Taddle Creek
Diabetes Education Program

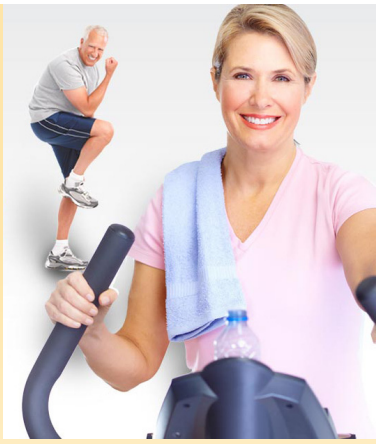
Newsletter

S P R I N G 2 0 1 9

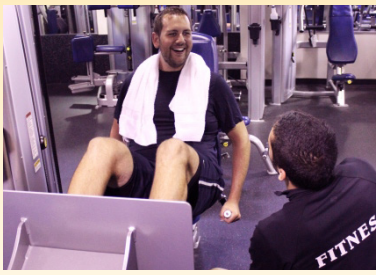
CURRENT EVENTS

Spring is a great time to start moving.
Have you heard of our free exercise program?

Let's Get Moving is an exercise class designed for adult participants living with diabetes. This class is for those who have modest physical fitness or no previous experience with group activity classes who wish to learn the fundamentals or get back into a fitness routine. You will acquire a full body workout, peer support and education about physical activity and diabetes.

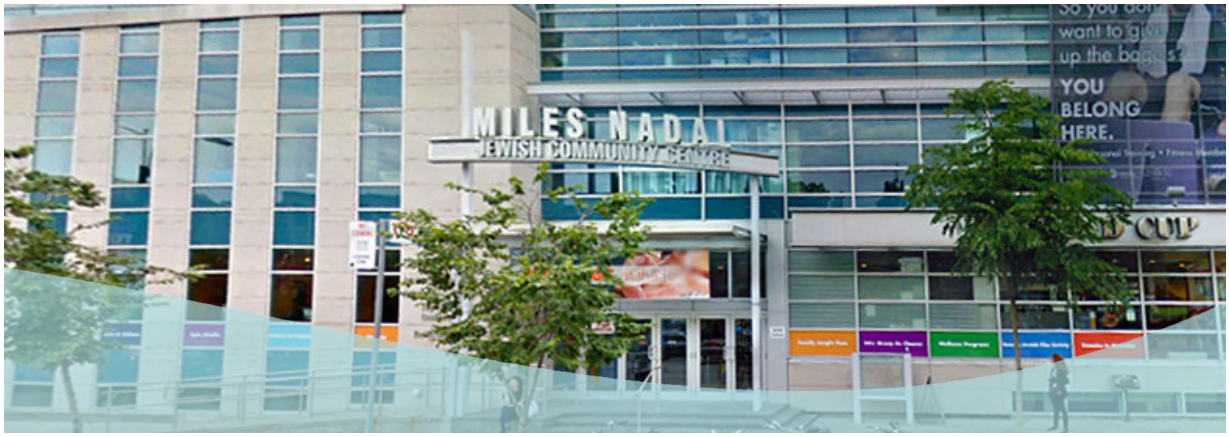


The exercise classes take place at the **Miles Nadal JCC** *(Spadina and Bloor)* and there is a new session starting this June.



Could this be the motivation you were looking for to get started with your fitness routine?

Call **416-204-1256 x 0** to get put on our wait list or for more information.



DIABETES 101

THE IMPORTANCE OF SLEEP IN DIABETES

Sleep is often an overlooked aspect of diabetes management. Most healthy adults need 7 to 9 hours of sleep each day. Similar to how humans need to eat to survive and exercise to thrive, humans need adequate sleep to function optimally. Not getting enough sleep can negatively impact diabetes and make it harder to manage.

GETTING LESS THAN 7 HOURS OF SLEEP CAN:

- Decrease how sensitive your cells are to insulin
- Decrease the amount of insulin your body releases
- Increase hunger and appetite
- Decrease fullness after a meal
- Encourage increased consumption of food and cravings, especially for foods high in carbohydrates, sugar, and calories
- Cause the body to release a stress hormone called cortisol
- Encourage the body to burn more muscle and less fat for energy
- Lead to weight gain
- Increase blood pressure
- Make you feel tired and less likely to exercise
- Contribute to decreased productivity, difficulty concentrating, increased irritability, decreased memory, absenteeism, anger, mood swings, a compromised immune system, and car crashes

SIGNS YOU MAY BE SLEEP-DEPRIVED:

- You find yourself re-reading the same sentence again and again
- You can doze off while sitting, reading, watching TV, in class, during a meeting, in a car, on the bus, or in traffic
- You have difficulty learning new concepts, making decisions, remembering things, paying attention, and focussing
- You cannot function well without caffeine (e.g. coffee) before noon
- You can fall asleep shortly again after waking up
- You are less productive, make more mistakes, react slower, and take longer to do things
- You feel very tired and fatigued and do not feel refreshed or alert when you wake up
- You get angry easily, have mood swings, feel sad or depressed, and/or lack motivation
- You sleep more on days when your schedule is open

SO HOW CAN YOU GET MORE SLEEP?

- Set a firm bedtime – such as 10pm – and commit to it.
- Go to bed and wake up at the same time every day – even on the weekends. Over time, your body will get used to this and you may start to naturally feel tired and wake up at the same time each day.
- Unwind an hour before bedtime. Make it a point to brush your teeth, change into pajamas, and shut off technology. Meanwhile, read a book, take a hot bath, meditate, or listen to soothing music to relax your mind and body before bedtime.
- Take less naps (especially later in the day), limit naps to 20-30 minutes, or eliminate them entirely if you have trouble sleeping at night. This may help you feel more tired and sleepy at the end of the day.
- Create a good sleep environment. Make sure it's quiet (consider wearing earplugs if noise is an issue), dark (close windows, doors, and lights and consider wearing a sleep mask), comfortable (make sure your pillow, mattress, sheets, and pajamas are comfortable), and the temperature is not too hot or too cold.
- Avoid consuming caffeine (coffee, tea, chocolate, soft drinks), nicotine, and alcohol from the late afternoon and onwards. Caffeine is a stimulant and can make you feel more alert and interfere with your ability to sleep. Nicotine can also delay your sleep. Alcohol can interrupt your sleep.
- Avoid heavy or large meals before bedtime and eating 2-3 hours before bedtime so you don't go to sleep uncomfortably full or experience digestive issues that may impact your sleep.

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DIABETES 101

THE IMPORTANCE OF SLEEP IN DIABETES

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SO HOW CAN YOU GET MORE SLEEP?

- See if a balanced nighttime snack works for you so you don't go to bed excessively hungry or wake up because of hunger. Many people enjoy warm milk or herbal tea.
- Put your phone on Airplane Mode an hour before bed so any texts, messages, and notifications don't distract or wake you up in the middle of the night and are saved for the morning.
- Keep a sleep diary, similar to a food diary. This can include your hours of sleep, how long it took to fall asleep, how many times you woke up in the middle of the night, and subjective ratings on a scale of 1-10 on how well you think your sleep went and how rested and energized you felt that day. Additionally, make notes on what else happened that day that may have impacted your sleep, including major events, caffeine consumption, noise, naps, stress, work, and nighttime rituals. This can help you find links between certain behaviors or events and sleep issues. Here is a sample Sleep Log from Diabetes Self-Management.
- If you often feel anxious or stressed before bed keep a "worry diary" to record your worries and get them out of your head before bed.
- Ditch the mindset that you can work more and sleep less on weekdays and catch up on sleep on the weekends. You may still be sleep-deprived and not functioning optimally for 5 out of 7 days of the week. Getting adequate sleep should be a consistent and daily habit.
- Prioritize sleep. You may feel more energetic and attentive the next day and over time, which counterintuitively may "make up" for the "hours lost to sleep". Quality over quantity!
- If you are snoring, waking up throughout the night and feeling very tired during the day you may have a condition called "Sleep Apnea" and it is important that you book a visit with your doctor to discuss this.

References:

- ***Diatribe.org:***
  - *(1) https://diatribe.org/most-destructive-diabetes-landmine-lack-sleep*
  - *(2) https://diatribe.org/sleep-most-forgotten-blood-sugar-strategy*
- ***National Sleep Foundation:***
  - *(3) https://www.sleepfoundation.org/articles/lack-sleep-may-increase-calorie-consumption*
  - *(4) https://www.sleepfoundation.org/articles/caffeine-and-sleep*
  - *(5) https://www.sleepfoundation.org/articles/abcs-zzzzs-when-you-cant-sleep*
  - *(6) https://www.sleepfoundation.org/articles/link-between-lack-sleep-and-type-2-diabetes*
  - *(7) https://www.sleepfoundation.org/articles/how-difficulty-falling-asleep-affects-sleep-satisfaction*
- ***Diabetes Self-Management***
  - *(8) https://www.diabetesselfmanagement.com/managing-diabetes/general-health-issues/getting-the-sleep-you-need/*
- ***National Heart, Lung, and Blood Institute***
  - *(9) https:/ /www.nhlbi.nih.gov/health-topics/sleep-deprivation-and-deficiency*

Question: Is Saturated Fat Bad for You?

Short Answer: Replacing saturated fats with polyunsaturated fats, monounsaturated fats, and whole grains can help to lower the risk for cardiovascular disease. However, saturated fats can be a part of a healthy diet when consumed in moderation. Furthermore, saturated fat from dairy sources are associated with a lower risk for cardiovascular disease compared to saturated fat from other animal and plant sources.

Long Answer: First, there was the low fat, high carbohydrate movement in the 1900's. Fat - and saturated fat in particular - was labelled as bad [(1).] To compensate, more sugar was added to food to improve the taste of low-fat and fat-free foods. Now, the opposite has happened - there is a rise in the popularity of diets lower in carbohydrates and higher in total and saturated fat. So what's up with saturated fat? Is it good or is it bad?

HERE IS WHAT THE RESEARCH TELLS US:

- High saturated fat intake is correlated with an increased risk for cardiovascular disease and an increase in LDL ("bad") cholesterol [(1-2)]
- Replacing saturated fats with unsaturated fats (polyunsaturated fats and monounsaturated fats) and whole grains may lower the risk for cardiovascular disease and lower LDL cholesterol [(1-5)].
- Saturated fat from dairy sources may have less of an impact on cardiovascular disease compared to saturated fat from other animal and plant sources [(4,6)]. This may be because dairy products also contain minerals, including calcium, phosphorus, magnesium, and potassium, which have blood pressure-lower effects [(4)].
- Butter is not necessarily recommended because it may be associated with a small or neutral association with cardiovascular disease and mortality [(4)].

Sources of unsaturated fats:

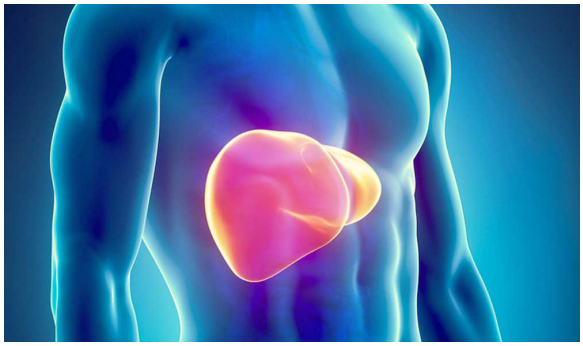
Unsaturated fats include all sources of fat that come from plants and fish. These include foods such as:

- Avocado & avocado oil
- Olive oil, canola oil and corn oil
- Nuts & seeds
- Nut butters (like peanut butter and almond butter)
- Fatty fish *(like salmon, tuna, maceral, trout and herring)*

BOTTOM LINE: A high intake of saturated fat may increase LDL ("bad") cholesterol levels and the risk for cardiovascular disease. Ideally, saturated fat can be replaced with polyunsaturated fats, monounsaturated fats, and whole grains to lower LDL cholesterol and cardiovascular disease risk. However, it is fine to consume saturated fats in moderate amounts for the purposes of consuming a diet that provides you with satisfaction. Additionally, when you do consume saturated fats, it would be ideal to consume the saturated fats from dairy sources, such as cheese, milk, and yogurt. This is because dairy products contain minerals that may be more cardioprotective, compared to saturated fats from other animal sources, such as fatty cuts of meats, lard and baked goods (made with butter or lard).

References:

(1) http://science.sciencemag.org/content/362/6416/764.full
(2) https://www.who.int/nutrition/publications/nutrientrequirements/sfa_systematic_review/en/
(3) https://openheart.bmj.com/content/5/2/e000871
(4) https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5492032/
(5) https://www.canada.ca/en/health-canada/services/canada-food-guide/resources/evidence/food-nutrients-health-interim-evidence-update-2018.html
(6) https://www.internationaljournalofcardiology.com/article/S0167-5273(17)36973-5/fulltext



Non-Alcoholic Fatty Liver Disease: What it is and what you can do about it

What is NAFLD?

If you have been told you have Non-Alcoholic Fatty Liver Disease (NAFLD), you are not alone. One quarter of the world population is living with NAFLD. NAFLD is a painless enlargement of the liver due to the deposit of fat droplets[1]. A small percentage of people with NAFLD develop a more severe form of the disease called Non-Alcoholic SteatoHepatitis (NASH). NASH is an inflammation and scaring of the liver in addition to the accumulation of fat droplets[2]. People may progress or regress between NASH and NAFLD over time[1].

What causes NAFLD?

Contrary to popular belief NAFLD is not a new disease. It has been around for much longer than the last few decades. In fact, it has been discussed in medical text books for over 140 years. Despite this, medical professionals still struggle to understand the cause and the treatment of NAFLD[1].

Why treat NAFLD?

NAFLD is very common and the majority of people living with NAFLD have a mild form of the disease. Saying that, progression of NAFLD to NASH can increase the risk for liver disease and heart disease[3]. Making lifestyle changes may help reduce progression of NAFLD to NASH and/or may help prevent complications related to NASH[3].

A Dietitian's suggestions to help manage NAFLD:

Following the Mediterranean diet has been shown to help manage NAFLD[4].
The Mediterranean diet emphasizes:

- Eating plant-based foods such as fruits, vegetables, whole grains, beans/legumes, nuts and seeds
- Replacing butter with olive oil and canola oil
- Reducing red meat to a few times per month
- Eating fish two times a week or more

A diet rich in slow release carbohydrates can help with NAFLD management especially when combined with the Mediterranean diet and regular daily movement[4]. Slow release carbohydrates also help reduce blood sugar spikes if you are living with diabetes. Slow release carbohydrates include:

- Whole grain bread and pumpernickel bread
- Brown rice, parboiled rice, quinoa, barley, and wheat berries
- Whole grain pasta and soba noodles
- Sweet potatoes, white potatoes with the skin, taro and plantains
- Oatmeal and All Bran Buds

It is recommended to stay away from fad diets if you are living with NAFLD[4], especially fad diets that result in rapid weight loss. Sudden weight loss may worsen liver injury and may be harmful[5]. Talk to a dietitian before trying a new diet to ensure it is a safe and healthy option for you.

Don't drink too much alcohol to keep your liver as healthy as possible. The American Heart Association recommends a limit of 1-2 drinks per day for men and 1 drink per day for women[1].

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Non-Alcoholic Fatty Liver Disease: What it is and what you can do about it

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Benefits of daily movement:

Both cardio (heart pumping) and resistance (muscle activating) activities have been shown to help with NAFLD[6]. Cardio activities could be anything from walking and cycling to playing tennis or dancing. If cardio activities are not possible for you, resistance activities have been shown to be just as effective in helping with NAFLD[6]. Resistance activities could be anything from weight lifting to Pilates and yoga. Some activities like swimming and water aerobics work your muscles and your cardiovascular system. Choose something you enjoy. See the article on mindful movement for more tips about how to move your body in a compassionate and enjoyable way.

What about supplements?

There is some research about the benefits of certain supplements on the management of NAFLD. In this article we highlight the most common and researched supplements.

Probiotics: There have been several studies indicating that probiotics can be helpful in reducing liver enzymes in people living with NAFLD[7]. Not all probiotic brands are created equally. Each brand has a specific type or combination of bacteria. Talk to your dietitian or pharmacist about what brand of probiotic would be best for management of NAFLD.

Omega-3: There haven't been enough studies to conclude that Omega-3 supplements help with NAFLD[4]. If your doctor has told you that you have high cholesterol, Omega-3 supplements could help with heart health[4]. Talk to your dietitian or pharmacist to see if an Omega-3 supplement might be right for you.

Vitamin D: Vitamin D deficiency is very common in Canada and around the world. Low levels of Vitamin D are associated with NAFLD[8]. If you are low in Vitamin D and you are living with NAFLD this could increase your risk for progression to NASH[8]. Since there are very little risks associated with taking Vitamin D supplements it is recommended to take Vitamin D daily.

Vitamin E: Although Vitamin E research looks promising for managing NAFLD, there are concerns about the long-term effect of taking Vitamin E supplementation. Further, there have been no studies done on the use of Vitamin E for NAFLD in the diabetic population[4]. We recommend talking to your doctor if you are thinking about taking a Vitamin E supplement.

Can I take medications to help manage NAFLD?

Medications that help to reduce insulin resistance in the body could also help with managing NAFLD[8]. If you are already taking diabetes medications, talk to your diabetes team. They can review your current medications and make sure you are on diabetes medications that can also help with NAFLD management.

References:

1. *Z.H. Henry & M.L. Perry. (2017). NAFLD: It Ain't Your Great Grandmothers Fatty Liver Disease or Is it? Diabetes Care and Education. 38:5-7.*
2. *E. Kelsey. (March 2019) NAFLD. Retrieved from: www.creatingpeacewithfood.com.*
3. *J. K. Dyson, Q.M. Anstee & S. McPherson. (2014). Non-alcoholic fatty liver disease: a practical approach to diagnosis and staging. Frontline Gastroenterology 5:211-218.*
4. *E. M. McCarthy & M.E. Rinella. (2012). The role of diet and nutrient composition in nonalcoholic fatty liver disease. Journal of the academy of nutrition and dietetics. 2212-2672.*
5. *Clark JM. (2006). Weight loss as a treatment for nonalcoholic fatty liver disease. J Clin Gastroenterol. 1:39-43.*
6. *K. Hallsworth et al. (2011). Resistance exercise reduces liver fat and its mediators in non-alcoholic fatty liver disease i ndependent of weight loss. Gut. 60:1278-1287.*
7. *R. Aller et al. (2011). Effect of a probiotic on liver aminotransferases in nonalcoholic fatty liver disease patients: a double blind randomized clinic trial. European Review for Medical and Pharmalogical sciences.15:1090-1095.*
8. *M. Del Ben, L. Polimeni, F. Baratta, D. Pastori, L. Loffredo & F. Angelico. (2014). Modern approach to the clinical management of non-alcoholic fatty liver disease. World Journal of Gastroenterology. 20:8341-8350.*

Mindful Movement : A Diabetes Educators Perspective

I injured myself a couple of years ago. Since then, I've been trying different types of movement to build a regular and sustainable exercise program. I have tried Aquafit (the schedule didn't work for me), lane swimming (too many people in my lane), a strength training class (what am I supposed to be doing with my elbows again? I don't understand), an app (let's not talk about that), physio (in progress) and new type of exercise class (something I was pretty reluctant to try but kept an open mind).

I wish I could say that I am motivated in order to improve my health, or to reduce my risk of a heart attack or dementia. However, like many other human beings, I am more motivated by immediate results than future rewards. And thinking about a possible stroke in 30 years does not usually get me off my couch. I did take some time to reflect on how I would like my life to change in 1 week, and I would like sleep more deeply, increase my focus & be more optimistic. When I remember these reasons - it is much easier for me to get out the door for a walk. I have dropped lane swimming and Aquafit as there were too many barriers and I didn't notice a difference in my sleep or focus and did notice an unfortunate drop in my optimism.

If you're struggling to build a regular exercise program as well, I invite you to stop forcing yourself to do things that you don't enjoy either. Chances are, you may already have done so (if you are part of the group of people who abandoned your gym membership).

Sometimes we can give exercise the side-eye, looking at it like something we should do, not something we look forward to experiencing. Michelle Segar, motivation researcher & author of "No Sweat" writes, "When something feels like a chore, we tend to put off doing it and find any reason to avoid it. It's going to be pretty hard, if not impossible, to make a chore a sustainable part of your life".

However, I do find hope in that there are many, many different types of movement and that we can keep trying different options to find something that feels more like a gift or even an essential part of our days. For some people that looks like a walk in the sunshine, or playing with their grandkids, or going dancing or stretching first thing in the morning.

AN ESSENTIAL PART OF KNOWING WHAT WORKS FOR YOU, IS BEING AWARE OF YOUR REASONS TO EXERCISE & REFLECTING ON YOUR EXPERIENCES. CONSIDER USING A FEW OF THE FOLLOWING QUESTIONS TO GUIDE YOUR REVIEW:

- *Why am I resistant to exercising?*
- *What can movement help me with?*
- *What sorts of movements do I enjoy? How can I incorporate this into my everyday life?*
- *What are my motivations for movement?*

If you're up to a more detailed review, try answering some of the following questions:

- How do you feel after moving? Energized, happy, sore, exhausted, underwhelmed?
- How might you need to change the movement for next time? Maybe you overdid it or maybe you could challenge yourself more
- Is your body is responding well to movement? Are you improving in areas you want to? Is your body developing or healing any injuries?
- The more aware you are when you exercise, the more you can adapt and change the exercise based on your body and what feels right for you

Keep in mind that different things work for different people, and that as human beings we change over time - so what worked for us in the past may not be as helpful anymore and it is okay to adapt a program to suit our current needs.

As for me, I tried to pace myself during the new exercise class, was surprised by how much I enjoyed it, and will remember to bring earplugs to the next session. More importantly, as I slept like a rock that evening, finally finished this article, and am grateful for the brief periods of sunshine this week - it's safe to say that this new exercise class is a keeper.

Ramona D'Mello

References:
Segar ML. No Sweat: How the Simple Science of Motivation Can Bring You a Lifetime of Fitness. New York (NY): Amacom; 2015.

RECIPE

Creamy Tomato Soup with Chicken and Vegetables

Serves 6

Ingredients

1 tbsp	olive oil
1 lb	ground chicken
1 tbsp	Italian seasoning
1 tsp	fennel
1	onion, minced
6	garlic cloves, minced
1	quart of chicken stock
1	14oz can crushed tomatoes
2 tbsp	tomato paste
1 tsp	salt
1	bunch kale, stems removed, roughly chopped
2	small zucchini, sliced
1	small head cauliflower cut into florets
1 cup	heavy cream
6-8	fresh basil leaves, ribboned
	parmesan cheese (optional)
1/4 tsp	red pepper flakes (optional)

Method

Heat a large soup pot over medium-high heat.
Add the chicken, onions, garlic and Italian seasoning to the pot and sauté until the meat is browned onions are soft and translucent, about 5 minutes. (Drain off any excessive fat.)
Add the chicken stock, crushed tomatoes and tomato paste.
Whisk until tomato paste is fully incorporated. Bring to a boil, season with salt then simmer for 15 minutes.
Add the kale, cauliflower, zucchini and heavy cream.
Simmer for 10 minutes until the cauliflower is tender.
Serve with parmesan cheese and red pepper flakes if desired.

Recipe retrieved from: https://themodernproper.com/

Taddle Creek

Want to contribute to the next edition of the DEP Newsletter?

Send in your favorite recipe or tell us your story about how you manage your diabetes!

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