



Physical Activity for Health: The Physician's Role

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Objectives/Introductions

- Physical activity levels in the United States
- Risks of inactivity
- Physical activity guidelines and definitions
- How and why to increase physical activity and exercise
- Physician conversation during medical appointment
- Exercise Prescription
- Getting Started



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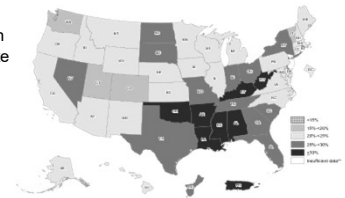
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Physical Inactivity

Overall physical inactivity outside of work: prevalence of 25.3%

The BRFSS question read:
"During the past month, other than your regular job, did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise?"



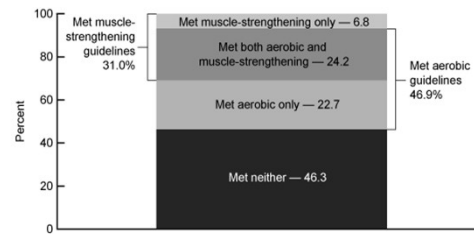
Prevalence of Self-Reported Physical Inactivity Among U.S. Adults by State and Territory, BRFSS, 2017–2020¹

How Much Physical Activity do I Need?



How is the US doing?

Percent distribution of adults aged 18 and over who met 2018 Physical Activity Guidelines for Americans for aerobic and muscle-strengthening activities: United States, 2020²



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Definitions

ACSM³

Physical Activity – “bodily movement produced by the contraction of skeletal muscles that results in a substantial increase in caloric requirements over resting energy expenditure”

Examples:

- Household chores:** Cleaning, gardening, or washing the car.
- Occupational tasks:** Carrying tools, stocking shelves, or manual labor.
- Leisure activities:** Casual biking, playing with children, or walking the dog.
- Active transportation:** Walking or cycling to commute.

Definitions

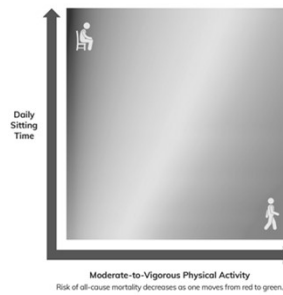
ACSM³

Exercise – “any PA consisting of planned, structured, and repetitive bodily movement of major muscle groups done to improve and/or maintain one or more components of physical fitness”

Examples:

- **Aerobic exercises:** Running, swimming, or cycling aimed at improving cardiovascular endurance.
- **Strength training:** Structured workouts using weights, resistance bands, or body-weight exercises to enhance muscle strength.
- **Flexibility exercises:** Yoga or structured stretching sessions designed to improve flexibility and range of motion.
- **Sports training:** Regular practice sessions for sports like basketball, tennis, or soccer to boost performance and fitness.

Why Exercise?



Exercise interventions have been associated with an:

- 80% reduction in cardiovascular disease (CVD) risk
- 90% reduction in type 2 diabetes risk
- 33% reduction in cancer risk
- 17% reduction in all-cause mortality
- Depression and anxiety symptoms also are improved with daily exercise⁵



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Why Else Do We Exercise?



- Improve bone density – fragility/fractures
- Age with independence and functionality
- Improve your mood, mindset, self confidence
- Creates grit, perseverance
- Develops self-discipline
- Increases self worth
- Increases self love
- Empowerment
- Inspires others to strive for healthier goals

Physician – Patient Conversation: Getting Started

Wellness Visit – 40 Minutes



1. Connection
to others*



2. Sleep



3. Diet



4. Exercise



5. Water

*In order of importance

Not Every Patient, Not Every Time

Do I have energy to give to this patient?

Are they open to hearing my message?

Motivating Patients

Character Traits to Draw Upon



Show interest-active listening



Enthusiasm



Perseverance



Optimism



Curiosity



Vulnerability

Give Hope

- Develop a goal (to be athletic).
- Develop a plan (EIM for example).
- Motivate (talk about the "WHY.")



Give Examples of My Patient Successes

- Grandparents lifting their 35lb grandchildren out of a pack-and-play
- Elderly patients being able to remain mobile and independent.
- Patients having the energy to walk the Metro parks, the zoo or Disney World with their families.
- Traveling abroad. Handling luggage.

Getting Started



American Heart Association recommends 150 min per week



Plan A, Plan B, and Plan ME.



5-10 min per day is a great beginning place.

Chris Jordan 7minute work out on YouTube
Any YouTube work out on your phone



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Exercise Prescription for adults

FITT Principle for Aerobic Activity

Frequency	3-5 days per week
Intensity	Moderate 40-59% Max Heart Rate or Vigorous 60-89% Max Heart Rate
Time	Moderate 30-60 minutes per day or Vigorous or combination 20-60 min per day
Type	Continuous or intermittent using large muscle groups (Walk, bike, swim, run)

Exercise Prescription for adults

RPE – Rate of Perceived Activity

Plan activities that allow for your RPE to be between a 4 and 6 during exercise.

Rating		How hard the exercise feels
10	Hardest:	Feels too hard to keep going any more. Out of breath and can't talk.
9	Very hard:	Hard to keep going for very long. Breathing very hard and can only speak a few words.
7 to 8	Hard:	A bit uncomfortable. Short of breath, but can still speak a sentence.
4 to 6	Moderate:	Breathing heavy, but can hold a conversation. Still comfortable, but becoming harder.
2 to 3	Light:	Feels like you can keep going for a long time. It's easy to breathe and talk.
1	Very light:	Hardly any effort, but more than sleeping or watching TV.

Exercise Prescription for adults

FITT Principle for Strength Training

Frequency	At least 2 days per week Targeting all major muscle groups
Intensity	8-12 reps per set
Time (Volume)	2-3 sets
Type	Body weight, Bands, Resistance machines, Free weights



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Pathways to Exercise

Pool – water classes or swimming

Outdoor Nature walks or neighborhood walks

YouTube –free videos

Recreation centers or structured classes

FitOn app-free

Exercise is Medicine Program

Increasing Physical Activity Programming Solution-Exercise is Medicine



- Exercise is Medicine (EIM), a global health initiative, encourages primary care physicians and other healthcare providers to:
 - Make physical activity assessment and promotion standard in clinical care
 - Minimum of 150 minutes of moderate intensity physical activity per week
 - Muscle strengthening activities involving all major muscle groups 2 or more days per week
 - Include physical activity when designing treatment plans
 - Refer patients to evidence-based exercise programs and qualified exercise professionals



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Support for Success

Create a Vision

- Help them to envision a more athletic version of themselves
 - Goal setting
- Help them find a path toward the goal: EIM, gym, app, video
- Encourage them by showing how it can feel to be empowered, confident, strong and worthy.
- Promote that self discipline will spread to other areas of their life (sleep, nutrition, and increased productivity).

Support for Success


Define Your "Exercise Style"

What are your personal preferences with exercise?

- Group fitness or individual workouts?
- Indoors or outdoors?
- Are you competitive?
- What are your limitations and body capabilities?



Work with an exercise professional to help get you started if you are unsure.





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Challenge

Connect

Inspire

Empower



Citations

1 Centers for Disease Control and Prevention (CDC). *Behavioral Risk Factor Surveillance System Survey Data*. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2017-2020.

2 Elgaddal, Nazik;Kramarow, Ellen A.;Reuben, Cynthia; *Physical activity among adults aged 18 and over : United States, 2020*. NCHS Data Briefs 08/30/2022 <https://stacks.cdc.gov/view/cdc/120213>

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4 Ekelund U, Steene-Johannessen J, Brown W.J, Fagerland MW, Owen N, Powell KE, Bauman A, Lee IM; Lancet Physical Activity Series 2 Executive Committee; Lancet Sedentary Behaviour Working Group. Does physical activity attenuate, or even eliminate, the detrimental association of sitting time with mortality? A harmonised meta-analysis of data from more than 1 million men and women. *Lancet*. 2016 Sep 24;388(10051):1302-10. doi: 10.1016/S0140-6736(16)30370-1. Epub 2016 Jul 28. Erratum in: *Lancet*. 2016 Sep 24;388(10051):e6. doi: 10.1016/S0140-6736(16)31677-4. PMID: 27475271.

5 Wesley J. Tucker, Isabel Fegers-Wustrow, Martin Halle, Mark J. Haykowsky, Eugene H. Chung, Jason C. Kovacic, Exercise for Primary and Secondary Prevention of Cardiovascular Disease: JACC Focus Seminar 1/4, *Journal of the American College of Cardiology*, Volume 80, Issue 11, 2022