

健身与健康概念

(第10版)

Concepts of Fitness & Wellness (Tenth Edition)

查尔斯·B. 科尔宾 格利高里·J. 韦尔克 威廉·R. 科尔宾 卡伦·A. 韦尔克 著

Charles B. Corbin Gregory J. Welk William R. Corbin Karen A. Welk



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Concepts of **Fitness & Wellness** *A Comprehensive Lifestyle Approach*

TENTH EDITION

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HELP is here!

A proven philosophy for achieving health, wellness, and physical fitness

“Health is available to Everyone for a Lifetime, and it’s Personal.”

A proven approach for teaching fitness and wellness

Concise content modules—based on sound learning objectives—highlight key concepts and promote active lifestyles.

With *Connect Fitness and Wellness*

A powerful online, interactive set of tools for learning and behavior change.

A winning combination!

The goal of our program—summarized in the “HELP” philosophy stated above—is to help all people make personal lifestyle changes that promote health, fitness, and wellness over a lifetime. Organized into concise concepts that make it easy for students to learn, Concepts of Fitness and Wellness is integrated with online activities and assessments that enable students to apply the latest research on fitness and wellness to their own lives.

HELP: A proven philosophy for achieving lifetime fitness and wellness . . .

“Health is available to Everyone for a Lifetime, and it’s Personal”

LEARNING OBJECTIVES

After completing the study of this concept, you will be able to:

- ▶ Describe the HELP philosophy and discuss its implications in making personal decisions about health, wellness, and fitness.
- ▶ Define the dimensions of health and wellness, and explain how they interact to influence health and wellness.
- ▶ Distinguish health-related and skill-related dimensions of physical fitness.
- ▶ Identify the determinants of health, wellness, and fitness, and explain how they each contribute to health, wellness, and fitness.
- ▶ Identify related national health goals and show how meeting personal goals can contribute to reaching national goals.
- ▶ Use health behavior change strategies to carry out self-assessments of personal lifestyles and wellness perceptions.

- Concise modules called “concepts” give instructors flexibility and students a manageable framework for learning and mastering course content. New learning objectives introduce each concept, guiding students on key points and how to assess their progress.

A CLOSER LOOK

Blue Zones

For his book *Blue Zones*, Dan Buettner researched communities across the world that had higher life expectancies and quality of life than other communities. He identified their common characteristics to try to determine the underlying factors that influence good health. He referred to these communities as “Blue Zones” and came up with nine specific attributes that contributed to the improved health. It is not surprising that physical activity (labeled as “Move Naturally”) was at the top of the list. (To see the complete list of principles, visit

www.bluezones.com.) Some public health groups and agencies have sought to promote broad application of these principles as the basis for coordinated community health programming. The book, in this case, can be viewed as a guide or recipe for healthy communities. However, it may also be likened to a fad diet that might promise an easy path to health and wellness.

Is it possible for communities to follow these recommendations as part of building a healthy community? Why or why not?

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ACTIVITY

- The new **A Closer Look** feature focuses on recent and sometimes controversial topics. Additional features include **Technology Update** (advances in technology), **In the News** (late-breaking fitness and wellness information), and **HP 2020** (highlights of the Healthy People 2020 national health goals). New follow-up, critical-thinking questions spur class discussion and personal reflection and are assignable within *Connect*.

HELP Health is available to Everyone for a Lifetime, and it’s Personal

According to the National Institutes of Health, although genes do not necessarily cause diseases, they do influence our risk of developing diseases, such as cancer, heart disease, and addiction. The interaction between our genes and our environments and experiences is a complex one that is still being studied.

Would knowing you were genetically predisposed to a particular disease change the lifestyle decisions you make?

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ACTIVITY

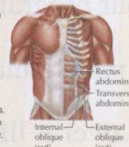
- **HELP** activities encourage students to reflect, think critically, and apply the HELP philosophy to their lives.

Table 10 Exercises for Core Strength

connect
VIDEO 3

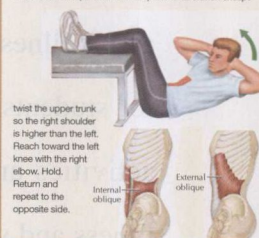
1. Crunch (Curl-Up)

This exercise develops the upper abdominal muscles. Lie on the floor with the knees bent and the arms extended or crossed with hands on shoulders or palms on ears. If desired, legs may rest on bench to increase difficulty. For less resistance, place hands at side of body (do not



3. Crunch with Twist (on Bench)

This exercise strengthens the oblique abdominals and helps prevent or correct lumbar lordosis, abdominal ptosis, and backache. Lie on your back with your feet on a bench, knees bent at 90 degrees. Arms may be extended or on shoulders or hand on ears (the most difficult). Same as crunch except



- Detailed, updated illustrations show students exactly how to perform strength training and flexibility exercises, and the core muscles they are improving.

A proven approach for **teaching** behavior change for health, fitness, and wellness

Connect Fitness and Wellness gives students the tools needed to think critically about lifestyle changes and the behavioral skills needed to adopt and maintain healthy lifestyles.

Lab 10B Planning and Logging Stretching Exercises

Name Section Date

Purpose: To set 1-week lifestyle goals for stretching exercises, to prepare a stretching for flexibility plan, and to self-monitor progress in your 1-week plan

Procedures

1. Using Chart 1, provide some background information about your experience with stretching exercise, your goals, and your plans for incorporating these exercises into your normal exercise routine.
2. In Chart 2, keep a log of your actual participation in stretching exercise. You can choose from any of the stretching exercises described in Table 3, 4, or 5. Try to pick at least eight exercises and perform them at least 3 days in the week (ideally every day).
3. Describe your experiences with your stretching exercise program. Be sure to comment on your plans for future stretching exercise.

Chart 1 Stretching Exercise Survey

1. Determine your current stage for flexibility exercise. Check only the stage that represents your current activity level.
 - ☐ Precontemplation. I do not meet flexibility exercise guidelines and have not been thinking about starting.
 - ☐ Contemplation. I do not meet flexibility exercise guidelines but have been thinking about starting.
 - ☐ Preparation. I am planning to start doing regular flexibility exercises to meet guidelines.
 - ☐ Action. I do flexibility exercises, but I am not as regular as I should be.
 - ☐ Maintenance. I regularly meet guidelines for flexibility exercises.
2. What are your primary goals for flexibility exercise?

Lab 10B

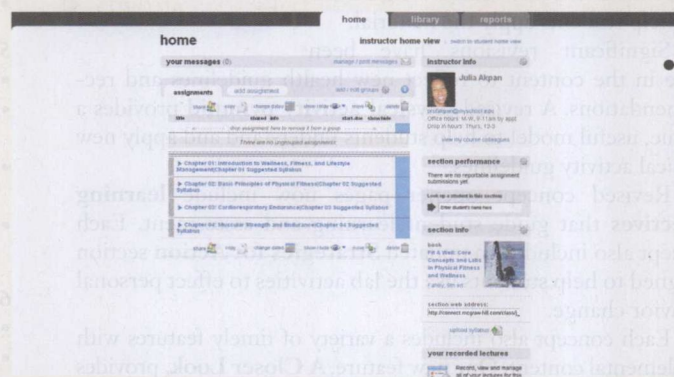
Planning and Logging Stretching

- Interactive fitness labs allow students to assess their current level of fitness, develop plans for improvement, and put those plans into action.

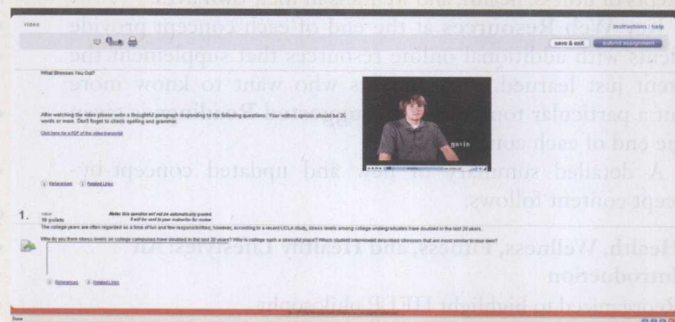
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ACTIVITY

connect
VIDEO

- **Connect** icons link text to additional online assignments and video activities.



- **Connect** gives instructors the tools to choose and create assignments, monitor student progress, and manage their course more easily and efficiently.



- New video clips and video activities engage students, make the concepts relevant, and inspire them to change.

Highlights of the Tenth Edition

The tenth edition of *Concepts of Fitness and Wellness* is designed to deliver an integrated print and digital program that continues to be at the cutting edge of physical activity and health promotion, empowering students to take positive steps toward developing a lifelong commitment to healthy and active living. With its hallmark modular approach called “concepts,” the new edition has been thoroughly updated and offers several new features designed to enhance student learning.

Extensive revisions to the content in *Connect* add new and exciting materials for easy use by students and instructors. A variety of updated and expanded *Connect* video activities help explain complex issues and provide opportunities for personal reflection and critical thinking. New **Connect icons** throughout the text guide students to these and additional online assignments that help students apply the material.



Significant revisions have been made in the content to reflect new health guidelines and recommendations. A revised **physical activity pyramid** provides a unique, useful model to help students understand and apply new physical activity guidelines.

Revised concept opener pages now include **learning objectives** that guide student learning and assessment. Each concept also includes an updated **Strategies for Action** section designed to help students use the lab activities to effect personal behavior change.

Each concept also includes a variety of timely features with supplemental content. One new feature, **A Closer Look**, provides information about new and sometimes controversial information related to fitness, health, and wellness. Another, called **HP 2020**, helps students see relationships between their behaviors and broader national health goals. Other updated features in each concept include **Technology Update** (describes advances in health and fitness technology), **In the News** (highlights late-breaking fitness, health, and wellness information), and **HELP** (provides tips to show students how to *help* themselves). Follow-up questions are assignable in *Connect*, helping students develop self-management, critical thinking, and reflection skills and motivating them to apply concepts of fitness, health, and wellness in their own lives.

Key **Web Resources** at the end of each concept provide students with additional online resources that supplement the content just learned. For students who want to know more about a particular topic, a list of **Suggested Readings** is given at the end of each concept.

A detailed summary of new and updated concept-by-concept content follows:

1 Health, Wellness, Fitness, and Healthy Lifestyles: An Introduction

- Reorganized to highlight HELP philosophy
- New information and statistics about Healthy People 2020
- Updated statistics about health and wellness
- Revised model of health, fitness, and wellness

2 Self-Management and Self-Planning Skills for Health Behavior Change

- New content on social-ecological models of health and wellness

- Expanded content on SMART goals
- Specific goal-setting guidelines for people with different levels of experience
- New discussion of “Blue Zones” and characteristics of healthier environments

3 Preparing for Physical Activity

- Updated content on warm-up and stretching guidelines
- Revised CPR guidelines
- Clarification of the distinctions between dynamic and sport-specific warm-ups
- New discussion of “minimalist” running shoes

4 The Health Benefits of Physical Activity

- Revised information about hypokinetic diseases
- Updated information on links between inactivity and metabolic syndrome
- Updates on the *Exercise is Medicine* campaign

5 How Much Physical Activity Is Enough?

- Updated descriptions of exercise training principles
- Revised content on FITT model and applications for exercise prescription
- Updated model of the physical activity pyramid with revised guidelines
- New content on sedentary behavior and independent risks from inactivity

6 Moderate Physical Activity: A Lifestyle Approach

- Clarification on concept of METS and Met-Minutes
- New definitions for vigorous activity and sedentary activity
- New information on health benefits of moderate activity and metabolic fitness
- New content about the built environment and walkability

7 Cardiovascular Fitness

- New content on ACSM fitness guidelines (Frequency–Intensity–Time)
- Revised information on target heart rate calculations and heart rate zones
- Updated content on the benefits of vigorous exercise

8 Vigorous Aerobics, Sports, and Recreational Activities

- Revised presentation of aerobic exercises
- New content on patterns and trends in aerobic exercise, sport, and recreation
- New information on types (and popularity) of group exercises (e.g., Zumba®)
- Expanded content on vigorous recreation and extreme sports

9 Muscle Fitness and Resistance Exercise

- New information about power as a health-related fitness dimension
- New sections on functional fitness and core strength
- New depictions of isometric, isokinetic, and isotonic exercise
- Revised resistance training guidelines
- New graphics and revised content on periodization
- New discussion of the popularity of the P90X fitness program

10 Flexibility

- Expanded content on flexibility fundamentals and importance for health

- Clarification on factors influencing flexibility
- Importance of flexibility for functional fitness
- New content on dynamic stretching (and distinctions from ballistic stretching)
- Revised stretching guidelines

11 Body Mechanics: Posture, Questionable Exercises, and Care of the Back and Neck

- New content on causes of back pain
- Updated information on (and explanations of) microtrauma
- Strategies for correcting postural deviations
- Revised discussion on implications of poor posture
- Enhanced conceptual graphics depicting good posture and good body mechanics

12 Performance Benefits of Physical Activity

- New content on high intensity interval training (HIIT)
- New information on the importance of functional fitness for sports training
- Expanded content and models on periodization

13 Body Composition

- Revised statistics about the prevalence of obesity
- Updated information about links between obesity and health
- Revised content about basal metabolic rate and creeping obesity

14 Nutrition

- New content on MyPlate and applications for diet education
- Updated information on the dietary guidelines and strategies for implementation
- Revised content on trans fat guidelines and fat substitutes
- New content on omega 3 fatty acids, soy, and antioxidants
- New legislation on vending machines and nutritional information requirements

15 Managing Diet and Activity for Healthy Body Fatness

- New conceptual model on energy balance
- Updated information on contributions of light activity to weight control
- New content on “emotional eating” and “mindless eating”
- New model of obesogenic environments and strategies for healthy eating
- New information about public/private partnerships for obesity prevention

16 Stress and Health

- Updated figure depicting stressors and reactions to stress
- New content on discrimination experiences as a source of stress
- Updated information on individualized differences in the stress response

17 Stress Management, Relaxation, and Time Management

- Updated information about mental health benefits of physical activity
- New content and image on time use and implications for stress management
- New content on effective coping strategies
- Clarification between appraisal-focused and emotion-focused coping

18 The Use and Abuse of Tobacco

- Revised content and statistics on smoking patterns and trends

- Updated facts about secondhand smoke and implications for policy
- New information on policies related to smoking and marketing of tobacco
- Expanded content and new table on strategies for quitting smoking

19 The Use and Abuse of Alcohol

- New information on patterns and trends in heavy episodic drinking
- New facts on risks associated with drinking and driving
- Updated information on campus issues with alcohol and alcohol abuse
- New content on strategies for alcohol prevention and treatment
- New discussion of caffeinated alcoholic drinks

20 The Use and Abuse of Other Drugs

- Clarification on physiological and psychological effects of drugs
- Updated statistics on prevalence and consequence of illicit drug use
- New information on risks associated with misuse of prescription drugs
- New discussion of synthetic cannabinoids

21 Preventing Sexually Transmitted Infections

- Updated statistics on prevalence of different sexually transmitted infections
- New model explaining HIV replication cycle
- Expanded discussion on issues with HPV vaccinations
- New content on factors that contribute to STIs
- New discussion and statistics on sexting

22 Cancer, Diabetes, and Other Health Threats

- Updated information on prevalence of various cancers
- Updated information on cancer screening guidelines (including new table)
- Expanded discussion about issues with health screening guidelines

23 Evaluating Fitness and Wellness Products: Becoming an Informed Consumer

- New content on nutrition quackery
- Updated information about efforts to combat fraud and quackery
- Discussion of issues with labeling of “herbal” and “natural” supplements
- New content on health literacy
- Recent rulings on exaggerated health claims on fitness shoes
- New discussion of titanium necklaces

24 Toward Optimal Health and Wellness: Planning for Healthy Lifestyle Change

- Reorganized content on factors influencing health and wellness
- Expanded content on inherited risks and using the health-care system
- New content on the impact of environmental factors (including new table)
- Guidelines for adopting healthy lifestyles

Teaching and Learning with *Concepts*

Concepts in Loose-Leaf Format

McGraw-Hill has done a considerable amount of research with college students, not only asking them questions about how they study and use course materials, but also using ethnographic research tools to observe how they study. During the course of this research, students told us they want books and online learning systems that are:

- Light and easy to carry
- Engaging and relevant to their own lives
- Inexpensive
- Supported by digital activities that help them learn and succeed in their course

Based on what we heard from students, we are introducing *Concepts* in a *three-hole punched, loose-leaf* format that is portable, flexible, and cost effective. *Concepts* in loose-leaf format offers these advantages:

- Students will need to carry only the portion of the book that's being covered in class with them.
- In addition to the print version of the book, students will receive an integrated, multimedia eBook, including videos and links to other resources.

Would you still like your students to have a bound book? You will be able to order one through our *Create* system. While you're at it, we can pull out any of the chapters of the book you don't assign. This ensures that students are purchasing only the content that is being assigned to them, making the book 100 percent relevant to your course, more affordable for students, lightweight, and portable.



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Tegrity Campus is a fully automated, cloud-based lecture-capture solution used in traditional, hybrid, and online courses to record lectures and/or supplementary course content. It's incredibly easy to use, as instructors simply click a button to start the recording, and click another to stop it. From there, the content is uploaded instantly to the Tegrity Cloud, where students are able to access it anytime and anywhere on just about any device. Tegrity's personalized learning features make study time incredibly efficient and more than 7 out of 10 students say the use of Tegrity improved their grades. To learn more about Tegrity, watch a 2-minute Flash demo at <http://tegritycampus.mhhe.com>.



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Online
LearningCenter

Online Learning Center

The *Concepts of Fitness and Wellness* Online Learning Center (www.mhhe.com/corbin10e) provides easy access to a variety of resources for instructors:

- PowerPoint presentations
- Instructor's manual
- Test bank
- Image bank

Thank You

Two words that can never be said enough to the many people who have helped the *Concepts* books to be successful, including the thousands of instructors and students who have taught and learned from these books for more than 45 years. We are proud that the *Concepts* books were among the first ever published for use in college fitness and wellness courses; that the *Surgeon General's Report on Physical Activity and Health* adopted definitions from the book; and that instructors have continued to select the *Concepts* books for use in their courses for more than 4 decades.

We listen to those who review our books and to our users, who provide comments by mail, phone, personal conversations, and email. Comments and critiques help us make our books better for both students and instructors. The list of people who have helped us over the years is now nearly two pages long. But we feel that the pages that allow us to acknowledge those who have helped us are well worth it. At the risk of inadvertently failing to mention someone, we want to acknowledge the following people for their role in the development of this book.

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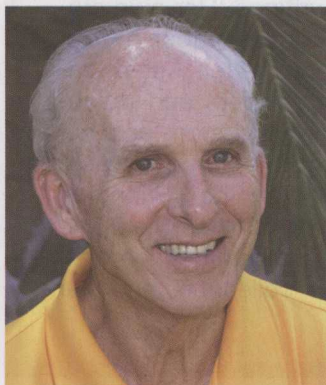
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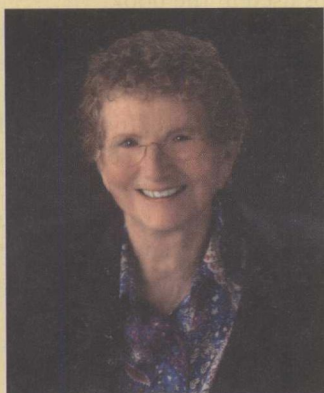
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Dedication

The authors wish to dedicate this book in loving memory to Charles Samuel “Charlie” Corbin (April 22, 2004–July 18, 2004), son of Will and Suzi Corbin, grandson of Cathie and Chuck Corbin, and to Alyson Welk (April 30, 1995–June 2, 2003), daughter of Karen and Greg Welk. We also want to dedicate this new edition to our nonauthor wives, non-author children, and grandchildren, whose sacrifices have allowed us to spend the time necessary to create this book. Without their support, this program would not be possible. Thank you, Cathie Corbin, Suzi Corbin, Charles Corbin Jr., Dave Corbin, Katie Corbin, Julia Corbin, Molly Corbin, Lucy Corbin, Colin Welk, Evan Welk, and Grant Welk.



Ruth Lindsey 1926–2005

In Memoriam:
A Tribute to
Our Co-author and
Friend

On May 29, 2005, we lost a great leader and an outstanding advocate for healthy lifestyles, physical activity, and physical education. Our long-time co-author and friend, Ruth Lindsey, will long be remembered for her contributions to the *Concepts* books and to our profession. Ruth was born in 1926 in Kingfisher, Oklahoma, and graduated from high school in Checotah. She earned her BS from Oklahoma State University in 1948, her MS from the University of Wisconsin in 1954, and her doctorate from Indiana University in 1965.

Ruth began her college teaching career at Oklahoma State University (OSU) in 1948, and after brief stints at Monticello College and DePauw University, she returned to OSU in 1956, where she advanced through the ranks to full professor. In 1976, she was a visiting professor at the

University of Utah. Ruth then served as professor of physical education at California State University at Long Beach until her retirement in 1988. She continued to contribute as author of the *Concepts* books until 2003.

Ruth was a recognized scholar in physical education with special expertise in biomechanics, kinesiology, questionable exercises, nutrition, and physical activity for senior adults. She actively campaigned against consumer health fraud. She was the author of more than a dozen books, including *Body Mechanics*, *The Ultimate Fitness Book*, *Fitness for Life*, *Concepts of Physical Fitness*, and *Concepts of Fitness and Wellness*. Ruth published numerous papers and served as a leader in many professional organizations. She was an accomplished athlete who won the Oklahoma Women's Fencing Championship and was a low-handicap golfer.

Over the years, hundreds of thousands of students have read Ruth's writings. Her own students and her co-authors will remember her for her command of her subject matter, her attention to detail, the red ink on papers and manuscripts, her concern for her profession, and her personal concern for each individual. Ruth was a woman of principle and character. She will long be remembered for her contributions to our field and for being the kind and caring person that she was. We miss our co-author, our colleague, and our friend.

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