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FREQUENTLY ASKED QUESTIONS BY PATIENTS ABOUT EXERCISE

Julie Evans

October 2021

Milton Family Practice

Mentor: Dr. Hageman

Problem

- Metabolic syndrome is the presence of 3 or more of the following: insulin resistance, hypertension, elevated triglycerides, low HDL, and abdominal obesity
 - *27% of Vermonters are obese*
 - *1 in 12 have diabetes/insulin resistance*
 - *30% have hypertension (10)*
- In addition, 8.7% have cardiovascular disease, which is higher than the US average of 8.4%
- Regular exercise can be useful in primary prevention of metabolic syndrome (9) and can reduce the mortality from cardiovascular disease and diabetes (5).
- A significant portion of office visits at Milton Family Practice are related to diabetes, obesity, cardiovascular disease, hypertension or a combination of these.
 - *Frequently patients have questions about exercise, where to start, what counts etc.*

Public health cost

- Physical inactivity leads to 250,000 deaths in the US annually (5)
- “Average annual total costs between subjects with metabolic syndrome versus no metabolic syndrome differed by a magnitude of 1.6 overall (\$5,732 vs. \$3,581), and a magnitude of 1.3 when stratified by diabetes (diabetes, \$7,896 vs. \$6,038; no diabetes, \$4,476 vs. \$3,422). Overall, total costs increased by an average of 24% per additional risk factor ($P < 0.001$).” (1)
- \$1 out of every \$4 in US health care costs is spent on caring for people with diabetes (2).
- Exercise is a cost-effective way to prevent and decrease the impact of metabolic syndrome and cardiovascular disease (7)
- Walking has been shown to be beneficial for cardiovascular health and can lead to significant improvements in seven cardiovascular risk factors: decreases in body mass, BMI, body fat, systolic and diastolic blood pressure, fasting glucose, and an increase in VO₂ max (8, 4)

Community perspective

- Milton patients would especially benefit from written document about exercise “as we as providers tend to start the conversation about exercise more than patients coming to us with questions for starting.”
- The greatest barrier noticed to exercise is time and money. One of the most commonly asked questions is what counts as exercise. Frequently, patients mention walking when asked what exercise they are considering starting.
- The majority of our programs from the Milton recreation department are Health & Wellness based.
 - *“Programs running right now that are focused on healthy exercise include yoga (\$10-12), round dancing (\$7.63), pickleball (\$11.25), kettlebells (\$9.90), and jazz dance.”*
 - *There are also opportunities for exercise in “our parks and natural areas. We have three natural areas in Milton (Milton Town Forest, Lamoille River Walk, and Eagle Mountain) that allow for hiking, trail running, XC, snowshoeing, fishing, boating/kayaking/canoeing, etc. (Recreation often teams up with our Library in order to offer equipment rentals to the community). We also have two parks, Bombardier Park and River Street Park.”*
 - *“We have a scholarship program that will cover anywhere from 25%-100% of the cost of programs for those 18 and under. There are no income requirements, they just have to fill out an easy and accessible online application. Once a year we offer a free walking club with the Town Manager, and we usually offer 3 free nutrition classes each season. “*

Intervention

- Creation of a frequently asked questions handout to give to patients who recently began exercising or are thinking about starting
 - *Include medical recommendations of how to gauge exercise intensity, amounts of exercise that should be completed per week, and resources in the community*
- Creating a SmartPhrase containing the same information for ease of delivery to patients (.exercisefaq)

Results

Why should I exercise?

Exercise offers many health benefits including helping you live longer, increased mobility, decreased stress, and improved mood. Exercise can also give you more energy and help treat certain medical conditions (like diabetes and high blood pressure)

What counts as exercise?

Anything that gets your heart rate elevated! The goal heart rate for exercise is 65-80% of your maximum heart rate per the American academy of family physicians (aka your doctors).

Where should I start?

The USPTF recommends 150 minutes of moderate intensity cardiorespiratory exercise or 75 minutes of high intensity exercise per week.

Incorporating resistance training (think pushups, lifting weights etc), stretching, and neuromuscular training (these are exercises that work your brain too – balance, core strength, plyometrics, speed training) is great, but most importantly make it fun!

How long should I exercise every day?

Start with 10-20 minutes of exercise at a time and increase as you are able. Think about adding 5 minutes onto your starting time per week. A good rule of thumb is to increase by 10% a week – i.e. if you start at 10 minutes, go to 11 minutes the next week.

I don't have the time to exercise, what should I do?

If you feel there's no room in your schedule consider adding exercise into your day in little ways:

- If you watch TV every night, consider walking place while watching.
- Take the stairs instead of elevators any chance you get.
- Consider walking the longer way to get to your desired location

Does walking count as exercise?

Walking is one of the best things you can do to get exercise! Many studies have shown that walking can lead to significant improvements in cardiovascular disease risk factors including decreases in body mass, BMI, body fat, systolic and diastolic blood pressure, and fasting glucose. In addition, studies have shown walking outdoors can improve your mental health as well as your physical health.

Where can I walk?

Anywhere that feels safe for you! Walking in your home is a great way to start if you aren't comfortable walking around other people. If you have stairs in your house use them to your advantage and walk up them a few times.

Are there any exercise programs in the area?

The Milton recreation department offers a variety of affordable exercise classes including Zumba (\$8), round dancing (\$7.63), and yoga (\$10-12). They also have a scholarship program for 18 and under that covers 25-100% of costs with a simple online application!

Every time I start exercising, I just can't keep doing it long term

Make sure to pick exercise that is fun! Whether that be dancing, walking the dog, or taking your kids on a nature walk, anything that gets you moving counts. Consider incorporating exercise into a routine. Setting a schedule for when you exercise can help you get used to it and make it feel more natural. Many people wake up early to exercise and others may choose to exercise a few minutes after getting home from work.

How to calculate goal heart rate:

220 – your age multiplied by 0.65 or 0.80

Moderate intensity exercises:

Brisk walking, vacuuming, using a push mower, doubles tennis, riding a bike (slowly)

Vigorous intensity exercises:

Running, hiking, shoveling snow, singles tennis

Natural areas with walking trails in Milton:

Bombardier park
Lamoille river walk
Milton Town Forest
Eagle mountain natural area
River street Park

From Milton recreation:

- Large sections of their trails are ADA compliant making them safe and fun for everyone!
- Snowshoes and disc golf kits can be checked out for free at the Milton Public Library
- Bombardier park has 3 miles of walking trails, NEW disc golf course, two playgrounds, tennis courts, basketball courts, baseball/softball fields, horseshoe court, volleyball court.
- A 0.5 mi fitness walk with stations coming soon!
- The Trails at Arrowhead golf course can be accessed with a pass for \$25/year

For more information:

<https://www.miltonvt.gov/recreation>

*Check out the parks trails and facilities section

Evaluation and limitations

- To assess effectiveness, consider a survey for patients to fill out as to how helpful the handout was
 - *If patients received any of the handouts from the Milton recreation department or visited their website, consider sending any feedback to them as well*
- Limitations include:
 - *Only so much information could be placed on the handout without being overwhelming*
 - *Patients have varying questions, so content covered may not match what each patient is looking for*
 - *If created SmartPhrase is used (.exercisefaq) patient's have to ask for their after visit summary or look for it on MyChart to access the information*

Future plans

- Include more exercises with specific steps to do them on future handouts
- Consider creating a website with exercise information patients can access with a QR code or via MyChart links
- Find and approve exercise videos for patients

References

- 1. Boudreau DM, Malone DC, Raebel MA, et al. Health care utilization and costs by metabolic syndrome risk factors. *Metab Syndr Relat Disord*. 2009;7(4):305-314. doi:10.1089/met.2008.0070
- 2. Centers for Disease Control and Prevention. CDC. Cost Effectiveness of Diabetes Interventions. Available at: <https://www.cdc.gov/chronicdisease/programs-impact/pop/diabetes.htm>. Accessed on: September 27, 2021.
- 3. Krinski K, Machado DGS, Lirani L et al. Let's walk outdoors! Self-paced walking outdoors improves future intention to exercise in women with obesity. *Journal of Sport and Exercise Psychology*. 2017; 39:145-157
- 4. Mabire L, Mani R, Liu L et al. The influence of age, sex, and body mass index on the effectiveness of brisk walking for obesity management in adults: a systematic review and meta-analysis. *Journal of Physical Activity and Health*. 2016; 14:389-407
- 5 Meriwether RA, Lee JA, Lafleur AS, Wiseman P. Physical activity counseling. *Am Fam Physician*. 2008;77(8):1129-1136.
- 6. Morales-Palomo F, Ramirez-Jimenez M, Ortega JF, Mora-Rodriguez R. Effectiveness of Aerobic Exercise Programs for Health Promotion in Metabolic Syndrome. *Medicine and Science in Sports and Exercise*. 2019 Sep;51(9):1876-1883. DOI: 10.1249/mss.0000000000001983. PMID: 31415443.
- 7. Myers J, Kokkinos P, Nyelin E. Physical Activity, Cardiorespiratory Fitness, and the Metabolic Syndrome. *Nutrients*. 2019; 11(7):1652. <https://doi.org/10.3390/nu11071652>
- 8. Oja P, Kelly P, Murtagh EM, et al. Effects of frequency, intensity, duration and volume of walking interventions on CVD risk factors: a systematic review and meta-regression analysis of randomised controlled trials among inactive healthy adults. *British Journal of Sports Medicine* 2018;52:769-775
- 9. Okura, T., Nakata, Y., Ohkawara, K., Numao, S., Katayama, Y., Matsuo, T. and Tanaka, K. (2007), Effects of Aerobic Exercise on Metabolic Syndrome Improvement in Response to Weight Reduction. *Obesity*, 2015: 2478-2484. <https://doi.org/10.1038/oby.2007.294>
- 10. Vermont Department of Health. VDOH. Performance Scorecards. Available at: <https://www.healthvermont.gov/about/performance>

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. Kim Sikule

Name: Dr. Kim Hageman

Name: Jennifer Tucker

Did NOT Consent

Name:

Name: