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FIT TO BE WELL

ESSENTIAL CONCEPTS

**FOURTH
EDITION**



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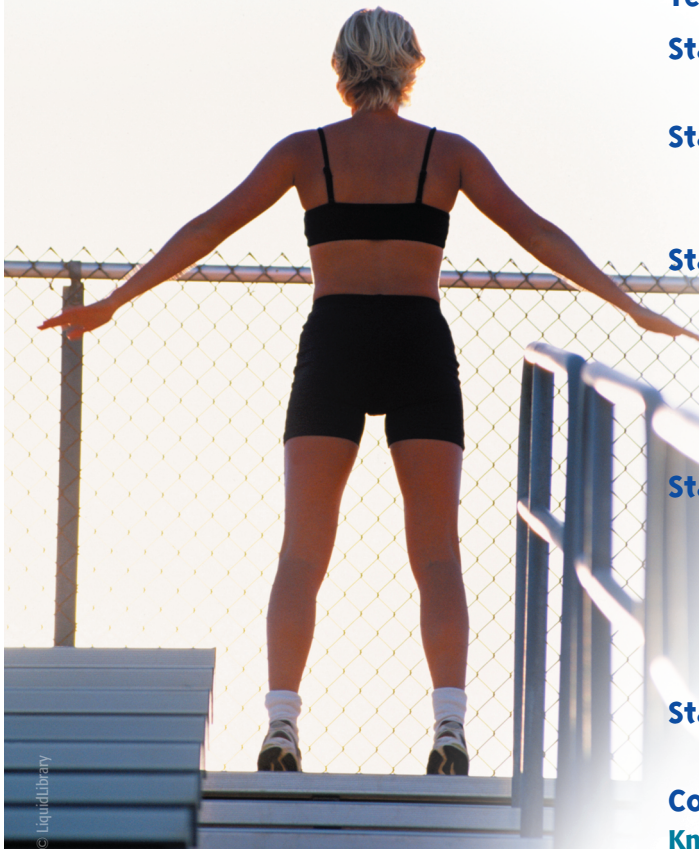
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Preface

The purpose of this book is, first, to introduce you to the extraordinary world of physical fitness and, second, to change your life.

In a time of high-tech advances, we have lost sight of the fact that the greatest high-tech invention of all time is the human body. What happens to our bodies as we move through life is the result of our lifestyle.

As priceless as good health is, it is freely available to us if we live the right way. The child does not have to be taught to play, but the adult must learn how to exercise. As we age and our lives become busier, we lose that childhood instinct to run and jump, to skip, and to walk briskly. But it is movement in assorted styles and speeds on a regular basis that is critical in maintaining the high-tech machinery of our bodies.

The good news is that it is never too late to start exercising, eating properly, and managing stress, regardless of your age or physical condition. This book can help you make the lifestyle changes that will sustain your health and make your life a better one.

Attempting to reach the goal of good health and wellness through physical fitness can be compared with preparing to take a journey. If you were driving from Los Angeles to New York City, you would first obtain a road map to determine the best route to follow. The journey to good health and wellness is very similar, but most people are not familiar with or do not know where to obtain a road map leading to good health and wellness.

This book is your road map. It takes you from your current level of fitness to increased cardiorespiratory endurance, strength, and flexibility, and helps you maintain a healthy weight and learn to relax.

Fit to Be Well: Essential Concepts, Fourth Edition offers a simple, workable approach to a healthy lifestyle.

Notes to Students and Instructors

No other fitness book is like this one.

The content of this book is organized in a succinct, easy-to-navigate manner, with emphasis placed on important concepts and applications. The advantages of this approach include:

- Decreased reading time
- Faster access to information
- Improved learning
- Less expense
- High reader satisfaction
- Creative uses of information (e.g., uses “chunking” to put content into manageable units for better learning)
- Content that is concise and straightforward, with information that a person “needs” to know rather than content that is simply “nice” to know
- Evidence-based medical sources that provide the content and latest recommendations

Special Features

Special features to improve learning include:

What’s the word boxes throughout the text contain target terms and offer simple, clear definitions for terms of interest.

The **Inside Track** feature provides quick and easy guides to important information.

Benefits of Cardiorespiratory Endurance Exercise

Regular endurance exercise can benefit the body in many healthy ways. Following are the short- and long-term benefits achieved by exercising regularly, using the cardiorespiratory system.

Short-Term Benefits

Many people start a physical activity program because of its long-term benefits; however, it is the short-term benefits that keep them motivated to continue the habit.

Relaxes and Revitalizes

Physical activity reduces mental and muscular tension and increases concentration and energy levels. Regular aerobic exercise releases **endorphins**.

Offers a Break from Daily Routine and Stress

Planned or unplanned physical activity can be enjoyable and provide a release from day-to-day stress and boredom.

The Inside Track

Before menopause, women’s risk for cardiovascular disease is lower than that of men. After menopause, women’s risk becomes closer to that of men.

What’s the word...

endorphins Proteins produced in your brain that serve as your body’s natural pain-killer. Endorphins also reduce stress, depression, and anxiety.

Research clearly demonstrates the importance of avoiding inactivity. Even low amounts of physical activity reduce the risk of dying prematurely. The most dramatic difference in risk is seen between those who are inactive (30 minutes a week) and those with low levels of activity (90 minutes, or 1 hour and 30 minutes, a week). The relative risk of dying prematurely continues to be lower with higher levels of reported moderate- or vigorous-intensity, leisure-time physical activity.

All adults can gain this health benefit of physical activity. Age, race, and ethnicity do not matter. Men and women younger than 65 years as well as older adults have lower rates of early death when they are physically active than when they are inactive. Physically active people of all body weights (normal weight, overweight, obese) also have lower rates of early death than do inactive people.

Medical News You Can Use

Exercise Fights Middle-Age Spread

A 20-year study of more than 3,500 men and women found that high activity levels led to less excess weight (5.7 fewer pounds gained each year in men and 13.4 fewer pounds gained each year in women) when compared to adults with low activity levels. The key is to start an exercise program before middle age. Sticking with the national guidelines of 30 minutes of moderate exercise each day had a significant effect over the two decades of the study.

Source: Data from Hankinson A. L., et al. Maintaining a high physical activity level over 20 years and weight gain. *Journal of the American Medical Association* 2010; 304(23):2603–2610.

Reproduced from 2008 *Physical Activity Guidelines for Americans*. Courtesy of the U.S. Department of Health and Human Services, and the Centers for Disease Control and Prevention.

- **Identify the stage of change when you finish.**
- **Mini goals with rewards.** What are the intervals along the way that will indicate you are making progress?
- **Your signature.** Sign your name as a sign of your commitment to your plan.
- **Witness signature.** Have a close friend or family member sign your contract as well.

Stage 4: Action

The action stage is where you begin to move toward a healthier behavior. You have your motivation, your internal locus of control, and your goal. You are ready to make this change! Action involves the most observable behavioral changes and requires the greatest commitments of time and energy.

Ask Yourself ?

- Who could I really count on to support me when I'm trying to change behavior?
- What challenges will I face when I try to change?

Tipping Point

Rewards

- Self-contracting means you establish and administer your own rewards.
- Rewards are meant as motivation to keep the momentum going until you reach your goal.
- Rewards should be given immediately and frequently but in moderate amounts.
- Tailor your rewards to your individual taste—make sure they are desirable enough to motivate you.
- The reward should not be associated with the negative behavior you are trying to change. For example, if you are trying to lose weight, don't make your reward a brownie.

Medical News You Can Use consists of concise summaries from a range of recent medical journals and reports. These features simplify the technical language to provide a rich source of information. They serve not only as interesting reading, but more importantly, support many of this book's key concepts.

Tipping Point gives helpful hints and tips that explain to students how to manage their own fitness and healthy lifestyle program.

Reflect >>> Reinforce >>> Reinvalidate

Knowledge Check provides multiple-choice questions at the end of each chapter, which test students' knowledge of the information covered in the text.

Modern Modifications sections in each chapter provide a list of simple suggestions related to that chapter's topic. Each of these suggestions is specifically intended to be easily absorbed into students' daily routines. The strategies are realistic and take into consideration "real-life" obstacles.

Modern Modifications

Think about the activities you do and the postures you assume each day. Are there ways you can improve your flexibility and posture just by changing the way you do these activities? When you are sitting or standing, are you:

- Arching your back?
- Rounding your shoulders?
- Letting your head slump forward?

When you are lying down, are you:

- Tiling your pelvis down?
- Arching your back?

While lying on your back, you should have just enough room between the small of your back and the floor to slide a computer mouse under there. You know your posture is bad if your back is touching the floor (squishing the mouse) or arching (the mouse could do jumping jacks).

Consciously change what you do during each activity or posture. For instance:

- While sitting, keep your back straight, lean slightly forward, and use a footrest to keep your knees higher than your hips.
- While standing, use a footrest to raise one leg to help you keep your back straight.
- When lifting, bend at the knees, not at the waist, lift slowly, and push with your legs. Do not twist.
- Do one different stretching exercise each morning, at noon, and each evening before going to bed.

Critical Thinking

1. Consider your current level of activity. What role do flexibility and stretching play in your workouts? Identify three to five ways you can improve your flexibility based on the suggestions in the text.
2. What rationalizations do you believe you might hear from someone who does not practice stretching as a portion of his or her routine? What are the risks the individual may be taking by avoiding this piece of the routine?

Going Above and Beyond

American Academy of Orthopaedic Surgeons
<http://www.aaos.org>
 MedlinePlus
<http://www.nlm.nih.gov/medlineplus>
 National Institute on Aging
<http://www.nia.nih.gov>
 The Physician and Sports Medicine
<http://www.physportsmed.org>

Critical Thinking sections give students a chance to apply what they learned in each chapter. Questions and scenarios about the work that they will do and the goals they want to achieve will bring about some critical thoughts. This will help students assimilate what they learn and apply it to their daily lives.

Going Above and Beyond provides a perfect opportunity for students to take their research one step further. Complete bibliographies and websites are included so that students can learn more about topics of interest to them.

Time Outs explore topics of interest to students such as energy production, fad diets, and ethnic diets.

New to the *Fourth Edition*

- Information on latest fitness trends (e.g., high-intensity interval training, CrossFit, spinning)
- Additional Medical News You Can Use features
- Tips for using smartphone apps and other devices for fitness and wellness (e.g., step counters, heart rate monitors, calorie counters)
- Emphasis on core exercises (e.g., planking)
- Description of the A Body Shape Index for body composition calculation
- Updated nutritional information (e.g., trans fats)
- Emphasis on *Healthy People 2020* objectives
- Emphasis on productive and counterproductive methods to cope with stress

Supplements

Instructor Resources

Comprehensive teaching resources are available as free downloads. These helpful teaching aids include an Instructor's Manual, Presentations in PowerPoint format, and a Test Bank.

Student Resources

Digital Resources

Students can access digital resources that help reinforce key concepts in the text, including practice activities, an interactive glossary, weblinks, flashcards, and an interactive eBook.

LAB 11-1

Name _____ Section _____ Date _____

Decision Making: Paired Comparison Analysis

Paired comparison analysis can be used whenever making decisions about almost anything. It provides a framework for comparing your choices or options, and then selecting the best.

Directions

1. What decision are you making? _____
2. Criteria for judging the options should be established before making decisions (e.g., financial, effectiveness, availability). List the criteria you are using here:

3. Write in the options about which you are making a decision in the following Option Table. You may have fewer options than eight.
4. Beginning at the top of each column in the Matrix, compare each pair listed in the Option Table, while asking yourself, "If I could choose only one, which would it be?" Use the criteria listed in Step 2. Circle the number corresponding to your choice.
5. Continuing down each column, compare and choose one of the two options.
6. Count the number of times each number was circled on the Matrix, and fill in the blanks next to the corresponding number on the Option Table.

Matrix

1-2							
1-3	2-3						
1-4	2-4	3-4					
1-5	2-5	3-5	4-5				
1-6	2-6	3-6	4-6	5-6			
1-7	2-7	3-7	4-7	5-7	6-7		
1-8	2-8	3-8	4-8	5-8	6-8	7-8	

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Lab Manual

A student lab manual is included at the end of the text at no additional cost to students! By adding self-assessments and related labs to each of the chapters, this text becomes an interactive guide to building and implementing a fitness program that will work with students' individual needs and schedules.

Acknowledgments

Any book requires a great deal of effort, and not just on the part of the authors. This book is no exception to that rule.

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