Promoting Physical Activity to Reduce Chronic Disease: Resources from the Physical Activity Guidelines and the Move Your Way® Campaign

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Office of Disease Prevention and Health Promotion
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Outline

• The Science Behind the Guidelines
• The Physical Activity Guidelines, 2\textsuperscript{nd} edition
• How to Communicate the Guidelines – the Move Your Way\textsuperscript{®} Campaign
The Science Behind the Physical Activity Guidelines
Development and Implementation Process

- Appointment of PAG Advisory Committee
- Review of the current science
- PAGAC Scientific Report
- Development of Physical Activity Guidelines
- Implemented in Federal programs and initiatives

PAG = Physical Activity Guidelines
PAGAC = Physical Activity Guidelines Advisory Committee
2018 Physical Activity Guidelines Advisory Committee

Subcommittees and Work Group

• Aging
• Brain Health
• Cancer – Primary Prevention
• *Cardiometabolic Health & Weight Management
• Exposure
• *Individuals with Chronic Conditions
• Promotion of Physical Activity
• Sedentary Behavior
• Youth
• Pregnancy Work Group
# Evidence Grading Criteria

<table>
<thead>
<tr>
<th>Criteria</th>
<th>STRONG</th>
<th>MODERATE</th>
<th>LIMITED</th>
<th>NOT ASSIGNABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Applicability</strong></td>
<td>Study populations, exposures, and outcomes are directly related to the question</td>
<td>Some of the study populations, exposures, or outcomes are directly related to the question</td>
<td>Most of the study populations, exposures, and outcomes relate to the question indirectly</td>
<td>All of the study populations, exposures, and outcomes relate to the question indirectly</td>
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<tr>
<td><strong>Generalizability (to the US population of interest)</strong></td>
<td>Studied population, exposure, and outcomes are free from serious doubts about generalizability</td>
<td>Minor doubts about generalizability</td>
<td>Serious doubts about generalizability due to narrow or different study population, exposure, or outcomes studied</td>
<td>Highly unlikely that the studied population, exposure, and/or outcomes are generalizable to the US population</td>
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<td><strong>Risk of bias or study limitations (as determined by NEL BAT and/or AMSTAR&lt;sub&gt;EXP&lt;/sub&gt;)</strong></td>
<td>Studies are of strong design; free from methodological concerns, bias, and execution problems</td>
<td>Studies are of strong design with minor methodological concerns OR studies of weaker study design</td>
<td>Studies of weak design OR inconclusive findings due to design flaws, bias, or execution problems</td>
<td>Serious design flaws, bias, or execution problems across the body of evidence</td>
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<tr>
<td><strong>Quantity and Consistency (of the results across the available studies)</strong></td>
<td>Many studies have been published and the results are highly consistent in direction and approximate size of effect</td>
<td>A moderate number of studies have been published with some inconsistency in direction or size of effect</td>
<td>Few studies have been published with some inconsistency in direction or size of effect</td>
<td>Findings are too disparate to synthesize OR single small study unconfirmed by other studies</td>
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<tr>
<td><strong>Magnitude and precision of effect</strong></td>
<td>The magnitude and precision of the estimated effect provide considerable confidence in the accuracy of the findings</td>
<td>The magnitude and precision of the estimated effect provide confidence in the accuracy of the findings</td>
<td>The magnitude and precision of the estimated effect provide some but not a lot of confidence in the accuracy of the findings</td>
<td>Magnitude and precision of effect cannot be determined</td>
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PAGAC Conclusion Statements on Diabetes Prevention

• Strong evidence demonstrates a significant relationship between a higher volume of physical activity and lower incidence of type 2 diabetes. **PAGAC Grade: Strong.**

• Strong evidence demonstrates that an inverse curvilinear dose-response relationship exists between the volume of physical activity and incidence of type 2 diabetes, with a decreasing slope at higher levels of physical activity. **PAGAC Grade: Strong.**

• Moderate evidence indicates no effect modification by weight status. An inverse relationship exists between a higher volume of physical activity and lower incidence of type 2 diabetes for people who have normal weight, overweight, or obesity. **PAGAC Grade: Moderate.**
PAGAC Conclusion Statements on Diabetes Management

• Strong evidence demonstrates an inverse association between volume of physical activity and risk of cardiovascular mortality among adults with type 2 diabetes. PAGAC Grade: Strong.

• Strong evidence demonstrates an inverse association between aerobic activity, muscle-strengthening activity, and aerobic plus muscle-strengthening activity with risk of progression among adults with type 2 diabetes, as assessed by overall effects of physical activity on four indicators of risk of progression: glycated hemoglobin A1C, blood pressure, body mass index, and lipids. PAGAC Grade: Strong.

• Moderate evidence indicates an inverse, curvilinear dose-response relationship between physical activity and cardiovascular mortality among adults with type 2 diabetes. PAGAC Grade: Moderate.

• Moderate evidence indicates an inverse dose-response relationship between volume of aerobic activity and two indicators of risk of progression—blood pressure and hemoglobin A1C—among adults with type 2 diabetes. PAGAC Grade: Moderate.

• Moderate evidence indicates that the effects of physical activity on the disease progression indicator of blood pressure are larger in hypertensive individuals with type 2 diabetes than in those without hypertension. Similarly, moderate evidence indicates that the effects of physical activity on the disease progression indicator of hemoglobin A1C are larger in individuals with type 2 diabetes who have higher levels of hemoglobin A1C than in those with lower hemoglobin A1C. PAGAC Grade: Moderate.
Developing the Guidelines

- 2018 Physical Activity Guidelines Advisory Committee Report
- Physical Activity Guidelines for Americans
- Public comment
- Federal agency comment
- Peer review
Physical Activity Guidelines for Americans, 2nd edition
Physical Activity Guidelines for Americans, 2nd edition Outline

• Expanded science base
  • Discussion of sedentary behavior
  • Removal of bout length requirement

• Health benefits
  • Evidence for even more health benefits – including immediate effects

• Key guidelines

• Tested strategies for physical activity promotion
Move More and Sit Less

Sedentary behavior increases risk of:
- All-cause mortality
- Cardiovascular disease mortality
- Cardiovascular disease
- Type 2 diabetes
- Colon, endometrial, and lung cancers
Any Activity Counts

• No lower threshold for benefits from physical activity

• Most benefits are attained with at least 150-300 minutes of moderate physical activity per week

• Some health benefits are immediate
# New Health Benefits

<table>
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<tr>
<th>Short Term Benefits</th>
<th>Long Term Benefits</th>
<th>Disease Management</th>
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| • **Improve insulin sensitivity**  
• Improve quality of life  
• Reduce anxiety  
• Reduce blood pressure  
• Improve sleep outcomes | • For youth, improve cognition  
• For adults, prevent 8 types of cancer (previously 2)  
• For adults, reduce risk of dementia, including Alzheimer’s disease  
• For older adults, lowers risk of injuries from falls  
• For pregnant women, reduces the risk of postpartum depression  
• For all groups, reduces the risk of excessive weight gain | • **Reduce disease progression for type 2 diabetes**  
• Decrease pain of osteoarthritis  
• Reduce disease progression for hypertension  
• Reduce symptoms of anxiety and depression  
• Improve cognition for those with dementia, multiple sclerosis, ADHD, and Parkinson’s disease |
What Works?

For Individuals or Small Groups

• Guidance from peers or professionals
• Support from others
• Technology

For Communities

• Point of decision prompts
• School policies and practices
• Access to indoor or outdoor recreation facilities or outlets
• Community-wide campaigns
• Community design
Defining Intensity

Moderate Intensity
- Absolute scale: 3.0-5.9 METs
- Relative scale: 5 or 6 on a scale of 0 to 10

Vigorous Intensity
- Absolute scale: 6.0 or more METs
- Relative scale: begins at a 7 or 8 on a scale of 0 to 10

Talk Test
As a rule of thumb, a person doing moderate-intensity aerobic activity can talk, but not sing, during the activity. A person doing vigorous-intensity activity cannot say more than a few words without pausing for a breath.
Key Guidelines for Americans Ages 3 and Over

Preschool-Aged Children
Children and Adolescents
Adults
Older Adults
Pregnancy/Postpartum
Chronic Health Conditions/Disabilities
Adult Guidelines

Adults need a mix of physical activity to stay healthy.

Moderate-intensity aerobic activity*
Anything that gets your heart beating faster counts.

- at least 150 minutes a week

AND

Muscle-strengthening activity
Do activities that make your muscles work harder than usual.

- at least 2 days a week

If you prefer vigorous-intensity aerobic activity (like running), aim for at least 75 minutes a week.
If that's more than you can do right now, do what you can. Even 5 minutes of physical activity has real health benefits.

Key Guidelines for Adults

• Adults should **move more and sit less** throughout the day. Some physical activity is better than none. Adults who sit less and do any amount of moderate-to-vigorous physical activity gain some health benefits.

• For substantial health benefits, adults should do **at least 150 minutes** (2 hours and 30 minutes) to **300 minutes** (5 hours) a week of moderate-intensity, or 75 minutes (1 hour and 15 minutes) to 150 minutes (2 hours and 30 minutes) a week of vigorous-intensity aerobic physical activity, or an equivalent combination of moderate- and vigorous-intensity aerobic activity. Preferably, aerobic activity should be spread throughout the week.

• Adults should also do **muscle-strengthening activities** of moderate or greater intensity and that involve all major muscle groups on 2 or more days a week, as these activities provide additional health benefits.

• **Additional health benefits** are gained by engaging in physical activity beyond the equivalent of 300 minutes (5 hours) of moderate-intensity physical activity a week.
Key Guidelines for Older Adults

The key guidelines for adults also apply to older adults. In addition, the following key guidelines are just for older adults:

• As part of their weekly physical activity, older adults should do multicomponent physical activity that includes balance training as well as aerobic and muscle-strengthening activities.

• 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.

• 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.
Key Guidelines for Adults with Chronic Health Conditions and Adults with Disabilities

• Adults with chronic conditions or disabilities, who are able, should do at least 150 minutes (2 hours and 30 minutes) to 300 minutes (5 hours) a week of moderate-intensity, or 75 minutes (1 hour and 15 minutes) to 150 minutes (2 hours and 30 minutes) a week of vigorous-intensity aerobic physical activity, or an equivalent combination of moderate- and vigorous-intensity aerobic activity. Preferably, aerobic activity should be spread throughout the week.

• Adults with chronic conditions or disabilities, who are able, should also do muscle-strengthening activities of moderate or greater intensity and that involve all major muscle groups on 2 or more days a week, as these activities provide additional health benefits.
Who is Meeting the Guidelines?

Adults Who Met the Aerobic and Muscle-Strengthening Guidelines, 2008–2018
Communicate about the Guidelines Using the Move Your Way Campaign
Move Your Way® Campaign

- **Vision:** Consumer-focused campaign to promote physical activity recommendations in the second edition of the *Physical Activity Guidelines*

- **Purpose:**
  - Raise awareness of recommendations
  - Behavior change – get more people moving!

Do you know MyPlate? Move Your Way is the physical activity equivalent!

*Adults need a mix of physical activity to stay healthy.*

**Moderate-intensity aerobic activity**

Anything that gets your heart beating faster counts.

- At least 150 minutes a week

**Muscle-strengthening activity**

Do activities that make your muscles work harder than usual.

- At least 2 days a week

*If you prefer vigorous-intensity aerobic activity (like running), aim for at least 75 minutes a week.*

If that’s more than you can do right now, **do what you can.** Even 5 minutes of physical activity has real health benefits.

**Walk. Run. Dance. Play. What’s your move?**
Developing the Campaign

- Consumer Research
- Product Development
- Product Testing
- Evaluate
- Release and Promote Resources
- Prepare Final Resources
Partnerships

• Federal Steering Committee:
  • Administration for Children and Families (ACF)
  • Administration for Community Living (ACL)
  • Centers for Disease Control and Prevention (CDC)
  • Health Resources and Services Administration (HRSA)
  • National Institutes of Health
  • Office of the Assistant Secretary for Health (including OMH, OPA, OSG, OWH, RHO)

• External Partners:
  • Physical Activity Alliance (PAA)
  • National Association of City and Country Health Officials (NACCHO)

• Other Federal Partners and Collaborators:
  • Indian Health Service (IHS)
  • National Institutes of Health National Cancer Institute (NIH-NCI)
  • OASH Office on Women's Health (OWH)
  • United States Department of Agriculture (USDA)
Who is the Move Your Way® Campaign for?
Move Your Way® Audiences

- Materials for Adults
- Materials for Older Adults
- Materials for Parents and Kids
- Materials for During and After Pregnancy
- Materials for Professionals
Move Your Way® Posters and Fact Sheets
Move Your Way® Videos

Tip 4. Be a Role Model

Multitask.

But get active can help you get better – and help others get better!

Use these tips to help your kids get active indoors.

Regular physical activity:
- Boosts energy
- Helps you sleep better at night
Move Your Way® Social Media Graphics
Move Your Way® Consumer Microsite

Health.gov/MoveYourWay
Online Activity Planner

- Make a plan based on selected preferences
- Choose motivators for getting active
- Select activities that meet aerobic and/or muscle strengthening recommendations
- See progress toward meeting recommendations
Online Activity Planner (con’t)

• Make a plan based on selected preferences
• Choose motivators for getting active
• Select activities that meet aerobic and/or muscle strengthening recommendations
• See progress toward meeting recommendations
Online Activity Planner (more)

- Make a plan based on selected preferences
- Choose motivators for getting active
- Select activities that meet aerobic and/or muscle strengthening recommendations
- See progress toward meeting recommendations
Parent Interactive Tool

• Helps parents assess amount of physical activity their children are getting

• Offers opportunities for increased activity before, during, and after school

• Interactive tool shows progress towards guidelines (60 minutes)
Customize Move Your Way Resources

• Centers for Disease Control and Prevention (CDC) State and Community Health Media Center

• Customize the Move Your Way campaign resources to specific audiences
  • Add a logo
  • Replace an image with a photo from the Media Center’s image library
Campaign Implementation
Campaign Implementation in Communities

• Uses the Community-based Prevention Marketing Framework
  • Combines social marketing and community organizing
  • Uses a place-based approach

• ODPHP works with communities to drive behavior change

• Lead organizations work with partners to tailor outreach activities to local needs and resources
Move Your Way® Community Playbook

• Find tips and resources to help implement the campaign at the local level
• Use the sections of playbook that support your needs

Health.gov/MoveYourWay/Playbook
Elements of Campaign Implementation
Pilot Communities

2019
• Jackson, Mississippi
• Las Vegas, Nevada*

2020
• Cabarrus County, North Carolina
• Chicago, Illinois*
• Columbus, Ohio
• Fairfax County, Virginia
• Sioux City, Iowa*
• Southern West Virginia*
• Streator, Illinois
• Wyandotte County, Kansas

2021
• Little Rock, Arkansas
• 4 Returning Communities*
Community Pilot Implementation

• Distribution of printed materials in community centers, health care settings, recreation facilities, schools, and workplaces
• Geographically targeted ad buy
• 5-7 community events/activities
Community Pilots Spread the Word

• **143** community events and activities
• **283** partnerships
• **967,000** social media impressions
• **68,000** campaign materials distributed
Community Pilots Spread the Word (con’t)

- 4 million video views
- 104 million ad buy impressions
- 250 million impressions of #MoveYourWay
Outcome Evaluation

Respondents who reported being exposed to Move Your Way reported:

- **Awareness**: More aware of the *Physical Activity Guidelines for Americans*
- **Knowledge**: More likely to know correct dosage recommendations
- **Self-Efficacy**: More confident in ability to be active despite barriers
- **Behavioral Intent**: More likely to intend to be more active in near-future
Healthcare Providers Play an Important Role

- Research shows that consumers consider healthcare providers a trusted source for health information
- Move Your Way resources for healthcare providers include information about common barriers and conversation starters
Healthcare Providers Play an Important Role (con’t)

• Share Move Your Way resources
• Emphasize key message when engaging with patients
  • Lots of activities count
  • Short term benefits
  • Long term benefits
  • Anyone can be active
Partnering with Diabetes Prevention

“The Move Your Way campaign has been a helpful resource for the Southern Nevada Health District’s Clark County Diabetes Group. Many of our clinical and community partners are regularly looking for physical activity resources to share with their clients and class participants. The Move Your Way factsheets are an easy way for our group members to share with clients the message of being more physical activity and how that can support keeping blood glucose in a healthy range.”

– Representative of Southern Nevada Health District
Partnering with Diabetes Prevention (con’t)

“The Move Your Way partnership adds value to our messaging from a trusted source. These added materials help to keep our National Diabetes Prevention Program (NDPP) participants motivated and reminds them of the recommended physical activity guidelines for American’s. The Move You Way material offers easy to read messaging and images our diabetes prevention participants can relate to. The Move You Way material is an added resource for the NDPP coaches to utilize when helping participants stay motivated and accountable in the year long program.”

- Active Southern West Virginia
Learn More About the PAG and Move Your Way

• Read the Executive Summary or Full Second Edition: https://health.gov/our-work/nutrition-physical-activity/physical-activity-guidelines/current-guidelines

• Share the Move Your Way website with consumers: https://health.gov/moveyourway

• Find, download, and print campaign materials: https://health.gov/our-work/physical-activity/move-your-way-campaign/campaign-materials

• Watch Move Your Way videos: https://www.youtube.com/user/ODPHP/playlists

• Follow ODPHP on twitter (@Healthgov) and Facebook (@HHSHealthGov)

• Join the ODPHP Physical Activity Listserv on https://health.gov/our-work/physical-activity
Questions

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• Kate Olscamp, MPH, CHES, PMP
   Kate.Olscamp@hhs.gov
Related Publications

• **Journal of the American Medical Association (JAMA):** *The Physical Activity Guidelines for Americans*

• **JAMA Viewpoint:** *Physical Activity Guidelines for Health and Prosperity in the United States*

• **JAMA Research Letter:** *Joint Prevalence of Sitting Time and Leisure-Time Physical Activity Among US Adults, 2015–2016*

• **Circulation: Cardiovascular Quality and Outcomes:** *Physical Activity Guidelines for Americans from the U.S. Department of Health and Human Services: Cardiovascular Benefits and Recommendations*

• **Journal of Physical Activity and Health (JPAH):** *Umbrella and Systematic Review Methodology to Support the 2018 Physical Activity Guidelines Advisory Committee*

• **JPAH:** *The Scientific Foundation for the “Physical Activity Guidelines for Americans, 2nd Edition”*

• **JPAH:** *The Move Your Way Campaign: Encouraging Contemplators and Families to Meet the Recommendations From the Physical Activity Guidelines for Americans*

• **Medicine and Science in Sports and Exercise:** 14 ACSM Scientific Pronouncements led by the Physical Activity Guidelines Advisory Committee members (June 2019)