# Bariatric Surgery Nutrition

Synergy Bariatrics

# Bariatric Nutrition Outline

- Macronutrients
  - Protein
  - Carbohydrate
  - Fat
- Hydration and Fluid
- Supplements
  - Vitamins and Minerals
  - Protein Powders and Bars
- Tools for Success
  - Food Journaling
  - Using a Food Scale
  - Reading a Food Label
- How to Create Meals and Snacks

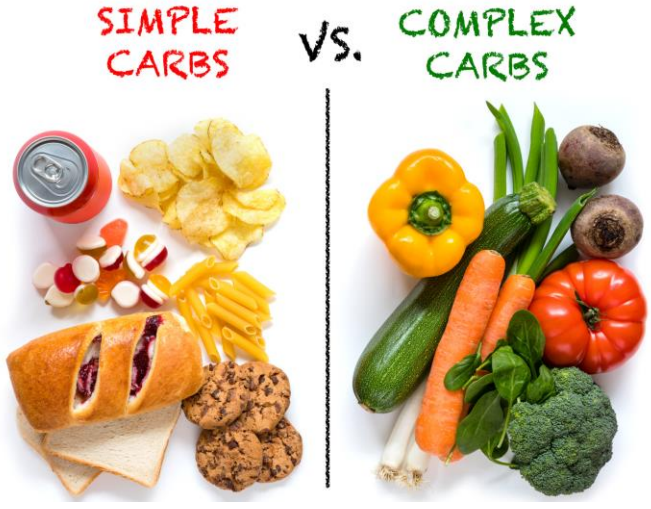
# Macronutrients

# Protein

- Goal of at least 80-100 grams of protein per day before surgery
- Goal of at least 60-80 grams of protein per day after surgery
- Your goal is to consume 15-30 grams of protein per meal or snack 4-6 times per day to reach your daily goal
- Most animal products are good sources of protein
    - (The exceptions are hot dogs, bacon, salami and bologna)
- Good sources of protein include chicken, steak, beef, eggs, cheese, fish, turkey, cottage cheese, Canadian bacon, Greek yogurt, light yogurt, milk, shrimp, tuna
- Prioritize whole foods first; real food protein
    - protein bars and shakes should be supplemental

# Carbohydrates

- Consume 90-150 grams of carbohydrate per day (this can vary based on physical activity)
- Include fruits, vegetables and whole grains which are also good sources of dietary fiber, vitamins and antioxidants
  - Based on physical activity level the grams of carbohydrate need can vary greatly
- It is best to consume consistent amounts of carbohydrate throughout the day
  - 15-30 grams of carbohydrate per meal or snack 4-6 times per day



# Fat

- Try to consume “heart healthy fats” at least two to three times per day
  - These include: nuts, seeds, olive oil, avocado, nut butters, olives, chia seeds, flax seeds, hummus and guacamole
- Creates satiety (fullness that lasts)
- Consume around 40-60 grams of fat per day
- Consume 10-15 grams of fat per meal or snack 3-4 times per day
- Helps with absorption of fat soluble vitamins (vitamins A, D, E and K)

# Hydration

- Your goal is to consume at least 6-8 cups (48-64oz) of fluid per day
  - Water is best but other non-calorie, sugar-free, carbonation-free, alcohol-free beverages are OK to consume
- Sugar free carbonated beverages (ie: Seltzer water) are OK if you tolerate them
- 2 cups of caffeinated product per day is OK
  - Be mindful of what you add to your coffee or tea
  - Adding flavored creamers and added sugar is not recommended
  - You will not be given caffeinated products in the hospital

# Supplements

# Recommended Vitamin and Mineral Supplements After Bariatric Surgery

- It is recommended that you start a bariatric multivitamin and mineral supplement after your first post operative appointment
- You MUST be on a **Bariatric multivitamin and mineral regimens for life**

| Bariatric MOV Name | Serving | Cost |
|---|---|---|
| **Bariatric Fusion- MOV chewables *has calcium** | 4 chewables per day (2, twice per day) | $22 per month with code SYNERGY20 |
| **Bariatric Fusion 1 per day MOV capsule with Iron** | 1 capsule | $14.40 for 30 days with code SYNERGY20 and purchase 90 day supply |
| **Bariatric Advantage Ultra Solo with Iron *contains vitamin K, do not take if on warfarin** | 1 capsule | $17.50 for 30 days with code SYNERGY and purchase 90 day supply |
| **Bariatric Advantage Ultra Solo without Iron *contains vitamin K, do not take if on warfarin** | 1 capsule | $16.83 for 30 days with code SYNERGY and purchase 90 day supply |
| **Procare Health Bariatric Multivitamin with 45mg OR 18 mg iron** | 1 chewable tablet or 1 capsule | $15-20 for 30 day supply |
| **Bariatric Pal Multivitamin One with 45mg iron** | 1 capsule | $30 for 30 day supply |
| **Bariatric Choice once Daily with 45 mg Iron** | 1 capsule | $29.99 for 90 day supply |
| **Barilife *has calcium** | 6 tablets (3 tablets twice a day) | $30.99 for 30 day supply |

# Protein Powder/Shakes

- 15-30 grams of protein per serving
- 5 or less grams of total fat per serving
- 5 or less grams of added sugar per serving
- Protein shakes can be used as a meal or snack replacement or as a supplement to your protein intake after surgery
- Protein powder can be added to food to increase the protein content without increasing the quantity of food
    - Unflavored collagen peptides

# Protein Bars

- At least 15-30 grams of protein per bar
- 5-15 grams of total fat
- 15-30 grams of carbohydrate
  - 5 or less grams of added sugar per serving
  - Try to find bars with at least three grams of fiber
- Examples include:
  - Pure Protein Bars
  - Quest
  - Barebells protein bars
  - Think thin high protein
  - Fit Crunch
  - Power Crunch

# Supplementation

- Protein shakes and bars can be used to assist you to meet protein goals after surgery

- Consuming real food proteins is encouraged at least three times a day
    - protein bars and shakes should be supplemental
    - find a shake you enjoy for 10-Day Liver Reduction Diet


Tools for Success
• Journaling
• Measuring
• Label Reading

# Food Journaling

- 2 weeks of food journals must be approved before surgery to confirm your eating patterns will support you after surgery
  - Protein in ounces
  - Hydration
- There are paper journals provided in the new patient packet
- Please email to the office or your RD to review
  - SynergyBariatrics@ecmc.edu
  - You‘re also welcome to drop off paper journals
- If you prefer to log in an app, Baritastic is recommended, but you may use any food journaling app
  - MyFitnessPal
- Baritastic App: Enter **53990** to connect your account to Synergy

# Using a Food Scale

You will need a food scale to most accurately measure how much protein you are eating

Unless otherwise stated, ounces noted are after being cooked

1. Place the digital scale on a flat, level surface
2. Turn the scale on and use the unit button to choose ounces (oz)
3. Place a bowl, plate, or bag on the scale to hold your food
4. Tare the scale: Press the "tare" or "zero" button to remove the weight of the container, setting the scale's display to zero
5. Add your ingredient to the container until the display shows the exact weight needed for your recipe or portion size

# Using a Food Scale

- When food journaling, **ounces of protein is required**
- Multiply ounces by 7 to record how many grams of protein are in an item
- Example: 4oz of cooked chicken breast x 7 = 28g of protein in serving of chicken

**This goes for unpackaged meats and cheeses. If items are packaged, read the food label

# A Handy Guide to Portion Sizes

**Tip:** a food scale can also be helpful for portioning packaged items like cereals, nuts, snacks, etc. but it's not required. It's an important lifestyle change to be able to estimate portions, especially on the go

**Fist = 1 Cup**

This can be helpful when measuring carbohydrates, such as rice, fruits, cereals, and salads.

**Cupped hand = ½ cup**

Use this tool for measuring foods such as nuts, potatoes, pasta, and beans.

**The palm = 3 oz.**

Use the palm to estimate a 3 oz. portion of protein. Items you can measure include chicken, beef, pork, fish, and tofu.

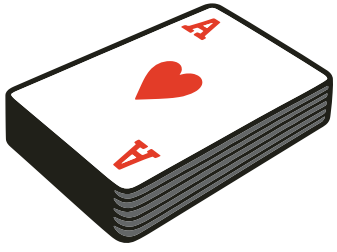
**Tip of thumb = 1 Tbsp**

A useful tool for measuring fats like peanut butter, mayonnaise, cheese, and oils.

**Thumbnail = 1 tsp**

Items you can measure include spices, sauces, and salad dressings.

## Other ways to measure:

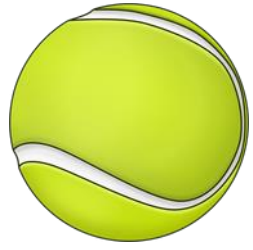


A deck of cards = 3 oz serving of protein

A softball = 3 cups

A baseball = 1 cup

A tennis ball = 1/2 cup



A golf ball = 2 tablespoons

# Reading Nutrition Facts Labels

# Reading Nutrition Facts Labels

Learning how to read and understand food labels can help you make healthier choices and ensure adequate protein consumption

**Step 1:** Note the serving size

- (Please note the grams next to the serving size is a weighted measurement and not grams of protein)

**Step 2:** Note the grams of protein per serving

- For this example, 1 egg contains 6 grams of protein. If you consumed 3 eggs you would be consuming 18 grams of protein

ONE LARGE EGG

**Nutrition Facts**

Serving Size 1 egg (50g)

| Amount Per Serving | |
|---|---|
| **Calories** 70 | Calories from Fat 40 |
| | **% Daily Value*** |
| **Total Fat** 4.5g | **7%** |
| Sat. Fat 1.5g | **8%** |
| Trans Fat 0g | |
| **Cholest.** 215mg | **71%** |
| **Sodium** 65mg | **3%** |
| **Total Carb.** Less than 1g | **0%** |
| **Protein** 6g | **10%** |

Vitamin A 6% • Vitamin C 0%

Calcium 2% • Iron 4%

Not a significant source of Dietary Fiber or Sugars.

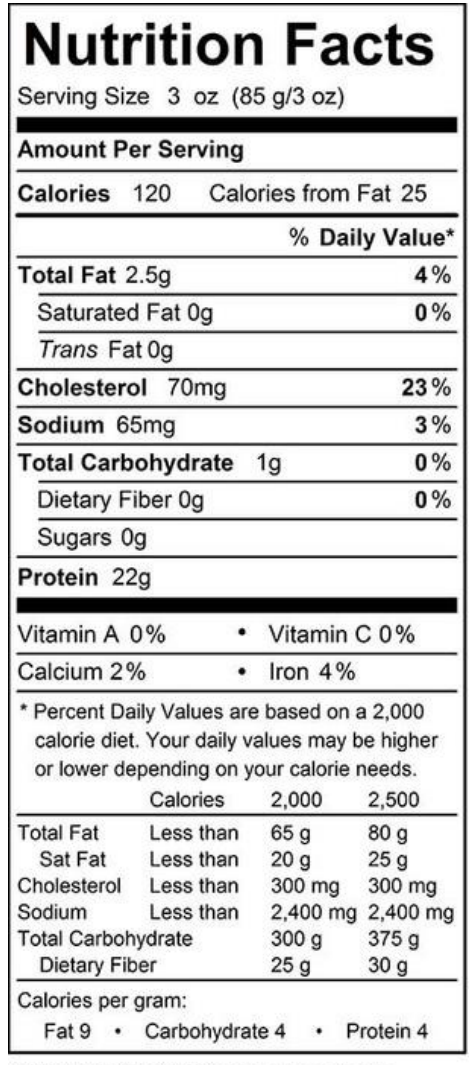
# Reading Nutrition Facts Labels

**Step 1:** Note the serving size

- (Please note the grams next to the serving size is a weighted measurement and not grams of protein)

**Step 2:** Note the grams of protein per serving

- For this example **3 oz** of this product would contain **22 grams** of protein. If you consumed **1.5 oz** of this product you would be consuming **11 grams** of protein.
- Using a food scale will help you determine how many ounces of meat or cheese you are consuming



**Nutrition Facts**

Serving Size 3 oz (85 g/3 oz)

**Amount Per Serving**

**Calories** 120 Calories from Fat 25

| | % Daily Value* |
|---|---|
| **Total Fat** 2.5g | **4%** |
| Saturated Fat 0g | **0%** |
| *Trans* Fat 0g | |
| **Cholesterol** 70mg | **23%** |
| **Sodium** 65mg | **3%** |
| **Total Carbohydrate** 1g | **0%** |
| Dietary Fiber 0g | **0%** |
| Sugars 0g | |
| **Protein** 22g | |

Vitamin A 0% • Vitamin C 0%

Calcium 2% • Iron 4%

* Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.

| | Calories | 2,000 | 2,500 |
|---|---|---|---|
| Total Fat | Less than | 65 g | 80 g |
| Sat Fat | Less than | 20 g | 25 g |
| Cholesterol | Less than | 300 mg | 300 mg |
| Sodium | Less than | 2,400 mg | 2,400 mg |
| Total Carbohydrate | | 300 g | 375 g |
| Dietary Fiber | | 25 g | 30 g |

Calories per gram:

Fat 9 • Carbohydrate 4 • Protein 4

INGREDIENTS: Organic Free Range Chicken Breast, Organic Rosemary, Nu Salt (Salt Substitute), Organic Garlic Powder

# Reading Nutrition Facts Labels

- Choose items with 5 or less grams of total fat per serving
  - items marked “light” “reduced fat” or “low fat” can lead you to making leaner choices
  - Healthy fats are the exception to this rule
    - Healthy fats will exceed 5 grams of total fat per serving and that is OK
- Keep the sugar to 5 or less grams per serving
  - If sugar is one of the first 5 ingredients listed under the “Ingredients” on the food label the product contains a good amount of “added sugar” and is not recommended
  - Fruit and dairy products contain natural sugars and are the exception to this rule
    - When choosing yogurt try to keep the sugar to 8 or less grams of sugar per 6oz serving
    - Milk contains 12 grams of sugar per 8 oz serving. Any grams of sugar over 12 grams of sugar is ADDED SUGAR

# How to Create Meals and Snacks

# Meal Frequency and Timing

- Consume 4-6 small meals/snacks per day
- Eat every 3-4 hours
- Eat breakfast every morning within an hour of waking
- Have your last meal or snack 2-3 hours before you go to bed
- Try to create a 12 hour fast overnight
  - For example, if you have breakfast at 7 AM have your last meal or snack at 7 PM

# STEP 1: Start with PROTEIN

- Try to stick with lean proteins
  - These contain 5 or less grams of total fat per serving (look at the nutrition facts label)
- Lean proteins contain less saturated fat and calories
- **Your goal is to consume 15-30 grams of protein per meal or snack 4-6 times per day**

# STEP 2: Add a CARBOHYDRATE

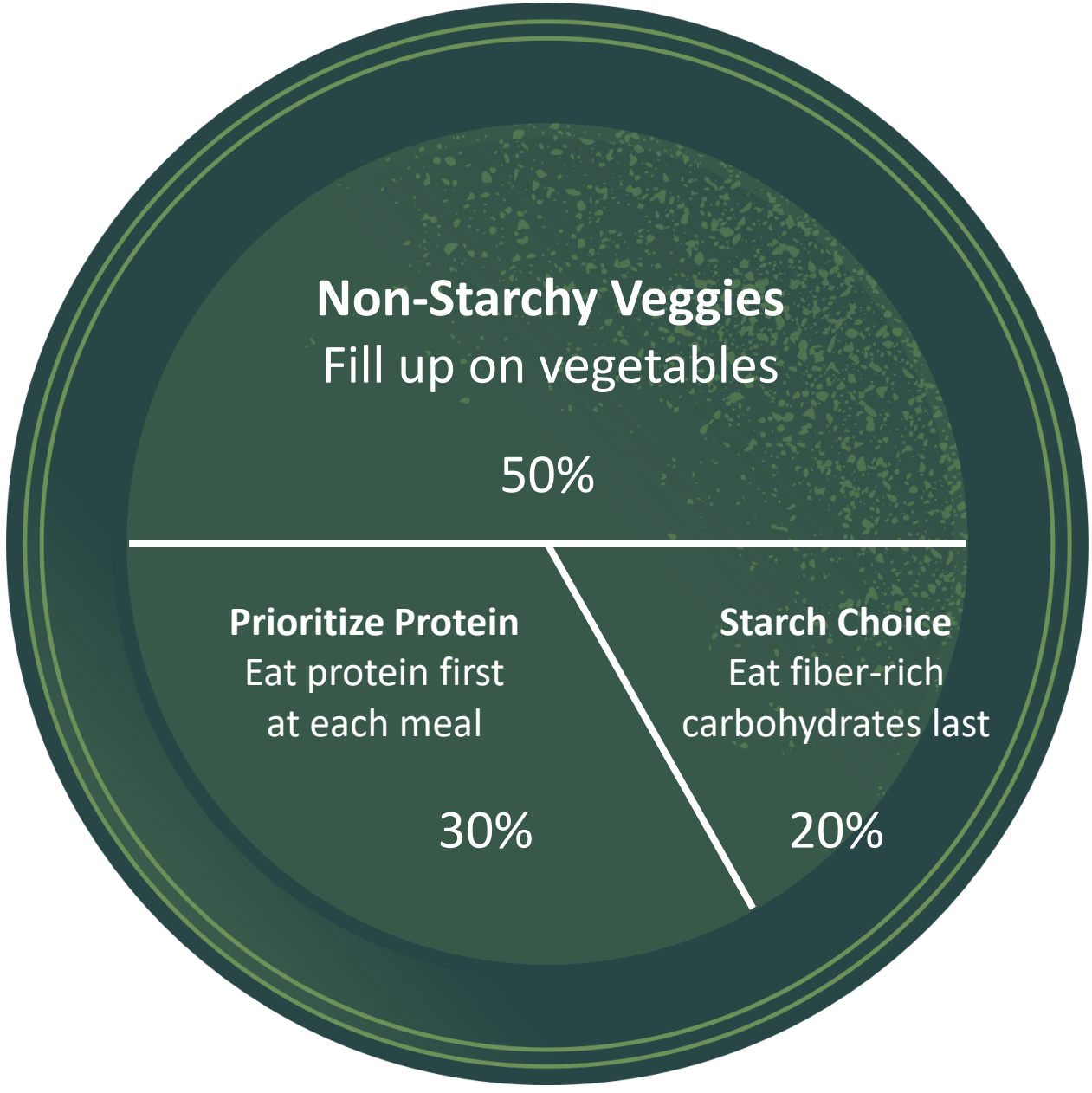
- Fruits, vegetables and whole grains (oatmeal, popcorn)
  - Potatoes, sweet potatoes, corn, peas
  - Beans (kidney, garbanzo)
- Any carbohydrate can easily be exchanged for any other carbohydrate. For example, you can substitute a banana for potatoes or a slice of whole grain toast.
- Note: including mostly natural, unprocessed carbohydrate choices into your meal such as fruit, vegetables and whole grains are best
- If you want more than one carbohydrate in a meal such as rice and vegetables, lower the amount of each to match your personal nutritional parameters.
  - **Aim for 15-30 grams of carbohydrate per meal and snack 4-6 times per day**

# STEP 3: Add a FAT

- Healthy fats include nuts, seeds, nut butters, olive oil or avocado oil, olive oil or avocado oil based dressings, avocados, etc.
- Any fat can easily be exchanged for any other fat. For example, you can substitute salad dressing for avocado. Though you can include any fat in your meal, please **note** that natural, unsaturated fats from non-animal sources are heart healthy
- If you want more than one fat at a meal or snack, such as olive oil and avocado, lower the amount of each to match your personal nutritional parameters
    - **Aim for 10-15 grams of fat per meal or snack 4-6 times per day**

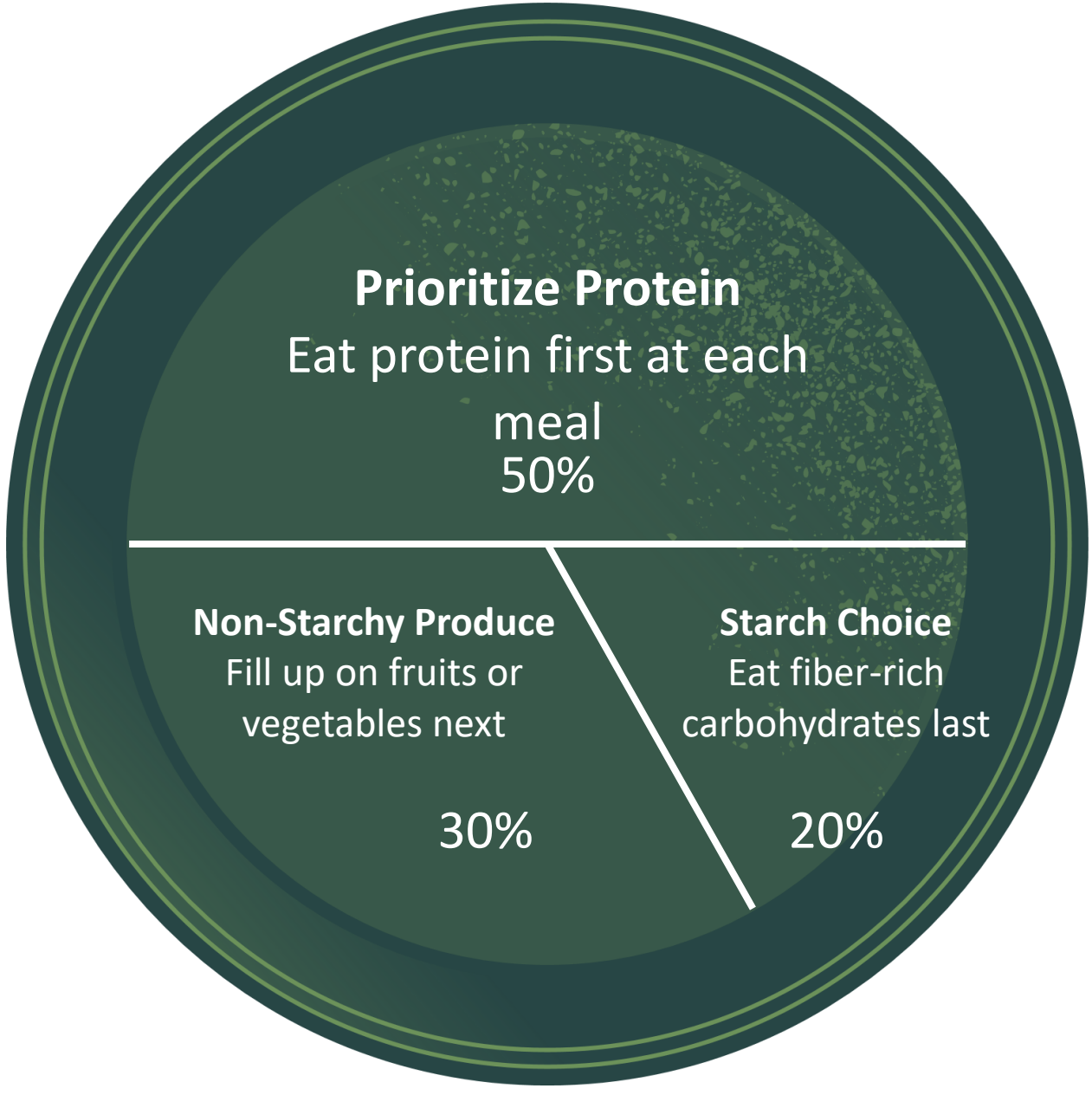
# Pre-Op Plate Method

- 3 – 4 oz of **lean protein**
- 2 cups of **non-starchy produce**
- 1/2 cup to 1 cup (or two small pieces) of fiber-rich starch choices like whole grains, fruit, or starchy vegetables
- **Add** healthy oils, like olive and avocado oils, for cooking and as a salad dressing



# Post-Op Plate Method (Stage 4)

- 3 – 4 oz of **lean protein**
- ½ cup of **non-starchy veggies or fruit**
- ¼ cup (or one half piece) of fiber-rich starch choices like whole grains, fruit, or starchy vegetables
- **Add** healthy oils, like olive and avocado oils, for cooking and as a salad dressing



# Prepared or Frozen Meal Recommendations

- 15-30 grams of protein
- 15-30 grams of carbohydrate
- 5 or less grams of added sugar
- Less than 15 grams of fat
- At least 5 grams of fiber

# Support Groups

- Held every other month
  - Hosted by the registered dietitian nutritionist (RDN) or Social Worker
- Support group sign up is available at ecmc.edu/health-services/bariatric-surgery under “Upcoming Events”