Northern Light
Eastern Maine Medical Center
The Skinny
Spring
2020

Nearly half of all U.S. adults could have obesity by 2030

(Zachery J. Ward, et. al. Projected U.S. State-Level Prevalence of Adult Obesity and Severe Obesity. N Eng J Med 2019;381:2440-2450.
Summarized by Mikiko Marzilli, MS RD LD)

A new analysis is predicting that nearly 1 in 2 adults will have obesity, and nearly 1 in 4 adults are projected to have severe obesity by 2030, with large disparities across states and demographic subgroups.

Body Mass Index (BMI)
Zachery J. Ward, et.al

<25 – underweight, or normal
25~ < 30– overweight
30 ~ < 35 – moderate obesity
≥35 – severe obesity

The chief author Zachary Ward, a PhD candidate at the Harvard T.H. Chan School of Public Health in Boston and his colleagues investigated 2 major national health surveys: Behavioral Risk Factor Surveillance System (BRFSS) and 1990-2010 National Health and Nutrition Examination Survey (NHANES). BRFSS data came from over 6 million self-reported Body Mass Index (BMI), and NHANES data contains and over 57,000 measured BMI. The purpose of the study was to adjust/correct potential self-reported bias, to estimate state-specific and demographic subgroup-specific trends, and to make projections of the obesity prevalence through 2030.

They found that the adjusted BMI distributions from NHANES data set did not differ significantly from those in the NHANES data set for each sex and time period and suggest that 48.9% of adults in the United States will be obese and 24.2% will be severely obese by 2030, with “high predictive accuracy”.

The prevalence will hit over 50% in 29 states including Maine (50.3%), and there will be no state with below 35% obesity rate by 2030. They also forecast that rates of severe obesity will be particularly pronounced among women (27.6%), non-Hispanic black adults (31.7%), and low-income adults (31.7%) with household income of less than $20, 000.

	State	Obesity (BMI≥30)	Severe obesity (BMI≥35)
	U.S. overall	48.9	21.1
Five states with highest obesity level	Oklahoma	58.4	31.7
	Arkansas	58.2	32.6
	Mississippi	58.2	31.7
	Alabama	58.2	30.6
	West Virginia	57.5	30.8
	Maine	**50.3**	**24.2**
Five states with lowest obesity level	California	41.5	18.3
	Massachusetts	42.3	20.0
	Hawaii	41.3	18.2
	Colorado	38.2	16.8
	District of Columbia	35.3	17.3

As seen in the table below, the state with the highest rate of obesity in 2030 is predicted to be Oklahoma, at 58.4%, with Arkansas, Alabama and Mississippi all tied for second place at 58.2%. District of Columbia, Colorado, and Hawaii will rank first, second, and third in having the lowest percentage at 35.3%, 38.2% and 41.3% respectively.

Obesity is a serious concern as excess weight is linked to many diseases such as liver disease, diabetes, osteoarthritis, heart disease, stroke, and many types of cancer. It is also associated with poorer mental health outcomes and reduced quality of life (*CDC*), as well as significant financial burden to the country. The medical care costs of obesity in the U.S. was approximately $147 billion in 2008, based on the Centers for Disease Control and Prevention reports, $1,429 higher per individual with obesity than those of normal weight. The annual nationwide productive costs of obesity-related absenteeism range between $3.38~$6.38 billion ($79~132 per individuals with obesity).

The researchers state, “although severe obesity was once a rare condition, our findings show that it will soon be the most common BMI category in the patient populations of many health care providers” and “given the difficulty in achieving and maintaining meaningful weight loss, these findings highlight the importance of prevention efforts”.

Ask the Pharmacist

Answers from Mark Basile, PharmD, Clinical Pharmacist Generalist

If I had Gastric Bypass, do I need to switch my Effexor extended release to non-extended release version? Based on the chart included in the SWL Red Binder, the absorption rate for Effexor remains the same before and after GBP.

Effexor ER

The chart I'm assuming you are referring to is from Seaman JS et. al (2005) - *Dissolution of common psychiatric medications in a Roux-en-Y gastric bypass model.* Of note, the data from this trial was **NOT** in actual patients. It was from an *experimental model* that was *simulating* a pre and post-gastric bypass patient (simulating smaller volume of fluid post-bypass in the stomach for drug dissolution and simulating the pH changes expected post-bypass in the stomach). **No extended release products were included** in this in vitro study.

In general, extended release products are advised to be **avoided** after gastric bypass since there is shorter transit time after surgery due to the removal of part of the patient's intestine, thus less surface area for absorption, thus suboptimal absorption of extended release medications.

However, this medication ***may*** be an exception to that rule. Venlafaxine (Effexor generic) ER is the only ER product I'm aware of that has at least **one study** looking into its use in gastric bypass patients. It's by no means a strong study (most bariatric studies aren't). It looked at **ten** pre-gastric bypass patient's (who were not on Venlafaxine or any anti-depressants at baseline) who were given a **single dose** of Venlafaxine ER 75 mg before surgery and then those same patients were given a **single dose** of Venlafaxine ER 75 mg after surgery at the 3 to 4 month mark. They did find **non-statistically significant differences** in the patient's serum Venlafaxine levels, indicating that it ***may*** be okay to use an ER Venlafaxine product in this patient population.

Of course, this does not mean that the differences seen in the study were not clinically significant. The study has **several limitations** to be aware of. The study could not address if the difference in absorption seen with the ER Venlafaxine products post-bypass are clinically significant as it was purely measuring drug levels after only a **single dose** in **non-depressed** patients. Also, it only looked at a **single point in time** (3-4 months after surgery). A final limitation of this study is that there are many ER Venlafaxine products on the market (both tablets and capsules). This study looked at generic ER Venlafaxine capsules, thus the results from this study may not apply to the tablet ER dosage form which uses different ER technology and may be affected differently post-gastric bypass.

The patient and provider should consider these factors and make a determination as to the appropriateness of continuing on ER Venlafaxine.

Surgical Weight Loss Support Groups

We encourage regular attendance to these groups. Attending groups is one way to reaffirm the importance of your commitment to surgery. Studies show those who attend groups, weigh themselves regularly, and record dietary intake are more likely to manage their weight. **Send an e-mail to Lynn Bolduc if you would like to be put on a reminder list for any one of the groups.**

Did you know…
- Regular attendance at support group doubles the likelihood of successful weight loss after surgery
- Those who regularly attend support group have 3.7x greater success with weight loss surgery

Bangor: Northern Light Eastern Maine Medical Center (for all patients, before and after surgery)

When	Where	Time	Leaders	Upcoming Groups
First Friday of every month	Brandow Conference Room*	4:30 – 6:30 pm	Lynn Bolduc, RD and Tama Fitzpatrick, RD	May 1 – on hold June 5, 2020 No July meeting August 7, 2020

Guest speakers/surgeons: TBA

*Location changed starting March 2020

Online: (Guest speakers/surgeons: TBA)

Third Tuesday of every month	**Online**	5-6pm	Northern Light SWL Dietitians	April 21, 2020 May 19, 2020 June 16, 2020 July 21, 2020 August 18, 2020

Bangor: Northern Light Health Center, Union St. - Staying On Track Support Group
(for patients who have had weight loss surgery):

When	Where	Time	Leaders	*Upcoming Groups*
Second Wednesday of every month	Northern Light Endocrine and Diabetes Care, Classroom 905 Union Street, Suite 11	5-6 pm	Dr. Nina Boulard, Clinical Psychologist	May 13 – on hold June 10, 2020 July 8, 2020 August 12, 2020

*Due to the small room size and sensitivity of topics discussed, we ask that you come alone to this group.
This group is now open to **ANYONE** who has had weight loss surgery. The group size is typically small.

Presque Isle: Northern Light A R Gould (Previously known as TAMC)

First Wednesday of every month	McCain A Conference Room	5-6 pm	Ben Mayhew, RD Thomas Merrow, RD Angel Hebert, RD	May 6 – on hold June 3, 2020 July 1, 2020 August 5, 2020

Waterville: Northern Light Inland Hospital

First Wednesday of every month	Medical Arts Building Conference Room	5-6:30 pm	Dr. Bryan Fritzler (June) Tama Fitzpatrick, RD (August)	May 6 – on hold June 3, 2020 No July meeting August 5, 2020

Updates

Struggling with weight regain after your surgery?

Beginning in January we have a new program to help. It is called **RETRAIN YOUR POUCH**.
This is a 14-week program offering nutrition, psychology, body composition testing, metabolism testing and a visit with our bariatric nurse practitioner to evaluate results along the way. The program consists of 5 visits over the 14-week period (week 1, 3, 6, 12 and 14).

To be eligible you must be:

- At least 18 months postop
- Up-to-date on your lab work to evaluate for vitamin/mineral deficiencies

No referral is needed for those who had surgery at Northern Light Eastern Maine Medical Center. If you had surgery at another institution, we will need a referral. Please contact the SWL main office at 973-6383 to get signed up or for more questions.

Stay connected through the COVID-19 pandemic

We have all recently had significant lifestyle changes due to the COVID-19 (coronavirus) pandemic. For our patients, this may include postponing weight loss appointments and possibly even putting surgery temporarily on hold. We appreciate your understanding as we all work together to keep our community safe. In order to contain the spread of the very contagious virus, we are limiting procedures and office visits throughout Northern Light Health to ensure no one puts you and your healthcare team at risk.

During this difficult time, we would like to provide continued care and support in a safe environment. On **Friday, April 3**, we are offering a FREE online session during lunch time where you can huddle with the Surgical Weight Loss team. The topics we may cover include nutrition, emotional eating, and coping strategies. These sessions are open to all patients, preop, or postop.

If you are interested in joining our quick online get-togethers, please email Valerie (vncurtis@northernlight.org) or Tama (tfitzpatrick@emhs.org) to learn how to join.

Our first three sessions will be:

- Friday, April 3, 12:15-12:45 pm
- Frida, April 17, 12:15-12:45 pm
- Friday, May 1, 12:15-12:45 pm

We look forward to this opportunity to connect and keep you on track toward your health goals.

Stay safe, and don't forget to clean your hands often!

Resources

Quarterly Newsletter: THE SKINNY

Hard copies of the newsletter are distributed at the support groups and dietitian visits. The SKINNY is published four times per year. If you want to receive this newsletter electronically, please e-mail Lbolduc@northernlight.org or mikikomarzilli@northernlight.org and they will add you to our distribution list. Once on the mailing list, you will receive monthly electronic e-mail reminders about support groups.

Online Information Session

The Northern Light Surgical Weight Loss comprehensive informational session is available online! The 60-minute video is broken up into 10 chapters, so it does not have to be watched all at once. If you or someone that you know is interested, please visit northernlighthealth.org/SWL, click on "**Surgical Weight Loss Information Sessions**" and then Online Information Session to read more. Once you have finished watching the online class, fill out the form located below the video links or call 973-6383 if you are interested in joining the program. **It is also a great refresher for those who have already had weight loss surgery**

Online Physical Therapy Videos

Check out our Physical Therapy videos. The 50-minute PT session is divided into 6 short chapters and is available for those starting the program, as well as those who would like to refresh their knowledge on a well-balanced exercise plan. northernlighthealth.org/SWL-Physical-Therapy Or from the Surgical Weight Loss home page, choose "Support Before Surgical Weight Loss", then "Physical Therapy for Surgical Weight Loss."

Check out our Patient Stories

Please visit northernlighthealth.org/SWL. Click on "**Testimonials"**

This web portal has our bariatric surgeons answering questions about weight loss surgery.

Support Group

We now offer an Online Group on the third Tuesday monthly at 5-6p for those who wish to participate. If you are interested in participating in our online support group, please email Lynn at Lbolduc@northernlight.org or tfitzpatrick@northernlight.org

Ultra-processed foods increase your health risks

(Articles summarized by Mikiko Marzilli, MS, RD, LD)

Ultra-processed foods (UPF) are known for their high content of sodium, calorie, fat, sugar, and lack of fiber: all considered to be low in nutritional quality. They also contain compounds formed during production, processing, and storage. Migration of additives and substances from packaging, such as bisphenol-A (BPA), being in contact with the food is possible especially because they often stay in their packaging for long periods of time owing to their long shelf life. Heat-treated and extruded UPF may also contain newly-formed contaminants.

Previous studies suggest these contaminants were associated with endocrine disturbances including insulin resistance and other health risks. A high level of UPF consumption is linked to an increased risk of all-cause mortality, obesity, and other chronic diseases such as cardiovascular diseases, hypertension, and dyslipidemia.

Based on an ongoing, population-based study which was launched in 2009 in France with over 100,000 participants, researchers are finding more links between UPFs and health risks and strengthening the idea that UPFs may be harmful to one's health.

What are the UPFs?

The box on the next page lists what type of foods are considered to be UPFs.

The researchers found that higher consumption of UPFs was linked to higher intakes of: calories, unhealthy fats, sodium, sugar, sugary drinks, red meats, and processed meats. Higher consumption of UPFs was also associated with lower intakes of: fiber, alcohol, whole grains, yogurt, nuts, fruits, and vegetables.

The main food groups contributing to UPF intake in the studies were sugary products and drinks, followed by starchy foods and breakfast cereals and ultra-processed fruits and vegetables.

Who is at risk?

Overall, UPFs were consumed more by: younger adult participants, obese individuals, those with lower physical activity levels, lower education levels, people with less family history of cancer, lower prevalence of metabolic diseases, and current smokers.

Findings:

- A 10% increase in the proportion of UPF in the diet was associated with 15% increase in the risk of Type 2 Diabetes.
- The higher proportion of unprocessed or minimally processed foods in diets was associated with lower risk of Type 2 Diabetes.
- The higher quantity of UPFs consumed (grams in a day) contributes to Type 2 Diabetes risk. Every 100 grams of UPF consumption per day resulted in 5% increase in the risk of Type 2 Diabetes.
- 10% increase in the proportion of UPFs in the diet was associated with a 12% increase in the risk of overall cancer, and a 11% increase in the risk of breast cancer.
- 10% increase in the proportion of UPFs in the diet was also associated with a 12% increase in the risk of cardiovascular disease, a 13% increase in the risk of coronary heart disease, and a 11% increase in the risk of cerebrovascular disease.

The increase in health risks from UPFs may be related to poorer food quality, food additives, or newly-formed contaminants through heat processing. While it may be too soon to make conclusions that UPFs trigger certain health issues, public health authorities in several countries such as France and Brazil are recommending limiting the consumption of unprocessed/minimally processed foods, and limiting the consumption of UPF as a precautionary measure.

UPF includes:

- Mass produced packaged breads and buns
- Sweet or savory packaged snacks
- Industrialized confectionary and desserts
- Sodas and sweetened drinks
- Meat balls, poultry and fish nuggets, and other reconstituted meat products transformed with addition of preservatives other than salt
- Instant noodles and soups
- Frozen or shelf stable ready meals
- Other food products made mostly or entirely from sugar, oils and fats, and other substances not commonly used in culinary preparations such as hydrogenated oils, modified starches, and protein isolates

Bernard Srour. MPH, PharmD, et.al. Ultraprocessed Food Consumption and Risk of Type 2 Diabetes Among Participants of the NnutriNet-Sante Prospective Cohort. *JAMA Intern Med.* 2020.180(2):283-291.

Thibault Fioet, et.al. Consumption of ultra-processed foods and cancer risk: results from Nutri-Net Sante Prospective Cohort. *BMJ*. 2018:360-k322.

Bernard Srour et al. Ultra-processed food intake and risk of cardiovascular disease: prospective cohort study (NutriNet-Santé). *BMJ* 2019;365:l1451

Recipes

Lemon Cream Protein Shake

Recipe suitable for Phase 4 diet plan. (Can substitute lemon zest for lemon extract to be suitable for Phase 2)
Servings: 1 - Calories 200, Protein 33g, Total Carbs 8g, Total fat 3g, Dietary Fiber 0g -
Recipe adapted from Bariatric Food Coach

Ingredients

- 1 cup unsweetened almond milk
- 1 scoop vanilla protein powder, such as Unjury
- ½ cup fat free Plain Greek Yogurt
- 2-3 tsp grated lemon zest
- 1-2 packets Truvia/stevia based sweetener, to taste
- 2-5 ice cubes, to desired thickness

Instructions:

1. Add all ingredients to a blender
2. Blend until completely combined

Roasted Carrots with Thyme

Recipe suitable for Phase 5 diet plan Servings: 6 - Calories 49, Protein 0g, Total Carbs 8g, Total fat 2g, Dietary Fiber 2g -
Recipe adapted from Taste of Home

Ingredients

- 1 lb. carrots peeled and halved lengthwise
- 2 tsp minced fresh thyme or ½ tsp dried thyme
- 2 tsp canola or olive oil
- 1 tsp honey
- ¼ tsp salt

Instructions:

1. Preheat oven to 400 degrees
2. Placed carrots on greased baking pan
3. In a small bowl, mix thyme, oil, honey and salt; brush over carrots
4. Roast for 20-25 minutes or until tender

Tuna Teriyaki Kabobs

Recipe suitable for Phase 5 diet plan
Servings: 6 Calories 260, Protein 30g, Total Carbs 10g, Total fat 11g, Dietary Fiber less than 1g
Recipe adapted from Taste of Home

Ingredients

- 1-1/2 pounds tuna steaks cut into 1-in. chunks
- 2 medium red peppers cut into 1-in. pieces
- 1 large sweet onion cut into 1-in. pieces

Marinade:

- ¼ cup minced cilantro
- ¼ cup sesame oil
- 3 Tbsp lime juice
- 2 tbsp soy sauce
- 1 Tbsp minced ginger root
- 2 cloves garlic

Instructions:

1. Thread tuna chunks onto 6 metal or soaked wooded skewers. Thread peppers and onion onto 6 skewers. Place skewers onto 13x9 in baking dish.
2. Whisk together marinade ingredients. Pour marinade over skewers; refrigerate covered for 30 minutes.
3. Grill kabobs, covered, on a greased grill rack over medium heat, turning occasionally, until tuna is slightly pink incenter for medium-rare (2-3 minutes per side) and vegetables are crisp tender (10-12 minutes). Remove tuna kabobs from direct heat and keep warm while vegetables finish grilling.

Hannaford: Individual or Small Group Tour for Surgical Weight Loss Patients and Families

Sign up to tour the store one on one or with a small group. Tours are available at the Broadway and Airport Mall locations and are scheduled as requested.

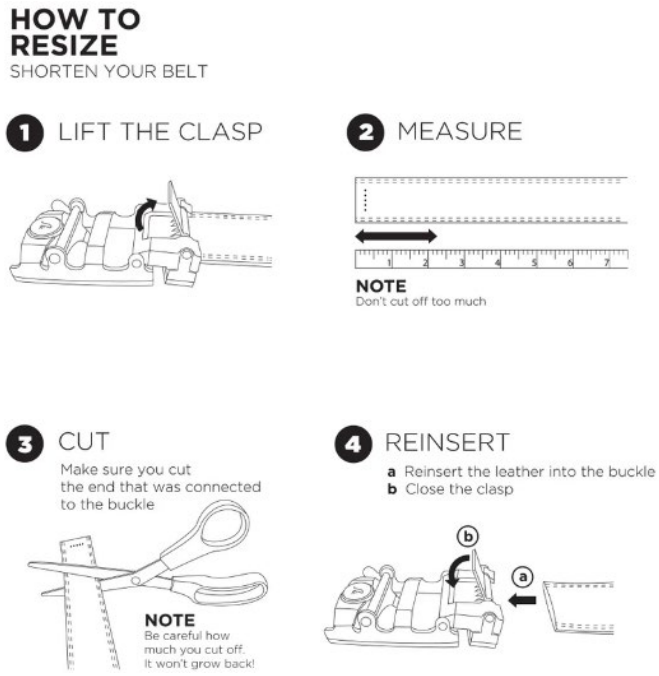
To sign up, please contact Caitlin Ratten, MS RD LD
by email Caitlin.Ratten@hannaford.com
or stop by the Hannaford Customer Service Desk.

This service is temporarily unavailable.

Ratchet Belt

Tammara's Story

A ratchet belt has been a huge success for both my husband and me. How? The way my husband was losing weight after surgery meant having to constantly put holes in his belt at the time.



Let's back up. My husband, Bill, had Gastric Bypass on November 1, 2018. He over the course of time has lost about 176 lbs. He was losing quickly and was spending a lot of time trying to find a belt that fit just right and held up his pants. He was trying to not buy clothes every week to keep up with his weight loss.

This belt is great. As you lose weight you can take the buckle off the leather and cut the leather to adjust to your size. The other bonus is you don't have to add holes to change size. I have added a photo to demonstrate what I mean.

Fast forward to November 14, 2019 when I had sleeve surgery. My first purchase after surgery was one of these belts. It is my saving grace; I have change pants size from a 20/22-ish to a 16 in 4.5 months. My go-to clothing item is this belt, especially if there is an outfit that I want to wear, and the pants are too big.

Pros

1. They come in sizes from 28' to 54'.
2. You don't have to buy numerous belts to accommodate your ever-changing waist.
3. It is truly uplifting when you have to adjust the size, especially when you hit a stall on the scale--it shows your body changing.

Cons

1. The belt end opposite to the buckle can become unsightly as time goes on.
2. The belt can be too wide for your belt loops
3. They may be hard to find locally, and you may need to order it online.

Overall I would recommend this to anyone thinking about weight loss only because it has made holding up our pants a lot easier!

Lori's Story

I made the very difficult decision to talk to my PCP about a referral for surgical weight loss almost a year ago (December 2018). I am an avid exerciser and following what I thought was a decent diet, but frustrated by my lack of ability to move the scale, or tape measure. Instead I was slowly watching myself go in the opposite direction and was so angry. Angry because of all the time spent in the gym running and meal prepping that seemed to only result in weight gain. Angry because of the continued pain in my lower back and joints that was only getting worse. Angry because I had a list of things that I wanted to still do in my life but felt imprisoned by my body. Angry because I felt that I had failed myself and succumbed to the "easy way out," surgical weight loss.

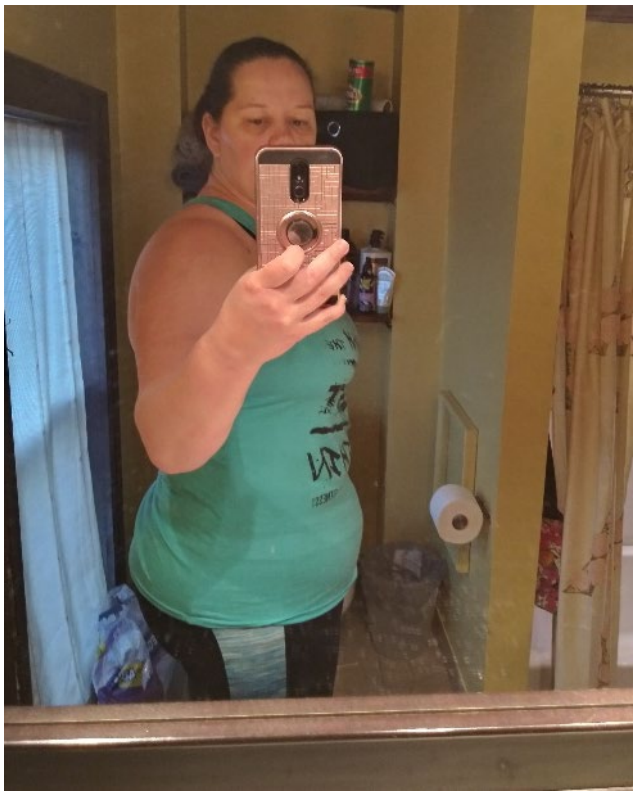
I was apprehensive of what to expect. I had watched more than a few friends either gain all their weight back or have serious complications as result of weight loss surgery. The thought of this terrified me and that was even before the hard work started. For those buds of mine that it didn't work for, it was for a couple of reasons:

1. They weren't open and honest with their care team – if something hurts, makes you sick or you just don't feel right, you must ask. Do not be afraid to ask questions, even if it is uncomfortable for you, even if it is about poop.
2. They didn't listen to their care team -
    a. Liquids at meal time? No.
    b. Eating too fast? SOOO much pain
    c. Trying out foods before you are ready…become well acquainted with your bathroom.

For anyone looking at this as an option, do not for one-minute think this is the easy way out, like I did. There is still a lot of hard work and dedication from losing the percentage of your body weight and the liquid diet pre-surgery, to the post-surgery diet of liquids and learning how to eat solid foods all over again. This process is not for the faint of heart, but I can tell you

that it is worth it. It is hard though. My body didn't work the same way anymore. Things that I use to be able to eat (on the approved list) made me sick. I learned early on the value of wisdom passed on by a friend "you only eat the wrong thing once." This is probably a time where I experienced frustration to the point of tears. I would be hungry, but sometimes the things I ate would come right back up. The most frustrating part is that these were deemed perfectly acceptable to eat on the phase I was on. So, lesson #1: my body wasn't the same anymore, and that is PERFECTLY okay.

Lesson #2: this procedure is a tool. A tool, if used correctly, can build beautiful, sturdy things. A tool used contrary to its intent will only cause destruction. Once the light bulb went off, I was determined to make the tool work for me. At my two-week post-op appointment, I asked Dr. Toder if I could resume normal workout activities: running and lifting. While she nixed the lifting, she said running was okay if I paid attention to my body. I then told her that I had signed up for the Millinocket Half Marathon back in January of 2019 (before I was really thinking about surgery). She kind of looked at me for a minute and then asked me how long it had been since I had last run (two weeks prior to my surgery is when I stopped). I think she was inwardly thinking I was insane but encouraged me to keep running and if I wound up being at Millinocket to get a picture.



So, I started running. To be truthful it was both exhilarating, tiring and frustrating. My first two weeks post op, I dropped close to 20 pounds. Running at 20 pounds lighter was phenomenal. I was able to run a bit faster and my body didn't hurt as badly after. The really tiring part came as I worked my way up gradually in mileage. At my 4-week post op, I was running 4 miles a day 4 days a week. I noticed that I was very fatigued that last mile and after the run. I started to worry that I wouldn't be able to run Millinocket but reached out to Valerie Curtis who is my nutritionist and part of my care team. She provided me with an article about Surgical Weightloss Athletes and fueling for endurance sports. It was life changing. Even though I couldn't "carb-load" like my counterparts, there were things I could do to make sure I didn't tire out during my training.

Now we come to lesson #3: learning to be gentle with myself. Did I run the Millinocket Half Marathon? No, not all of it. I had only made it up to 6.5 miles during my training runs, but I was okay with that.

I knew that I would have to walk part of, if not all of the course. The pictures of the Gold Road made me nervous…that's a big hill. Some of my runner friends voiced concern about the wisdom of doing this run, especially since I was only 12 weeks post-op and only made it to 6.5 miles in training. I made the decision that if I needed to quit during the race, I would. There would be plenty of ways for me to get back, and I wouldn't fault myself for not finishing.

Between mile 9 and 10, I got to that point. I was mentally and physically fatigued. I was in pain to the point of tears. It was only my own stubbornness that kept me going and the realization that the end was near. This was not a fairytale finish where you saw people running and jump for joy at the finish line. I staggered across the finish line, wrapped in my parka and massive hugs from a couple of brave friends who ran their half and then waited for me… all 4 hours and 54 minutes of it. I'd like to say that it was sunshine and rainbows, but it wasn't. It was tough, but I learned lesson #4: I can do anything I put my mind to; I can do the hard things that need to be done. I participated in a 13.1 mile run/walk on one of the toughest courses in the country in frigid conditions. I am proud of that and I have the bumper sticker, medal, and finish line picture to prove it. Without this program, my awesome care team, and my family and friends rooting for me, it never would have happened.

We need patient stories!

One of our favorite parts of putting together this newsletter is being able to publish our patients' stories of success. If you are interested in sharing your story for a future edition of the skinny, please contact us!

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Tama – tfitzpatrick@northernlight.org, Andrea – asaquet@northernlight.org