



Thunder Bay  
Regional Bariatric Care Centre

# Gastric Bypass Surgery

“Making An Informed Decision”



## Introduction

- You have taken the first step in finding out if this program is right for you
- Before making a decision you need to know what the surgery involves and how it will affect the rest of your life

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## Why Bariatric Surgery?

Research indicates that obesity is associated with many health risks, including cancer, cardiovascular disease and diabetes.

Bariatric surgery, when used effectively, has been shown to achieve potentially life-saving reductions in weight and weight related health issues for patient with obesity.

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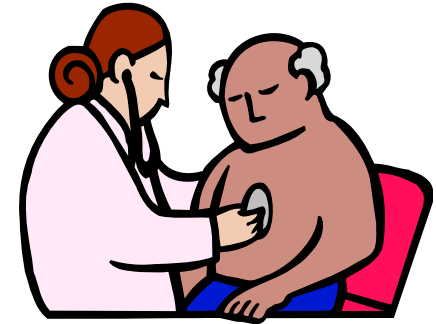
## A Team Approach

- You
- Surgeon
- Bariatric Clerk
- Bariatric Nurse Practitioner
- Registered Dietitian
- Medical Internist
- Kinesiology
- Psychologist
- Social Worker
- Pharmacist
- Endocrinologist

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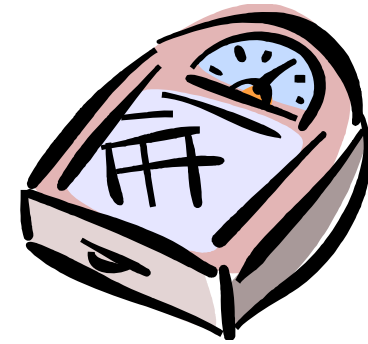
## Referral Program

- Suitable Body Mass Index (BMI)
- Weight Related Health Problems
- Quality of Life Issues
- Previous Weight Loss Attempts
- Psychologically and Medically Fit for Surgery



# Body Mass Index (BMI)

- Weight in relation to height
- Measure of health risk



- \* Candidates need a BMI  $> 40$ , or  $> 35$  with weight related health issues.



## BMI Chart by BodyMassIndexChart.org

Height [feet and inches]	Weight [pounds]																
	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260
4'6"	24	27	29	31	34	36	39	41	43	46	48	51	53	55	58	60	63
4'8"	22	25	27	29	31	34	36	38	40	43	45	47	49	52	54	56	58
4'10"	21	23	25	27	29	31	33	36	38	40	42	44	46	48	50	52	54
5'0"	20	21	23	25	27	29	31	33	35	37	39	41	43	45	47	49	51
5'2"	18	20	22	24	26	27	29	31	33	35	37	38	40	42	44	46	48
5'4"	17	19	21	22	24	26	27	29	31	33	34	36	38	39	41	43	45
5'6"	16	18	19	21	23	24	26	27	29	31	32	34	36	37	39	40	42
5'8"	15	17	18	20	21	23	24	26	27	29	30	32	33	35	36	38	40
5'10"	14	16	17	19	20	22	23	24	26	27	29	30	32	33	34	36	37
6'0"	14	15	16	18	19	20	22	23	24	26	27	28	30	31	33	34	35
6'2"	13	14	15	17	18	19	21	22	23	24	26	27	28	30	31	32	33
6'4"	12	13	15	16	17	18	19	21	22	23	24	26	27	28	29	30	32
6'6"	12	13	14	15	16	17	18	20	21	22	23	24	25	27	28	29	30
6'8"	11	12	13	14	15	16	18	19	20	21	22	23	24	25	26	27	29
6'10"	10	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
7'0"	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26

Underweight	Normal Range	Overweight	Obese

# Weight Related Health Problems

- Diabetes (Type 2)
- Sleep Apnea (requiring CPAP)
- Osteoarthritis (requiring hip or knee replacement)
- High Blood Pressure/High Cholesterol
- Acid Reflux
- Heart Disease
- Quality of Life Issues



# Requirements

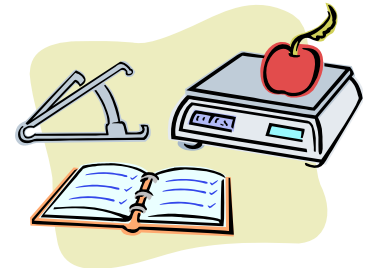
## Before Surgery:

- No **caffeine** for **2** months
- No **alcohol** for **2** months
- No **smoking** for **6** months (you will not be booked for initial assessment until you are 3 months smoke free!)
- No recreational or illicit **drugs** for **6** months



## More Requirements

- Use of birth control (female patients)
- Be cancer free for at least 5 years
- Exhausted all other non-surgical methods of weight loss
- Able to understand and follow instructions
- Able to make independent decisions



# Assessment for Surgery

In-depth process:

- Ensures patient safety and success
- Requires a commitment to the program



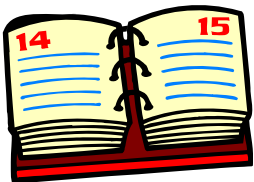
Individuals must:

1. Complete a Health/Nutrition Questionnaire
2. Attend all appointments with team
3. Complete all medical testing



# Appointments

- Appointments may be on different days
- Be prepared to come in for appointments and tests at least three times
- Please be patient, sometimes you may have to wait between visits
- If travel is an issue for you, consider this prior to scheduling appointments
- Telemedicine appointments will also be available



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## But...

- Cancellation Notice: 2 business days
- If you are 15 minutes late for an appointment it will be cancelled and rescheduled
- “No Shows” may result in treatment delays - and if excessive, possible discharge from the Program



# Pre-Operative Assessment

You will be required to have the following tests done prior to being approved for surgery:

- Blood Work
- ECG
- Abdominal Ultrasound
- Upper Endoscopy
- Colonoscopy (if you are 50 years old & over)

\* other necessary tests including echocardiogram, pulmonary function, etc.



## Referral for Surgery

- Will be done in consultation with the team, and through the Nurse Practitioner or Physician
- Once referred you will be required to attend a “Gastric Bypass Education Class”
- Prior to surgery you will meet with the Surgeon and the Anesthesiologist





## Surgery

Surgery will be performed at **St. Joseph's Hospital** in Hamilton, ON

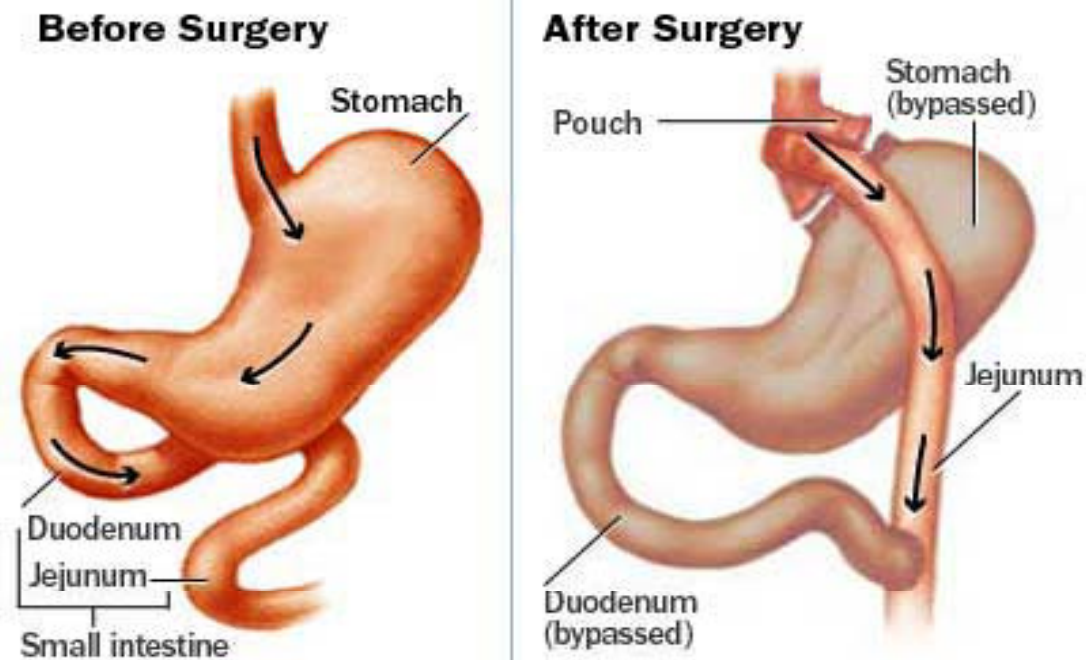
- You may be required to travel to Hamilton prior to and separate from your surgical date to be assessed by the Surgeon and/or Anesthetist
- Limited reimbursement is available for some travel expense

Northern Health Travel Grant

<http://www.health.gov.on.ca/en/public/publications/ohip/northern.aspx>

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# What is a Roux-En-Y Bypass



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- Prior to surgery, your stomach can stretch to the size of a football

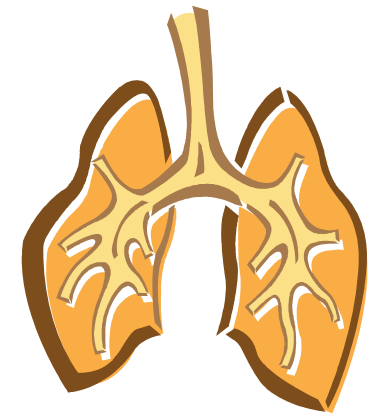


- After surgery, your stomach will be able to hold 30 to 60 mls of food, or about the size of a golf ball



# The Risks of Surgery

- Pneumonia
- Intestinal Leaks
- Intestinal Blockages or Bowel Obstruction
- Blood Clots in Legs or Lungs
- Death (mortality rate is 1 - 2 percent)





## Mortality Rate

Your Surgeon will talk to you about your level of risk based on your:

- Medical History
- Age
- Other Health Factors i.e. smoking

## Other Complications

- Infection
- Bleeding
- Ulcers
- Dehydration
- Nausea & Vomiting
- Malnutrition
- Internal Hernias





# Your Recovery Period

- Average length of stay in hospital is two to three days, including your day of surgery
- We recommend that you stay in Hamilton for at least 48 hours after you have been discharged
- You will be able to return to normal activities in about 4 to 6 weeks



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# Medications After Surgery

It is important to talk to your Health Care Provider and Pharmacist about how to safely take your medications after bariatric surgery.



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# Medications After Surgery

- Some medications will need to be crushed or taken in liquid form
- You cannot take enteric coated as well as most “long acting” medication
- You cannot take most anti-inflammatory medications (Advil, Motrin, Ibuprofen)



# Post-Op Medications

When you come home from the hospital you will be on:

- Medication to prevent stomach ulcers
- Medication to help if you experience nausea and vomiting
- Medication to help control pain and discomfort
- A daily needle to prevent blood clots



# Blood Clot Prevention

- Starts the first day after surgery
- The nurse injects a medication called Tinzaparin daily into your lower abdomen
- You, or your significant other, will be taught how to administer this medication prior to your discharge
- You will need 10 injections in total, starting the first day after surgery



# Diabetes and Surgery

For some people with diabetes who have gastric bypass surgery...

- blood sugars improve and less diabetic medications are required
- blood sugars return to normal and diabetic medications are no longer required



Testing your blood sugars will continue to be very important. Record your blood sugars in a log book or journal – you will need to bring this book with you to every clinic appointment.

# Surgical Follow-Up

It is extremely important to be checked frequently after surgery:

- 1 week
- 4 to 6 weeks
- 3 months + blood tests
- 6 months + blood tests
- 9 months
- 12 months + blood tests



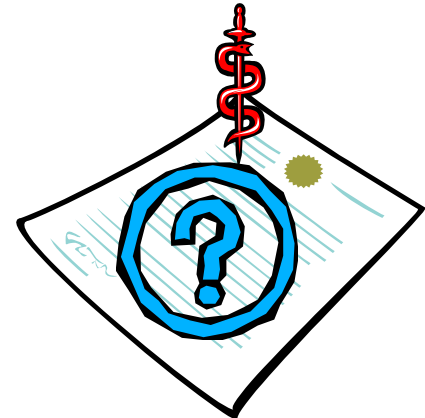
## Expected Weight Loss

- Each person is different
- Only 1% of patients achieve a normal BMI
- Setting realistic weight loss goals is important  
i.e. 1 to 2 lbs a week (0.45kg – 0.9kg)
- Expect to lose 60% to 70% of excess body weight in the first 2 years



## After Your Weight Loss

- You may have a lot of excess skin
- You may need or want Plastic Surgery
- It is not always covered by Ontario Health Care





# Kinesiology and Exercise Prescription



- Scope of Practice:
  - assessment of movement, performance and function
  - rehabilitation, prevention and management of disorders to maintain, rehabilitate or enhance movement, performance and function

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# Kinesiology and Exercise Prescription

- Kinesiology and You!

You will meet initially to discuss:

- your exercise-related medical history
- your past and current attempts with weight management programs
- your current functional capabilities, limitations, and injury status
- some short and long term goals to focus your exercise regime

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# Kinesiology and Exercise Prescription

- From there...
  - We will develop a safe personalized exercise prescription that meets your specific needs.
  - We will assess your suitability to utilize the Cardiac Rehab Lab and the exercise facility there (\*County Fair Mall, Thunder Bay)



*\*Programs for our Regional patients are in development.*



# Kinesiology and Exercise Prescription

Get a head start!

If your doctor has cleared you for exercise:

- Be proactive and get a head start by increasing your daily activities slowly and safely!
- Such things as walking, swimming and low to moderate aerobics classes are great ways to get started and motivated
- 30 minutes of activity per day, at least 5 days per week is recommended



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# Kinesiology and Exercise Prescription



If 30 minutes at one time is too much, try breaking it up into 3-4 bouts of 10 minutes of activity.



# Kinesiology and Exercise Prescription

- Remember!
  - You can turn “I **will** Exercise” into “I **am** Exercising!”
  - Exercise can be fun...try things such as music, games, sports to help keep you motivated and interested
  - Activities of daily living can be exercise - That means you don't have to “add more onto the pile”
  - We will help you make exercise become a lifestyle ...it will become habitual!

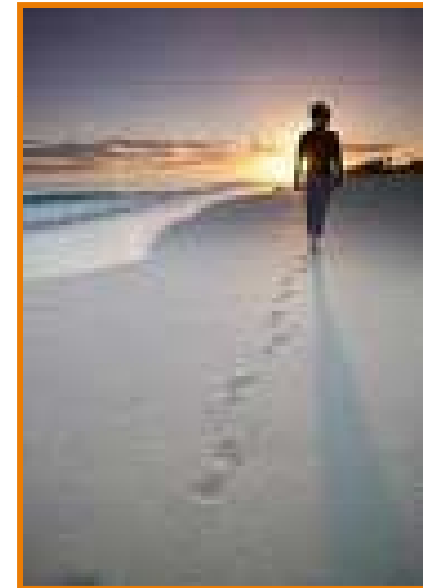
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# Kinesiology and Exercise Prescription



Footprints to your future cannot be made sitting down...so let's get up, get out and get healthier...Together!



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# Nutrition



## Before and After Surgery



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# Getting Started

- Initial Nutrition Assessment with Dietitian
- Nutrition Goals:
  - Eat Breakfast, Lunch, Supper and snacks if necessary
  - Avoid high fat & high sugar foods
  - Focus on mindful eating and portion control
  - Reduce caffeine and carbonated beverage intake
  - Keep a food journal



# Getting Started

- Show evidence of commitment to lifestyle changes i.e. breakfast everyday
- 8-week follow up:
  - Review of lifestyle changes
  - Discuss successes and challenges
  - Discuss multivitamin and other supplements
  - Further follow up if necessary



# Just Before Surgery

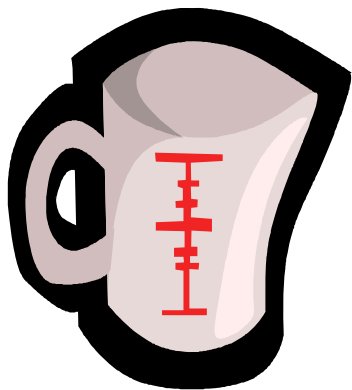
## Optifast Liquid Diet:

- OPTIFAST is a high protein liquid meal replacement
- Must be followed 2 to 4 weeks prior to surgery
- Reduces fat around the liver to make surgery safer and easier (aka liver shrinking diet)
- Prescription: 4 OPTIFAST packets each day with small amounts of clear fluids are allowed (ie. Broth, jello, crystal light)
- If you have Diabetes, you will need supervision



## After Surgery

- At first, your stomach can hold about 60 ml or  $\frac{1}{4}$  cup
- Small sips of fluids frequently are recommended
- At around 8 weeks, you can eat about 240 ml or 1 cup of solid food for each meal



## After Surgery

Progress slowly from clear fluids to a soft diet:

- Decreases irritation/stress to the surgical area
- Helps prevent vomiting
- Allows time to heal
- Helps with weight loss



Your Dietitian will teach you this diet before surgery

## After Surgery

### Avoid

- Alcohol for 3 - 6 months
- Caffeine for 3 - 6 months
- Carbonated beverages for life





# Nutrition Guidelines

1. Clear fluids for 1 day after surgery
2. Clear fluids and 3 protein drinks for 2 weeks
3. Full fluids and 3 protein drinks for 2 weeks
4. Pureed foods for 1 week
5. Minced foods for 1 week
6. Soft foods at week 7



(note: these timelines are approximate)

## Nutrition for Life

- Small portions (up to 6 small meals)
- Eat slowly, chew well
- 60 - 80 g Protein each day
- No Sugar
- Low fat, Low calorie foods
- No carbonated beverages
- No straws, no chewing gum





## Nutrition for Life

Eat 60 - 80 grams of protein each day:

- Helps promote loss of body fat and preserve lean body mass (muscle)
- Protein improves satiety with meals
- Good sources of protein may be the most challenging to tolerate after surgery i.e. meats
- Eat or drink protein at the beginning of each meal
- Divide protein into at least 3 to 4 meals

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## Nutrition for Life

Make sure that you get enough fluid:

- Must drink at least 2 litres or 8 cups of fluid each day
- Drink no more than 120mls to 180mls ( $\frac{1}{2}$  to  $\frac{3}{4}$  cup) of fluid in 1 hour
- Cannot drink fluids with meals as there is not enough room in your stomach for both liquid and food
- Keep a record to be sure you are getting enough



# Nutrition Related Problems

- Nausea and vomiting
- Intolerance to some foods
- Dehydration
- Dumping syndrome
- Constipation
- Diarrhea
- Gas
- Hair and skin changes
- Nutritional deficiencies



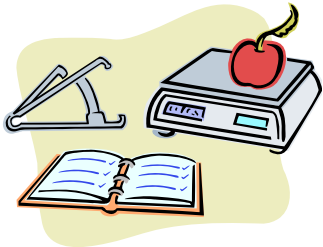
# Supplements for Life

- Prenatal Multivitamin
- Calcium Citrate with Vitamin D
- Vitamin B12
- Other Supplements (i.e. Iron)



# Successful Weight Loss

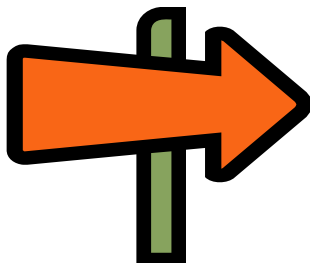
- Follow the nutrition guidelines
- Attend all of your post-op appointments
- Change eating habits
- Change your way of thinking about food
- Focus on your successes
- Change your lifestyle...for the rest of your life!





## Plan Ahead

- You need to have a support system. Bring your support to your clinic appointments
- Surround yourself with people who will support your decision for surgery
- Make sure this is the right time in your life for this surgery
- Our clinic staff is available to help with decision making



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## Plan Ahead

- Prepare your family for the changes that will occur to everyone's lifestyle
- Clean out your cupboards and remove high calorie and high sugar foods now
- Buy supplements and vitamins before surgery
- Buy or borrow a blender or food processor
- Arrange for help with childcare, housework and chores



## Plan Ahead - Budget

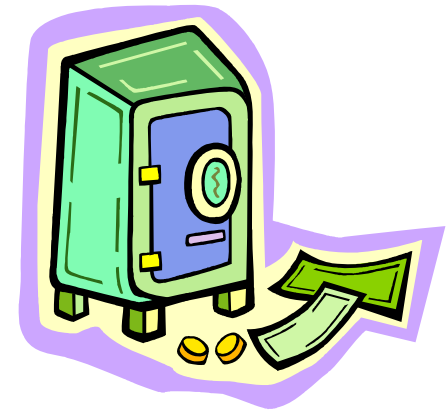
- OPTIFAST for 2 to 4 weeks:  
\$165 - \$350
- Liquid protein supplements for 4 weeks:  
\$150 - \$250
- Vitamins and minerals for life:  
\$20 - \$40 per month
- Medication to prevent blood clots:  
\$150



## Plan Ahead - Budget

Other things to consider:

- Travel and parking expenses
- Time off work for appointments before and after surgery
- Time off work for surgery



# Outcomes of Bariatric Surgery

- You will lose a dramatic amount of weight in the first 18 to 24 months after surgery
- If you do not continue with this new lifestyle and maintain the necessary changes to your diet you may regained substantial amounts of weight



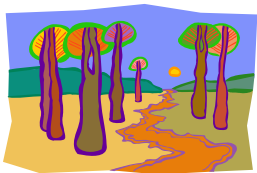


# Outcomes of Bariatric Surgery

At 18 to 24 months, there will be 2 paths available to you:

1. Maintaining or continuing your weight loss
2. Regaining weight

Which path you will follow depends on whether you have been able to create a...**“new normal”**...with regard to your eating habits and exercise activity.



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There is only one way to achieve and to maintain a healthier weight...

Make significant lifestyle changes in eating habits and activity level for the rest of your life.

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## The Awful Truth

If you do not learn and maintain healthier eating and exercise habits, you will regain the weight that surgery helped you lose and...

- You will not achieve your goals
- You will have incurred avoidable out of pocket expenses
- You will expose yourself to unnecessary surgical risk





## The Wonderful Truth

If you learn and maintain healthier eating and exercise habits, you will achieve and maintain a healthier weight for the rest of your life and you will achieve your goals!



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## Good News...

Lifestyle is a group of habits and habits can be changed.

## Even More Good News...

We know a great deal about the habits that you will need to change to achieve your goals and about how to change them and we will share this information with you!



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## When to Start?...Now!

Why?

- To reduce the risk of complications during and after surgery
- To increase the amount of weight loss in the 2 years after surgery
- To give yourself time to build the “new normal” with which you will achieve your goals



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But Please...



## Remember the Permanency of this Surgery

This is a serious lifetime commitment!

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