

Bull FC, Al-Ansari SS, Biddle S, Borodulin K et al.

**World Health Organization 2020 guidelines on physical activity and sedentary behaviour.**

Br J Sports Med. 2020 Dec;54(24):1451-1462. doi: 10.1136/bjsports-2020-102955.

**Background-** Most recent global estimates show that one in four (27.5%) adults and more than three-quarters (81%) of adolescents do not meet the recommendations for aerobic exercise and there is an urgent need to increase priority and investment directed towards services to promote physical activity both within health and other key sectors.

**Methods-** A search for systematic reviews and pooled analyses of cohort studies was conducted for the period from 2017 up to September 2019. Searched database were PubMed, CINAHL, MEDLINE EMBASE, PsychInfo, SportDiscus and Cochrane to identify reviews that were peer-reviewed, written in English with no restriction on country or country income group and inclusive of review including studies using subjective or objectively measured physical activity or sedentary behavior.

# ACADEMIC P.E.A.R.L.S

Pediatric Evidence And Research Learning Snippet



## World Health Organization 2020 Guidelines on Physical Activity & Sedentary Behaviour

**Recommendations for Children and adolescents(aged 5-17 years)**

- Children and adolescents should do at least an average of 60 min/day of moderate-to-vigorous intensity, mostly aerobic, physical activity, across the week.
- Vigorous-intensity aerobic activities, as well as those that strengthen muscle and bone should be incorporated at least 3 days a week.
- Children and adolescents should limit the amount of time spent being sedentary, particularly the amount of recreational screen time.

**Definitions:**

**Recreational screen time :** Time spent watching screens (television (TV), computer, mobile devices) for purposes other than those related to school or work.

**Sedentary screen time:** Time spent watching screen-based entertainment while sedentary, either sitting, reclining or lying. Does not include active screen-based games where physical activity or movement is required.

**Metabolic equivalent of task (MET):** The metabolic equivalent of task, or simply metabolic equivalent, is a physiological measure expressing the intensity of physical activities. One MET is the energy equivalent expended by an individual while seated at rest, usually expressed as mL O<sub>2</sub> /kg/min.

**Vigorous-intensity physical activity (VPA):** On an absolute scale, vigorous intensity refers to physical activity that is performed at 6.0 or more METs. On a scale relative to an individual's personal capacity, VPA is usually a 7 or 8 on a rating scale of perceived exertion scale of 0-10.

**Bone-strengthening activity** Physical activity primarily designed to increase the strength of specific sites in bones that make up the skeletal system. Bone-strengthening activities produce an impact or tension force on the bones that promotes bone growth and strength. Examples include any type of jumps, running and lifting weights.

**"Some physical activity is better than none:** If not currently meeting these recommendations, doing some physical activity will bring benefits to health. Start with small amounts of physical activity and gradually increase frequency, intensity and duration over time. It is important to provide all children and adolescents with safe and equitable opportunities and encouragement to participate in physical activities that are appropriate for their age and ability, that are enjoyable, and that offer variety.

**Conclusion:** These 2020 WHO guidelines update previous WHO recommendations released in 2010. They reaffirm messages that some physical activity is better than none, that more physical activity is better for optimal health outcomes and provide a new recommendation on reducing sedentary behaviors.

## EXPERT COMMENT



“ New 2020 WHO Guidelines on Physical Activity and Sedentary Behavior provide evidence-based public health recommendations concerning the amount and types of physical activity, across all ages above 5 years & special population like pregnant & post partum women to people living with disability . For all populations, the benefits of doing physical activity and limiting sedentary behavior outweighed the potential harms. Risks can be managed by gradual increase in the amount and intensity of physical activity.”

Dr Krutika Rahul Tandon MD (Ped),  
Fellowship in PICU, DAA  
Prof & Head, Department Pediatrics, PSMC, Karamsad(GUJ)

**DR MANINDER S DHALIWAL**

Editor – Academic Pearls  
pedpearls@gmail.com

**DR BAKUL JAYANT PAREKH**

President, IAP2020

**DR PIYUSH GUPTA**

President, IAP 2021

**DR G.V. BASAVARAJ**

Hon. Secretary Gen. 2020-21

**Reference**

Bull FC, Al-Ansari SS, Biddle S, Borodulin K et al. World Health Organization 2020 guidelines on physical activity and sedentary behaviour. Br J Sports Med. 2020 Dec;54(24):1451-1462. doi: 10.1136/bjsports-2020-102955.