

Physical Activity Guidelines for Americans and a Review of Scientific Literature Used

Hailey A. Cowell
Editor

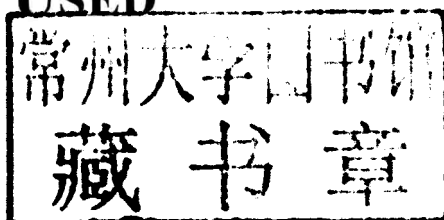
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PUBLIC HEALTH IN THE 21ST CENTURY

**PHYSICAL ACTIVITY GUIDELINES
FOR AMERICANS AND A REVIEW
OF SCIENTIFIC LITERATURE**

USED



HAILEY A. COWELL
EDITOR



Nova Science Publishers, Inc.

New York

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Additional color graphics may be available in the e-book version of this book.

LIBRARY OF CONGRESS CATALOGING-IN-PUBLICATION DATA

Physical activity guidelines for Americans and a review of scientific literature used / editor, Hailey A. Cowell.

p. ; cm.

Includes index.

ISBN 978-1-60876-063-3 (softcover)

1. Exercise--Standards--United States. I. Cowell, Hailey A.

[DNLM: 1. Physical Fitness--United States--Guideline. 2.

Exercise--United States--Guideline. 3. Review Literature as Topic--United States--Guideline. QT 255]

RA781.P5645 2010

613.70973--dc22

2010029833

Published by Nova Science Publishers, Inc., +New York

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PREFACE

Being physically active is one of the most important steps that Americans of all ages can take to improve their health. This book provides science-based guidance to help Americans aged 6 and older improve their health through appropriate physical activity. The guidelines in this book are designed to provide information and guidance on the types and amounts of physical activity that provide substantial health benefits. The main idea behind these guidelines is that regular physical activity over months and years can produce long-term health benefits and realizing these benefits requires physical activity each week.

Chapter 1- Being physically active is one of the most important steps that Americans of all ages can take to improve their health. The *2008 Physical Activity Guidelines for Americans* provides science-based guidance to help Americans aged 6 and older improve their health through appropriate physical activity.

The U.S. Department of Health and Human Services (HHS) issues the *Physical Activity Guidelines for Americans*. The content of the *Physical Activity Guidelines* complements the *Dietary Guidelines for Americans*, a joint effort of HHS and the U.S. Department of Agriculture (USDA). Together, the two documents provide guidance on the importance of being physically active and eating a healthy diet to promote good health and reduce the risk of chronic diseases.

The primary audiences for the *Physical Activity Guidelines* are policymakers and health professionals. These Guidelines are designed to provide information and guidance on the types and amounts of physical activity that provide substantial health benefits. This information may also be useful to interested members of the public. The main idea behind the Guidelines is that regular physical activity over months and years can produce

long-term health benefits. Realizing these benefits requires physical activity each week

This is an edited, reformatted and augmented version of a United States Department of Health and Human Services publication, 2008 Physical Activity Guidelines for Americans

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Included on Accompanying DVD:

A Scientific Literature Review: Physical Activity
Guidelines Advisory Committee Report, 2008
*United States Department of Health
and Human Services*

Chapter 1

2008 PHYSICAL ACTIVITY GUIDELINES FOR AMERICANS

United States Department of Health and Human Services

ACKNOWLEDGMENTS

The U.S. Department of Health and Human Services (HHS) would like to recognize the efforts of the Physical Activity Guidelines Steering Committee that oversaw the work of the Physical Activity Guidelines Advisory Committee and the Physical Activity Guidelines writing group: Rear Admiral Penelope Slade Royall, PT, MSW (Office of Disease Prevention and Health Promotion; Director, Secretary's Prevention Priority); Captain Richard P. Troiano, PhD (National Institutes of Health; Physical Activity Guidelines Coordinator and Advisory Committee Executive Secretary); Melissa A. Johnson, MS (President's Council on Physical Fitness and Sports; Physical Activity Outreach Coordinator); Harold W. (Bill) Kohl III, PhD (Centers for Disease Control and Prevention (CDC); Physical Activity Science Coordinator until October 2007); and Janet E. Fulton, PhD (CD C; Physical Activity Science Coordinator beginning October 2007).

The Department is grateful for the contributions of the HHS scientists and staff who participated in the Physical Activity Guidelines writing group that developed and created this document: David M. Buchner, MD, MPH (chair); Jennifer Bishop, MPH; David R. Brown, PhD; Janet E. Fulton, PhD; Deborah

A. Galuska, PhD, MPH; Commander Julie Gilchrist, MD; Jack M. Guralnik, MD, PhD; Jennifer M. Hootman, PhD, ATC; Melissa A. Johnson, MS; Harold W. (Bill) Kohl III, PhD; Sarah M. Lee, PhD; Kathleen A. (Kay) Loughrey, MPH, MSM; Judith A. McDivitt, PhD; Denise G. Simons-Morton, MD, PhD; Ashley Wilder Smith, PhD, MPH; Wilma M. Tilson, MPH; Captain Richard P. Troiano, PhD; Jane D. Wargo, MA; Gordon B. Willis, PhD; and the scientific writer/editor, Anne Brown Rodgers.

The Department also gratefully acknowledges the work conducted by the 2008 Physical Activity Guidelines Advisory Committee. Their extensive review of the scientific literature on physical activity and health and their committee deliberations are summarized in the *Physical Activity Guidelines Advisory Committee Report, 2008*. The Committee's report provided the basis for the *2008 Physical Activity Guidelines for Americans*. The Advisory Committee consisted of William L. Haskell, PhD (chair); Miriam E. Nelson, PhD (vice-chair); Rod K. Dishman, PhD; Edward T. Howley, PhD; Wendy M. Kohrt, PhD; William E. Kraus, MD; I-Min Lee, MBBS, ScD; Anne McTiernan, MD, PhD; Russell R. Pate, PhD; Kenneth E. Powell, MD, MPH; Judith G. Regensteiner, PhD; James H. Rimmer, PhD; and Antronette K. (Toni) Yancey, MD, MPH.

The Department also acknowledges the important role of those who provided comments throughout the Physical Activity Guidelines development process. Finally, the Department appreciates the contributions of numerous other departmental scientists, staff, policy officials, and the external peer reviewers who reviewed the *2008 Physical Activity Guidelines for Americans* and provided helpful suggestions.

2008 PHYSICAL ACTIVITY GUIDELINES FOR AMERICANS SUMMARY

Being physically active is one of the most important steps that Americans of all ages can take to improve their health. The *2008 Physical Activity Guidelines for Americans* provides science-based guidance to help Americans aged 6 and older improve their health through appropriate physical activity.

The U.S. Department of Health and Human Services (HHS) issues the *Physical Activity Guidelines for Americans*. The content of the *Physical Activity Guidelines* complements the *Dietary Guidelines for Americans*, a joint effort of HHS and the U.S. Department of Agriculture (USDA). Together, the

two documents provide guidance on the importance of being physically active and eating a healthy diet to promote good health and reduce the risk of chronic diseases.

The primary audiences for the *Physical Activity Guidelines* are policymakers and health professionals. These Guidelines are designed to provide information and guidance on the types and amounts of physical activity that provide substantial health benefits. This information may also be useful to interested members of the public. The main idea behind the Guidelines is that regular physical activity over months and years can produce long-term health benefits. Realizing these benefits requires physical activity each week.

Regular Physical Activity Can Produce Longterm Health Benefits

The steps used to develop the *Physical Activity Guidelines for Americans* were similar to those used for the *Dietary Guidelines for Americans*. In 2007, HHS Secretary Mike Leavitt appointed an external scientific advisory committee, called the Physical Activity Guidelines Advisory Committee. The Advisory Committee conducted an extensive analysis of the scientific information on physical activity and health. The *Physical Activity Guidelines Advisory Committee Report, 2008* and meeting summaries are available at <http://www.health.gov/PAGuidelines/>.

HHS primarily used the Advisory Committee's report but also considered comments from the public and Government agencies when writing the Guidelines. The Guidelines will be widely promoted through various communications strategies, such as materials for the public, Web sites, and partnerships with organizations that promote physical activity.

The *Physical Activity Guidelines for Americans* describes the major research findings on the health benefits of physical activity:

- Regular physical activity reduces the risk of many adverse health outcomes.
- Some physical activity is better than none.
- For most health outcomes, additional benefits occur as the amount of physical activity increases through higher intensity, greater frequency, and/or longer duration.

- Most health benefits occur with at least 150 minutes (2 hours and 30 minutes) a week of moderate- intensity physical activity, such as brisk walking. Additional benefits occur with more physical activity.
- Both aerobic (endurance) and muscle-strengthening (resistance) physical activity are beneficial.
- Health benefits occur for children and adolescents, young and middle-aged adults, older adults, and those in every studied racial and ethnic group.
- The health benefits of physical activity occur for people with disabilities.
- The benefits of physical activity far outweigh the possibility of adverse outcomes.

The following are the key Guidelines included in the *Physical Activity Guidelines for Americans*:

Key Guidelines for Children and Adolescents

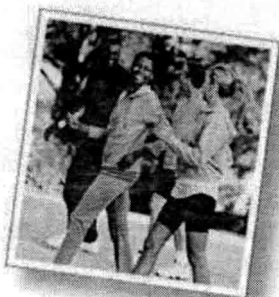
- Children and adolescents should do 60 minutes (1 hour) or more of physical activity daily.
 - **Aerobic:** Most of the 60 or more minutes a day should be either moderate- or vigorous-intensity aerobic physical activity, and should include vigorous-intensity physical activity at least 3 days a week.
 - **Muscle-strengthening:** As part of their 60 or more minutes of daily physical activity, children and adolescents should include muscle-strengthening physical activity on at least 3 days of the week.



- **Bone-strengthening:** As part of their 60 or more minutes of daily physical activity, children and adolescents should include bone-strengthening physical activity on at least 3 days of the week.
- It is important to encourage young people to participate in physical activities that are appropriate for their age, that are enjoyable, and that offer variety.

Key Guidelines for Adults

- All adults should avoid inactivity. Some physical activity is better than none, and adults who participate in any amount of physical activity gain some health benefits.
- For substantial health benefits, adults should do at least 150 minutes (2 hours and 30 minutes) a week of moderate-intensity, or 75 minutes (1 hour and 15 minutes) a week of vigorous-intensity aerobic physical activity, or an equivalent combination of moderate- and vigorous-intensity aerobic activity. Aerobic activity should be performed in episodes of at least 10 minutes, and preferably, it should be spread throughout the week.



- For additional and more extensive health benefits, adults should increase their aerobic physical activity to 300 minutes (5 hours) a week of moderate-intensity, or 150 minutes a week of vigorous-intensity aerobic physical activity, or an equivalent combination of moderate- and vigorous-intensity activity. Additional health benefits are gained by engaging in physical activity beyond this amount.
- Adults should also do muscle-strengthening activities that are moderate or high intensity and involve all major muscle groups on 2

or more days a week, as these activities provide additional health benefits.

Key Guidelines for Older Adults

The Key Guidelines for Adults also apply to older adults. In addition, the following Guidelines are just for older adults:

- When older adults cannot do 150 minutes of moderate-intensity aerobic activity a week because of chronic conditions, they should be as physically active as their abilities and conditions allow.
- Older adults should do exercises that maintain or improve balance if they are at risk of falling.



- Older adults should determine their level of effort for physical activity relative to their level of fitness.
- Older adults with chronic conditions should understand whether and how their conditions affect their ability to do regular physical activity safely.

Key Guidelines for Safe Physical Activity

To do physical activity safely and reduce the risk of injuries and other adverse events, people should:

- Understand the risks and yet be confident that physical activity is safe for almost everyone.
- Choose to do types of physical activity that are appropriate for their current fitness level and health goals, because some activities are safer than others.

- Increase physical activity gradually over time whenever more activity is necessary to meet guidelines or health goals. Inactive people should “start low and go slow” by gradually increasing how often and how long activities are done.
- Protect themselves by using appropriate gear and sports equipment, looking for safe environments, following rules and policies, and making sensible choices about when, where, and how to be active.
- Be under the care of a health-care provider if they have chronic conditions or symptoms. People with chronic conditions and symptoms should consult their health-care provider about the types and amounts of activity appropriate for them.

Key Guidelines for Women during Pregnancy and the Postpartum Period

- Healthy women who are not already highly active or doing vigorous-intensity activity should get at least 150 minutes of moderate-intensity aerobic activity a week during pregnancy and the postpartum period. Preferably, this activity should be spread throughout the week.
- Pregnant women who habitually engage in vigorous-intensity aerobic activity or who are highly active can continue physical activity during pregnancy and the postpartum period, provided that they remain healthy and discuss with their health-care provider how and when activity should be adjusted over time.

Key Guidelines for Adults with Disabilities

- Adults with disabilities, who are able to, should get at least 150 minutes a week of moderate-intensity, or 75 minutes a week of vigorous-intensity aerobic activity, or an equivalent combination of moderate- and vigorous-intensity aerobic activity. Aerobic activity should be performed in episodes of at least 10 minutes, and preferably, it should be spread throughout the week.
- Adults with disabilities, who are able to, should also do muscle-strengthening activities of moderate or high intensity that involve all major muscle groups on 2 or more days a week, as these activities provide additional health benefits.
- When adults with disabilities are not able to meet the Guidelines, they should engage in regular physical activity according to their abilities and should avoid inactivity.

- Adults with disabilities should consult their healthcare provider about the amounts and types of physical activity that are appropriate for their abilities.

Key Messages for People with Chronic Medical Conditions

- Adults with chronic conditions obtain important health benefits from regular physical activity.
- When adults with chronic conditions do activity according to their abilities, physical activity is safe.
- Adults with chronic conditions should be under the care of a health-care provider. People with chronic conditions and symptoms should consult their health-care provider about the types and amounts of activity appropriate for them.

A ROADMAP TO THE 2008 PHYSICAL ACTIVITY GUIDELINES FOR AMERICANS

- For an overview of the development of the *Physical Activity Guidelines for Americans* and important background information about physical activity, read **Section 1—Introducing the 2008 Physical Activity Guidelines for Americans**.

NOTE

The Guidelines assume that many readers will not read all the chapters, but will read only what is relevant to them. Important information may therefore be repeated in several chapters.

- To learn about the health benefits of physical activity, read **Section 2—Physical Activity Has Many Health Benefits**. This information may help motivate people to become regularly active.
- To understand how to do physical activity in a manner that meets the Guidelines:
 - For youth aged 6 to 17, including youth with disabilities, read **Section 3—Active Children and Adolescents**.
 - For adults aged 18 to 64, read **Section 4—Active Adults**.

- For adults aged 65 and older, read **Section 5—Active Older Adults**. This chapter is also appropriate reading for adults younger than age 65 who have chronic conditions. The Guidelines for older adults are similar to those for other adults but add some specific considerations, such as guidelines for fall prevention.
- For women who are pregnant or who have recently given birth (postpartum period), read the age-appropriate chapter and also the section on physical activity and pregnancy in **Section 6—Safe and Active** and **Section 7—Additional Considerations for Some Adults**.
- For adults with disabilities, read **Section 4—Active Adults** and **Section 7—Additional Considerations for Some Adults**.
- To understand how to reduce the risks of activity-related injury, read **Section 6—Safe and Active**.
- Those interested in an overview of ways to help people participate regularly in physical activity should read **Section 8—Taking Action: Increasing Physical Activity Levels of Americans**.
- The **Glossary** contains definitions of key terms used in the Guidelines. Terms that are defined in the glossary are underlined the first time they are used.
- Additional information and resources relevant to the Guidelines are available in the **Appendices**.

1. INTRODUCING THE 2008 PHYSICAL ACTIVITY GUIDELINES FOR AMERICANS

Being physically active is one of the most important steps that Americans of all ages can take to improve their *health*. This inaugural *Physical Activity Guidelines for Americans* provides science-based guidance to help Americans aged 6 and older improve their health through appropriate *physical activity*.

The U.S. Department of Health and Human Services (HHS) issues the *Physical Activity Guidelines for Americans*. The content of the *Physical Activity Guidelines* complements the *Dietary Guidelines for Americans*, a joint effort of HHS and the U.S. Department of Agriculture (USDA). Together, the two documents provide guidance on the importance of being physically active and eating a healthy diet to promote good health and reduce the risk of chronic diseases.