

ACTIVE LEARNING WORKBOOK

FOR

FAHEY, INSEL, AND ROTH'S SIXTH EDITION

FIT & WELL

CORE CONCEPTS IN PHYSICAL FITNESS AND WELLNESS

VICTOR L. KATCH
PROFESSOR, KINESIOLOGY
ASSOCIATE PROFESSOR, PEDIATRICS
THE UNIVERSITY OF MICHIGAN
ANN ARBOR, MI

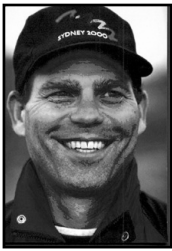
FRANK I. KATCH
INTERNATIONAL RESEARCH SCHOLAR
FACULTY OF HEALTH AND SPORT
AGDER UNIVERSITY COLLEGE
KRISTIANSAND, NORWAY

FORMER PROFESSOR & CHAIR OF EXERCISE SCIENCE
UNIVERSITY OF MASSACHUSETTS
AMHERST, MA

FITNESS TECHNOLOGIES PRESS
SANTA BARBARA, CA

CORE CONCEPTS AND LABS IN
PHYSICAL FITNESS AND WELLNESS

About the Authors



Professor Victor Katch has been active in the field of nutrition and exercise physiology for more than 34 years. He received undergraduate degrees in International Relations and Physical Education (Kinesiology) from California State University, Northridge (CSUN). He also studied at the prestigious University of Uppsala in Sweden (International Relations), and completed his graduate degrees from The University of California, Berkeley. In 1972 Professor Katch joined the University of Michigan, where he continues to teach undergraduate and graduate courses. He was the University's first women's basketball coach (1973), and founder and former director of the University's Weight Control Clinic, Applied Physiology and Body Composition Laboratories. In 1982, Professor Katch helped set-up and run the Exercise Physiology Laboratory in Pediatric Cardiology. He is the recipient of an outstanding teaching award and nominee for the University's Distinguished Professor Award. He is also an elected Fellow of the American Academy of Kinesiology and Physical Education. Professor Katch has published more than 130 peer reviewed research papers, received numerous research grants and contracts, co-authored 7 books, published more than 80 research abstracts and given over 150 invited lectures at national and international conferences.



Professor Frank Katch took early retirement from the University of Massachusetts, Amherst (1977-2001) where he served as Professor and Department Head (1977-1990) and Graduate Program Director (1977-1986). His first teaching job after completing graduate studies at the University of California, Berkeley was at Queens College of the City University of New York (1970-1977). Dr. Katch is an elected Fellow of the American College of Sports Medicine and the American Academy of Kinesiology and Physical Education. He has published over 140 peer-reviewed scientific and professional papers, and presented over 200 invited lectures at national and international conferences. His college texts co-authored with William McArdle and brother Victor include *Exercise Physiology: Energy, Nutrition, and Human Performance*. 5th ed., 2001, winner of the first prize in the field of medicine category from the British Medical Association, and *Sports and Exercise Nutrition*, 2nd ed., 2005. Dr. Katch has authored articles in popular magazines including Mademoiselle, Vogue, Harper's, Woman's Day, Reader's Digest, Weight Watcher's, Muscle and Fitness, Shape, Self, and American Health, and collaborated on 3 consumer books; *Getting In Shape* (Houghton Mifflin), *Fitness Walking* (Putnam), and *The Fidget Factor* (Andrews McMeel, 2000). Professor Katch currently resides in Santa Barbara, CA where he continues to write, develop continuing education courses, serve as a visiting International Research Scholar at Agder University College in Kristiansand, Norway, and as an instructor in UCLA's Certificate Program in Fitness Instruction. He takes daily walks on the beach and plays golf whenever possible.

Drs. Katch and Katch have consulted with professional football teams (Cowboys, Jets, Dolphins, Saints, Redskins), professional baseball (Boston Red Sox), NBA, US Olympic Team, and many national and international corporations. They have served on the editorial boards of numerous scientific journals and as members of various scientific advisory boards.

ACTIVE LEARNING WORKBOOK

FOR

FAHEY, INSEL, AND ROTH'S SIXTH EDITION

FIT & WELL

CORE CONCEPTS IN PHYSICAL FITNESS AND WELLNESS

VICTOR L. KATCH
PROFESSOR, KINESIOLOGY
ASSOCIATE PROFESSOR, PEDIATRICS
THE UNIVERSITY OF MICHIGAN
ANN ARBOR, MI

FRANK I. KATCH
INTERNATIONAL RESEARCH SCHOLAR
FACULTY OF HEALTH AND SPORT
AGDER UNIVERSITY COLLEGE
KRISTIANSAND, NORWAY

FORMER PROFESSOR & CHAIR OF EXERCISE SCIENCE
UNIVERSITY OF MASSACHUSETTS
AMHERST, MA

FITNESS TECHNOLOGIES PRESS
SANTA BARBARA, CA

FITNESS TECHNOLOGIES PRESS
5043 VIA LARA LANE
SANTA BARBARA, CA 93111

Copyright© 2006 by Fitness Technologies Press

Copyright© under the International Copyright Union. All Rights Reserved. The use or reproduction of this work in any form or by any means (electronic, mechanical, or other means, now known or hereafter invented including recording, photo-copying, xerography, or in any information retrieval system), is strictly forbidden without written permission of Victor Katch, Frank Katch and Fitness Technologies Press.

Printed in the United States of America

PRINT NUMBER 4321

ISBN: 0-9742965-8-9

Title: Active Learning Workbook For Fahey, Insel and Roth's Sixth Edition Fit & Well

DEDICATED TO SIX GREAT ACTIVE LEARNERS, OUR CHILDREN

**ERIKA, LESLIE AND JESSE
DAVID, KEVIN AND ELLEN**

PREFACE

This Active Learning Workbook is a resource companion to Fahey, Insel, and Roth's *Fit & Well: Core Concepts and Labs in Physical Fitness and Wellness; Sixth Edition*. Its purpose is to help students better understand the text content by focusing on key terms and concepts, and on specific questions within each chapter. The addition of sample quizzes at the end of the chapters (with answers provided in the Appendix) will better prepare students for exams.

Based on over 65 combined years of in-class teaching experience, we have discovered that students become more engaged and understand more thoroughly what they read when they write down major concepts, ideas, and relationships and facts to questions based on their reading. This pedagogical exercise ideally occurs while reading the text, not sometime afterwards. To accomplish this objective, students should use the workbook as they read the text. This concurrent “active reading/learning” element enhances student understanding of text material to a much greater extent than either only reading, reading and underlining text, or answering questions in some other form at a later time. The study questions follow the sequence of each chapter. This strategy makes it is easy to locate the answers to each of the questions by referring back to the appropriate section heading within the chapter.

We would like to thank Tom Fahey for encouraging us to produce this workbook.

Victor Katch

Ann Arbor, MI

Frank Katch

Santa Barbara, CA

TABLE OF CONTENTS

1. INTRODUCTION TO WELLNESS, FITNESS AND LIFESTYLE MANAGEMENT	1
2. BASIC PRINCIPLES OF PHYSICAL FITNESS	11
3. CARDIORESPIRATORY ENDURANCE	21
4. MUSCULAR STRENGTH AND ENDURANCE	35
5. FLEXIBILITY AND LOW-BACK HEALTH	45
6. BODY COMPOSITION	54
7. PUTTING TOGETHER A COMPLETE FITNESS PROGRAM	61
8. NUTRITION	67
9. WEIGHT MANAGEMENT	86
10. STRESS	94
11. CARDIOVASCULAR HEALTH	104
12. CANCER	119
13. SUBSTANCE USE AND ABUSE	133
14. SEXUALLY TRANSMITTED DISEASES	146
15. WELLNESS FOR LIFE	154
ANSWERS TO CHAPTER PRACTICE QUIZZES	164

