

References for Physical Benefits of Living Schoolyards

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1. childrenandnature.org
2. <https://www.cdc.gov/obesity/data/childhood.html>
3. Cunningham S. et al. Incidence of Childhood obesity in the United States. *NEJM* 2014 Jan 30;370(5):403-411
4. Ogden CL, Carroll MD, Kit BK, Flegal KM. Prevalence of Obesity and Trends in Body Mass Index Among US Children and Adolescents, 1999-2010. *JAMA*. 2012;307(5):483–490
5. Rigolon, A. 2016. A complex landscape of inequity in access to urban parks: A literature review. *Landsc Urban Plan* 153: 160–169
6. Wen, M, Zhang, X, Harris, CD, Holt, JB and Croft, JB. 2013. Spatial Disparities in the Distribution of Parks and Green Spaces in the USA. *Ann Behav Med Publ Soc Behav Med* 45(Suppl 1): 18–27
7. Stevenson, KT, et al. 2020. A national research agenda supporting green schoolyard development and equitable access to nature. *Elem Sci Anth*, 8: 10
8. Van Den Eeden SK, et al. Association between residential green cover and direct healthcare costs in Northern California: An individual level analysis of 5 million persons. *Environ Int*. 2022 May;163:107174
9. Wolch J et al. Urban green space, public health, and environmental justice: The challenge of making cities ‘just green enough’. *Landscape and Urban Planning* 125 (2014):234-244
10. <https://www.bloomberg.com/news/articles/2019-03-19/access-to-green-space-varies-by-class-race-in-the-u-s>
11. Ansari A. et al. combating obesity in head start: Outdoor play and child in Children’s BMI. *J Dev Behav Pediatr*. 2015 Oct;36 (8):605-612
12. The Institute for European Environmental Policy; <https://www.theguardian.com/society/2017/mar/21/access-nature-reduces-depression-obesity-european-report> and en Brink, P. et al. The Health and Social Benefits of Nature and Biodiversity Protection. Institute for European Environmental Policy. April 28 2016
13. Dymont JE, Bell AC. Grounds for movement: green school grounds as sites for promoting physical activity. *Health Educ Res*. 2008 Dec;23(6):952-62
14. Lanza K, Alcazar M, Durand CP, Salvo D, Villa U, Kohl HW. Heat-Resilient Schoolyards: Relations Between Temperature, Shade, and Physical Activity of Children During Recess. *J Phys Act Health*. 2022 Dec 23;20(2):134-141
15. Bikomeye JC, Balza J, Beyer KM. The Impact of Schoolyard Greening on Children's Physical Activity and Socioemotional Health: A Systematic Review of Experimental Studies. *Int J Environ Res Public Health*. 2021 Jan 11;18(2):535
16. Donovan et al. Vegetation Diversity protects against childhood asthma: Results from a large New Zealand Birth Cohort. *Nature Plants*. 2018 4:358-364
17. Roslund M. et al. Biodiversity intervention enhances immune regulation and health-associated commensal microbiota among daycare children. *Science Advances*. 14 Oct 2020. vol 6, issue 42

18. Li Q. Effects of forest environment (Shinrin-yoku/Forest bathing) on health promotion and disease prevention -the Establishment of "Forest Medicine". *Environ Health Prev Med.* 2022;27:43
19. Rose KA, Morgan IG, Ip J, Kifley A, Huynh S, Smith W, Mitchell P. Outdoor activity reduces the prevalence of myopia in children. *Ophthalmology.* 2008 Aug;115(8):1279-85.10.
20. Dirani M, Tong L, Gazzard G, Zhang X, Chia A, Young TL, Rose KA, Mitchell P, Saw SM. Outdoor activity and myopia in Singapore teenage children. *Br J Ophthalmol.* 2009 Aug;93(8):997-1000
21. <https://actigraphcorp.com/research-database/can-promotion-of-outdoor-activities-impact-peoples-vitamin-d-levels/>
22. Duncan, M. J., Clarke, N. D., Birch, S. L., Tallis, J., Hankey, J., Bryant, E., Eyre, E. L., (2014). The effect of green exercise on blood pressure, heart rate and mood state in primary school children. *International Journal of Environmental Research and Public Health,* 11(4), 3678-3688
23. Dadvand P, et al. The Association between Lifelong Greenspace Exposure and 3-Dimensional Brain Magnetic Resonance Imaging in Barcelona Schoolchildren. *Environ Health Perspect.* 2018 Feb 23;126(2):027012
24. Dadvand P, et al. Green spaces and cognitive development in primary schoolchildren. *Proc Natl Acad Sci U S A.* 2015 Jun 30;112(26):7937-42
25. Faber Taylor, A., Kuo, F. E., (2009). Children with attention deficits concentrate better after walk in the park. *Journal of Attention Disorders,* 12(5), 402-409
26. Jia P, Shi Y, Jiang Q, Dai S, Yu B, Yang S, Qiu G, Yang S. Environmental determinants of childhood obesity: a meta-analysis. *Lancet Glob Health.* 2023 Mar;11 Suppl 1:S7