

Concepts of Fitness and Wellness

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Fundamental Concepts of Fitness and Wellness

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Preface for the Instructor

The first *Concepts* book, written over 30 years ago, had a “product” focus. As we pioneered the development of fitness and wellness classes, we focused on trying to get people fit and well. To be sure, fitness is an important product, as is wellness, another product of healthy lifestyle change. But scientific advances have shown that health, fitness, and wellness (all products) are not things you can “do” to people. You have to help them help themselves. Educating them and giving them the self-management skills that help them adopt healthy lifestyles can do this.

The focus of the new millennium is on the *process*. Healthy lifestyles, or what a person does, rather than what a person can do, constitute process. If a person does the process (i.e., adopting a healthy lifestyle), positive changes will occur to the extent that change is possible for that specific person. As noted in the first concept of the book, lifestyles are the most important factors influencing health, fitness, and wellness. Healthy lifestyles (the processes) are also within a person’s individual control. *Any person* can benefit from lifestyle change, and any person can change a lifestyle. These lifestyle changes will make a difference in health, fitness, and wellness for all people.

The emphasis on lifestyle change is consistent with the focus of national health objectives for the new millennium. Though the principal national health goals are to increase years and quality of life (products) for all people, the methods of accomplishing these goals focus on changing lifestyles. As we move into the new century, we must adopt a new way of thinking to help all people change their lifestyles to health, fitness, and wellness.

New Features of this Edition

The HELP Philosophy

The “new way of thinking” for the new millennium is based on the HELP philosophy, which is outlined and emphasized in the text. **H** is for *health*. Health and its positive component—wellness—are central to the philosophy. **E** is for *everyone*. Health, fitness, and wellness are for all people. **L** is for *lifetime lifestyle* change, and **P** is for *personal*. The goal is to HELP all people to make personal lifetime lifestyle changes that promote health, fitness, and wellness.

The book adheres to this HELP philosophy. To assure that it is useful to everyone, we include discussions to adapt healthy lifestyles based on personal needs. Separate sections are *not* included for specific groups such as older people,

women, ethnic groups, or those with special needs. Rather, we focus on healthy lifestyles *for all people* throughout the book.

Meeting Higher-Order Objectives

The “new way of thinking” based on the HELP philosophy suggests that each person must make decisions about healthy lifetime lifestyles if the goals of longevity and quality of life are to be achieved. What one person chooses may be quite different from what another chooses. Accordingly, our goal in preparing this book is to help readers to become good problem solvers and decision makers. Rather than focusing on telling them what to do, we offer information to help readers make informed choices about lifestyles. The stairway to lifetime fitness and wellness that we present helps readers understand the importance of “higher-order objectives” devoted to problem solving and decision making.

Strategies for Action

You will notice a new system of organization as well as many other new features in this edition. These changes are designed to put the HELP philosophy and higher-order objectives into action. The changes are also designed to increase the educational effectiveness of the book. At the end of each concept, *strategies for action* are provided. These are suggestions for putting content into action. Many of these strategies require readers to perform or practice self-assessment or other self-management techniques.

Organization

Consistent with the focus on process or lifestyle change the focus is on lifestyles rather than fitness. The physical activity concepts are organized sequentially around the physical activity pyramid. Nutrition and stress management are two additional priority healthy lifestyles that follow. Concepts on planning are presented early to help students begin the planning process. The concept on body composition is placed with nutrition after the physical activity concepts. The final concept is designed to help students plan a comprehensive activity and healthy lifestyle program.

Activity Features with Activity Labs

Each of the exercises described in the book is contained in activity features using a contemporary magazine format. This format allows students to get immediately involved in activity

and to keep activity logs using visually appealing labs. “Basic 8” tables feature easy to use exercises.

Web Icons

As we begin the new millennium, it is appropriate that students be provided with state-of-the-art technology to promote educational effectiveness. The web icons are unique to this book. It allows learners to locate (at point of use) additional pictures, tables, and figures that illustrate concepts presented in the book. Web addresses to supplemental resource materials such as a self-study guide, sample exam questions, and definitions of terms, as well as other enrichment materials, are also provided on the Online Learning Center.

Easy to Use Labs

Many of the labs in this book were created based on recommendations of users of earlier *Concepts* books. They are designed to get users involved in practicing self-management skills that will promote healthy lifestyle change. The labs are in an attractive and educationally effective format. They are easy to find and easy to use. In many cases, lab resource materials that aid the student in performing lab activities precede them. These resources are retained in the book even when the labs are torn out. This allows future use of such materials as fitness self-assessments. The physical activity labs are designed to get people active early in the course and ultimately to allow each user to plan his or her own personal activity program.

Focus on Self-Management Skills

The educational effectiveness of a book depends on more than just presenting information. If lifestyle changes are to be implemented, there must be opportunities to learn how to make these changes. Research suggests that learning self-management skills is important to lifestyle change. An extensive section is included early in the book, and additional discussions of how to practice and implement these skills are included throughout the book.

Health Goals for the Year 2010

The health goals are based on the revised health goals for the new millennium (Health Goals for the Year 2010). These goals are provided at the beginning of each concept to help readers relate content to goals.

Magazine Format

The attractive format supports student reading and studying with a more appealing look in a new magazine format. This format has been shown to be educationally effective.

Preface for the Student

This new guide follows the Preface to the Instructor, and it is designed to help students use the book more effectively. Instructors are encouraged to urge students to read this section prior to using the book.

Terms at Point-of-Use

It greatly pleased us that the *Surgeon General's Report on Physical Activity and Health* adopted our physical fitness definitions in their report. Just as we have led the way in defining fitness, we now include state-of-the-art definitions related to wellness and quality of life. These—and all other definitions—are now included at the first point-of-use to make them easier to locate.

Successful Features

We are especially proud of the fact that the ninth edition of our *Concepts* book recently received the Textbook Authors Association (TAA) award for continuing excellence for textbooks (the McGuffey Award) in pedagogical soundness, quality content, and attractiveness. In this new *Fundamental Concepts of Fitness and Wellness*, we retain many of the features that led to the TAA award.

Continued Use of Conceptual Format

The TAA award acknowledged the conceptual format that provides information in a useful way. We use concepts rather than chapters, and each concept contains factual statements that follow concise informational paragraphs. This tried-and-true method has proven to be educationally sound and well received by students and instructors.

Pedagogical Aids

Suggested Readings

Because students want to know more about a particular topic, a list of readings is given at the end of each concept. Most suggested readings are readily available at bookstores or public libraries.

Appendixes

Fundamental Concepts of Fitness and Wellness, includes five appendixes that are valuable resources for the student. The metric conversion chart, metric conversions of selected charts and tables, caloric guide to common foods, calories of protein, carbohydrates, and fats in food, and the Canadian food guide are included for your use.

Ancillaries

A Note for Instructors

As with our other *Concepts* books, you will see that we use the most recent scientific information. The thoroughness of content was a feature recognized by TAA judges. We use an organizational plan and a lab format that encourage learners to participate in healthy lifestyles. We have designed experiences to promote higher-order thinking. There is another consideration we think to be important. As usual, we have worked to keep the price of the book low.

As always with our *Concepts* books, an extensive list of ancillary materials is available to help you provide the most effective instruction. Brief descriptions of these materials follow.

Instructor's Resource Materials

Instructor's Manual (IM)

The Instructor's Manual contains all new lesson plans, as well as lab plans, suggestions for grading, audiovisual resources, sources of equipment, objectives, and discussion questions.

Microtest III

A completely revised version of our computerized testing software is available with this new *Concepts* book. This test bank software provides a unique combination of user-friendly aids that enables the instructor to select, edit, delete, or add questions, as well as construct and print tests and answer keys. The computerized test bank package is available for IBM Windows and Macintosh computers.

Course Organizer

In order to put it all together, we offer this special course-planning binder, which conveniently organizes all the ancillary package items with tabbed dividers.

Visual Resources

PowerPoint Presentation Program. With the publication of this book, we continue to provide PowerPoint slide presentations for instructor use. This is also available as a gratis downloadable ancillary on the *Concepts* book-specific web site: www.mhhe.com/hper/physed/clw.

Instructional Videos

Video 1: Introduction to Physical Fitness. This video includes a statement of fitness philosophy, a look at important fitness objectives, including the Stairway to Lifetime Fitness, and a description of the fitness tests included in the *Concepts* books. Test descriptions include estimated 1 RM for strength, the trunk rotation test for flexibility, and the curl-up test for muscular endurance. Other fitness test descriptions are also described. This video may be viewed by instructors or shown to students to help them understand the various tests. It has been proven popular with both students and instructors. The HELP philosophy is part of the flow of the video presentation of concepts.

Instructional Video 2: Introduction to Wellness. This second instructional video defines wellness and puts wellness, health, and fitness in perspective for both students and instructors. The video helps establish common ground for the study of wellness. This proven video has helped provide the basic foundation for the study of wellness that is needed by many students.

The Lifetime Fitness Concepts Course Video Series

This is a series of fifteen 28-minute video programs designed to provide basic conceptual physical fitness information to young adults. When used in conjunction with this text, the videos help interested students learn how to do self-tests of fitness and wellness, plan effective lifetime fitness and wellness programs, and learn concepts that will make them better fitness and wellness decision makers. This is available from Arizona State University (480-965-6738).

McGraw-Hill Fitness & Wellness Transparencies

Illustrations and graphics are available as transparency acetates. Attractively printed in full color, these useful tools facilitate learning and classroom discussion.

Concepts Transparencies

Fifty four-color acetate transparencies illustrate anatomical and physiological concepts, and help instructors to describe the scientific concepts of physical fitness and health-related fitness.

Student Self-Assessment Materials

Fitness/Wellness Profile Diskette. This proven computer diskette includes several valuable fitness and wellness program applications that will enhance student learning. Included are a fitness evaluation profile as well as the target

heart rate, heart disease risk, and nutrition and stress programs, which have proven to be effective in the past. The fitness profile allows students to enter fitness test results and receive ratings on a “learn as you go” basis.

The Fitness Analyst Software. This software is designed to provide comprehensive support for health and fitness appraisal, prescription, and performance tracking. It is ideally suited to provide student/client appraisal data, generate exercise prescription, track performance data, and create well-designed reports.

Fitsolve II Software. Fitsolve is educational software designed to facilitate the teaching of high-order physical fitness objectives such as self-evaluation, diagnosis, and problem-solving skills, which in turn enable the achievement of fitness independence, and a state of self-sufficiency in which individuals can design and implement their own fitness programs.

Mosby's NutriTrac Software. Available for Windows and Macintosh computers, this nutrient-analysis software allows you and your students to analyze diets easily, using an icon-based interface and on-screen help features. Foods for breakfast, lunch, dinner, and snacks may be selected from more than 2,250 items. Records may be kept for any number of days. The program can provide intake analyses for individual foods, meals, days, or for an entire intake period.

Testwell by the National Wellness Institute. This is a self-scoring, pencil-and-paper wellness assessment booklet developed by the National Wellness Institute in Wisconsin, and distributed exclusively by McGraw-Hill Publishers.

Internet Resources

Book-Specific Web Site. This ancillary allows instructors and students to get book-specific resources on the Web. Instructors and students can access the Online Learning Center to find online quizzes, interactive key terms, hot-off-the-press articles, and web links. The web icons in the book indicate the location of web materials related to specific information present at that point of use.

HealthQuest CD-ROM. *HealthQuest* is designed to help students explore the behavioral aspects of personal health and wellness through a state-of-the-art interactive CD-ROM. Your students will be able to assess their current wellness status, determine their health risks, and make decisions to improve the behaviors that impact their health.

Interactive Personal Trainer CD-ROM. The Interactive Personal Trainer CD-ROM provides users with a variety of features. First, self-assessments for all parts of health-related fitness are provided. Still pictures and QuickTime

movies illustrate the assessments, and written statements describe each one. Second, a fitness profile allows users to input assessment results to get a rating profile. In many cases (e.g., skinfolds), calculations are made automatically. Third, physical activities and exercises are provided for each part of fitness and for care of the back and good posture. Users can select exercises for any part of fitness or for different body parts and get descriptions, still pictures and real-time videos of each. Finally, pictures and descriptions of risky exercises are provided followed by descriptions and real-time movies of appropriate alternatives. The CD-ROM is available in either Windows or Mac versions.

Print Publications

UC Berkeley Wellness Letter. This highly regarded health-related newsletter keeps you informed of the latest developments in the health and wellness field.

The AIDS Booklet, Sixth edition, by Frank Cox. This booklet provides current and accurate facts about AIDS and HIV: what it is, how the disease is transmitted, its prevalence among various population groups, symptoms of HIV infection, strategies for prevention, etc. Also included are various legal, social, medical, and ethical issues related to HIV and AIDS. Updated semiannually, this short booklet makes HIV and AIDS understandable for your students.

Acknowledgments

It is only fitting as we enter the new millennium that we acknowledge those people who have contributed to the development of our *Concepts* books over the past 30+ years. At the risk of inadvertently failing to mention someone, we want to acknowledge the following people for their role in the development of our books.

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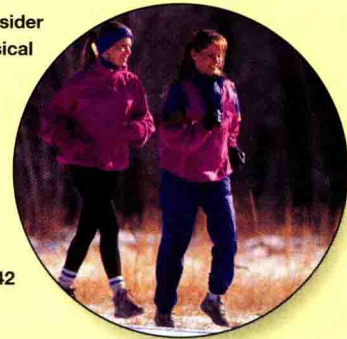
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Section 1

Lifestyles for Health, Fitness, and Wellness

Concept 1

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

**Good health,
wellness,
fitness, and
healthy
lifestyles are
important for
all people.**





Health Goals

for the year 2010

Increase quality and years of healthy life.

Eliminate health disparities.

Increase incidence of people reporting
“healthy days”.

Increase incidence of people reporting
“active days”.

Increase access to health information and
services for all people.

A Statement about National Health Goals

At the beginning of each concept in this book is a section containing abbreviated statements of the new national health goals from the document *Healthy People 2010: National Health Promotion and Disease Prevention Objectives*. These statements, established by expert groups representing more than 300 national organizations, are intended as realistic national health goals to be achieved by the year 2010. These objectives for the first decade of the new millennium, are intended to improve the health of those in the United States, but they seem important for all people in North America and in other industrialized cultures throughout the world. The health objectives are designed to contribute to the current World Health Organization strategy of “Health for All.” This book is written with the achievement of these important health goals in mind.

Introduction

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The first national health goals were developed in 1979 to be accomplished by the year 1990. The focus of those objectives was on reduction in the death rate among infants, children, adolescents, young adults and adults. Except for reducing death rates among adolescents, those goals were met and the average life expectancy was increased by more than 2 years by the 1990s. Those first national health objectives gave way to the Healthy People 2000 objectives designed to be accomplished by the turn of the century. The emphasis in these objectives shifted from reduction in premature death to disease prevention and health promotion. While many of these objectives have been achieved, others have yet to be accomplished.

The goals of the Healthy People 2010 continue to focus on disease prevention and health promotion, but have areas of expanded focus. First, the goals emphasize quality of life, well-being, and functional capacity—all important wellness considerations. This emphasis is based on the World Health Organization statement that “It is counterproductive to evaluate development of programs without considering their impact on the quality of life of the community. We can no longer maintain strict, artificial divisions between physical and mental well-being (World Health Organization, 1995).” Second, the new national health goals take the “bold step” of trying to “eliminate” health disparities as opposed to reducing them as outlined in Healthy People 2000. Consistent with national health goals for the new millennium, this book is designed to aid all people in adopting healthy lifestyles that will allow them to achieve lifetime health, fitness and wellness.

The Facts about Health and Wellness

Good health is of primary importance to adults in our society.

When polled about important social values, 99 percent of adults in the United States identified “being in good **health**” as one of their major concerns. Two other concerns expressed most often were good family life and good self-image. The one percent who did not identify good health as an important concern had no opinion on any social issues. Among those polled, none felt that good health was unimportant. Results of surveys in Canada and other Western nations show similar commitments to good health.

Health varies greatly with income, gender, age, and family origin.

Reducing health disparities among adults over 18 is a major national health goal. We have some distance to go in accomplishing this goal because health varies widely depending on income, gender, age, and family origin. Self-ratings of health have been shown to be good general indicators of health status. When asked to rate health as excellent, good, fair, or poor, more than a few adults indicated that their health was only fair or poor (see Figure 1). It is evident that many more people in poor or near-poor income groups are considered to be fair or poor in health as opposed to good or excellent. African Americans and Hispanics are more often classified as fair or poor in health than white non-Hispanics. Minority women are also likely to be classified as fair or poor in health. Though not indicated in Figure 1, there is good evidence that older adults are especially likely to report poor health and wellness. An important national health goal is to increase the number of **healthy days** people have each month.

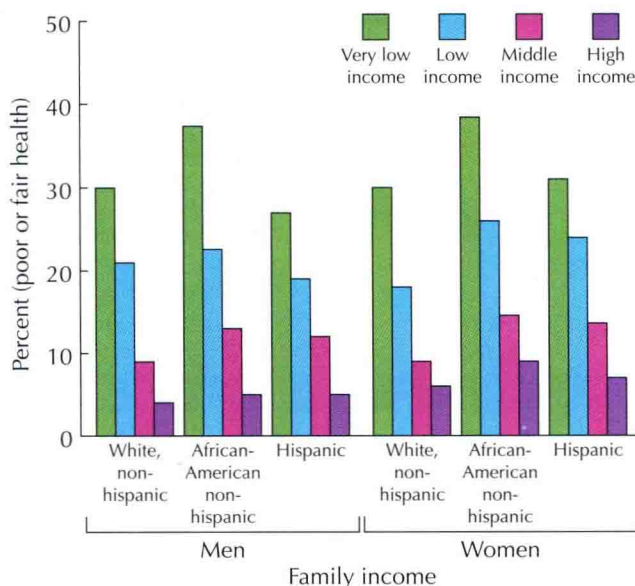


Figure 1

Fair or poor health among adults 18 and over by income, gender, and family origin.

NOTE: Percents are age adjusted.

SOURCE: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health Interview Survey. *Health United States, 1998*.

Increasing the span of healthy life is a principal health goal.



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The principal public health goal of Western nations is to increase the healthy life span of all individuals. During this century, the life expectancy for the average person has increased by 60 percent. A child born in 1900 could expect to live only 47 years. By 1930, the life expectancy increased by more than 10 years; currently, the average life expectancy is slightly more than 76 years. As illustrated in Figure 2, women live longer than men, with the difference between men and women becoming more dramatic with each passing decade. Unfortunately, the average person can expect only about 64 years of healthy life. Approximately 12 years are characterized as dysfunctional or lacking in quality of life (see Figure 3). Disease and illness often associated with poor health limit length of life and contribute to the dysfunctional living.

Health is more than freedom from illness and disease.

Over 50 years ago, the World Health Organization defined *health* as being more than freedom from illness, disease, and debilitating conditions. In recent years, public health experts

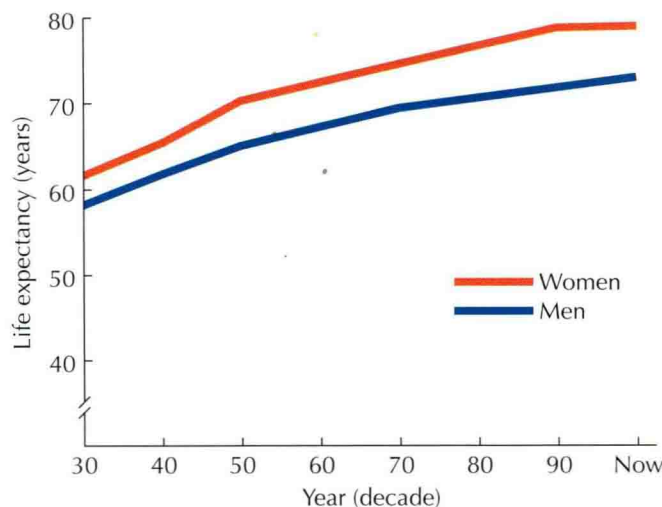


Figure 2

Life expectancy.

SOURCE: National Center for Health Statistics.

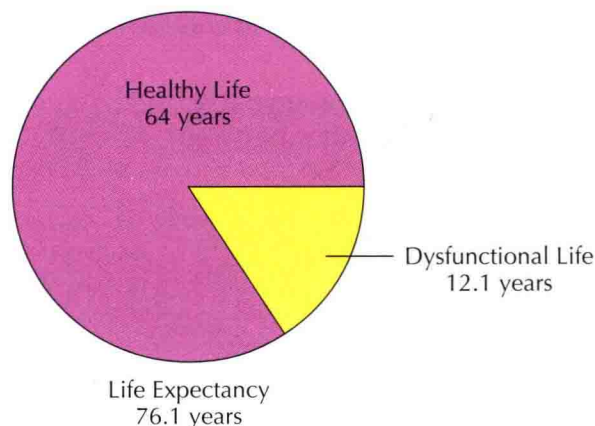


Figure 3

Years of healthy life as a proportion of life expectancy (U.S. population).

SOURCE: Data from *National Vital Statistics System* and *National Health Interview Survey*. Centers for Disease Control and Prevention, Atlanta, GA.

Health Health is optimal well-being that contributes to quality of life. It is more than freedom from disease and illness, though freedom from disease is important to good health. Optimal health includes high-level mental, social, emotional, spiritual, and physical wellness within the limits of one's heredity and personal abilities.

Healthy days A self-rating of the number of days (per week or month) a person considers himself or herself to be in good or better than good health.

**Figure 4**

A model of optimal health including wellness.

have identified **wellness** as “a sense of well-being” and “**quality of life.**” Healthy People 2010 objectives use the number of “**activity days**” as one indicator of wellness.

Many illnesses are manageable and have only limited effect on total health.

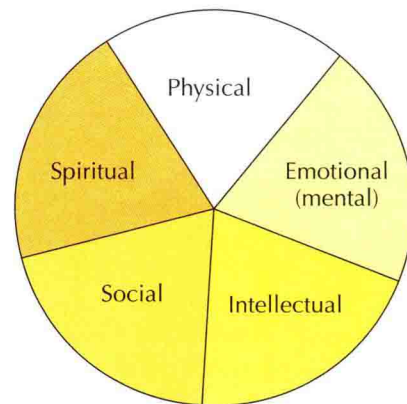
Many **illnesses** are curable and may have only a temporary effect on health. Others, such as diabetes, are not curable but can be managed with proper eating, physical activity, and sound medical supervision. It should be noted that those possessing manageable conditions may be more at risk for other health problems, so proper management is essential. For example, unmanaged diabetes is associated with high risk for heart disease and other health problems.

Wellness is the positive component of optimal health.

Death, disease, illness, and debilitating conditions are negative components that detract from optimal health. Death is the ultimate opposite of optimal health. Disease, illness, and debilitating conditions obviously detract from optimal health. Wellness has been recognized as the positive component of optimal health as evidenced by a sense of well-being reflected in optimal functioning, a good quality of life, meaningful work, and a contribution to society (see Figure 4). Wellness allows the expansion of one’s potential to live and work effectively and to make a significant contribution to society.

Health and wellness are multidimensional.

The dimensions of health and wellness include the emotional (mental), intellectual, physical, social, and spiritual.

**Figure 5**

The dimensions of health and wellness.

Figure 5 illustrates the importance of each dimension to total wellness. Throughout this book, references will be made to these wellness dimensions (see Table 1) to help reinforce their importance.

Wellness reflects how one feels about life as well as one’s ability to function effectively.

A positive total outlook on life is essential to wellness and each of the wellness dimensions. A “well” person is satisfied in his/her work, is spiritually fulfilled, enjoys leisure time, is physically fit, is socially involved, and has a positive emotional-mental outlook. This person is happy and fulfilled. Many experts believe that a positive total outlook is a key to wellness (see Table 2).

The way one perceives each of the dimensions of wellness affects total outlook. Researchers use the term *self-perceptions* to describe these feelings. Many researchers believe that self-perceptions about wellness are more important than actual ability. For example, a person who has an important job may find less meaning and job satisfaction than another person with a much less important job. Apparently, one of the important factors for a person who has achieved high-level wellness and a positive life’s outlook is the ability to reward himself/herself. Some people, however, seem unable to give themselves credit for their life’s experiences. The development of a system that allows a person to positively perceive the self is important. Of course, the adoption of positive **lifestyles** that encourage improved self-perceptions is also important. The questionnaire in the Lab 1A will help you assess your self-perceptions of the various wellness dimensions. For optimal wellness, it would be important to find positive feelings about each dimension.