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Incorporating Physical Activity into your Daily Life

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Incorporating physical activity in your daily life

DFEND 2.0

August 7, 2020

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Learning Objectives

1. Identify the 5 health-related components of fitness
2. Understand and Identify examples of how to meet the US Physical Activity Guidelines
3. Understand how to incorporate healthy physical activity into everyday life
4. Compare wearables to track your physical activity
5. Identify opportunities for safe physical activity during the COVID-19 pandemic

Source for information

- WHO - #healthyathome
 - <https://www.who.int/campaigns/connecting-the-world-to-combat-coronavirus/healthyathome>
- American College of Sports Medicine – staying healthy at home
 - <https://www.acsm.org/read-research/newsroom/news-releases/news-detail/2020/03/16/staying-physically-active-during-covid-19-pandemic>
- Aspen Institute – Project Play
 - <https://www.aspenprojectplay.org/coronavirus-and-youth-sports>
- CDC – Youth Sports Game plan
 - <https://www.cdc.gov/coronavirus/2019-ncov/community/schools-childcare/youth-sports.html>

Definitions

Physical activity – any bodily movement produced by contraction of muscles that results in a substantial increase in caloric requirements

Exercise – PA that is planned, structured, and repetitive for the purpose of conditioning any part of the body

Fitness – the ability to carry out daily tasks with vigor and alertness, without undue fatigue and with ample energy to enjoy leisure-time pursuits and to meet unforeseen emergencies

US National Physical Activity Guidelines for Adults (aged 18–64)

Easy to remember

- 2 hours and 30 minutes a week of moderate-intensity
 - or 1 hour and 15 minutes a week of vigorous
 - or an equivalent combination
- ~~Episodes of at least 10 minutes, preferably spread throughout the week~~
- Additional health benefits are provided by increasing to 5 hours (300 minutes) a week of moderate
 - or 2 hours and 30 minutes a week of vigorous
 - or an equivalent combination of both
- Muscle-strengthening activities on 2 or more days per week

150 moderate

Or half

75 vigorous

Double for additional benefits

300 moderate

Or half

150 vigorous

+ muscle strengthening x2



US National Physical Activity Guidelines for Children (aged 6–17)

- 60 minutes (1 hour) or more of moderate-to-vigorous physical activity daily
 - Most should be moderate- or vigorous intensity
 - Vigorous-intensity physical activity on at least 3 days a week
- Muscle-strengthening activities on at least 3 days a week
- Bone-strengthening activities on at least 3 days a week

- Preschool children (aged 3-5)
- Should be physically active throughout the day
- Encourage active play that includes a variety of activity types



What is moderate and vigorous physical activity?

- Talk test
 - Light – can talk & sing
 - Moderate – can talk but can't sing
 - Vigorous – can't talk or sing
- Moderate activities (3-<6 METs)
 - Brisk walking, golf, canoeing, water aerobics, ballroom dancing, vacuuming
- Vigorous Activities (≥ 6 METs)
 - Running, sports like basketball, chopping wood, carrying groceries up stairs
- More on this next week!



A MET is a metabolic equivalent of how much energy you're using

<https://sites.google.com/site/compendiumofphysicalactivities/Activity-Categories>

08 - Lawn & Garden

2011 Compendium categories in **blue** are activities with MET values supported in published literature. 2011 Compendium categories in **red** are estimated MET values.

*References can be downloaded from the references page.

1993 Compendium		2000 Compendium		2011 Compendium		Types of Lawn & Gardening
Codes	METs	Codes	METs	Codes	METs	Description
				08009	3.3	carrying, loading or stacking wood, loading/unloading or carrying lumber, light-to-moderate effort
08010	5.0	08010	5.0	08010	5.5	carrying, loading or stacking wood, loading/unloading or carrying lumber
				08019	4.5	chopping wood, splitting logs, moderate effort
08020	6.0	08020	6.0	08020	6.3	chopping wood, splitting logs, vigorous effort
				08025	3.5	clearing light brush, thinning garden, moderate effort
08030	5.0	08030	5.0	08030	6.3	clearing brush/land, undergrowth, or ground, hauling branches, wheelbarrow chores, vigorous effort
08040	5.0	08040	5.0	08040	5.0	digging sandbox, shoveling sand
				08045	3.5	digging, spading, filling garden, composting, light-to-moderate effort

New Activity Updates

This page will provide new activities, new description, and associated MET values since the 2011 Compendium of Physical Activities was published.

New Compendium codes will be added during a future update and are listed as To Be Determined (TBD).

Additions in an activity description are presented in *italics*.

Compendium		New Activity
Codes	METs	Description
TBD	6.5	Zumba - Cumbia, American Mix ¹
TBD	7.3	Zumba - Merengue, Salsa ¹
TBD	6.3	Activity promoting video game - Single player mode - Zumba Fitness Rush XBOX 360 ⁶
TBD	6.0	Activity promoting video game - Multiplayer mode - Zumba Fitness Rush XBOX 360 ⁶
11075	2.5	Childcare, daycare, general
11077	3.5	Childcare, daycare, playing with children, moderate effort, only active periods
20020	2.0	Standing, preaching/singing in church, attending a ceremony, standing, active participation
TBD	2.0	Sitting, singing
TBD	2.3	Standing, singing
TBD	9.8	Kettlebell workout, interval or continuous kettlebell swings ^{2,3}



Meet Guidelines

- 30 minutes basketball on Monday (vigorous)
- 30 minutes racquetball on Thursday (vigorous)
- 30 minute walk with kids on Sunday (moderate)



Meet Guidelines

- 20 minute walk Tuesday (moderate)
- 20 minutes walk Thursday (moderate)
- 60 minutes mowing lawn on Friday (moderate)
- 20 minutes vacuuming on Saturday (moderate)
- 30 minutes weeding on Sunday (moderate)

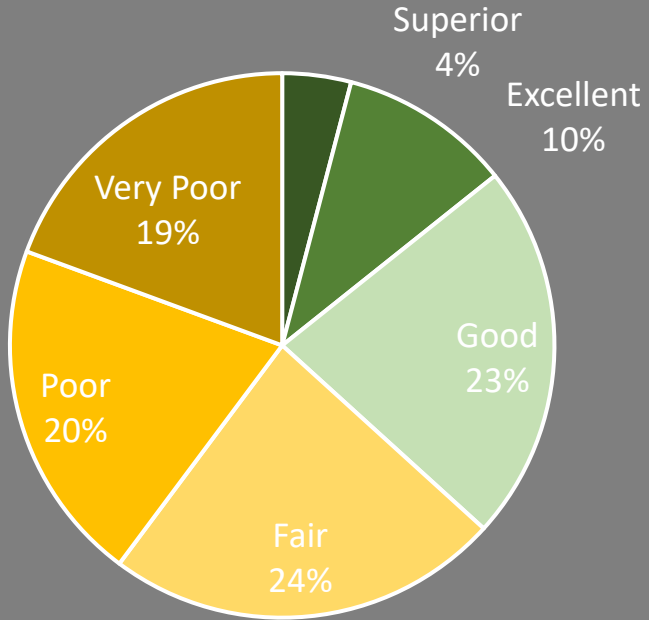
5 Health-related components of physical activity

1. Aerobic capacity
2. Muscular Strength
3. Muscular Endurance
4. Flexibility
5. Body composition

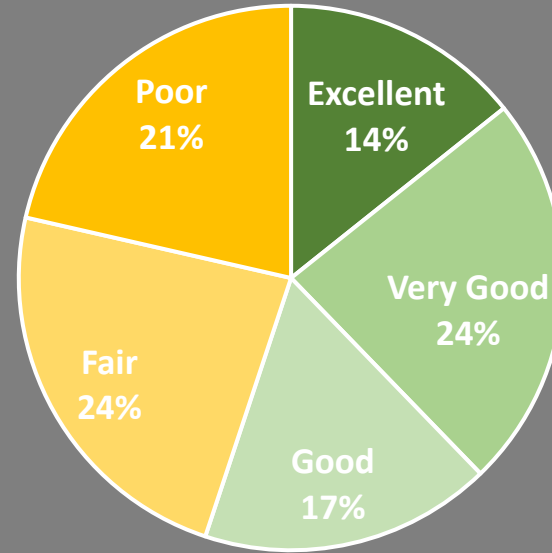


Fitness of University of Arkansas Students, Faculty and Staff

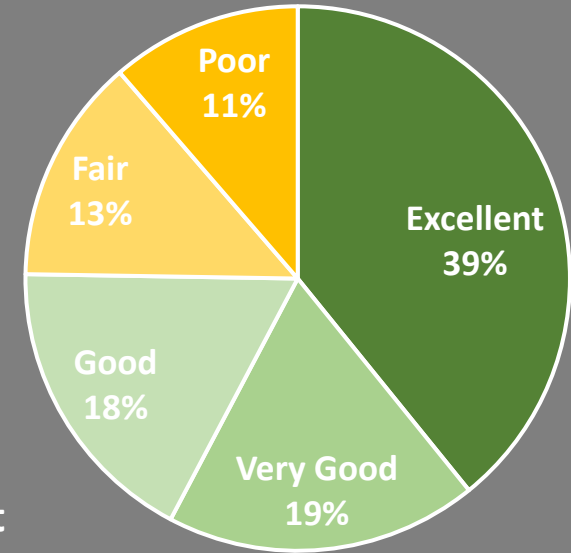
Aerobic Fitness



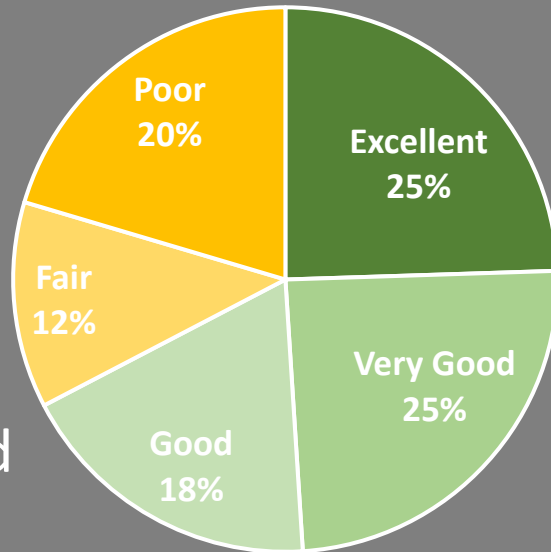
Muscular Strength



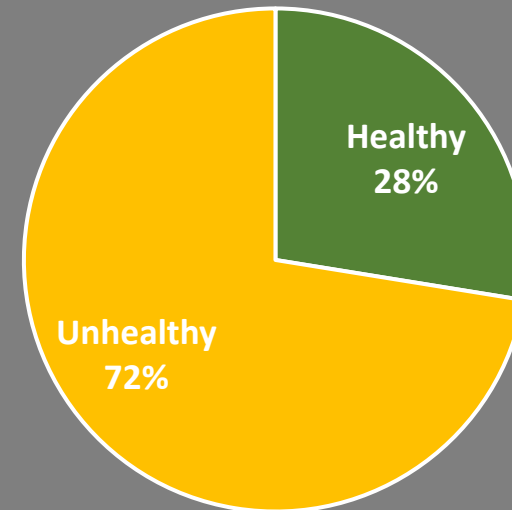
Muscular Endurance




Flexibility



Body Fat



In general...

 = Good

 = Not so good

Activity break



Aerobic fitness

- The ability of the circulatory and respiratory system to supply oxygen during sustained physical activity
- Ways to improve: Walking up hills and stairs, cycling on the greenway, taking a fitness class



Muscular Strength

- The ability of a muscle to exert force
- Ways to improve: Use a weight room, try a group personal training session, Kettlebell squats, Bicep curls with your heaviest cookbook



Muscular Endurance

- The ability of a muscle to continue to perform without fatigue
- Ways to improve: As many body squats as you can, Planks to the your favorite song



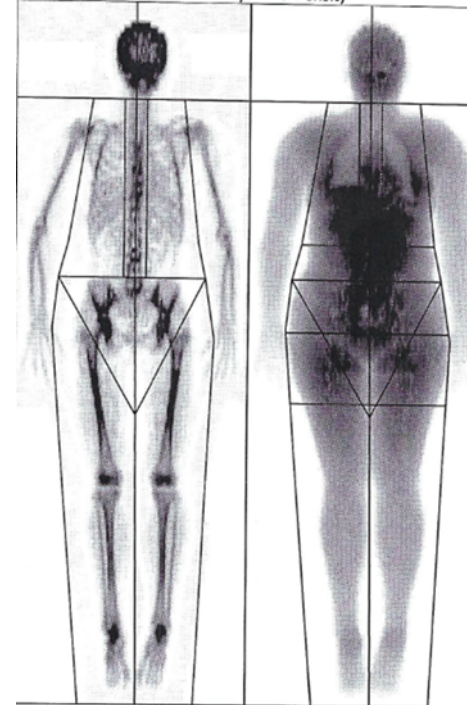
Flexibility

- The range of motion available at a joint
- Ways to improve: yoga videos, Hamstring stretches on a bench, Calf stretches going up the steepest hill you can find



Body composition

- The relative amounts of muscle, fat, bone and other vital parts of the body
- Ways to improve: Drink water, Check out some new fruits and veggies at the your local farmers market



#healthyathome

Tips to stay active at home during #COVID19 outbreak



Walk up and down the stairs



Do some stretching exercises



Dance to music for a few minutes



Seek more ideas & resources online



World Health Organization

#BeActive

#HealthyAtHome

<https://www.who.int/news-room/campaigns/connecting-the-world-to-combat-coronavirus/healthyathome/healthyathome---physical-activity>



AMERICAN COLLEGE of SPORTS MEDICINE® LEADING THE WAY

Staying Physically Active During the COVID-19 Pandemic

Mar 16, 2020

ACSM is dedicated to supporting and promoting health through physical activity. Amid concerns around the coronavirus disease 2019 (COVID-19) pandemic, individuals in communities across the country and around the world are being encouraged to stay home. Below you will find many resources to help you continue to stay physically active while at home.

Featured Resources

- [COVID-19, Exercise, Children and their Developing Immune System | Blog](#)
- [A Call to Action: Physical Activity and COVID-19 | Op-Ed](#)
 - Available in Spanish
- [Staying Active During COVID-19 | A blog from Liz Joy, M.D., MPH, FACSM, FAMSSM and Exercise is Medicine](#)
- [Staying Active During the Coronavirus Pandemic | Handout](#)
- [Keeping Children Active during the Coronavirus Pandemic | Handout](#)
- [The Physician's Perspective on COVID-19 | The Sports Medicine Checkup, a Podcast by ACSM](#)
- [Exercise, Immunity and the COVID-19 Pandemic | Blog](#)
- [Ten Sought-After Functions in Workout Apps | Infographic](#)
- [ACSM Summit Workouts | YouTube Playlist | Need a full at-home workout? Check out these workouts that were presented at previous ACSM Health & Fitness Summit events!](#)



<https://www.acsm.org/read-research/newsroom/news-releases/news-detail/2020/03/16/staying-physically-active-during-covid-19-pandemic>



Music & Dance for Healthcare Workers



Walkin' Tutorial

A quick clip from Dance and Bmore with Peabody Faculty Member, CJay Philip.



We Throw Shine!

We are throwing some shine your way today!



Quick Clip! Warm Up with the Forever Fit & Fun Club!



Quick Clip! Shoulder & Neck Stretches

<https://www.hopkinsmedicine.org/joy-at-jhm/office-of-well-being/covid/physical-activities.html>



Going to the gym safely

1. Screening
2. Staff should wear face covering, patrons when not exercising
3. Sanitation
4. 12 ft between people



Parks and exercising outdoors

- 3 main physical factors on virus persistence outdoors:
 - temperature
 - Humidity
 - sunlight
- 90% or more of SARS-CoV-2 virus will be inactivated after being exposed for 11-34 minutes of midday sunlight in most US and world cities during summer

Metropolitan area	Latitude	Solar virucidal UV flux ($J/m^2_{254}{}^2/min$) ^{5/} <i>Time for 90% Infectivity reduction (min)</i> ⁴			
		Summer Solstice	Equinox		Winter Solstice
			Spring	Fall	
Miami, FL	25.8 °N	0.51/14 + ⁵	0.34/20 +	0.41/17 +	0.13/53
Houston, TX	29.8 °N	0.44/16 +	0.25/28 +	0.33/21 +	0.08/86
Dallas, TX	32.8 °N	0.39/18 +	0.20/34	0.28/25 +	0.06/115
Phoenix, AZ	33.4 °N	0.39/18 +	0.19/36	0.26/27 +	0.05/138 ⁶
Atlanta, GA	33.7 °N	0.39/18 +	0.18/38	0.26/27 +	0.05/138
Los Angeles, CA	34.1 °N	0.38/18 +	0.18/38	0.26/27 +	0.05/138
San Francisco, CA	37.7 °N	0.34/20 +	0.13/53	0.20/34	0.03/230
Washington, D.C.	38.9 °N	0.33/21 +	0.12/57	0.19/36	0.02/>300
Philadelphia, PA	39.9 °N	0.32/22 +	0.11/63	0.18/38	0.02/>300

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7300806/pdf/PHP-9999-na.pdf>



What is open:

- Day use areas, such trails used for hiking, mountain biking, and wildlife watching, and trails listed below.
- Camping
- Backcountry camping sites at Hobbs State Park-Conservation Area, Mount Nebo State Park, and White Oak Lake State Park are open. Contact parks for information.

<https://www.arkansasstateparks.com/covid-19-update>

Sports



RETURN TO PLAY

COVID 19 RISK ASSESSMENT TOOL



+ PICKLEBALL



Lowest Risk

Train or engage in activities alone or with household members at home (shadow swing, dinking, footwork) with your own equipment.



Medium Risk

Play or train on public or shared court only with household members.



Highest Risk

Play or train on public or shared court with non-household members; no measures taken to minimize touching of shared objects.

Sources and resources: USA Pickleball Association

<https://www.aspenprojectplay.org/return-to-play>

YOUTH SPORTS GAME PLAN

Reduce the Spread of COVID-19

LOWER RISK

HIGHER RISK



Skill-building drills at home



Team practice



Within-team competition



Competition with teams from your area



Full competition from different areas



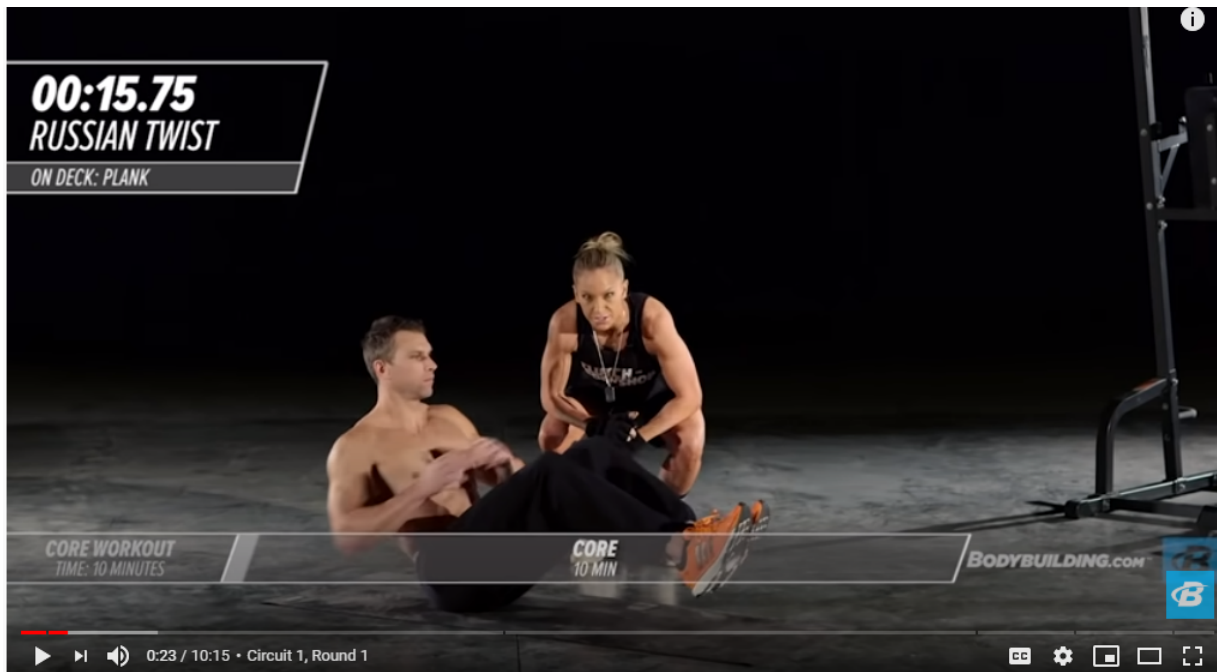
[cdc.gov/coronavirus](https://www.cdc.gov/coronavirus)

CS 317099-E 05/28/2020

<https://www.cdc.gov/coronavirus/2019-ncov/community/schools-childcare/youth-sports.html>

Online videos

1. Who is sponsoring the video? Is it from a trusted source?
2. What claims does the video make? Are they realistic?
3. Who is the target audience? Are they people like you?



Fitness monitors



Is it accurate?

What type of activity do I do?

Will I wear it?



What functions do I need?

If I need an app, is it useful?

Tips for staying active

Set goals

Get instruction

Find a role model

Monitor your activity

Create activity prompts (sticky note on the fridge)

Write a contract

Find a physical activity buddy

Build it into your schedule

Give yourself a reward (not food)

Get feedback

Practice, practice, practice

https://ore.exeter.ac.uk/repository/bitstream/handle/10871/13753/Abraham%20%20Michie%20_2008_%20Behaviour%20Change%20Techniques%20Taxonomy%20Health%20Psychology.pdf;sequence=2

It takes a village

Are there laws that encourage activity?



How can my workplace promote activity?

What community events or resources are there to be active?

Are my friends, family, coworkers active?

What activities do I like? What barriers do I have?

Exercise is Medicine[®] On Campus

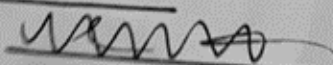
University of Arkansas

Name: EVERYONE
Address: WorldWide Date: always

Rx Exercise

Dosage: 30 min. a day

Side effects: increased energy, improved brain health, weight loss, strengthens lungs, and heart, reduces blood sugar levels, regulates blood pressure, improves mood, reduce risks of cancers and heart disease

MD, Dr. Feel Good
SIGNATURE 

Questions?

ekhowie@uark.edu