
8 ways
that
parks
IMPROVE
your
health

1.

Research has shown that physical activity is one of the most important contributors to fitness and health.[1,2] But 95 percent of U.S. adults, 92 percent of adolescents, and 58 percent of children aren't getting the recommended amount of daily physical activity.[3] Parks can help. The more parks there are in a community, the more people exercise.[4-6] People who live closer to parks exercise more.[7] And people who regularly use parks get more exercise than people who don't.[7-9] The takeaway? Building new parks—and improving existing parks—is a great way to keep people active.

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2. While any physical activity is better than none, nothing builds fitness as well as exercise that raises a sweat and gets our hearts pumping. Parks are where much of that type of exercise occurs. According to one study, approximately 12 percent of moderate exercise takes place in neighborhood parks. But for vigorous exercise, the proportion soars to 50 percent.[10]

3.

Most people know from experience that exercise can leave us with a sense of calm and well-being.[11] But more surprising is that people who live closer to parks report better mental health—even if they don't actually exercise there.[12-15] This may be particularly true for parks with a lot of trees, grass, and other natural features, as studies show that exposure to nature can reduce stress and promote relaxation.[12,16,17] Time spent in green outdoor spaces has also been shown to boost focus and concentration in both adults and children.[16] Kids with attention deficit hyperactivity disorder (ADHD) experience milder symptoms when they play outside in a natural setting.[18,19]

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4. Sprucing up a park has been shown to increase the number of people who visit and exercise there, sometimes dramatically. The more aesthetically pleasing a park, the more likely people are to exercise there and in surrounding neighborhoods.[20-22] Larger parks with more facilities are more likely to be used.[23,24] Simply improving park signage has been shown to increase park use, and more substantial renovations can go even further. [25,26] Of two recently renovated San Francisco parks, one experienced a more than fivefold increase in park use; in the other park, use nearly doubled.[27]

5.

It's no surprise that park features like basketball courts and playing fields encourage physical activity.[28,29] But recent research has shown that the same is true of the humble walking path, which provides a place to exercise for people of all ages.[30,31] And while you'd expect a skate park to attract skaters, it turns out that adding one can increase park use overall—even among those who'd never step foot on a board.[32]

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6. Trust for Public Land Fitness Zones® are special areas of public parks set aside for free outdoor exercise equipment. One study indicated that Fitness Zones attract new users to parks, encourage former park users to return to parks, and increase the amount of physical activity that occurs in parks—even among visitors who are not themselves using the equipment.[33] Fitness Zones have proven particularly popular with women, who typically use parks less often than men.[33] And when Fitness Zones are installed near playgrounds, they allow adults to model healthy behavior for their children, encouraging kids to develop good habits that can last a lifetime.

7. Team sports, clubs, classes, exercise groups—parks that offer these are much more likely to be used than those that don't.[8,30] Classes at skate parks have been shown to increase their popularity—especially among girls, who might not otherwise use them.[32] Without programming and distinctive features to attract visitors, park use declines.[34] Lack of programming may be one reason parks in lower-income neighborhoods are less likely to be used than those in neighborhoods where incomes are higher.[23]

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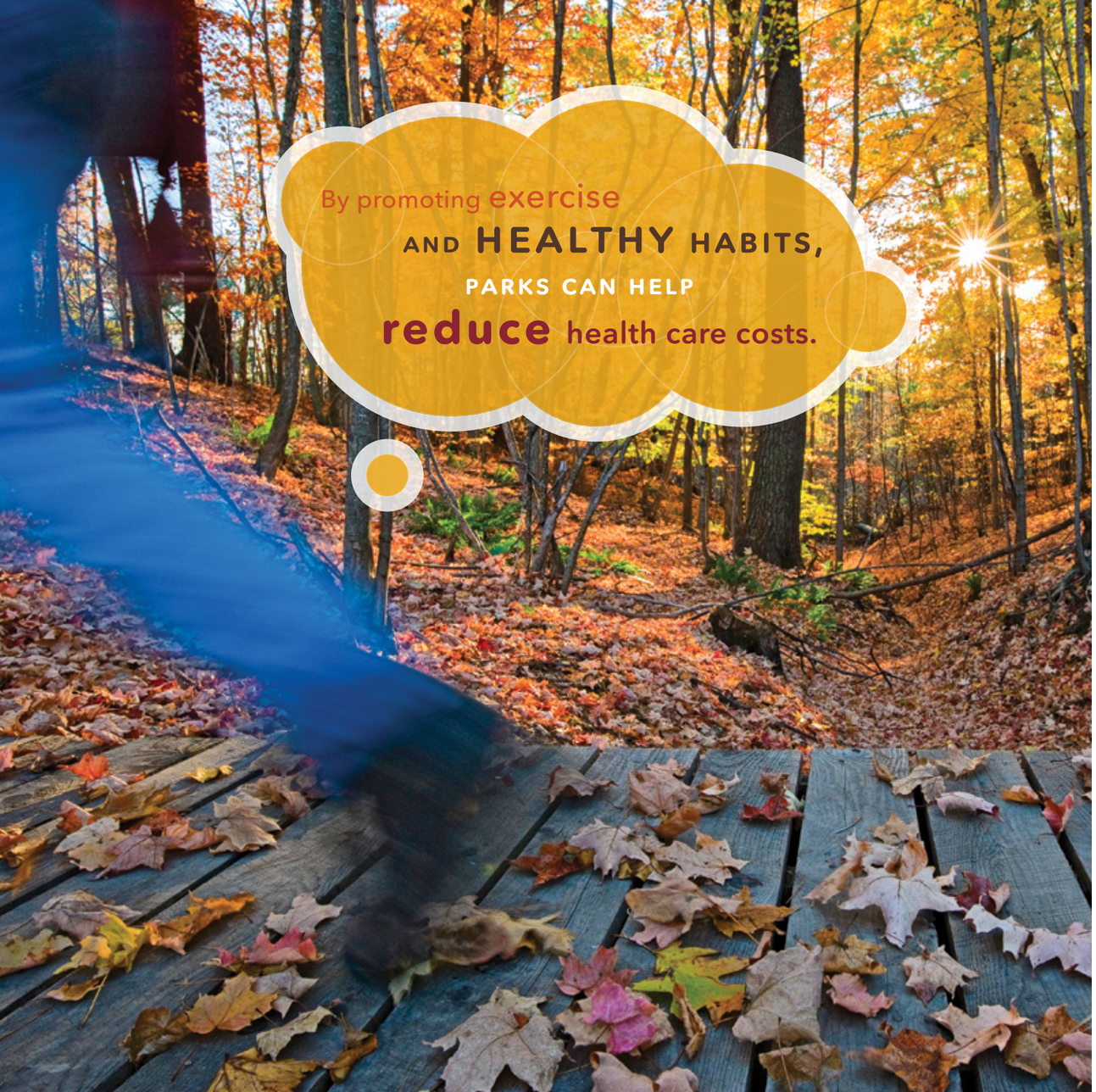

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8. Exercise is one of the cheapest ways to stay healthy. One recent study found that exercise can prevent chronic diseases as effectively as medication.[35] Another found that moderately active retirees had significantly lower health care costs than sedentary retirees.[36] Building new parks, upgrading old ones, and enriching all parks with programing and features that promote exercise is not only good medicine, it's also good for the bottom line.

1. WHO. *GLOBAL HEALTH RISKS: Mortality and burden of disease attributable to selected major risks.* Geneva: WHO; 2009.
2. Blair SN. Physical inactivity: the biggest public health problem of the 21st century. *British Journal of Sports Medicine.* 2009; 43(1):1-2.
3. Troiano RP, Berrigan D, Dodd KW, Mâsse LC, Tilert T, McDowell M. Physical activity in the United States measured by accelerometer. *Medicine and Science in Sports and Exercise.* Jan 2008; 40(1):181-188.
4. Laxer RE, Janssen I. The proportion of youths' physical inactivity attributable to neighbourhood built environment features. *International Journal of Health Geographics.* Jun 18 2013; 12(1):31.
5. McCormack GR, Rock M, Toohey AM, Hignell D. Characteristics of urban parks associated with park use and physical activity: a review of qualitative research. *Health Place.* Jul 2010; 16(4):712-726.
6. Cohen DA, Ashwood JS, Scott MM, et al. Public parks and physical activity among adolescent girls. *Pediatrics.* Nov 2006; 118(5):e1381-1389.
7. Cohen DA, McKenzie TL, Sehgal A, Williamson S, Golinelli D, Lurie N. Contribution of public parks to physical activity. *American Journal of Public Health.* Mar 2007; 97(3):509-514.
8. Cohen DA, Lapham S, Evenson KR, et al. Use of neighbourhood parks: does socio-economic status matter? A four-city study. *Public Health.* Apr 2013;127(4):325-332.
9. Evenson KR, Wen F, Hillier A, Cohen DA. Assessing the contribution of parks to physical activity using GPS and accelerometry. *Medicine and Science in Sports and Exercise.* Mar 22 2013.
10. Han B, Cohen D, McKenzie TL. Quantifying the contribution of neighborhood parks to physical activity. *Preventative Medicine.* Jul 1 2013.
11. Penedo FJ, Dahn JR. Exercise and well-being: a review of mental and physical health benefits associated with physical activity. *Current Opinion in Psychiatry.* Mar 2005; 18(2):189-193.
12. White MP, Alcock I, Wheeler BW, Depledge MH. Would you be happier living in a greener urban area? A fixed-effects analysis of panel data. *Psychological Science.* Jun 2013; 24(6):920-928.
13. Stigsdotter UK, Ekholm O, Schipperijn J, Toftager M, Kamper-Jorgensen F, Randrup TB. Health promoting outdoor environments--associations between green space, and health, health-related quality of life and stress based on a Danish national representative survey. *Scandanavian Journal of Public Health.* Jun 2010; 38(4):411-417.
14. Richardson EA, Pearce J, Mitchell R, Kingham S. Role of physical activity in the relationship between urban green space and health. *Public Health.* Apr 2013; 127(4):318-324.
15. Francis J, Wood LJ, Knuiman M, Giles-Corti B. Quality or quantity? Exploring the relationship between public open space attributes and mental health in Perth, Western Australia. *Social Science and Medicine.* May 2012; 74(10):1570-1577.
16. Bowler DE, Buyung-Ali LM, Knight TM, Pullin AS. A systematic review of evidence for the added benefits to health of exposure to natural environments. *BMC Public Health.* 2010; 10:456.
17. Bedimo-Rung AL, Mowen AJ, Cohen D. The significance of parks to physical activity and public health: a conceptual model. *American Journal of Preventative Medicine.* 2005; 28(2S2):159-168.
18. Taylor AF, Kuo FE. Children with attention deficits concentrate better after walk in the park. *Journal of Attention Disorders.* Mar 2009; 12(5):402-409.
19. Taylor AF, Kuo FE. Could exposure to everyday green spaces help treat ADHD? Evidence from children's play settings. *Applied Psychology: Health and Well-Being.* 2011; 3(3):281-303.
20. Leslie E, Cerin E, Kremer P. Perceived neighborhood environment and park use as mediators of the effect of area socio-economic status on walking behaviors. *Journal of Physical Activity and Health.* 2010; 7(6):802-810.
21. Tappe KA, Glanz K, Sallis JF, Zhou C, Saelens BE. Children's physical activity and parents' perception of the neighborhood environment: neighborhood impact on kids study. *The International Journal of Behavioral Nutrition and Physical Activity.* 2013; 10:39.
22. Kondo K, Lee JS, Kawakubo K, et al. Association between daily physical activity and neighborhood environments. *Environmental Health and Preventative Medicine.* May 2009; 14(3):196-206.
23. Cohen DA, Han B, Derose KP, et al. Neighborhood poverty, park use, and park-based physical activity in a Southern California city. *Social Science and Medicine (1982).* 2012; 75(12):2317-2325.
24. Kaczynski AT, Potwarka LR, Saelens BE. Association of park size, distance, and features with physical activity in neighborhood parks. *American Journal of Public Health.* Aug 2008; 98(8):1451-1456.
25. Cohen DA, Han B, Derose KP, Williamson S, Marsh T, McKenzie TL. Physical Activity in Parks: A Randomized Controlled Trial Using Community Engagement. *American Journal of Preventative Medicine.* 2013; in press.
26. Tester J, Baker R. Making the playfields even: Evaluating the impact of an environmental intervention on park use and physical activity. *Preventative Medicine.* Apr 2009; 48(4):316-320.
27. Cohen DA, Han B, JW I, et al. Impact of park renovations on park use and park-based physical activity. *Unpublished.* 2013.
28. Spengler JO, Floyd MF, Maddock JE, Gobster PH, Suau LJ, Norman GJ. Correlates of park-based physical activity among children in diverse communities: results from an observational study in two cities. *American Journal of Health Promotion.* May-Jun 2011; 25(5):e1-9.
29. Suau LJ, Floyd MF, Spengler JO, Maddock JE, Gobster PH. Energy expenditure associated with the use of neighborhood parks in two cities. *Journal of Public Health Management and Practice: JPHMP.* Sep-Oct 2012; 18(5):440-444.
30. Cohen DA, Marsh T, Williamson S, et al. Parks and physical activity: why are some parks used more than others? *Preventative Medicine.* 2010; 50 (Suppl 1:S9-12. Epub 2009 Oct 19. PMC2821457):S9-12.
31. Cohen D, Sehgal A, Williamson S, et al. Park use and physical activity in a sample of public parks in the City of Los Angeles. Santa Monica: RAND; 2006.
32. Cohen DA, Sehgal A, Williamson S, Marsh T, Golinelli D, McKenzie TL. New recreational facilities for the young and the old in Los Angeles: policy and programming implications. *Journal of Public Health Policy.* 2009; 30 Suppl 1:S248-263.
33. Cohen DA, Marsh T, Williamson S, Golinelli D, McKenzie TL. Impact and cost-effectiveness of family Fitness Zones: a natural experiment in urban public parks. *Health Place.* Jan 2012; 18(1):39-45.
34. Cohen DA, Golinelli D, Williamson S, Sehgal A, Marsh T, McKenzie TL. Effects of park improvements on park use and physical activity: policy and programming implications. *American Journal of Preventative Medicine.* Dec 2009; 37(6):475-480.
35. Naci H, Ioannidis JPA. Comparative effectiveness of exercise and drug interventions on mortality outcomes: metaepidemiological study. *BMJ 2013; 347:f5577 doi: 10.1136/bmj.f5577 (Published 1 October 2013).* 2013.
36. Wang F, McDonald T, Reffitt B, Edington DW. BMI, physical activity, and health care utilization/costs among Medicare retirees. *Obesity Research.* Aug 2005; 13(8):1450-1457.

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