A WELLNESS

third edition

of life

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POWERS

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A WELLINESS third edition

of life

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reface

From the Authors

This book is about enjoying life—living it to your fullest potential. The purpose of A Wellness Way of Life is to help you pursue a wellness lifestyle. We wanted to provide a book that would present a body of knowledge that goes beyond fitness. This knowledge helps you make informed, responsible decisions affecting your wellness. However, we know it takes much more than knowledge. It takes personal commitment, self-management skills, and coping strategies to live a healthy lifestyle. Therefore, a primary focus of this book is identifying behavior changes that you can easily incorporate into your life. Our goal is not only to deliver fitness and health information but to motivate and guide you toward making positive choices.

Abraham Lincoln said, "We are about as happy as we make up our minds to be." We believe that one secret to happiness is having the competence and confidence to make informed decisions that affect your daily well-being. Self-responsibility and self-empowerment are means of increasing the quality and quantity of life. There is no better feeling than to know that you are doing something good for yourself! As you read each chapter, you will learn strategies for taking control of your life and discover the joy in traveling the wellness journey. This book will help you wade through the myriad of health and wellness information and ultimately make you an informed wellness consumer. The end result will be the indescribable joy in knowing you are attaining your highest potential for well-being.

Gwen Robbins Debbie Powers Sharon Burgess

About the Audience

This text is designed to meet the needs of a course that goes beyond the basics of physical fitness to encompass the broader scope of wellness. The content—covering all aspects of fitness, nutrition, weight management, stress management, heart health, and substance use and abuse—easily accommodates a variety of fitness, wellness, and health courses. It is a flexible book that fits nicely into a lecture/fitness activity format. The text has been classroom-tested since the late 1980s in a fitness/wellness program that started the current trend that is sweeping the nation.

New Features in This Edition

Based on the idea of self-responsibility, A Wellness Way of Life gives students practical information about how to make good decisions that will positively affect their well-being throughout their lives. It's an open, accessible resource that minimizes technical jargon and presents health as a positive, dynamic process. New features for this third edition include

- A seventh dimension of wellness—environmental wellness—has been added to help students understand that wellness extends to their impact on the environment.
- More information on people from diverse backgrounds broadens understanding for all readers.
- New American College of Sports Medicine Manual of Exercise Prescription Standards guidelines for health promotion and endurance provide realistic guidelines for the amount of exercise needed to stay healthy.

- ➤ New nutritional information on antioxidants, calcium, food labels, and fats keeps students and instructors up-to-date.
- New learning activities for each chapter help students apply to their own lives what they've learned through reading and lecture.
- New information on LSD, heroin, the Clock method for smoking cessation, the prevention of date rape, age-adjusted fitness norms, heart health, stress reduction, and fitness tests gives readers the most up-to-date facts available.
- The new book design, featuring a larger format and new activities tabs, improves readability and helps students more easily find activities related to chapters.
- ➤ A new glossary helps students master the language of wellness.
- Prochaska Stages of Change Model helps students make their behavioral change a successful reality.

What Is the Prochaska Stages of Change Model?

In order to help people be more effective in their attempts to change their behavior, psychologists James Prochaska, John Norcross, and Carlo DiClemente decided to study individuals who had successfully changed health-related behaviors on their own. Prochaska and his colleagues wanted to find out which behavior change techniques successful changers found to be most helpful. What these researchers discovered during their years of studying behavior change is that individuals progress through distinct stages of change on their way to improved well-being. Their initial research was done on people who quit smoking but has expanded to cover other health behaviors. The stages of change are

- 1. *Precontemplation*. People at this stage see no problem with their behavior and have no intention of changing it.
- 2. Contemplation. In this stage, people come to understand their problem and its causes, and they start to think about taking action to solve it.
- 3. *Preparation*. In the preparation stage, people are planning to take action within the next month and are putting together a plan of action.
- 4. Action. A person in the action stage has taken the leap and is actively making behavior changes.
- 5. Maintenance. Even after action has been taken successfully, it must be maintained to prevent relapse.

Prochaska and his colleagues noted that certain behavioral change techniques work better than others in some stages of change. This model has received a great deal of attention in both the popular press and among health educators. Prochaska et al. published a successful trade book called *Changing for Good* on how to use their model to change behavior successfully.

Pedagogical Highlights

A Wellness Way of Life includes a number of built-in resources that make learning easy:

Chapter Objectives Found at the beginning of each chapter, the objectives provide a starting point and focus for readers.

Key Terms Important terms are highlighted in boldface to catch students' attention, increase retention, and indicate glossary terms.

Chapter Summary The key points from each chapter are summarized at the end to increase student comprehension and retention of vital information.

References Accurate and current documentation is provided at the ends of the chapters.

Suggested Readings A number of sources for additional reading and research are cited to provide students with a handy, useful reference.

Preface

Resources A listing of additional current resources is provided to encourage further exploration.

Appendices and Activities The appendices and chapter activities provide lab-like opportunities for students to apply to their own lives what they've learned and information on specific activities for the development of fitness, such as aerobic dance, bicycling, fitness swimming, indoor exercise equipment, jogging, walking, and water exercise/aqua aerobics.

Supplements

An *Instructor's Manual* provides everything instructors need to make the most of A Wellness Way of Life, from chapter overviews to teaching strategies.

A comprehensive *Test Item File* makes testing easier, with over 1,200 test questions.

Testing, quizzing, and grading are easy with the help of MicroTest III Software for Macintosh and IBM.

A set of 50 full-color Brown & Benchmark Fitness & Wellness Transparencies vividly illustrates important concepts.

Qualified adopters of A Wellness Way of Life may receive a free subscription to the Berkeley Wellness Newsletter.

For additional help on nutrition and diet, Food Processor Software* helps students analyze their eating habits, as well as realize the impact of lifestyle changes on their nutritional needs.

To assist students in designing their own personal lifestyle changes, Lifestyle Improvement Inventory Software* prompts users to answer a variety of questions and then recommends specific behavior modifications.

The Health & Wellness Videodisc* encourages exploration and helps stimulate critical thinking.

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We dedicate this third edition to the devoted fitness/wellness faculty at Ball State. Their support and suggestions have been invaluable.

^{*}Available to qualified adopters.

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Wellness

>Objectives

After reading this chapter, you will be able to:

- 1. Explain the focus of the publication Healthy People 2000.
- 2. List ten health habits that, when practiced, can reduce the risk of health problems.
- 3. Distinguish between health and wellness.
- 4. Define wellness.
- 5. Identify the seven dimensions of wellness, and give three examples within each dimension.
- 6. List and describe the six factors that influence growth in wellness, as shown on the wellness wheel.
- 7. Differentiate between self-managed behavior change and willpower.
- 8. Identify and describe Prochaska's nine behavior change processes and his five stages in behavior change.
- 9. Write a behavior change contract/plan.
- 10. Give four examples of ways society supports wellness, and four examples of ways society detracts from wellness.

Terms-

- Emotional dimension
- Environmental dimension
- Health
- Health promotion

- Intellectual dimension
- Occupational dimension
- Physical dimension
- Self-management

- Social dimension
- Societal norm
- Spiritual dimension
- Wellness

Life is not merely to be alive, but to be well.

Martial

a

s Rob lay in the coronary care unit, his eyes surveyed various tubes and wires connected to his tired body. The nightmare of the last 24 hours was over, but the pain and confusion lingered.

"How can this be? I'm only 49 years old. How could I have had a heart attack? What if I die? What about my wife? My son? My daughter? I've just become a grandpa. I was given a big promotion at work. Why now?" Rob's mind drifted.

"But I'm an athlete! Well, I was an athlete, back in high school. Once I started college there was no time for sports or exercise. Started smoking, too. Figured I'd stop when the pressure was off, but the pressure never stopped. Drank too much, too; partied a lot. Still like several drinks to end the day. I always thought I'd lose those extra 30 pounds—always next year, always a New Year's resolution. Diet? Too busy. Vending machines, hot dog stands, snacks in front of the TV, fast food. No time. Too much to do. Money to make. A lot of stress. Can't stop now. There'll be time later."

Rob's mind drifted back to his room. He could hear his doctor's voice—"Stop smoking. Change in lifestyle. Low-fat diet. Start exercising. Cholesterol is 280. Break old habits." Rob thought, "How I wish I could turn back the clock!"

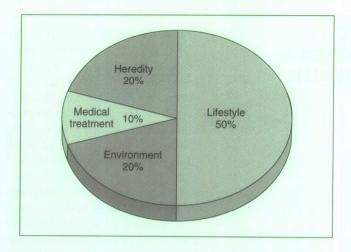
This scenario is all too common in the United States. In fact, more than half of all deaths in this country are attributed to coronary heart disease and stroke. Even though most heart attacks occur after middle age, many are a result of years of lifestyle abuse. One hundred years ago the leading causes of death were infectious diseases such as tuberculosis, polio, diphtheria, pneumonia, and influenza and various diseases of infancy. Advances in medicine, the discovery of antibiotics, and improved sanitation diseases.





FIGURE 1.1 >

Factors affecting longevity. Our longevity is affected by a combination of factors—only heredity is totally beyond our power.



minished these ravaging diseases and increased the average life span. Through scientific discovery, technology, industrial growth, and automation, the entire American lifestyle has changed. We use remote controls to change television channels and to open garage doors. Appliances wash our clothes, dishes, and teeth. We ride vehicles to work, school, and even while playing golf! We allow ourselves to be bused and trucked, elevated, and escalated and then wonder why we grow fat and are out of shape. This so-called "good life" has created sedentary living, changes in eating habits (fast foods, increased fats and sweets, processed foods), stress, alcohol and drug abuse, and obesity.

The latest statistics released by the American Heart Association are startling. In a single year, diseases of the heart and blood vessels kill far more Americans than were killed in World Wars I and II, the Korean War, and the Vietnam War, combined. Those who survive a coronary incident are often faced with a restricted, less fulfilling life that causes an unnecessary, costly drain on the resources available for health care. Such horrendous figures should outrage the public and should cause a demand for reform, since carnage is normally the basis for alarm and legislation. Instead, apathy is the general response of many, and many of us do not even begin to worry about health until it is lost.

The harsh truth is that a high percentage of disease and disability affecting the American people is preventable, a consequence of unwise behavior and lifestyle choices. The decision to smoke, for instance, is responsible for one of every six deaths in the United States each year. Twenty-one percent of heart disease deaths, 87 percent of lung cancer deaths, and 30 percent of all cancer deaths are linked to smoking. Smoking costs our society over \$52 billion annually. Dr. William Foege at the Centers for Disease Control in Atlanta states that as much as *two-thirds* of all disability and death up to age 65 would be preventable in total or in part if we applied what we know about the effects of lifestyle on premature illness and death. Figure 1.1 illustrates the extent to which our longevity is affected by a combination of our lifestyle decisions.

You may already possess some knowledge about these and other health topics. If you are like most, however, you generally underestimate your future risk of lifestyle diseases. This underestimation is of substantial concern, because action should be an outcome of knowledge. After all, the truly educated individual understands *cause* and *effect*. It is encouraging to know that the evidence is becoming more and more clear—health and longevity are not solely a result of genetics and luck but an outcome of personal behavior. This personal behavior involves responsible choices, self-discipline, and a commitment to excellence.

This chapter introduces the basic concept of health, the impact of lifestyle on well-being, and the dynamics of high-level wellness. It also explores the challenges and strategies involved in making self-managed behavior changes.

Wellness

3

Basic Concepts of Health

Traditionally health has been viewed as the "lack of disease." If you show no signs or symptoms of illness, you are healthy. Health is seen as a state of being. You are either ill or healthy. Some health-care facilities still reflect this simplistic view. Many insurance companies pay for treatments and hospitalization when sickness occurs but pay nothing for preventive checkups or procedures. Employers allow "sick days," yet personal days or vacation days must be used for pursuing health-promoting activities. Because of this curative focus, a majority of our health-care dollars are spent on procedures for patching people up after the damage has been done. Billions of dollars are spent to treat the results of bad eating habits, stress, sedentary living, and smoking. This is a "sickness-care" system rather than a "health-care" system. Because of the medical procedures, drugs, and technologies presently available, many people have become complacent about their health habits. They think they can be "bailed out" by medical science (at the cost of billions of dollars a year to society).

Expanding the focus of health to include many different aspects of life (social, psychological, spiritual, and so on) as well as empowering individual responsibility involves health promotion.

Health promotion is "the science and art of helping people change their lifestyles to move toward a state of optimal health." Health promotion involves systematic efforts by organizations to create healthy policies and supportive environments as well as the reorienting of health services to include more than clinical and curative care. Examples of health promotion programs are weight-loss workshops, smoking cessation clinics, and stress management seminars. Laws and policies such as those prohibiting drunk driving and those establishing smoke-free workplaces also assist in health promotion. More discussion of health promotion is found in Chapter 14.

Another trend in health care is renewed emphasis on medical self-care. Medical self-care includes all actions taken by an individual with respect to a medical problem. It accounts for 85 percent to 95 percent of all medical care. Medical self-care promotes self-sufficiency in diagnosis and requires decision making as to whether a physician's services are needed. It is usually used for minor illnesses or injuries such as colds, flu, cuts, and sprains. Individual decision making becomes the focus. Do I need a physician for this problem? What can I do for myself? What can I expect from the health-care profession? However, medical self-care goes beyond minor illness. Individuals with diabetes, asthma, and allergies have a major responsibility for their own care. Even emergency procedures such as cardiopulmonary resuscitation (CPR) and the Heimlich maneuver fall into the realm of medical self-care. No longer are thermometers the only diagnostic tool in home medicine cabinets. It is now common to find blood pressure kits, home pregnancy tests, colon-rectal cancer detection kits, and blood sugar and cholesterol self-tests. The purpose of self-care is not to replace the physician but to promote personal responsibility for health, rather than total dependence on physicians.

Lifestyle and Health

The preventive aspects of health have become increasingly clear, and new research studies of scientists often become instant, sensationalized news headlines: Yo-yo weight loss harmful. Vasectomy causes prostate cancer. Aspirin prevents heart attacks. Sometimes the information is only partially reported, resulting in confusion and contradiction. Bewildered and wary, many Americans reject or ignore many health pronouncements: Cut fat to under 30 percent of calories. Exercise aerobically 30 minutes five times per week. Eat five or more fruits and vegetables daily. Unfortunately, a majority of present-day Americans continue to be sedentary and overweight. Stress levels and blood cholesterol readings continue to soar. The relationship between lifestyle and health is clear, but adopting healthy lifestyle habits has been difficult for many.

Healthy People 2000

Because of the concern for our nation's health and vitality, a vigorous national crusade for health promotion was initiated in 1990 with the publication of *Healthy People 2000:* National Health Promotion and Disease Prevention Objectives. Facilitated by the U.S. Public Health Service, Healthy People 2000 is a statement of national opportunities, emphasizing individual control of our health destinies: "personal responsibility, which is to

table 1.1

A SAMPLE OF HEALTH OBJECTIVES FROM HEALTHY PEOPLE 2000

- Increase moderate daily physical activity to at least 30 percent of people (a 36 percent increase).
- Reduce overweight to a prevalence of no more than 20 percent of people (a 23 percent decrease).
- Reduce dietary fat intake to an average of 30 percent of calories (a 17 percent decrease).
- Reduce cigarette smoking prevalence to no more than 15 percent of adults (a 48 percent decrease).
- Reduce alcohol-related motor vehicle crash deaths to no more than 8.5 per 100,000 people (a 12 percent decrease).
- Reduce homicides to no more than 7.2 per 100,000 people (a 15 percent decrease).
- Reduce coronary heart disease deaths to no more than 100 per 100,000 people (a 26 percent decrease).
- Increase the daily consumption of fruits and vegetables to five or more servings per person (present average is 2½ servings).

say responsible and enlightened behavior by each and every individual, truly is the key to good health. . . . Our physical and emotional well-being is dependent upon measures that only we, ourselves, can affect."⁵

This document outlines specific health objectives for the nation targeted for the year 2000 in twenty-two priority areas (physical activity, nutrition, tobacco use, family planning, cancer, alcohol and drug use, sexually transmitted diseases, and heart disease to name a few). The document identifies three broad goals as the means of bringing about fuller human potential:⁶

- 1. Increase the span of healthy life for Americans.
- 2. Reduce health disparities among Americans.
- 3. Achieve access to preventive services for all Americans.

Table 1.1 lists just a few of the objectives found in *Healthy People 2000*. Because of the diversity and varying needs of Americans, reaching these goals is a challenge. Nevertheless, the federal government is playing a leadership role in cultivating a culture of healthier, life-enhancing habits for all Americans, regardless of income, race, sex, or other status. If we do not act now, the cost of health care in this country will reach \$1.5 trillion by the end of the decade.⁷

Most of the proposals in *Healthy People 2000* to eliminate disease and create health are linked to everyday practices. Not all of these lifestyle behaviors are easily undertaken. As you look through the following list of healthy habits, note that this book contains information to help you achieve many of them:

- Stop the use of all tobacco products (Chapter 12).
- ➤ Reduce blood pressure (Chapter 6).
- Consume little or no alcohol (Chapter 12).
- ➤ Manage stress (Chapter 7).
- Exercise in moderation three to five times per week (Chapter 2).
- Maintain an appropriate weight (Chapter 10).
- ➤ Reduce total blood cholesterol levels (Chapter 6).
- ➤ Eat more fresh fruit, vegetables, and fiber (Chapter 9).

- ➤ Practice safer sex (Chapter 13).
- Consume less red meat and poultry, substituting fish, lentils, and rice (Chapter 9).
- Participate in cancer self-exams and age-appropriate screenings (Chapter 11).
- ➤ Place smoke detectors in your home or apartment (Chapter 14).
- ➤ Drive within 5 miles per hour of the speed limit (Chapter 14).
- Wear seat belts in cars and helmets on bicycles and motorcycles (Chapter 14).

The typical American diet has become a serious health-risk factor.



There is nothing extreme or magical in this list. It does shift the main responsibility for health to the individual, rather than relegating the individual to a position of passivity amidst excessive surgeries, medications, and medical tests. One physician has appropriately summarized the issue by stating, "One of my frustrations in medicine was having people come to me expecting way too much of me and not expecting anything of themselves." To evaluate your personal lifestyle habits, look to *Healthy Lifestyle: A Self-Assessment*, found in the Activities Section at the end of the book.

Understanding Risks

Often in this book we will talk about risks. In an effort to prevent disease and to promote health, it is important to identify the factors that cause disease and injury. From this, probabilities are determined as to the chances for occurrence. Like placing a bet at a race track, identifying risks is a way of quoting the odds. No one can honestly promise you that doing something or refraining from doing it will keep you safe or that doing one thing will positively kill you. You simply must draw your own conclusions from the evidence. Since there is no such thing as absolute safety, you only can choose to widen or narrow your risk margins with your habits.

One ongoing study has resulted in much of the information we know about the risk factors associated with coronary heart disease. The people of Framingham, Massachusetts, a community 18 miles west of Boston, have been studied and charted since 1950. The Framingham Study, as it has become known, has resulted in information about how heredity, environment, medical care, and lifestyle factors affect heart disease and general wellbeing. A comprehensive longitudinal study such as this, in contrast to a short-term, isolated study involving very few people, results in reputable data.

Heredity Is Not Destiny

For some, familial tendencies constitute a psychological trap. If your father died young of a heart attack or your mother has diabetes, your chances for following in their footsteps are greater than those of someone whose parents are healthy at 75 years of age. However, this is only the case if your parents' health problems were an actual result of