



Physical Activity

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What is the Evidence for Physical Activity and Health Promotion?

Naczenski, et al., 2017. -

- Physical activity **decreases** burnout in health professionals.
- Consistent evidence was found to support that physical activity is an **effective** way to reduce burnout; however, there is a lack of high quality longitudinal and intervention studies indicating more research is needed.

Bretland & Thorsteinsson, 2015. -

- Physical activity **promotes** well-being; physical activity **decreases** stress and burnout in health professionals.
- Cardiovascular exercise and resistance training **impact positive** well-being and decreased perceived stress levels when compared to control group.
- Cardiovascular exercise **reduced** psychological distress and emotional exhaustion when compared to the control group.
- Resistance training **improved** personal accomplishment when compared to the control group.
- Exercise **increases** well-being while decreasing stress and emotional exhaustion.

U.S. Department of Health and Human Services, 2018. -

- Physical activity **promotes** sleep, physical functioning and well-being; physical activity **decreases** anxiety in health professionals.
- **Improved** physical function and perceived quality of life.
- Moderate-to-vigorous physical activity **improves** the quality of sleep in adults.
- May **improve** cognitive function including memory, attention, and executive function (the ability to plan and organize; monitor, inhibit, or facilitate behaviors; initiate tasks; and control emotions).

Gerber, et al., 2014. -

- A combination of vigorous and moderate physical activity promotes mental health and decreases stress and depressive symptoms.
- Vigorous-intensity physical activity, in addition to moderate-intensity physical activity, is associated with improved mental health, less perceived stress and fewer depressive symptoms.



What are the Mechanisms for the Health Effects Physical Activity?

- Improves Immunity.
- Promotes Physiological Processes that Reduce Stress.
- Improves Psychological Well-being.
- Counteract negative and depressive symptoms.
- Protect against stress-related mental disorders.
- Reduce anxiety and improve mental energy and concentration.
- Increases well-being.

Finding your Target Heart Rate:

First practice finding your resting heart rate before attempting to determine your heart rate for different intensity zones (light, moderate and vigorous).

- Using the equation below, perform an activity you believe will place you into a specific zone (i.e. march in place or stairs).
- Immediately following the activity take your heart rate and plug it into the equation or in the calculator at the QR code in the circle.



Target Zone Heart Rate = 220 - Your Age x (Target Intensity Zone)

Heart Rate Zones

MET (Metabolic equivalent of task) - the ratio of the rate of energy expended during an activity to rate of energy expended at rest

Light - 57-63%

Light-intensity activities are defined as waking non-sedentary behaviors of less than 3.0 METs. Walking at 2.0 miles per hour requires 2.5 METs of energy expenditure and is therefore considered a light-intensity activity.

Moderate - 64-76%

Moderate-intensity activities are defined as 3.0 to 5.9 METs. Walking at 3.0 miles per hour requires 3.5 METs of energy expenditure and is therefore considered a moderate-intensity activity.

Vigorous - 77-95%

Vigorous-intensity activities are defined as 6.0 METs or more. Running a mile in 10 minutes (6.0 mph) is a 10 MET activity and is therefore classified as a vigorous-intensity activity.





RENEWU BODY: PHYSICAL ACTIVITY

Some example activities are listed below -

Light-intensity, aerobic workout

- Casual walking
- Household chores (such as dishes)
- Cooking



Moderate-intensity, aerobic workout

- Raking the yard
- Tennis
- Speed walking

Vigorous-intensity, anaerobic workout

- Burpees
- Shoveling snow
- Running

Additional examples can be found at the QR code.

Recommended guidelines: The American College of Sports Medicine recommends at least 150-minutes of Moderate-intensity activity or 75-minutes of Vigorous-intensity activity.

Your Heart Rate Zones Appropriate Activities

Light - _____ - _____ BPM Light-intensity activities:

Moderate - _____ - _____ BPM Moderate-intensity activities:

Vigorous - _____ - _____ BPM Vigorous-intensity activities:

Reflection Questions:

If you are currently meeting the physical activity guidelines, what can you do to continue this practice even during busy seasons of life?

If you are not meeting the physical activity guidelines, where is there an opportunity in your work week to implement physical activity? (I.e. Take the stairs instead of the elevator or take a 15-minute walk during lunch break).

Consider your work environment, how or where can physical activity be incorporated into your regular work rhythms?



References

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