an instrument that is inserted through a body opening or small incision, has allowed the noninvasive examination of passageways, hollow organs, and body cavities. The first endoscopes were rigid lighted telescopes that could be inserted only a short distance into the body. Today, physicians can navigate the twists and turns of the digestive tract using long fiberoptic endoscopes composed of flexible, light-transmitting bundles of glass or plastic.

Physicians can detect structural abnormalities, ulcers, inflammation, and tumors in the GI tract endoscopically. In addition, they use endoscopes to remove fluid or tissue samples for testing. Some surgery can even be done with an endo-

scope, such as polyp removal from the colon or sphincter expansion. Endoscopy can also be used to examine and operate on joints (arthroscopy), the bladder (cystoscopy), respiratory passages (bronchoscopy), and the abdominal cavity (laparoscopy).

A "virtual colonoscopy" uses computerized x-rays to generate detailed images of the colon. This method can provide an adequate screening for most people, although a small percentage might then need a standard colonoscopy for further assessment or surgery. Capsular endoscopy, a recent technological advance, has made examination of the GI tract even easier. It uses a pill-sized camera that a patient can swallow! As the camera moves through the digestive tract, it transmits video images to a data recorder worn on the patient's belt.

Box 12-2

Health Professions

Dental Hygienist

Dental hygienists are concerned with dental health maintenance and preventive dental care. They examine patients' teeth, using hand, rotary, and ultrasonic instruments to remove deposits, such as calculus, stains, and plaque. They may also apply fluorides to prevent cavities. They work independently or along with a dentist to administer anesthesia, finish fillings and restorations, remove sutures, or assist in periodontal (gum) treatment. Dental hygienists must be informed about safety concerning x-ray equipment, anesthesia, and infectious diseases. They wear safety glasses, surgical masks, and gloves to protect themselves and their patients. A major component of the dental hygienist's work is patient education for maintenance of good oral health. They may give instruction on diet and proper dental care, such as flossing and brushing the teeth.

Most dental hygiene programs award an associate degree; some offer a certificate, bachelor's, or master's degree. The higher degrees are required for research, teaching, or practice in public or school health facilities. The curriculum includes academic and health-oriented sciences, material on the legal aspects of dental hygiene practice, and clinical training. After graduation, dental hygienists must be licensed in their states by passing a clinical examination and a written examination administered by the American Dental Association's (ADA's) Joint Commission on National Dental Examinations.

Almost all hygienists work in dental offices. One advantage of this field is scheduling flexibility and the opportunity for part-time work. Job prospects are good; dental hygiene is among the fastest growing occupations. Benefits of this place of employment include:

Box 15-1

For Your Reference

Main Methods of Birth Control Currently in Use

METHOD	DESCRIPTION
SURGICAL	
Vasectomy/tubal ligation	Cutting and tying the tubes that carry the gametes
HORMONAL	
Birth control pills	Estrogen and progesterin or progesterin alone taken orally to prevent ovulation
Birth control shot	Injection of synthetic progesterone every 3 months to prevent ovulation
Birth control patch	Adhesive patch placed on body that administers estrogen and progesterin through the skin; left on for 3 weeks and removed for a fourth week
Birth control ring	Flexible ring inserted into vagina that releases hormones internally; left in place for 3 weeks and removed for a fourth week
BARRIER	
Male condom	Sheath that fits over erect penis and prevents release of semen
Diaphragm (with spermicide)	Rubber cap that fits over cervix and prevents sperm entrance
Contraceptive sponge (with spermicide)	Soft, disposable foam disk containing spermicide, which is moistened with water and inserted into vagina
Intrauterine device (IUD)	Metal or plastic device inserted into uterus through vagina; prevents fertilization and implantation by release of copper or birth control hormones
OTHER	
Spermicide	Chemicals used to kill sperm; best when used in combination with a barrier method
Fertility awareness	Abstinence during fertile part of cycle as determined by menstrual history, basal body temperature, or quality of cervical mucus

Word Part Tables

Detailed Tables

Present roots, prefixes, and suffixes covered in each chapter in an easy-to-reference format (with examples of their use in medical terminology).

Word Part Knowledge aids in the learning and understanding of common terminology.

Table 15-4 Roots Pertaining to Pregnancy and Birth

Root	Meaning	Example	Definition of Example
amnio	amnion, amniotic sac	diamniotic di-AM-nē-OT-ik	showing two amniotic sacs
embryo/o	embryo	embryonic em-brē-ON-ik	pertaining to the embryo
fet/o	fetus	fetometry fē-TOM-e-trē	measurement of a fetus
toc/o	labor	dystocia dis-TŌ-sē-ā	difficult labor
nat/i	birth	neonate NĒ-ō-nāt	newborn
lact/o	milk	lactose LAK-tōs	sugar (-ose) found in milk
galact/o	milk	galactagogue ga-LAK-tō-gog	agent that promotes (-agogue) the flow of milk
gravida	pregnant woman	nulligravida nul-i-GRAY-i-dā	woman who has never (nulli-) been pregnant
para	woman who has given birth	multipara mul-TIP-a-ra	woman who has given birth two or more times

EXERCISE 15-4

Define the following words:

1. prenatal (prē-NĀ-tal) _____
2. embryogenesis (em-brē-ō-JEN-e-sis) _____
3. neonatal (nē-ō-NĀ-tal) _____
4. fetoscopy (fē-TOS-kō-pē) _____
5. monoamniotic (mon-ō-am-nē-OT-ik) _____
6. agalactia (ā-ga-LAK-shē-ā) _____
7. hyperlactation (hī-per-lak-TĀ-shun) _____

Use the appropriate roots to write words for the following:

8. study of an embryo _____
9. study of the newborn _____
10. any disease of an embryo _____
11. cell (-cyte) found in amniotic fluid _____
12. incision of the amnion (to induce labor) _____
13. instrument for endoscopic examination of the fetus _____
14. rupture of the amniotic sac _____
15. after birth _____
16. woman who is pregnant for the first time _____
17. woman who has been pregnant two or more times _____
18. woman who has never given birth _____
19. woman who has given birth to one child _____

Use the suffix *-tocia*, meaning "condition of labor," to write words for the following:

20. dry labor _____
21. slow labor _____

Use the root *galact/o* to write words for the following:

22. discharge of milk _____
23. cystic enlargement (-cele) of a milk duct _____

Exercises

Exercises designed to test your knowledge before you move to the next learning topic that follows each table.

Term Tables

Key Terms include the most commonly used terms.

Supplementary Terms list more specialized terms.

Terminology		Key Terms
FEMALE REPRODUCTIVE SYSTEM		
Normal Structure and Function		
cervix SER-viks	Neck	Usually means the lower narrow portion (neck) of the uterus (root: cervic/o); cervix uteri (U-ter-i)
clitoris KLIT-o-ris	A small erectile body anterior to the urethral opening that is similar in origin to the penis	(roots: clitor/o, clitorid/o)
contraception kon-tra-SEP-shun	The prevention of pregnancy	
corpus luteum KOR-pus LU-tē-um	The small yellow structure that develops from the ovarian follicle after ovulation and secretes progesterone and estrogen	
cul-de-sac kul-di-SAK	A blind pouch, such as the recess between the rectum and the uterus; the rectouterine pouch or pouch of Douglas (see Fig. 15-1)	
endometrium en-dō-MĒ-trē-um	The inner lining of the uterus	
estrogen ES-trō-jen	A group of hormones that produce female characteristics and prepare the uterus for the fertilized egg. The most active of these is estradiol	
fallopian tube fa-LO-pē-an	See oviduct	
fimbriae FIM-brē-ē	The long fingerlike extensions of the oviduct that wave to	(see Fig. 15-1) (singular: fimbria)
follicle-stimulating hormone (FSH)	A hormone secreted by the	stimulates
fornix FOR-niks		
Terminology		Supplementary Terms
FEMALE REPRODUCTIVE SYSTEM		
Normal Structure and Function		
adnexa ad-NEK-sa	Appendages, such as the adnexa uteri—the ovaries, oviducts, and uterine ligaments	
areola a-RĒ-ō-la	A pigmented ring, such as the dark area around the nipple of the breast	
greater vestibular gland	A small mucus-secreting gland on the side of the vestibule (see below) near the vaginal opening.	Also called Bartholin (BAR-to-lin) gland (see Fig. 15-12)
hymen HI-men	A fold of mucous membrane that partially covers the entrance of the vagina	
mons pubis monz PŪ-bis	The rounded, fleshy elevation anterior to the pubic joint that is covered with hair after puberty	
oocyte Ō-ō-sit	An immature ovum	
perimenopause per-i-MEN-ō-pawz	The period immediately before and after menopause; begins at the time of irregular menstrual cycles and ends 1 year after the last menstrual period; averages 3 to 4 years	
vestibule VES-ti-bŭl	The space between the labia minora that contains the openings of the urethra, vagina, and ducts of the greater vestibular glands	
Disorders		
cystocele SIS-tō-sēl	Herniation of the urinary bladder into the wall of the vagina (Fig. 15-11)	

Abbreviations for common terms.

Terminology		Abbreviations
Pregnancy and Birth		
AB	Abortion	GIFT Gamete intrafallopian transfer
AFP	Alpha-fetoprotein	hCG Human chorionic gonadotropin
AGA	Appropriate for gestational age	HDN Hemolytic disease of the newborn
AI	Artificial insemination	IVF In vitro fertilization
ART	Assisted reproductive technology	LMP Last menstrual period
C-section	Cesarean section	NB Newborn
CPD	Cephalopelvic disproportion	NICU Neonatal intensive care unit
CVS	Chorionic villus sampling	OB Obstetrics
D&E	Dilatation and evacuation	PDA Patent ductus arteriosus
ECMO	Extracorporeal membrane oxygenation	PIH Pregnancy-induced hypertension
EDC	Estimated date of confinement	PKU Phenylketonuria
FHR	Fetal heart rate	SVD Spontaneous vaginal delivery
FHT	Fetal heart tone	UC Uterine contractions
FTND	Full-term normal delivery	UTP Uterine term pregnancy
FTP	Full-term pregnancy	VBAC Vaginal birth after cesarean section
GA	Gestational age	ZIFT Zygote intrafallopian transfer

Chapter Review Exercises

Chapter Review Exercises are designed to test your knowledge of the chapter material and appear at the end of each chapter.

Chapter Review

LABELING EXERCISE
The Digestive System > Write the name of each numbered part on the corresponding line of the answer sheet.

Anus Ascending colon Cecum Descending colon Duodenum (of small intestine) Esophagus Gallbladder Liver Mouth Pancreas	Parotid salivary gland Pharynx Rectum Sigmoid colon Small intestine Stomach Sublingual salivary gland Submandibular salivary gland Transverse colon
---	---

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____
16. _____
17. _____

Chapter Review (continued)

Accessory Organs of Digestion > Write the name of each numbered part on the corresponding line of the answer sheet.

Common bile duct Common hepatic duct Cystic duct Diaphragm Duodenum	Gallbladder Liver Pancreas Pancreatic duct Spleen
---	---

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

TERMINOLOGY

Matching > Match the following terms and write the appropriate letter to the left of each number:

- | | |
|---|--|
| <ol style="list-style-type: none"> _____ 1. sublingual _____ 2. emetic _____ 3. labial _____ 4. agnathia _____ 5. lacteal _____ 6. icterus _____ 7. colicentesis _____ 8. ileum _____ 9. peristalsis _____ 10. enzyme _____ 11. leukoplakia _____ 12. cirrhosis _____ 13. cholangiectasis _____ 14. choledochal _____ 15. cholelithotripsy | <ol style="list-style-type: none"> a. lymphatic capillary b. pertaining to the lip c. substance that induces vomiting d. hypoglossal e. absence of the jaw a. terminal portion of the small intestine b. wavelike muscular contractions c. organic catalyst d. surgical puncture of the colon e. jaundice a. a type of liver disease b. pertaining to the common bile duct c. crushing of a biliary calculus d. dilatation of a bile duct e. white patches on a mucous membrane |
|---|--|

Case Studies and Case Study Questions

Case Studies and Case Study Questions in every chapter present terminology in the context of a medical report. These are an excellent review tool as they test your cumulative knowledge of medical terminology, and put terminology into a real-world context.

Case Studies

► **Case Study 18-1: Medical Records**

An electrical fire in the physicians' dictation room left a charred mass of burned and water-damaged medical records. Discharge charts had been stacked awaiting physician sign-off before they could be returned to Medical Records for storage. Several medical transcriptionists spent 3 days sorting through the remains to reassemble the charts, all of which were from patients of the large otorhinolaryngology practice. In addition to patient identification information, the transcriptionists matched word cues to create piles of similar documents. Patients treated for middle and inner ear problems were identified with words such as stapedectomy, tympanoplasty, myringotomy, cochlear, acoustic neuroma. Patients treated for external ear conditions were grouped using terms such as otoplasty, pinna, postauricular, and otitis externa. Mastoid, laryngeal, and nasal surgery patients were grouped separately. Restoring the charts was an impossible task, and the records were determined to be either incomplete or a total loss. The only document to survive the fire was an audiology report.

► **Case Study 18-2: Audiology Report**

S.R., a 55-year-old man, had decreased hearing sensitivity in his left ear. He had a history of hearing loss and was referred to an audiologist for a hearing evaluation. The audiologist performed a hearing test and found that S.R. had a mild hearing loss in his left ear. The audiologist recommended that S.R. be referred to an otolaryngologist for a hearing aid evaluation. S.R. was referred to an otolaryngologist for a hearing aid evaluation. The otolaryngologist performed a hearing test and found that S.R. had a mild hearing loss in his left ear. The otolaryngologist recommended that S.R. be referred to an audiologist for a hearing aid evaluation.

Case Studies (continued)

- Mastoid surgery incisions are made postauricularly, which is:
 - anterior to the ear drum
 - over the left ear
 - behind the ear
 - inferior to the tympanic membrane
 - between the ears
- The study of hearing is termed:
 - acoustiology
 - radio frequency
 - light spectrum
 - otology
 - audiology
- Sensorineural hearing loss may result from:
 - damage to the second cranial nerve
 - otitis media
 - otosclerosis
 - damage to the eighth cranial nerve
 - stapedectomy
- Ultrasound destruction and aspiration of the lens is called:
 - cataractomy
 - phacoemulsification
 - stapedectomy
 - radial keratotomy
 - refraction
- The term akinesia means:
 - movement
 - lack of sensation
 - washing
 - lack of movement
 - incision
- The term that means "on the same side" is:
 - contralateral
 - bilateral
 - distal
 - ventral
 - ipsilateral
- Another name for an acoustic neuroma is:
 - macular degeneration
 - acoustic neurilemoma
 - auditory otosclerosis
 - 8th cranial labyrinthitis
 - acoustic glaucoma

Write terms from the case studies with the following meanings:

- record obtained by tympanometry _____
- pertaining to or perceived by the ear _____
- inflammation of the middle ear _____
- inflammation of the external ear _____
- physician who specializes in conditions of the eye _____
- within the eye _____
- abnormal contraction of the pupil _____
- generic drug name for Versed _____

Abbreviations. Define the following abbreviations:

- Hz
- BAEP
- OD
- IOL

CASE STUDY QUESTIONS

Multiple choice. Select the best answer and write the letter of your choice to the left of each number:

- The medical specialty of otorhinolaryngology is most often referred to as:
 - ENT, or ear, nose, and throat
 - optometry
 - PERLA
 - oral surgery
 - EENT/dental

The surgery to remove one of the microscopic bones of the middle ear is a(n):

- stapedectomy
- mastoidectomy
- myringotomy
- tympanoplasty
- otoplasty

The procedure in question 2 may require connection of a new eardrum, a procedure called _____

- stapedectomy
- myringotomy
- transfer
- tympanoplasty
- otoplasty

(continued)

Flashcard Starter Set

More than 100 flashcards are included at the back of the text. Add to this collection with your own cards as you work through the text (please be sure to see the Student Resources section for information on creating your own set of flashcards using the Flashcard Generator).

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3. MyPowerLearning will send you an email with your username and password you will use to log in to MyPowerLearning and complete your Learning Style Assessment (*Don't worry—There are no wrong answers!*).
4. Print and read your own personal learning styles report to better understand how to study most effectively and efficiently.

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- Multiple choice, true–false, and fill-in-the blank questions
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- Zooming In
- Pronounce It
- Spell It
- Sound It
- Hangman
- Crossword Puzzles
- Quiz Show
- Concentration
- Case Studies and Case Study Questions
- Dictionary and Audio Glossary application
- Flashcards and Flashcard Generator applications
- Animations
- Audio Drills (which allow for chapter audio files to be downloaded as MP3 files)
- Chapter Quizzes

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