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It's a Walk in the Park: The health benefits of exercising in nature and a beginner's guide to hiking in Connecticut

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IT'S A WALK IN THE PARK

The health benefits of exercising in nature and a
beginner's guide to hiking in Connecticut



Elena Dansky

July-August 2021

Mentor: Dr. Eurica Chang

PROBLEM IDENTIFICATION

Physical inactivity increases risk for chronic disease. There has been an increase in inactivity over the past 50 years. Physical inactivity contributes to 6-10% of the burden for certain chronic diseases. [6]

A 2008 study showed a steady decrease in nature recreation from 1987-2008. [7]

There is not data from the past decade. But, a decrease nature utilization would also mean less of the health benefits associated.

BENEFITS OF OUTDOOR EXERCISE

HIKING HAS BEEN SHOWN TO DECREASE:

- Blood Pressure
- Resting Heart Rate
- Cholesterol
- Body Fat
- Stress and Depression
- Risk of Heart Attacks
- Risk of Stroke
- Risk of Diabetes

HIKING HAS BEEN SHOWN TO INCREASE:

- Energy
- Immune Function
- Attention
- Fitness
- Life Satisfaction
- Quality of Life
- Social Connection
- Desire to Continue Exercising

PUBLIC HEALTH COST

One study estimated that physical inactivity worldwide costs healthcare systems \$53.8 billion in 2013, plus an additional \$13.7 billion productivity lost to death. [1]

Finding ways to encourage activity will decrease the cost burden.

Hiking is a low-cost intervention associated with many health benefits that will help reduce the cost burden of physical inactivity. [5]

COMMUNITY PERSPECTIVE

DR. EURICA CHANG
NEWTOWN PRIMARY CARE

"This would be a good way to get people who don't walk to give it a try."

ANONYMOUS HIKER
LAKE MOHEGAN TRAILS

"On the days that I hike I notice my mood is drastically improved."

INTERVENTION AND METHODS

We created a tri-fold pamphlet to be handed out at Newtown Primary Care Clinic or other offices in the area.

The pamphlet consists of information about:

- Health benefits to hiking and outdoor exercise
- Health risks to hiking and some tips to protect yourself
- Information about CT's Passport to the Parks program
- Online resources to find hikes or hiking groups
- Some local State Parks
- What to bring
- Information about Leave No Trace
- Pictures of local nature to inspire usage



RESULTS

Due to time constraints of the clerkship, the pamphlet was not distributed at this time. However, here are some effects we may expect.

Behavioral Changes

- Inspire people with low exercise compliance to attempt exercising outside.
- Motivate people who are not exercising to start
- Remind people who have enjoyed natural recreation in the past to restart.

Public Health

- Decrease the public health cost burden associated with physical inactivity and make people healthier overall

Environmental

- Increase State Park and natural resource utilization in the area.
- Outdoor recreation is associated with an increase desire to support nature conservation. [10] More nature utilization may help conservation efforts, potentially leading to better environmental health.

EVALUATION OF EFFECTIVENESS

Potential ways to evaluate efficacy may include surveys assessing intent and outdoor activity before and after given pamphlet or CT State Park utilization data

LIMITATIONS

The pamphlet may be self selecting to people who are already active or already interested in nature.

While education on health risks is important, it may be a barrier to people getting outside.

Certain parts of the pamphlet are not generalizable outside the state of CT.

FUTURE DIRECTIONS

This pamphlet could be used at Primary Care offices throughout the state

It could be easily adapted to other states with some small changes.

Further education could be made to target specific groups, such as pregnant women, people with disabilities, or people with cardiopulmonary conditions.

REFERENCES

1. Ding D, Lawson KD, Kolbe-Alexander TL, et al. The economic burden of physical inactivity: a global analysis of major non-communicable diseases. *Lancet*. 2016;388(10051):1311-1324. doi:10.1016/S0140-6736(16)30383-X
2. Eigenschenk B, Thomann A, McClure M, et al. Benefits of Outdoor Sports for Society. A Systematic Literature Review and Reflections on Evidence. *Int J Environ Res Public Health*. 2019;16(6):937. Published 2019 Mar 15. doi:10.3390/ijerph16060937
3. Hanson S, Jones A. Is there evidence that walking groups have health benefits? A systematic review and meta-analysis. *Br J Sports Med*. 2015;49(11):710-715. doi:10.1136/bjsports-2014-094157
4. Lipman GS, Sharp LJ, Christensen M, et al. Paper Tape Prevents Foot Blisters: A Randomized Prevention Trial Assessing Paper Tape in Endurance Distances II (Pre-TAPED II). *Clin J Sport Med*. 2016;26(5):362-368. doi:10.1097/JSM.0000000000000319
5. Mitten D, Overholt JR, Haynes FI, D'Amore CC, Ady JC. Hiking: A Low-Cost, Accessible Intervention to Promote Health Benefits. *Am J Lifestyle Med*. 2016;12(4):302-310. Published 2016 Jul 9. doi:10.1177/1559827616658229
6. Ozemek C, Lavie CJ, Rognmo Ø. Global physical activity levels - Need for intervention. *Prog Cardiovasc Dis*. 2019;62(2):102-107. doi:10.1016/j.pcad.2019.02.004
7. Pergams OR, Zaradic PA. Evidence for a fundamental and pervasive shift away from nature-based recreation. *Proc Natl Acad Sci U S A*. 2008;105(7):2295-2300. doi:10.1073/pnas.0709893105
8. Physical Activity and Exercise During Pregnancy and the Postpartum Period: ACOG Committee Opinion, Number 804. *Obstet Gynecol*. 2020;135(4):e178-e188. doi:10.1097/AOG.0000000000003772
9. Thompson Coon J, Boddy K, Stein K, Whear R, Barton J, Depledge MH. Does participating in physical activity in outdoor natural environments have a greater effect on physical and mental wellbeing than physical activity indoors? A systematic review. *Environ Sci Technol*. 2011;45(5):1761-1772. doi:10.1021/es102947t
10. Zaradic PA, Pergams OR, Kareiva P. The impact of nature experience on willingness to support conservation. *PLoS One*. 2009;4(10):e7367. Published 2009 Oct 7. doi:10.1371/journal.pone.0007367
11. "Lover's Leap State Park - Connecticut" by Dougtone is licensed under CC BY-SA 2.0

INTERVIEW CONSENT

Thank you for agreeing to be interviewed. This project is a requirement for the Family Medicine clerkship. It will be stored on the Dana Library ScholarWorks website. Your name will be attached to your interview and you may be cited directly or indirectly in subsequent unpublished or published work. The interviewer affirms that he/she has explained the nature and purpose of this project. The interviewee affirms that he/she has consented to this interview.

Consented:

Name: Dr. Sarah Schlein

Name: Dr. Eurica Chang

Name: Hikkers, anonymous (2)

HEALTH RISKS

While there are many health benefits, any type of exercise can pose risks. Here's how you can protect yourself.

Ticks

- Tick checks for you and any kids or pets that join you. Remove any you find immediately.

Bee Stings

- If you are allergic, make sure to bring your epi-pen with you.

Cold

- Keep your hands and toes warm.
- Use a warm hat to keep your whole body warm

Poison Ivy

- Learn to recognize it
- If exposed, wash it out with coconut oil or Tecnu within a few hours

Sun/Heat

- Use sunscreen
- Drink water when you're thirsty

Blisters/Chaffing

- If you feel a blister coming on, you can use paper tape to prevent it
- Synthetic or wool fabric is less likely to chafe than cotton

If you have any safety concerns about underlying health conditions, ask your doctor.

LEAVE NO TRACE

Leave No Trace is a common practice among those going outdoors. If you decide to go into nature, it's important to be respectful of the environment and others around you. Please don't leave trash or take things from their natural habitat.

To find out more about the 7 principles of Leave No Trace, go to www.lnr.org or use the QR code.



References

Eigenschenk B, Thomann A, McClure M, et al. Benefits of Outdoor Sports for Society. A Systematic Literature Review and Reflections on Evidence. *Int J Environ Res Public Health*. 2019;16(6):937. Published 2019 Mar 15. doi:10.3390/ijerph16060937

Hanson S, Jones A. Is there evidence that walking groups have health benefits? A systematic review and meta-analysis. *Br J Sports Med*. 2015;49(11):710-715. doi:10.1136/bjsports-2014-094157

Lipman GS, Sharp LJ, Christensen M, et al. Paper Tape Prevents Foot Blisters: A Randomized Prevention Trial Assessing Paper Tape in Endurance Distances II (Pre-TAPED II). *Clin J Sport Med*. 2016;26(5):362-368. doi:10.1097/JSM.0000000000000319

Mitten D, Overholt JR, Haynes FI, D'Amore CC, Ady JC. Hiking: A Low-Cost, Accessible Intervention to Promote Health Benefits. *Am J Lifestyle Med*. 2016;12(4):302-310. Published 2016 Jul 9. doi:10.1177/1559827616658229

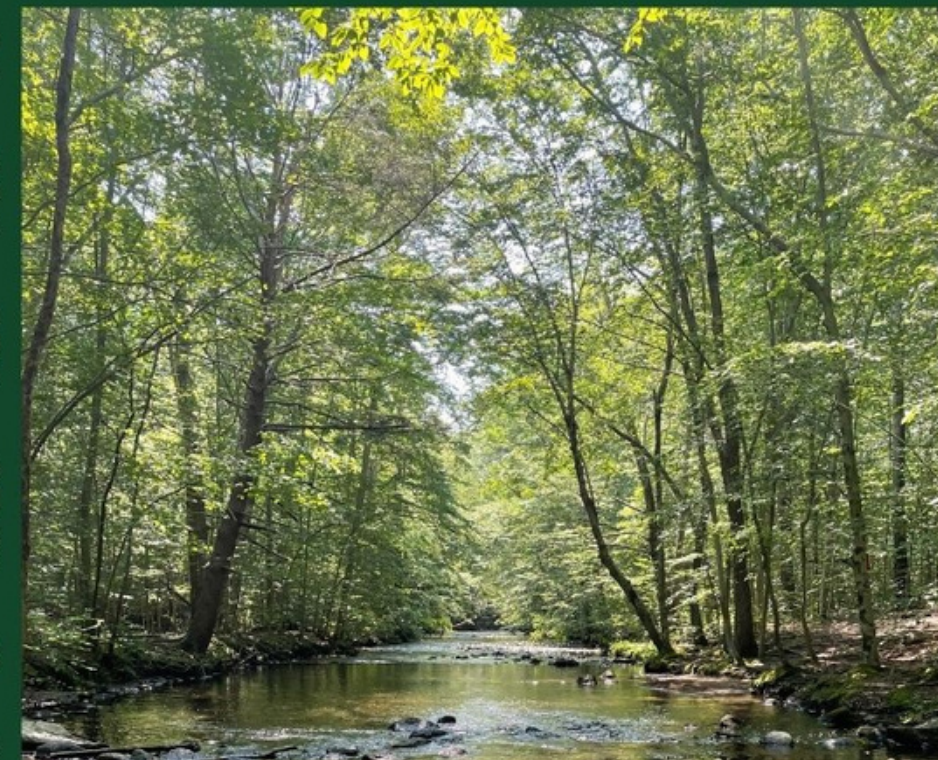
Thompson Coon J, Boddy K, Stein K, Whear R, Barton J, Depledge MH. Does participating in physical activity in outdoor natural environments have a greater effect on physical and mental wellbeing than physical activity indoors? A systematic review. *Environ Sci Technol*. 2011;45(5):1761-1772. doi:10.1021/es102947t

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Lake Mohegan Walking Trails

HEALTH BENEFITS

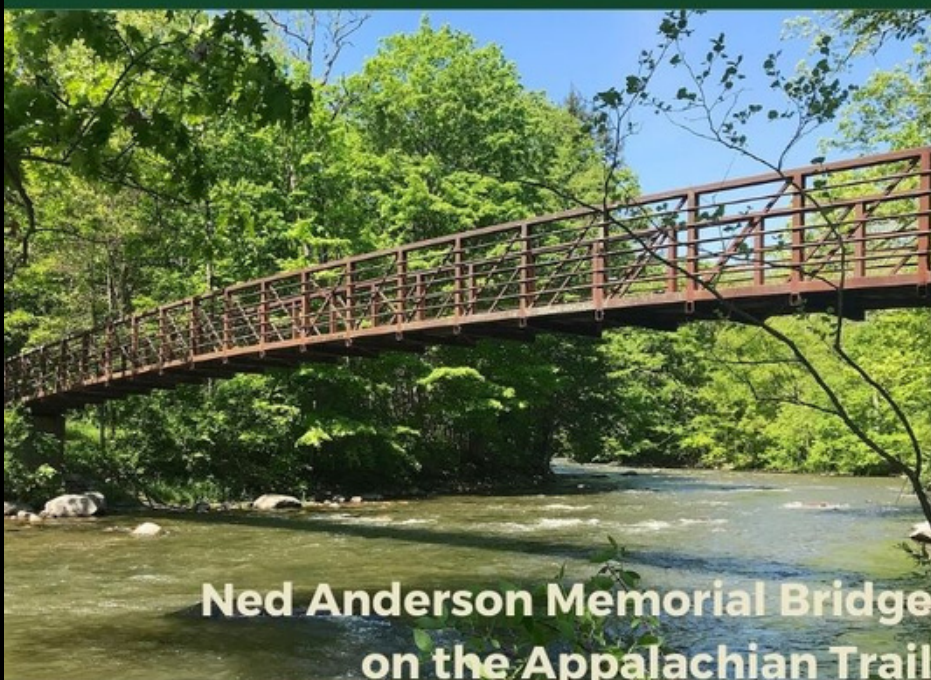
Studies suggest that exercising outside is more beneficial than the same level of exercise indoors with effects lasting up to one week.

Hiking has been shown to decrease:

- Blood Pressure
- Resting Heart Rate
- Cholesterol
- Body Fat
- Stress and Depression Levels
- Risk of Heart Attacks, Stroke, and Diabetes

Hiking has been shown to increase:

- Energy
- Immune Function
- Attention
- Fitness
- Life Satisfaction
- Quality of Life
- Social Connection
- Desire to continue exercising more than indoor forms of exercise



WHAT TO BRING

Hiking is a great low cost option to get the benefits of outdoor exercise. All you need to get started is a **good pair of shoes, a bag, and plenty of water**. For other items you may want to pack or questions about getting started, americanhiking.org is a great resource.



FINDING A HIKE

- alltrails.com allows you to search for hikes by difficulty, length, and rating. They also have a mobile app you can download for trail maps.
- Looking for someone to go with you? Meetup.com has many hiking groups in the area.

Did you know?

All CT registered vehicles have **free parking** to all 139 CT State Parks and Forests? And some are free to all! To learn more or to find trail maps, check out portal.ct.gov or use the QR code.



Local State Parks and Forests

- Lovers Leap - New Milford
- Paugussett State Forest - Newtown
- Rocky Glen State Park - Newtown
- George Waldo - Southbury
- Kettletown State Park - Southbury
- C.P. Huntington - Redding/Bethel/Newtown
- Wooster Mountain - Danbury
- And many more!