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OBESITY MEDICINE BOOTCAMP

Basics of obesity medicine for your daily practice

Online toolkit @
www.DallasObesity.com

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AOM

Anti-Obesity Medications

INDICATIONS

BMI	Height (Feet & Inches)																							
Weight (lbs)	4'	10"	4'	11"	5'	0"	5'	1"	5'	5"	5'	5"	5'	5"	5'	5"	5'	5"	5'	5"	5'	5"	5'	5"
100	20.9	20.2	19.5	18.9	18.3	17.7	17.2	16.6	16.1	15.7	15.2													
105	21.9	21.2	20.5	19.8	19.2	18.6	18.0	17.5	16.9	16.4	16.0	15.5	15.1											
110	23.0	22.2	21.5	20.8	20.1	19.5	18.9	18.3	17.8	17.2	16.7	16.2	15.8	15.3										
115	24.0	23.2	22.5	21.7	21.0	20.4	19.7	19.1	18.6	18.0	17.5	17.0	16.5	16.0	15.6	15.2								
120	25.1	24.2	23.4	22.7	21.9	21.3	20.6	20.0	19.4	18.8	18.2	17.7	17.2	16.7	16.3	15.8	15.4							
125	26.1	25.2	24.4	23.6	22.8	22.1	21.5	20.8	20.2	19.6	19.0	18.5	17.9	17.4	17.0	16.5	16.0							
130	27.2	26.3	25.4	24.6	23.8	23.0	22.3	21.6	21.0	20.4	19.8	19.2	18.7	18.1	17.6	17.1	16.7							
135	28.2	27.3	26.4	25.5	24.7	23.9	23.2	22.5	21.8	21.1	20.5	19.9	19.4	18.8	18.3	17.8	17.3							
140	29.3	28.3	27.3	26.4	25.6	24.8	24.0	23.3	22.6	21.9	21.3	20.7	20.1	19.5	19.0	18.5	18.0							
145	30.3	29.3	28.3	27.4	26.6	25.7	24.9	24.1	23.4	22.7	22.0	21.4	20.8	20.2	19.7	19.1	18.6							
150	31.3	30.3	29.3	28.3	27.4	26.6	25.7	25.0	24.2	23.5	22.8	22.1	21.5	20.9	20.3	19.8	19.3							
155	32.4	31.3	30.3	29.3	28.3	27.5	26.6	25.8	25.0	24.3	23.6	22.9	22.2	21.6	21.0	20.4	19.9							
160	33.4	32.3	31.3	30.3	29.3	28.3	27.5	26.6	25.8	25.1	24.3	23.6	23.0	22.3	21.7	21.1	20.5							
165	34.5	33.3	32.3	31.3	30.3	29.2	28.3	27.5	26.6	25.8	25.1	24.4	23.7	23.0	22.4	21.8	21.2							
170	35.5	34.3	33.3	32.3	31.3	30.3	29.2	28.3	27.4	26.6	25.8	25.1	24.4	23.7	23.1	22.4	21.8							
175	36.5	35.3	34.3	33.3	32.3	31.3	30.3	29.1	28.2	27.4	26.6	25.8	25.1	24.4	23.7	23.1	22.5							
180	37.5	36.4	35.3	34.3	33.3	32.3	31.3	30.3	29.0	28.2	27.4	26.6	25.8	25.1	24.4	23.7	23.1							
185	38.5	37.4	36.3	35.3	34.3	33.3	32.3	31.3	30.0	29.0	28.1	27.3	26.5	25.8	25.1	24.4	23.8							
190	39.5	38.4	37.3	36.3	35.3	34.3	33.3	32.3	30.9	29.9	28.9	28.1	27.3	26.5	25.8	25.1	24.4							
195	40.5	39.4	38.3	37.3	36.3	35.3	34.3	33.3	31.8	30.8	29.8	28.8	28.0	27.2	26.4	25.7	25.0							
200	41.5	40.4	39.3	38.3	37.3	36.3	35.3	34.3	32.7	31.7	30.7	29.7	28.7	27.9	27.1	26.4	25.7							
205	42.5	41.4	40.3	39.3	38.3	37.3	36.3	35.3	33.6	32.6	31.6	30.6	29.6	28.8	28.0	27.2	26.5							
210	43.5	42.4	41.3	40.3	39.3	38.3	37.3	36.3	34.5	33.5	32.5	31.5	30.5	29.4	28.6	27.8	27.0							
215	44.5	43.4	42.3	41.3	40.3	39.3	38.3	37.3	35.4	34.4	33.4	32.4	31.4	30.3	29.2	28.4	27.6							
220	45.4	44.3	43.3	42.3	41.3	40.3	39.3	38.3	36.3	35.3	34.3	33.3	32.3	31.1	30.0	29.0	28.2							
225	46.4	45.3	44.3	43.3	42.3	41.3	40.3	39.3	37.2	36.2	35.2	34.2	33.2	32.0	30.9	29.7	28.9							
230	47.3	46.3	45.3	44.3	43.3	42.3	41.3	40.3	38.1	37.1	36.0	35.0	34.0	32.8	31.7	30.5	29.6							
235	48.3	47.3	46.3	45.3	44.3	43.3	42.3	41.3	39.0	38.0	36.9	35.9	34.9	33.7	32.6	31.4	30.4							
240	49.3	48.3	47.3	46.3	45.3	44.3	43.3	42.3	39.9	38.9	37.8	36.8	35.8	34.6	33.5	32.3	31.3							
245	50.3	49.3	48.3	47.3	46.3	45.3	44.3	43.3	40.8	39.8	38.7	37.7	36.7	35.5	34.4	33.2	32.1							
250	51.3	50.3	49.3	48.3	47.3	46.3	45.3	44.3	41.7	40.7	39.6	38.6	37.6	36.4	35.3	34.1	33.0							

BMI ≥ 30 kg/m²
BMI ≥ 27 kg/m² with presence of at least one complication from excess body weight such as diabetes, hypertension, hyperlipidemia, sleep apnea, osteoarthritis, metabolic syndrome.



COMPREHENSIVE TREATMENT IS ESSENTIAL



ADDITIONAL HANDOUTS AVAILABE ONLINE @

WWW.DALLASOBESITY.COM



Mindful Eating Techniques Portion Guide

Tips For Achieving And Maintaining A Healthy Weight Prioritizing Protein

Bariatric Surgery Supplementation Guides Mindful Fast Food Choices Salad Building Guide

Meatless Protein Products Fiber Fact Sheet Macro Nutrient Guides

How To Meet Hydration Needs What You Need to Know About Physical Activity & Your Weight

*After 12-16 weeks, if a **weight loss of 4-5% loss from baseline** has not been achieved, consider an increase in dose or an alternative medication.

Treatment should be comprehensive and actively engage the patient in **lifestyle and behavior modification.

***Pregnancy & breastfeeding are absolute contraindications to all FDA approved AOM.

MOTIVATIONAL INTERVIEWING

5A's of Obesity Management

Working with patients to empower them to make change one step at a time. Meet patients where they are at.

Ask

- Ask for permission to discuss body weight.
- Explore readiness for change.

Assess

- Assess BMI, waist circumference, and obesity stage.
- Explore drivers and complications of excess weight.

Advise

- Advise the patient about the health risks of obesity, the benefits of modest weight loss (i.e., 5-10 percent), the need for long-term strategy, and treatment options.

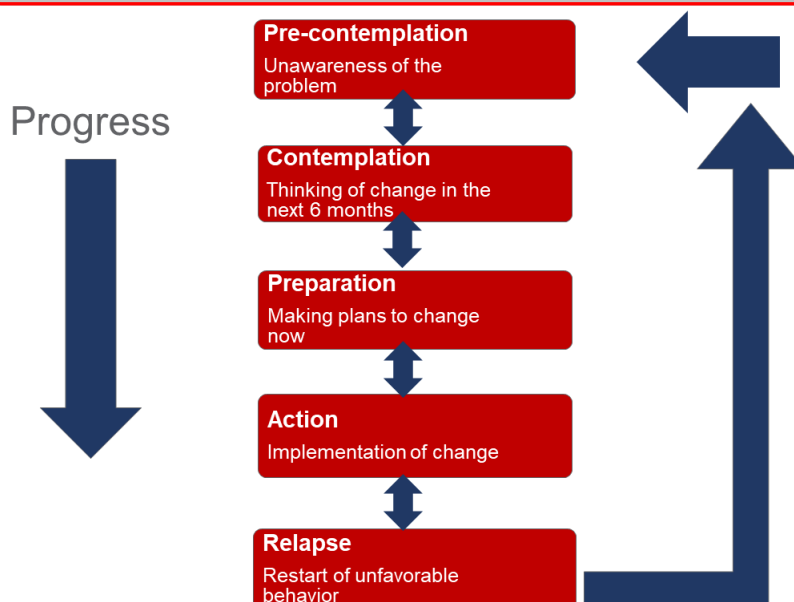
Agree

- Agree on realistic weight-loss expectations, targets, behavioral changes, and specific details of the treatment plan.

Arrange/Assist

- Assist in identifying and addressing barriers; provide resources; assist in finding and consulting with appropriate providers; arrange regular follow up.

STAGES OF CHANGE





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BELVIQ/BELVIQ XR

lorcaserin

Belviq	Schedule IV drug
Mechanism of action	Serotonin 2C receptor agonist: reduces appetite via POMC neuron activation in the hypothalamus
Pharmacokinetics	CYP2D6 metabolism: renal excretion Can be administered with or without food
Side Effects	Headache, nausea, fatigue, dry mouth, constipation Increased hypoglycemia with diabetes Can increase suicidal thoughts, consider using PQH-9 for screening Decrease BP, HR, Total & LDL-C & fasting glucose
Contraindications	Renal failure (eGFR<30ml/min) Pregnancy/breastfeeding Other 5HT drugs

2 Dosing Options:
 XR 20 mg daily
 Or
 10 mg twice daily



Advantage:
 May alter the taste of some foods
 Very tolerable, can be used in older adults
 Not a stimulant

Disadvantages:
 Caution with moderate renal impairment and severe hepatic impairment.

Side effects:
 Dizziness, memory problems, fatigue
 May cause hypoglycemia in patients with DM treated with anti-DM medications & lower CHO diets.

Warnings & Precautions:
Serotonin syndrome (caution with use with SSRI/SNRI), valvular heart disease, prolactin elevation, cognitive impairment, psychiatric disorders, monitor for depression or suicidal thoughts, priapism, decreased heart rate, hematological changes.

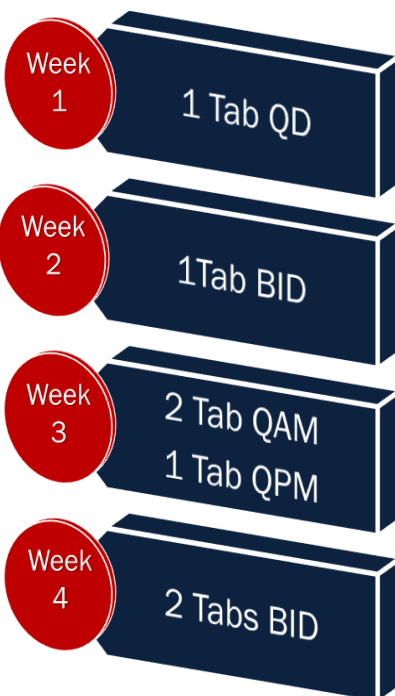


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CONTRAVE

naltrexone/bupropion

Contrave	Not a scheduled drug
Mechanism of action	Bupropion works to reduce hunger and increase satiety by stimulation of proopiomelanocortin (POMC) neurons in the hypothalamus as well as potentially affecting reward/craving stimulus by norepinephrine and dopamine reuptake inhibition. Naltrexone potentiates the action of bupropion on POMC neurons by antagonizing inhibitory u-opioid receptors.
Pharmacokinetics	(bupropion) metabolized by the liver; CYP450: 2B6 substrate (naltrexone) metabolized by the liver, renal excretion, with or without food (with food may decrease nausea caused by naltrexone)
Side Effects	Nausea, vomiting, constipation, diarrhea, headache, dry mouth, insomnia
Contraindications & Cautions	Should NOT be administered with opioids . Use cautiously with other drugs metabolized by CYP2D6 (SSRIs, MAOIs, anti-psychotics (Haldol, risperidone & thioridazine; beta blockers (metoprolol); type 1C antiarrhythmics (propafenone & flecainide) Do not take with uncontrolled HTN or history of seizures Avoid use in individuals with anorexia or bulimia.
Black Box Warning	Suicidal behavior & ideation



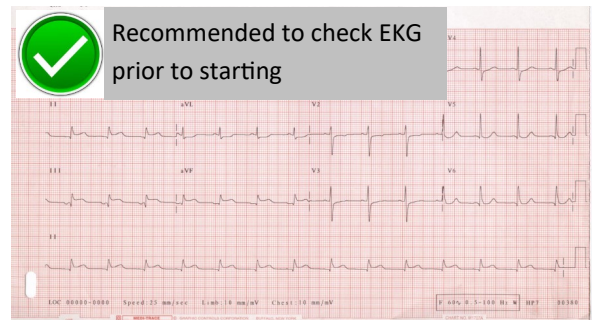
- Can be helpful for patients that experience low mood or difficulty with impulsive or emotion-driven eating
- Should be avoided during pregnancy/ breastfeeding as well as in patients with history of seizures, or those with current, chronic, or future opioid needs
- Nausea is the most common side effect
-Slowing the dose titration can help minimize this.

phentermine

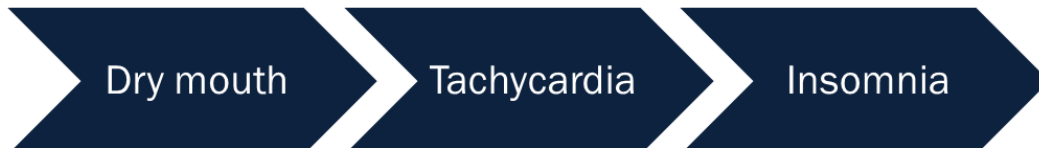
8 mg, 15 mg, 30 mg & 37.5 mg dosing options

phentermine	Schedule IV drug
Mechanism of action	Sympathomimetic amine for short-term treatment of obesity
Pharmacokinetics	Renal excretion may be (62-85% unchanged); half-life 19-24 hours
Side Effects	Palpitations, tachycardia, elevated blood pressure, dizziness, insomnia tremor, headache
Contraindications & Cautions	Cardiac ischemia, uncontrolled HTN, arrhythmia or tachycardia, pulmonary HTN, psychosis, Do not use with drug or alcohol dependency/abuse Do not use with MAOI within 14 days or with glaucoma Not for use with pregnancy or while breastfeeding
Black Box Warning	None

Advantages:
 Generic
 Inexpensive
 Decreases Cravings



Common side effects



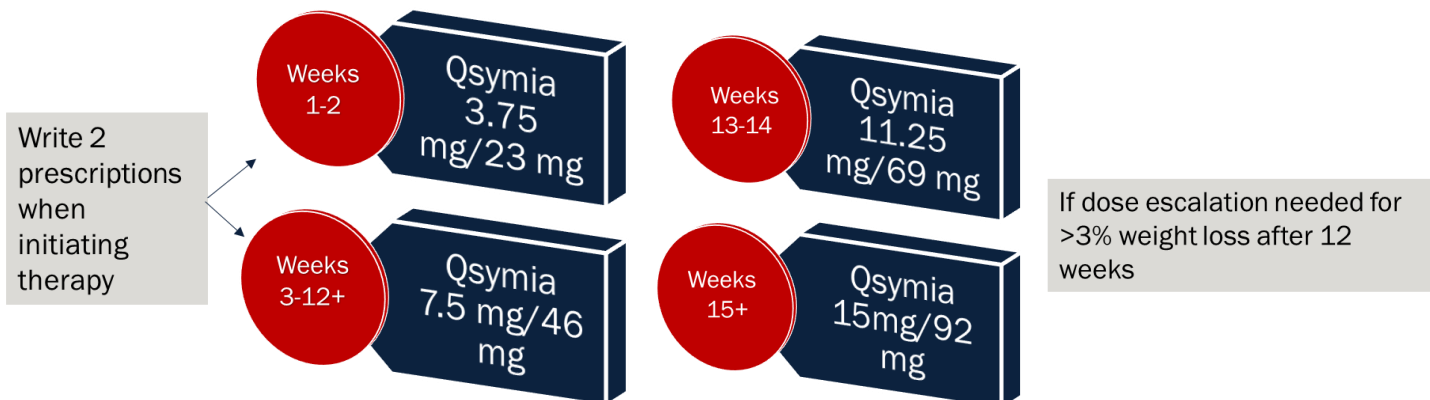


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QSYMIA

phentermine/topiramate ER

Qsymia	Schedule IV drug
Mechanism of action	Targets pro-opiomelanocortin (POMC) neurons in hypothalamus decreasing appetite & cravings and increases satiety Sympathomimetic amine, increases GABA activity, carbonic anhydrase inhibitor
Pharmacokinetics	Phentermine metabolized by liver & excreted by kidney Topiramate is excreted mainly by kidney
Side Effects	Paresthesia, dizziness, change in taste, constipation, dry mouth Fetal toxicity: cleft palate. Increased HR, may cause DUB but NOT an increased risk of pregnancy; OCP should NOT be discontinued if spotting occurs. Avoid alcohol as may potentiate CNS depressants; may potentiate ↓K ⁺ of non-potassium sparing diuretics. Need to increase hydration, may ↑kidney stones.
Contraindications	Pregnancy, glaucoma, MAOIs (within 14 days), hyperthyroidism
Monitoring	Obtain negative pregnancy test before starting and monthly Possible lab abn: ↓ glucose; ↑ creatinine; metabolic acidosis



Completion of the FDA-mandated **REMS program** is optional and not required prior to prescribing phentermine HCL/topiramate extended release. Implementation of a REMS program by clinicians and pharmacies is intended to provide appropriate safety information to females of reproductive potential.



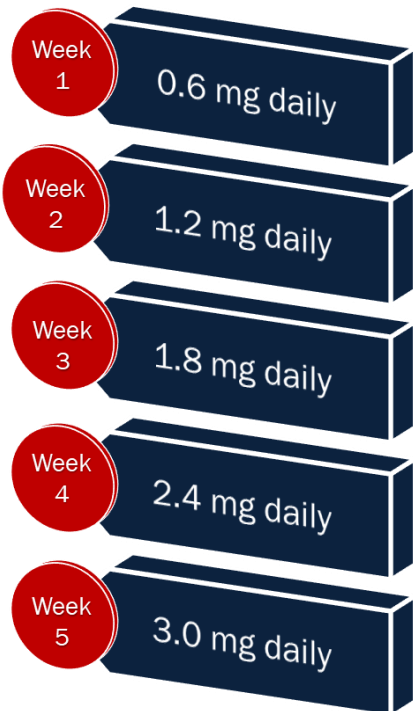
SAXENDA

liraglutide

Saxenda	Not a scheduled drug
Mechanism of action	GLP-1 agonist; POMC & CART neuron activation. Delays gastric emptying
Pharmacokinetics	98 % protein bound No specific metabolizing organ (SC injection) 5-6 % excreted in urine/feces
Side Effects	Nausea, headache, vomiting, diarrhea, constipation, dizziness, dyspepsia, fatigue
Contraindications	Personal or family history of medullary thyroid carcinoma (MTC); multiple endocrine neoplasia syndrome type 2 (MEN 2); acute pancreatitis; active gallbladder disease Routine monitoring of serum calcitonin or thyroid ultrasound is of uncertain value.
Caution	Possible hypoglycemia with concomitant sulfonylurea, consider lowering dose and check glucose more frequently; renal impairment may worsen usually in association with dehydration associated with N/V/D. Patients on Saxenda should be monitored for emergence or worsening of depression or suicidal thoughts.
Black Box Warning	Thyroid C-cell tumor risk

PATIENT TEACHING:

- Utilize demo kit to demonstrate ease of use.
- Monitor for and take steps to prevent constipation
See handouts in Online Toolkit: **Fiber Fact Sheet**
- Advise patients to eat mindfully and limit portions
Toolkit: **Mindful Eating Techniques**





Mindful Eating techniques

Enjoy your food!


Mindfulness is the act of experiencing life, living intentionally, and staying **“in the moment”**

It takes **practice** to eat in a mindful way



Consider these techniques to help you get the most out of your **eating experience**

Establish a consistent meal routine



- Aim for **3 meals** per day, with planned between meal **snacks only if needed for physical hunger**
- Even if it is small and simple, eat breakfast every day
 - 1-2 eggs or a meal replacement is more helpful than skipping 
 - *Try to avoid going more than 1-2 hours after waking without consuming protein*
- Have convenience options around if you do not feel like cooking
 - This will help to avoid impulsively getting fast foods or hard to balance food choices

Experience all the colors, flavors, textures, smells and tastes of your food


- Try to set time aside to **focus on eating and enjoying your meals** 
 - Even 15-20 minutes focusing on your meal will provide more satisfaction than rushing through
 - **Avoid distractions** like your phone, work emails, television, or anything that keeps you from savoring flavors in a memorable way
- Try to eat meals that require utensils 
 - Place your fork down between bites
 - Use your non-dominant hand
 - Chew thoroughly, enjoy your food


Gauge your hunger before, during, and after eating

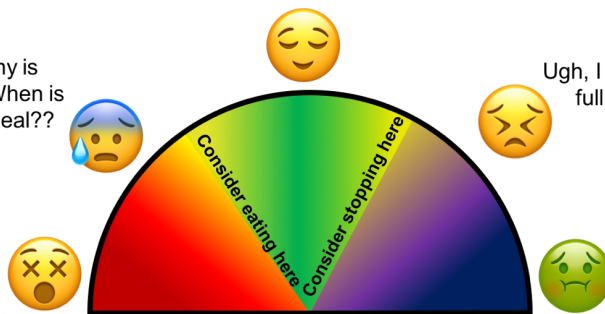
Feeling **“full”** may be a sign that we have **over-eaten**


Waiting too long between meals may cause us to **eat too quickly** and consume more food


I could eat a few more bites, but I don't have to. I look forward to my next opportunity to nourish myself, but in the meantime, let's go do something fun!

My tummy is rumbling. When is my next meal?? 

I don't care what it is... put it in my mouth before I die! 



Ugh, I over did it. I'm so full, I can't move! 

Where's the bathroom?! 

Weight loss is not a passive process, engage yourself in order to achieve your goals



- **Spend time** reflecting on your goals and values
- **Plan** to make decisions that move you closer to these goals and values
- Consider creating a **list of benefits** and sacrifices to weight loss
- Every time we eat and drink, it is an **opportunity to nourish** our bodies
- Try to stay **mindful in your approach** to nutrition and exercise





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MAKING PEACE WITH THE SWEET LIFE...

❖ Challenge the thoughts of good vs bad foods ❖

All foods have **calories** providing the body with **energy**

All foods are made of carbs, protein or fat or a combination—some have a better balance and provide more nutrients than others

Placing foods off limits can lead to a **“diet mentality”** and feelings of **deprivation** making dietary changes **less sustainable**

❖ Utilize **mindfulness techniques** to enjoy your sweet choice ❖

Inquire about your reasons for choosing this food

Hunger, craving, emotions, boredom, habit?

Think about what amount is appropriate for you

If you find yourself thinking the serving size will not be enough, **consider** that you are anticipating the future instead of **being in the present**

Take the time to enjoy your sweets—think about the things you **appreciate** about the food

Minimizing distractions may provide a more satisfying experience and reduced intake.

❖ Keep your weight loss and health goals in mind ❖

Consider how this sweet fits into your weight loss goals

Smaller bowls provide a better presentation of a smaller serving

Pre-portioned sweets may be helpful if mindful portions are a struggle

Well balanced consistent meals throughout the day may lead to decreased desires/cravings and or reduced portions of sweets





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Give yourself a HAND to estimate portion sizes



FIST
ONE CUP



Non-starchy veggies
High fiber fruits



CUPPED HAND
ONE-HALF CUP



Starches
Cooked oats, grains, beans, starchy veggies



PALM
(AREA + THICKNESS)
THREE OUNCES



Lean Proteins



PALM
(SURFACE, SINGLE LAYER)
ONE TO TWO OUNCE(S)



High fat proteins
Nuts, cheese



THUMB
ONE TABLESPOON



“Solid” fats and condiments
Dressings, dips, nut-butters



FINGER TIP
ONE TEASPOON



“Fluid” fats
Oils and butter/margarine



Tips For Achieving And Maintaining A Healthy Weight

- Have planned meals daily, weekdays and weekends**
 - Maintaining a **consistent meal routine** is essential to establishing a healthy pattern of eating
 - Prolonged periods without eating can make it more difficult to control portions and options
- Start every day with breakfast**
 - This helps to control your appetite later in the day
 - Set yourself up for success with a planned meal or meal replacement that aligns with your goals
- Eat your foods in order**
 - **Eat protein first** at every meal and snack
 - Next move on to veggies and finally carbohydrates
 - Protein helps to minimize overeating on other foods like carbohydrates or fat
 - This can help with weight loss and maintaining healthy blood sugar levels
- Choose solid sources of protein when possible**
 - **Prioritize protein** for keeping your hunger manageable
 - Solid sources of protein are **more satisfying** than liquid or semi-solid sources
 - Aim for a source of **lean protein with each meal and snack**
- Choose ONE carb per meal**
 - Make your carb a **"worth it"** choice and balance this with the rest of your plate
 - This includes all breads, pastas, rice, tortillas, corn, potatoes fruits, sweets, desserts, etc.
 - Chose **whole grain** options whenever possible
- Measure all sources of dietary fat, even the "good" fats**
 - Though they are "heart healthy" options, avocado, nuts and oils still add calories from fat
 - **Fat is our densest source of energy - small amounts are high in calories**
 - Every teaspoon of oil is about 50 calories
 - **A handful of nuts can have nearly 400 calories!**
- Reduce your food distractions**
 - The more food options you have in your environment or on your plate, the more you will eat, even if you are no longer hungry
 - **Portion only what you will need to be satisfied**
 - Reduce the temptation to snack by keeping high calorie options put away when it is not an appropriate time to be consuming food
- Be physically active, as often as possible**
 - Aim for 10,000 steps daily and progress to three days of strength training
 - Regular planned physical activity promotes healthy muscles and helps to maintain blood sugar levels
 - Avoid increasing your calorie budget with what you think you burned during exercise - **they are not an even trade!**



Carbohydrates

Carbs are found in *many foods and beverages* and turn into sugar (glucose) when we digest them. Some sugar is used for energy, but extra sugar is **stored as fat** if we consume more calories than we actively use. Below is a list of common foods and beverages that contain carbohydrates.

Breads, crackers and cereals	Pasta, rice and grains
Starchy vegetables, beans and legumes	Fruits, dried fruit and fruit juices
Milk, soy milk and yogurt	Sweets, desserts, sweetened beverages

1 serving (unit) = approximately 15 grams of carbohydrate

Breads, crackers, cereals, pasta and rice

Food	Serving Size
Bread	1 standard slice
Bagel	1/4 large
English Muffin	1/2
Hamburger/hot dog bun	1/2
Pita Bread	1/2
Granola	1/4 cup
Oatmeal	1/2 cup (cooked)
Dinner roll	1 small (2 inch)
Pasta	1/3 cup (cooked)

Food	Serving Size
Tortilla	6 inch
Taco shells	2, 5 inch
Crackers	4-6 small
Pretzels and chips	3/4 oz. (1/2 cup)
Popcorn	3 cups popped
Chapati or roti	6 inches
French fries	1/4 cup
Saltine crackers	6
Rice	1/3 cup (cooked)

Fruits, dried fruits and fruit juices

Food	Serving Size
Fresh fruit	1 small piece/ 4 oz.
Frozen fruit	1/2 cup
Grapes	17 small
Fruit Juice	1/2 cup or 4 oz.
Apple, large	1/2
Clementine	1

Food	Serving Size
Dried fruit	2 tablespoons
Berries	1 cup
Melon	1 cup
Banana	1/2
Grapefruit, large	1/2
Canned fruit	1/2 cup

Milk and milk alternatives (unflavored)

Food	Serving Size
Low-fat milk	1 cup
Nonfat yogurt	6 oz. (3/4 cup)

Food	Serving Size
Soy milk	1 cup
Evaporated milk	1/2 cup

Starches

Food	Serving Size
Corn, peas, potatoes	1/2 cup
Baked potato, large	1/4

Food	Serving Size
Winter squash	1 cup
Sweet potato/yam	1/2 cup

Beans and legumes

Food	Serving Size	Food	Serving Size
Beans	1/2 cup	Lentils	1/2 cup
Baked beans	1/3 cup	Lima beans	2/3 cup

Sweets, desserts, and sweetened beverages

Food	Serving Size
Cake, unfrosted	2-inch square
Ice cream	1/2 cup
Sherbet/sorbet	1/4 cup
Soda (regular), sweet tea	4 oz. (1/2 cup)
Flavored milks	4 oz. (1/2 cup)

Food	Serving Size
Cookies, small	2
Frozen yogurt	1/2 cup
Syrup, jam or honey	1 tablespoon
Sports drinks (Gatorade, etc.)	8 oz. (1 cup)
Fruit smoothie (Naked, etc.)	4 oz. (1/2 cup)

Combination foods

Food	Serving Size
Casseroles	1/2 cup
Spaghetti sauce	1/2 cup

Food	Serving Size
Broth and cream soup	1 cup
Enchilada sauce	1 cup

Non-starchy vegetables

These vegetables contain only small amounts of carbohydrates and calories. Include them at meals and snacks to increase fiber intake and feeling of satiety.

Serving sizes: about 2 cups raw or 1 cup cooked

Artichoke and artichoke hearts
Asparagus
Bean sprouts
Beets
Broccoli
Brussels sprouts
Cabbage
Carrots
Cauliflower
Celery
Cucumber
Eggplant
Green beans
Green onions or scallions
Greens (collard, kale, mustard, turnip)

Leeks
Mushrooms
Okra
Onions
Snow pea pods
Peppers (all varieties)
Radishes
Salad greens (lettuce, romaine, spinach)
Sauerkraut
Spinach
Summer squash
Tomato
Turnips
Watercress
Zucchini

Tips for Staying On-Track

Log it

- Keep daily food records to monitor your calorie, carbohydrate and protein intake
- Try to spread your meals evenly throughout the day

Go high tech

- Use technology to help you track your eating and physical activity
- Apps and fitness trackers promote awareness and accountability to help keep you on track
- Use them to **uncover patterns** and make adjustments over time

Measure it

- Studies show that most people overestimate portions by more than 50% when they don't measure
- Use measuring cups and food scales to assess portion sizes with the best accuracy
 - **Portion, Plate, Put Away**

Focus on the food

- Mindless eating in front of the TV, computer or tablet can lead to overeating
- These distractors disconnect you from being aware of your true hunger and fullness cues

Get adequate fiber

- Include non-starchy vegetables at each meal and snack to aid in meeting your daily fiber needs
- Chose whole grain options whenever including grains or starches
 - **Continue to measure portions!**

Read the labels

- Become your own nutrition expert
- Know what you are consuming by accurately reading your Nutrition Facts
- Pay close the serving size, the calories per serving, and the balance (in g) of fat, carbs, and protein
- Compare similar items at the grocery store to find the best option for you

Nutrition Facts	
2 servings per container	
Serving size	2/3 cup (55g)
Amount per serving	
Calories	230
% Daily Value	
Total Fat 8g	10%
Saturated Fat 1g	5%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 160mcg	7%
Total Carbohydrate 37g	13%
Dietary fiber 4g	14%
Total Sugars 12g	
includes 10g Added Sugars	20%
Protein 3g	
Vitamin D 2mcg	10%
Calcium 260mg	20%
Iron 8mg	45%
Potassium 235mg	6%

For every 2/3 cup of this I eat, I will get 230 calories which is coming from 8g fat, 37g carb, and 3g protein.

Is it a "worth it" choice?





DALLAS
OBESITY
SOCIETY

3, 2, 1, Go!

A simple method for building salads and “bowl” meals that are filling and satisfying



For breakfast, lunch, or dinner... building your bowl with some key ingredients can be a balanced meal. Mix and match for combinations that give you different flavor profiles without spending a fortune at the grocery store (or even more at a restaurant).

3

Low calorie
high nutrient foods
(non starchy veggies)

2

Moderate calorie
high satisfaction foods
(at least one should be
a lean protein)

1

High calorie
flavor packed ingredient

Go!

Minimal calorie
low-sodium, colorful,
flavorful add-ons

3

**Low calorie
high nutrient foods**

Non-starchy vegetables

Include those that can be eaten **raw** or **cooked**

- Portion size for *raw* NSVs is about **2 cups**
- Portion size for *cooked* NSVs is about **1 cup**

asparagus, beets, broccoli, Brussels sprouts, carrots, cauliflower, celery, cucumbers, greens (collard, kale, mustard, turnip), green beans, eggplant, mushrooms, okra, onions, pea pods (snow peas, sugar snap peas), peppers (yellow, green, orange and red), salad greens, spinach, summer squash, tomatoes, zucchini

2

**Moderate calorie
high satisfaction foods**

Chose **2** from group **A**

OR

1 from group **A** and **1** from group **B**
Group A—Lean proteins

- **Meat (2-4 oz.):** canned/pouched tuna or chicken in water, rotisserie chicken, lean deli meats (turkey, chicken, lean ham), 93% lean butcher meats (cut/ground skinless chicken or turkey, trimmed beef or pork sirloin), all fish
- **Eggs:** Whole (1-2) or Egg Whites (3) – hard-boiled, scrambled, pan fried, poached
- **Dairy:** fat-free or low-fat Greek yogurt (½ cup), fat-free or 1% cottage cheese (½ cup), part-skim ricotta (½ cup), reduced-fat hard cheese (1 oz.)
- **Plants-based (½ cup):** edamame, tofu, seitan, vegetarian/vegan products that have higher protein than carbohydrate (meatless deli slices, chicken/beef/pork substitutes etc.)

Group B—Starches (½ cup)

- Whole grains: corn, couscous, brown rice, bulgur, farro, grits, buckwheat, oats, pasta, quinoa
- Beans, peas, lentils, legumes
- Plantains, potatoes, winter squash
- Any type of fruit

1

**High calorie
flavor packed ingredient**

Nuts or seeds (¼ cup)

Solid fat (2 tablespoons):

- Avocado or guacamole
- Hummus
- Nut butters
- Regular fat cheese
- Bacon (crumbled)

Sauce/Dressing
(1 tablespoon)

- Mayonnaise
- Pesto
- Tahini
- Queso
- Salad dressing
- Sour cream
- Cream cheese
- Gravy

Oils and butters (1 teaspoon)

Go!

**Minimal calorie
flavorful add-ons**

Acids and zests

All vinegars (without oil)
Lemon or lime juice
Citrus zest

Herbs (dried or fresh)

Basil, chervil, cilantro, coriander, dill, fennel, green onions, lavender, lemongrass, oregano, parsley, rosemary, thyme

Salt-free spices (whole or ground)

All spice, anise, black pepper, caraway, cardamom, cinnamon, coriander, cumin, curry, dill, fennel, garlic, ginger, horseradish, mustard, nutmeg, onion, turmeric

Chiles and peppers

Ancho, anaheim, cayenne, chipotle, habanero, jalapeno, paprika, pablano, red pepper, serrano

Aromatics

Garlic, green onion, shallot



Meatless Protein Products

When choosing vegetarian or vegan products, aim for *higher protein* and more *moderate carbohydrate* choices. These options will better help you stay on track to reaching your weight goals. Foods like tofu, seitan, and edamame are generally on-target.



1 cup firm tofu
22-24g Protein



3 oz prepared seitan
16-21g Protein



1 cup cooked edamame
16-18g Protein

When looking for commercially available meat substitutes, consider the following options:



High protein Moderate carbohydrate

Options like these tend to be more filling for fewer calories. Consider choosing these the more often.



Brand	Product	Brand	Product
Tofurky	http://www.tofurky.com	Gardein	https://gardein.com/products/
	Slow Roasted Chk'n		Sweet and Sour Porkless Bites
	Deli Slices		The Ultimate Ground/Burger
	Dogs & Links		Classic Meatless Meatballs
	Sausages		Good Start Breakfast Patties
	Grounds/Crumbles		Home Style Beefless Tips
Quorn	https://www.quorn.us		Lightly Seasoned Chick'n Scaloppini
	Fajita Chick'n Strips		Teriyaki Chick'n Strips
	Meatless/Vegan Naked Chik'n Cutlets		Crispy Chick'n Patties
	Chik'n Strips		Sweet and Tangy Barbecue Wings
	Meatless/Vegan Chik'n Tenders		Lightly Breaded Turk'y Cutlets
	Turkey Roast		
	Grounds/Meatballs/Beef Strips	Upton's	http://www.uptonsnaturals.com
	Vegan Burgers		Any Seitan product
	Breakfast Sausage Patties		Classic Burger



Moderate-High protein Moderate-High carbohydrate

These options are more calorie dense and may not keep you satisfied as long.
These are less on target—consider choosing them less frequently



Brand	Product	Brand	Product
Tofurky	http://www.tofurky.com	Gardein	https://gardein.com/products/
	Veggie Burgers		Sizzling Szechuan Beefless Strips
	Tempehs		Homestyle Meatless Meatloaf
	Holiday Roasts		Mandarin Orange Crispy Chick'n
Quorn	https://www.quorn.us/products/all		7-Grain Crispy Tenders
	Meatless Italian Sausage		Chipotle Lime Fingers
	Meatless Gourmet Burger		Savory Stuffed Turk'y
	Meatless Bacon Style Slices		Holiday Roast



Low-Moderate protein High-Very High carbohydrate

Options like these are the most calorie dense.
These are even less on target—consider choosing them the least frequently



Brand	Product	Brand	Product
Tofurky	http://www.tofurky.com	Gardein	https://gardein.com/products/
	Gluten-free Pizza		Chipotle Black Bean Burger/Sliders
	Veggie Pockets		The Ultimate Beefless Sliders
			Garden Veggie Burger
Quorn	https://www.quorn.us/products/all		Crispy Chik'n Sliders
	Vegan Spicy or Meatless Chik'n Patties		Mini Crispy Crabless Cakes
	Chik'n and Sharp Cheese Cutlets		Golden Fishless Filets
	Pesto and Mozzarella Chik'n Cutlets	Upton's	http://www.uptonsnaturals.com
	Meatless Chik'n Nuggets		All Jackfruits
	Meatless Chik'n and Apple Sausage		All Thai Noodles
	Vegan Breaded Chik'n Cutlets		Massaman Curry
	Meatless Gourmet Pub Cheeseburger		Ch'eesy Mac/Ch'eesy Bacon Mac



Prioritize Protein

High protein foods can be **prepared ahead of time**, kept in the refrigerator or freezer, and enjoyed throughout the week. Aim for only one type of carbohydrate (grains, bread or potatoes) per meal and prepare the following using small amounts of fat, like oil or butter.

Breakfast

Protein Type	Serving Size	PRO Grams	Preparation notes and ideas
Eggs	1 egg	6-7 g	Enjoy them scrambled, hard-boiled, over easy/ medium or as omelets, frittatas or egg "muffins." Add lean proteins, low-fat cheese, or vegetables to egg scrambles, omelets or frittatas.
Greek Yogurt	5-6 oz.	10-15 g	Choose fat-free or low-fat whenever possible, and avoid any with added fruit, granola or other ingredients.
Cottage Cheese	½ cup	12-19 g	Choose fat-free or 1% whenever possible. Add veggies (tomatoes or peppers) in place of fruit.
Ham/Turkey Deli Meat	1 oz.	7 g	Choose low-fat and uncured whenever possible and purchase from the deli counter.
Canadian Bacon	1 oz.	7 g	Choose uncured whenever possible.
Turkey Sausage	1 patty/ 2-3 links	6-8 g	Purchase them already prepared at the grocery store or make your own turkey patties using an extra-lean ground turkey and season to taste.
Turkey Bacon	1 slice	6-7 g	Choose items like Applegate Uncured Turkey Bacon (1.5 g of fat and 6 g of protein per serving).
Morningstar Veggie Breakfast Patties	1 patty	9 g	These meatless sausage patties provide 9 grams of protein with only 3 grams of fat and 70 calories.
Protein Shake or Bar	1 bar or 1 shake	10-30 g	Consider Premier Protein, Slim Fast Advanced Nutrition, Unjury, Muscle Milk, Orgain, or Ensure MAX for shakes. For bars, consider Think!, Quest, EPIC, Pure Protein, One, Simply, and Julian Bakery Thin
Ultra filtered milk	8 oz.	11-13 g	Choose skim or 2% where possible Fairlife, Kroger Carbmaster, HEB Mootopia, etc.
Frozen Breakfast Sandwiches	1 sandwich	10-17 g	Choose light items like Jimmy Dean Delights, Special K or Evol Lean and Fit breakfast sandwiches for just 150-250 calories.



Lunch and Dinner

Protein Type	Serving Size	PRO Grams	Preparation notes and ideas
Chicken breast, turkey cutlets, pork loin	3-6 oz	21-42 g	Purchase frozen, pre-cooked or raw and prepare yourself.
Lean cuts of beef	3-6 oz	21-42 g	Purchase frozen, pre-cooked or raw and prepare yourself.
Ground meats: beef, chicken or turkey	3-6 oz	21-42 g	Choose extra-lean (97% lean or leaner) whenever possible.
Ham/Turkey Deli Meat	2-4 oz	14-28 g	Choose low-fat and uncured whenever possible. Purchasing from the deli counter will give you the best product.
Canned tuna or chicken	2-5 oz	14-35 g	Choose in a pouch or packed in water.
Seafood	3-6 oz	21-42 g	Examples: salmon, tilapia, shrimp, trout, herring, mackerel, albacore tuna; purchase frozen, pre-cooked or raw and prepare yourself.
Eggs	1 egg	6-7 g	Don't forget that you can eat eggs for lunch or dinner! <i>See egg muffin recipe idea on page 3</i>
Morningstar Veggie Patties	1 patty	10 g	Crumble them over salads or eat as a sandwich on thin slices of bread. These provide 10 grams of protein with only 3 grams of fat and 110 calories.
Firm Tofu	1 cup	22-24 g	Marinate tofu in your favorite low carb options—it takes the flavor of whatever ingredients you chose. Prepare like you would any other meat item; slice and sear, roast in the oven, scramble in a pan. Tofu is a truly versatile plant protein.
Cooked Edamame	1 cup	16-18 g	Steam in the microwave and add a splash of flavor with lemon juice or your favorite hot sauce. Use edamame on salads or eat on its own. Also consider products made from edamame—these can be high in protein, potassium, and fiber.
Protein Shake or Bar	1 bar or 1 shake	10-30 g	Consider Premier Protein, Slim Fast High Protein, Unjury Protein powder & 100 calorie Muscle Milk shakes. For bars, consider Think thin, Quest, Pure Protein, and Premier Protein.
Frozen entrees less than 300 calories	1 entrée	15+ g	Choose entrees with more protein than fat and consider Lean Cuisine, Healthy Choice, Kashi, store brands, and others. Look for options with at least as much protein as carbohydrate.

Lean Meat Choices

Beef	Choose round steaks and roasts (eye of round, top round, bottom round, round tip), top loin, top sirloin, chuck shoulder, and arm roasts.
Pork	Choose pork loin, tenderloin, center loin and ham.
Ground meats	Choose extra-lean ground beef, extra-lean ground turkey, or extra lean-ground chicken. The label should say at least “90% lean”, and it’s even better to aim for “97% lean” and up!
Chicken/Turkey	Choose skinless chicken parts, or remove the skin before cooking. Boneless, skinless chicken breasts and turkey cutlets are the leanest protein choices.
Deli Meats	Choose lean turkey, roast beef, ham or low-fat luncheon meats instead of options like bologna or salami that have more fat.
Seafood	Choose tuna fish canned or packed in water instead of oil.

Egg Muffin Recipe

Ingredients

1. 12 eggs
2. Salt and pepper to taste
3. **Optional add-ins***
 - 1 cup of vegetables, such as: mushrooms, bell peppers, spinach, onions or whatever else you choose
 - ¼ cup of shredded cheese
 - ¼ cup of lean protein (cooked)
4. Non-stick 12 cup muffin pan
 - Muffin cups if you aren't using a non-stick pan

**The great thing about egg muffins is you can customize them to make a high-protein, low-carb breakfast or snack*

Instructions

1. Preheat oven to 350 degrees Fahrenheit
2. Wash and dice all vegetables you wish to include and put them in a large mixing bowl
3. Add the eggs and salt (*optional*) to the bowl and mix well
 - If you are adding cheese and protein, mix them in with the eggs and vegetables
4. Use a non-stick muffin pan, otherwise line a standard muffin pan with muffin cups
5. Bake the egg muffins for 15-18 minutes, or until the tops are firm to the touch.
6. Enjoy them then or keep them in the refrigerator or freezer to heat up at a later time



Tips for Cooking Light

- Before cooking, trim away all of the visible fat from meats and poultry
- Instead of frying, broil, grill, roast, poach or boil fish, poultry or meat
- Drain off any fat that shows up during cooking
- Skip or limit the breading on meat, poultry or fish
 - Breading adds calories and will soak up more fat during the frying or cooking process
- Prepare beans, legumes, and tofu without added fats
- Avoid cooking with or adding high fat sauces, gravies or canned soups to proteins



What is fiber and how much do I need?

Fiber is the structural part of plant foods that is not digested

There are two types of fiber in food: *soluble* and *insoluble*

Some types of fiber provide food for the “good” bacteria in our gut

You may have heard this called “prebiotic” fiber

In general, the daily recommendation for most healthy adults is:

- **Women ages 19-50: 25g/day**
 - 28g/day is recommended during pregnancy
- **Women ages 51+: 21g/day**
- **Men ages 19-50: 38g/day**
- **Men ages 50+: 30g/day**

A serving size tells you how much of a food or a liquid is in 1 serving.

Nutrition Facts	
Serving Size ½ cup (130g)	
Serving Per Can 3½	
Amount Per Serving	
Calories	140
Calories from Fat 0	
% Daily Value*	
Total Fat	0.5g 1%
Saturated Fat	0g 0%
Trans Fat	0g
Cholesterol	0mg 0%
Sodium	510g 21%
Total Carbohydrates	28g 9%
Dietary Fiber	6g 24%
Sugars	11g
Protein	6g
Vitamin A	2%
Vitamin C	0%
Calcium	6%
Iron	10%

This number tells you how many grams (g) of fiber are in 1 serving.

- The *Nutrition Facts Label* will list the total fiber content per serving size
- Foods with 1.25g (5% “daily value”) or less are considered “low” fiber, while those with 5g (20% “daily value”) or more are “high” fiber foods
- Including some high fiber foods every day can help you meet your needs

Getting fiber in our diet

Some foods are higher in fiber than others. These are typically from whole grains, fruits and vegetables (with skin on), as well as nuts, seeds, beans, and lentils.

- **Choose appropriate portion sizes for your daily goals**
- Look for foods higher in fiber at meals and snacks to increase satiety
- Cooked frozen vegetables are an easy way to get more fiber in our meals
 - **Edamame is high in fiber and protein!**
- Keep raw, cut-up vegetables handy for quick snacks — *choose colorful dark green, orange, and red vegetables, such as broccoli florets, carrots, and red peppers*
- Enjoy 1/2 cup portions of cooked beans as the carbohydrate portion of your meals
- Switch to **whole grain** versions of commonly consumed foods
 - 100% whole wheat breads, cereals, and pasta
 - Quinoa, brown rice
- Limit refined grains and products made with refined grains
 - Cakes, chips, cookies, crackers, etc.

Fiber Content of Foods

The following options can help you meet your fiber needs while maintaining a balanced eating pattern.

Aim for **high fiber** (5g or more per portion) foods as often as you can.

Fun fact—veggies from the freezer aisle will have more fiber per portion once cooked! Freezing helps to break down the plant's structure and allows the food to be cooked down, giving you more total fiber per equal volume compared to raw or cooked from fresh veggies. Enjoy your non-starchy veggies each day (from fresh or frozen) to help reach your long term goals.

Food	Portion Size	Fiber (g)	Calories (per portion)	Protein (g)	Carb (g)
Bran Cereal	1/2 cup	10.0	80	4	23
Edamame (cooked)	1 cup	8.1	188	18	14
Frozen Mixed Vegetables (cooked)	1 cup	8.0	118	5	24
Raspberries (whole, raw)	1 cup	8.0	64	1	15
Lentils (cooked)	1/2 cup	7.8	115	9	20
Artichoke (cooked)	1 cup	7.7	76	5	15
Canned Black Beans (drained and rinsed)	1/2 cup	7.6	114	8	20
Canned Pumpkin (not pie mix)	1 cup	7.1	83	3	20
Canned Kidney Beans (drained and rinsed)	1/2 cup	7.0	120	7	27
Frozen Spinach (cooked)	1 cup	7.0	65	8	9
Brussels Sprouts (cooked, chopped)	1 cup	6.4	65	6	13
Blackberries (whole, raw)	1 cup	5.3	43	1	10
Frozen Broccoli (cooked)	1 cup	5.1	55	4	11
Frozen Cauliflower (cooked)	1 cup	4.9	34	3	7
Canned Chickpeas (drained and rinsed)	1/2 cup	4.8	105	5	2
Chayote (pieces)	1 cup	4.5	38	1	8
Green Peas (cooked)	1/2 cup	4.4	67	4	13
Almonds (raw)	1 oz	4.0	170	6	6
Okra (sliced, cooked)	1 cup	4.0	35	3	7
Small Apple (skin on)	3 inch across	3.6	77	0	21
Asparagus (cooked)	1 cup	3.6	40	4	7
Beets (cooked)	1 cup	3.4	75	3	17
Carrots (raw)	1 cup	3.4	50	1	12
Mushrooms (white, cooked)	1 cup	3.4	44	3	8
Baked Sweet Potato (skin on)	1/2 cup	3.3	90	2	21
Prunes or Dates	1/4 cup	3.0	100	1	26
Strawberries (whole, raw)	1 cup	2.9	46	1	11
Cabbage (cooked, chopped)	1 cup	2.9	34	2	8
Cooked Quinoa	1/2 cup	2.6	111	4	20
Peanuts	1 oz	2.4	161	7	5
Small Orange (peeled)	2.5 inch across	2.2	42	1	11
Baked White Potato (skin on)	1/2 cup	2.1	94	2	21
Cooked Brown Rice	1/2 cup	1.6	124	3	26



What You Need to Know About Physical Activity and Your Weight

Benefits of Physical Activity

Planned consistent activity helps to improve our health and quality of life. Exercise lowers premature death rates by improving cardiovascular health (improves glucose levels, blood pressure, and lipids– cholesterol, LDL/HDL, and triglycerides), and reducing the risk of developing some cancers.

Regular exercise also helps to prevent weight gain and weight regain for those who have lost weight in the past.

Exercise improves physical and mental health and body composition by maintaining muscle mass.

Exercise for the health benefits, NOT for weight loss.

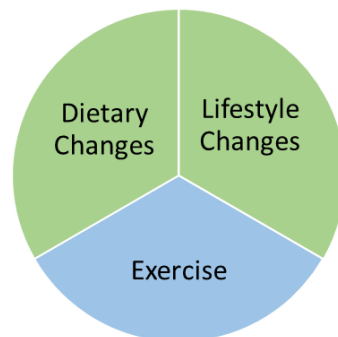
Role of Physical Activity in Weight Loss

- Exercise alone results in very modest weight loss
 - Combining physical activity with diet and lifestyle changes can improve weight loss results
- Diet and lifestyle changes drive weight loss, not exercise
 - There is a lot of variability in the amount of calories “burned” during exercise
 - It takes a significant amount of time and energy to expend sufficient calories through exercise
 - We achieve a more consistent calorie deficit through dietary changes
- During weight loss, 20% of weight reduction is lean muscle and 80% is fat
 - Physical activity (like **consistent, planned** strength/resistance exercise) helps to minimize muscle loss
 - Reducing muscle loss minimizes changes to our metabolic rate and makes it easier to maintain our weight loss
- Exercise is not required for weight loss
 - However, incorporating exercise into your diet and lifestyle changes will reduce risk of weight regain in the future

The Role of Physical Activity in Maintaining Weight Loss

- Those who participate in planned physical activity maintain more weight loss than those who are sedentary
- Exercise minimizes muscle mass loss which naturally decreases with age and weight loss
- As we age, we need to increase physical activity to prevent weight gain
- A combination of aerobic and weight training are more beneficial than either activity alone

Most important for weight loss.



Important to prevent weight gain or weigh regain.

Energy Expenditure

The figure below depicts how the body uses calories to function, aka our “metabolism”
Remember that exercise plays a *minor* role in energy expenditure, aka “calorie burn”

**Activity Related
Energy Expenditure
(Exercise + NEAT)**

—
30% or LESS

Exercise - measured in the amount of oxygen consumed by your body; naturally reduces with age & excess body weight

Engaging in physical activity can have a positive effect on metabolism by preserving lean muscle mass

NEAT

Non Exercise Activity Thermogenesis

- any unplanned activity such as self care

Thermic effect of food — 6-10%

- Energy used to digest food, **contributes the least to total energy expenditure**

- *Least amount of variation, can not change*

Basal Metabolic Rate — 60-80%

- Energy used for the body to function at rest, **contributes the most to total energy expenditure**

- Age, sex, weight, height, muscle and fat mass all play a role

BMR will decrease with weight loss and age

Increasing planned exercise can help prevent weight gain as our metabolism slows

This minimizes the reduction in BMR that naturally occurs as muscle mass is lost

Recommendations

» **Start a plan that is sustainable with your lifestyle and commitments** «

You will be more likely to achieve your goals and maintain consistency

» **For weight training, aim for 3-4 days a week for 30-45 minutes** «

» **For aerobic exercise, engage in 150-250 minutes of activity every week** «

You can also combine resistance and aerobic exercise through circuit training

Pick 5-10 exercises and repeat 3 times

» **Duration and intensity are both important—set a goal to challenge yourself** «

» **Remember to give yourself grace through this process** «

You will not always attain your goals, but that is part of the journey

Strategies to Stay Consistent with Physical Activity

Try a new activity

You never know how it will be until you try. Even if you did not like it in the past, try again. Our preferences can change over time.

Set a Small Goal

Choose something realistic and work up from there. Ask someone to hold you accountable. Find someone who will join you or participate in group classes where people are counting on you to be there.

Commit Even if You Don't Feel Up to It

Instead of trying to reach your goal on days you are less motivated, set a smaller goal. Sometimes a smaller goal sounds more appealing. Once you get going you may find that was the hardest part.

Plan Activities for Vacation

Engage in activities you normally would not be able to. For snowy trips consider hiking, skiing, snowshoeing. For beach trips consider water sports, swimming, water fitness classes, treading water, snorkeling or scuba diving.

Even regular activities you do such as body weight exercises, walking or running can be new and refreshing with new scenery on a trip.

Two Things At Once

Watch your favorite show, talk with a friend, listen to a podcast, take your pet, a friend or family member, read, listen to music, review work/school content, pray, sing, think about what you enjoy about the activity you choose.





Post-Sleeve and Bypass Surgery Daily Supplements

1 tab twice daily

Chewable multivitamin/multimineral

- One tablet twice daily (preferably with a meal)
- Flintstones Chewable or generic equivalent
- Avoid “gummy” multivitamins

Why?: After weight loss surgery, chewable multivitamins are more likely to be absorbed. Take them twice per day to increase your absorption of these important nutrients. Gummy vitamins usually do not provide enough nutrients; however, children’s chewables (like Flintstones) are likely to meet your needs.



2 tabs twice daily

Calcium citrate

- Citrate is the best absorbed form of calcium, especially after bariatric surgery
- Citracal “Petites” are smaller tablets, but are still quite large
 - It is possible to cut these tablets in half for easier swallowing
 - Consider ordering chewable calcium citrate (*the chewable brands found in most pharmacies are usually not calcium citrate*)
 - Celebrate Vitamins: <https://tinyurl.com/y86rsqq4>
 - Bariatric Fusion: <https://tinyurl.com/y7zs29md>
- Total daily goal is 1000-1200 mg in divided doses
 - 2 Citracal Petites, twice daily
 - 1 Soft Chew, twice daily



Why?: After weight loss surgery it may be harder to eat/drink enough calcium rich foods. It is also difficult for your smaller stomach to breakdown calcium supplements for absorption. Calcium citrate should be used to meet daily calcium needs.

Vitamin D3 (cholecalciferol) _____ IU daily

- Daily preferred to weekly doses (commonly given as a prescription)
- Usually 2,000-3,000 international units daily for maintenance
 - Typically as 1,000 units from Calcium + D3 supplements, and 2,000 units from a standalone Vitamin D3
- Any over-the-counter brand will be fine



Why?: Vitamin D is one of the most common nutrient deficiencies. It is important for many functions in the body. It is essential for bone health.

Post-Bariatric Surgery “As Needed” Supplements

Vitamin B12 (cobalamin)

Additional daily B12 may be necessary if you are low

- 500 micrograms (mcg) once daily, or 2500 mcg once weekly
- Melting, chewable, or sublingual formulations are all okay
- Avoid “slow release” forms
- Injections are usually not needed

Iron (ferrous fumerate, sulfate or iron polysaccharide)

For women having monthly menstrual cycles, additional iron is advised

- 65mg “elemental” iron can be found in over-the-counter 325 mg Ferrous sulfate
- “High Potency” iron may be advisable in some cases
 - Novaferum 125 is a liquid iron supplement available to order: <https://tinyurl.com/yaqa7q4x>

Soluble fiber (psyllium husk)

To avoid “dumping syndrome” after surgery, supplemental fiber may be useful

- Psyllium husk is the best option—it is a gel-forming, soluble fiber
- Taken before meals it can slow digestion and absorption and decreases blood sugar spikes
 - Start with 1 teaspoonful in 2-4 oz. water 15-30 minutes prior to meals
 - Increase to 1 tablespoon as tolerated
- Look for sugar-free Metamucil or a generic equivalent
 - Unflavored or ‘raw’ psyllium fiber can also be found, typically in the “Natural Foods” section of some grocery stores

Probiotics

Current evidence is limited on recommendations for specific probiotic supplements

- Some people may have improved bowel habit with the use of daily probiotics
- In general, they safe to use; however:
 - Avoid taking probiotics until all internal surgical wounds have fully healed
 - Avoid taking if you have been diagnosed with “Intestinal Bacterial Overgrowth”
- Probiotics are also found in cultured dairy products (Greek yogurt, Kefir, etc.) or fermented foods and beverages (sauerkraut, kimchi, kombucha, etc.)

Other nutrients as prescribed

Individual vitamins or nutrients will be advised based on clinical findings

- Make sure to ask before beginning a new supplement if you are unsure of the purpose
- It is best only to take supplements if there is a direct need or nutrient deficiency
 - Some nutrients can interfere with one another or with medications
 - It is possible (and sometimes dangerous) to have excessively high levels of some nutrients
- When in doubt, feel welcome to discuss your supplement needs with your provider



Post-LapBand Surgery Daily Supplements

1 tab daily

Chewable multivitamin/multimineral

- One tablet daily (preferably with a meal)
- Flintstones Chewable or generic equivalent
- Avoid “gummy” multivitamins

Why?: After weight loss surgery, chewable multivitamins are more likely to be absorbed. Take them twice per day to increase your absorption of these important nutrients. Gummy vitamins usually do not provide enough nutrients; however, children’s chewables (like Flintstones) are likely to meet your needs.



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- Citrate is the best absorbed form of calcium, especially after bariatric surgery
- Citracal “Petites” are smaller tablets, but are still quite large
 - It is possible to cut these tablets in half for easier swallowing
 - Consider ordering chewable calcium citrate (*the chewable brands found in most pharmacies are usually not calcium citrate*)
 - Celebrate Vitamins: <https://tinyurl.com/y86rsqg4>
 - Bariatric Fusion: <https://tinyurl.com/y7zs29md>
- Total daily goal is 1000-1200 mg in divided doses
 - 2 Citracal Petites, twice daily
 - 1 Soft Chew, twice daily



Why?: After weight loss surgery it may be harder to eat/drink enough calcium rich foods. It is also difficult for your smaller stomach to breakdown calcium supplements for absorption. Calcium citrate should be used to meet daily calcium needs.

Vitamin D3 (cholecalciferol) _____ IU daily

- Daily preferred to weekly doses (commonly given as a prescription)
- Usually 2,000-3,000 international units daily for maintenance
 - Typically as 1,000 units from Calcium + D3 supplements, and 2,000 units from a standalone Vitamin D3
- Any over-the-counter brand will be fine



Why?: Vitamin D is one of the most common nutrient deficiencies. It is important for many functions in the body. It is essential for bone health.

Post-Bariatric Surgery “As Needed” Supplements

Vitamin B12 (cobalamin)

Additional daily B12 may be necessary if you are low

- 500 micrograms (mcg) once daily, or 2,500 mcg once weekly
- Melting, chewable, or sublingual formulations are all okay
- Avoid “slow release” forms
- Injections are usually not needed

Iron (ferrous fumerate, sulfate or iron polysaccharide)

For women having monthly menstrual cycles, additional iron is advised

- 65mg “elemental” iron can be found in over-the-counter 325 mg Ferrous sulfate
- “High Potency” iron may be advisable in some cases
 - Novaferum 125 is a liquid iron supplement available to order: <https://tinyurl.com/yaqa7q4x>

Soluble fiber (psyllium husk)

To avoid “dumping syndrome” after surgery, supplemental fiber may be useful

- Psyllium husk is the best option—it is a gel-forming, soluble fiber
- Taken before meals it can slow digestion and absorption and decreases blood sugar spikes
 - Start with 1 teaspoonful in 2-4 oz. water 15-30 minutes prior to meals
 - Increase to 1 tablespoon as tolerated
- Look for sugar-free Metamucil or a generic equivalent
 - Unflavored or ‘raw’ psyllium fiber can also be found, typically in the “Natural Foods” section of some grocery stores

Probiotics

Current evidence is limited on recommendations for specific probiotic supplements

- Some people may have improved bowel habit with the use of daily probiotics
- In general, they safe to use; however:
 - Avoid taking probiotics until all internal surgical wounds have fully healed
 - Avoid taking if you have been diagnosed with “Intestinal Bacterial Overgrowth”
- Probiotics are also found in cultured dairy products (Greek yogurt, Kefir, etc.) or fermented foods and beverages (sauerkraut, kimchi, kombucha, etc.)

Other nutrients as prescribed

Individual vitamins or nutrients will be advised based on clinical findings

- Make sure to ask before beginning a new supplement if you are unsure of the purpose
- It is best only to take supplements if there is a direct need or nutrient deficiency
 - Some nutrients can interfere with one another or with medications
 - It is possible (and sometimes dangerous) to have excessively high levels of some nutrients
- When in doubt, feel welcome to discuss your supplement needs with your provider



Post-Duodenal Switch Surgery Daily Supplements

2 tab twice daily

Chewable multivitamin/multimineral

- Two tablets twice daily (preferably with a meal)
- Flintstones Chewable or generic equivalent
- Avoid “gummy” multivitamins

Why?: After weight loss surgery, chewable multivitamins are more likely to be absorbed. Take them twice per day to increase your absorption of these important nutrients. Gummy vitamins usually do not provide enough nutrients; however, children’s chewables (like Flintstones) are likely to meet your needs.



3-4 tabs twice daily

Calcium citrate

- Citrate is the best absorbed form of calcium, especially after bariatric surgery
- Citracal “Petites” are smaller tablets, but are still quite large
 - It is possible to cut these tablets in half for easier swallowing
 - Consider ordering chewable calcium citrate (*the chewable brands found in most pharmacies are usually not calcium citrate*)
 - Celebrate Vitamins: <https://tinyurl.com/y86rsqg4>
 - Bariatric Fusion: <https://tinyurl.com/y7zs9md>
- Total daily goal is **1800-2400 mg** *in divided doses*
 - 3 Citracal Petites, twice daily
 - 2 Soft Chew, twice daily



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- Any over-the-counter brand will be fine



Why?: Vitamin D is one of the most common nutrient deficiencies. It is important for many functions in the body. It is essential for bone health.

Post-BPD/DS Surgery “As Needed” Supplements

B-complex

Water soluble B vitamins are mostly absorbed in the part of the intestines bypassed by the BPD/DS. Maintaining high intake from supplements may be necessary to prevent deficiencies.

- Look for a total daily intake of the following
 - 300-500mcg B12
 - 50-100mg B1 (thiamin)

Iron (ferrous fumarate, sulfate or iron polysaccharide)

For women having monthly menstrual cycles, additional iron is advised

- 65mg “elemental” iron can be found in over-the-counter 325 mg Ferrous sulfate
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