

Nutrition Before Bariatric Surgery



UCLA Health

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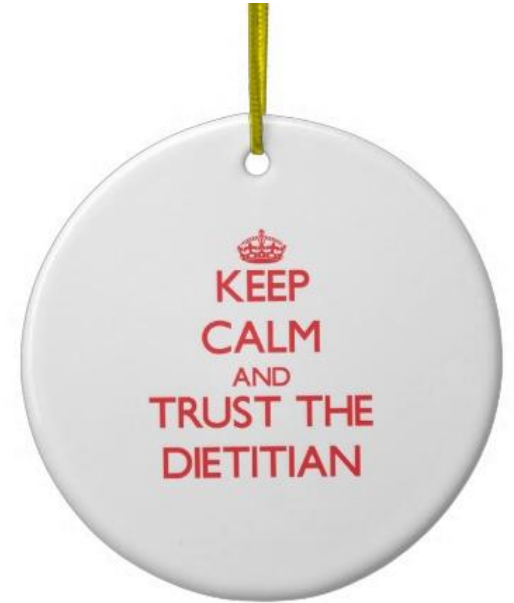
Learning Objectives

- Role of Dietitian
- Importance of Pre-Surgical Weight Reduction
- How to Reduce Your Weight Before Surgery
- Review of Food Groups
- Dining out Tips
- Emotional Eating
- Physical Activity
- Label Reading



Role of Dietitian

- To educate and counsel
- To assess individual eating behaviors, nutrition needs and food preferences.
- To monitor your nutrition status.
- To support you!



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Importance of Pre-Surgical Weight Reduction

- Decreases fat around liver & stomach, which makes surgery easier & safer
- Surgery is only a tool
 - Lifestyle & behavior modifications are the KEY to success
- On average- pt's. reduce approximately 60-80% of EXCESS weight with surgery
- Best to reduce 5-10% of your current weight before surgery



How do I Lose Weight Before Surgery?

- Find or make a meal plan that works for you and your lifestyle that you can follow everyday and feel satisfied with
 - 3 meals with 3 snacks, 3 meals 2 snacks or calorie counting.
- Limit Calories to 1200-1800 depending on what your Dietitian recommends for you
- Portions! Portions! Portions!
- Everything in moderation, variety and balance

How do I Lose Weight Before Surgery?

- Practice mindful eating
- Stay active!
 - Exercise, park farther away, walk with friends, worksite wellness

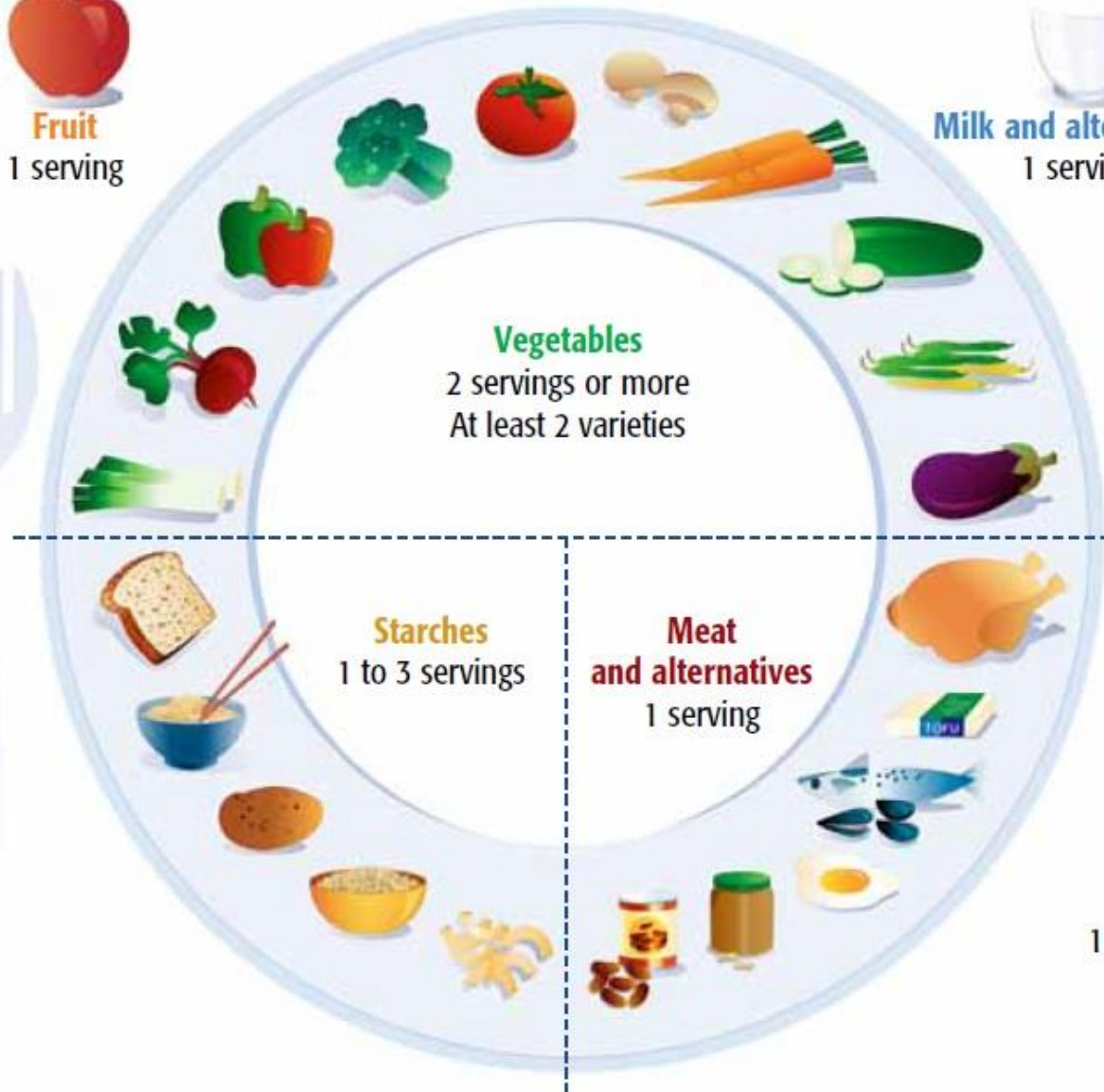




Fruit
1 serving



Milk and alternatives
1 serving

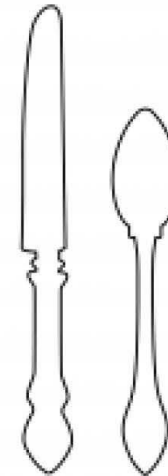
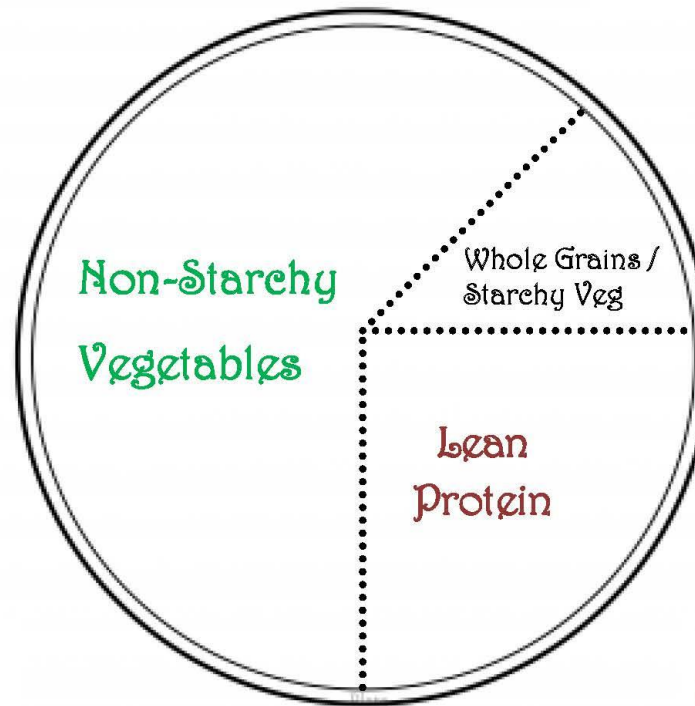
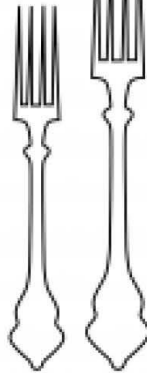
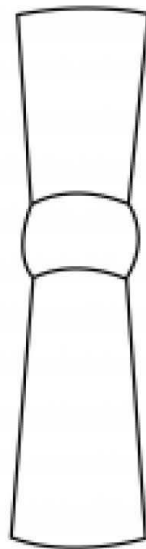


Fats
1 to 3 servings



BALANCED PLATE

Designed by: Lauren Maddahi, MS RD



*Whole grains: 100% whole wheat bread, 100% whole grain crackers, barley, quinoa, brown rice, steel-cut oatmeal, millet, amaranth, farro

*Add small amounts of healthy fats: nuts, seeds, olive oil, avocado, grape seed oil, coconut oil



Main Categories of Food

- Carbohydrate

- Bread, pasta, rice, etc
 - Fruit
 - Milk
 - Starchy vegetables
- * Non-starchy Vegetables

- Protein

- Meat, chicken, turkey
- Fish, eggs, some dairy
- Tofu, beans, tempeh

- Fats

- Oils, butter, shortening, lard

Carbohydrates

Only source of energy for some body tissue

- A carbohydrate is anything with flour, sugar, or grain as the first ingredient
 - Also, fruits, starchy vegetables, legumes and some dairy products
- Provides immediate energy to the body
- 1 Serving = 1 ounce by weight = 15 grams carbohydrate
- 60-100 kcal /serving



Carbohydrate Samples

Food Item	1 Serving
• Whole grain bread	• 1 slice/1 ounce
• Corn or whole wheat flour tortilla	• 1 (6 inches across)
• Corn taco shells	• 2 (5 inches across)
• Whole wheat pita bread	• ½ (3 inch across)
• Whole wheat bagel	• ¼ large or 1 ounce
• Whole wheat hamburger or hot dog bun	• ½ or 1 ounce
• Brown rice cakes	• 2 (4 inches across)
• ½ English muffin	• 1 oz
• Waffle or pancake	• 1 (4 inches across)
• Broth-based soup (potato, split pea, etc)	• 1 cup
• Small whole wheat crackers	• 4-6
• Graham cracker squares	• 3
• Pasta, brown rice, quinoa, millet, barley (cooked)	• 1/3 cup
• Beans, peas, corn, sweet potatoes, winter squash or mashed or boiled potatoes (cooked)	• ½ cup
• Baked potato	• ¼ large, 3 ounces
• Pretzels, potato or tortilla chips	• 10-15
• Homemade popcorn	• 3 cups
• Whole grain cereal, cold	• ¾ cup
• Cereal, cooked	• ½ cup
• Marinara sauce	• ½ cup
• Pudding	• 1/2 cup
<u>Fruit</u> Approximately 60-80 calories, 15 grams carbohydrate	• Small to medium piece
• Berries and Cut Fruit	• 1 cup
• Grapes, cherries	• 12
• Grapefruit, Mango, papaya, banana	• 1/2
• Dried fruit	• ¼ cup
• Plums, Tangerines, apricots	• 2
• Apple, pear, orange	• 1 small

More Carbohydrate Samples

FRUITS:

- 1 fruit = 15 grams carbohydrate
- 60-80 kcal/serving
- Size of your fist or smaller



MILK: Fall in the carbohydrate *and* protein group
1 cup = 90-150 kcal

Carbohydrate Complex vs. Simple

Choose more complex carbohydrates over simple carbohydrates

Complex (Choose more from this group)

- 100% whole grain bread, wheat pasta, brown rice, quinoa, barley
- Legumes
- Fruits with skin
- Starchy vegetables with skin (yams)

Simple (Limit / Avoid this group)

- Fruit juice
- Sugary desserts (cakes)
- Sugar (soda, syrup, candy)
- White bread and rice

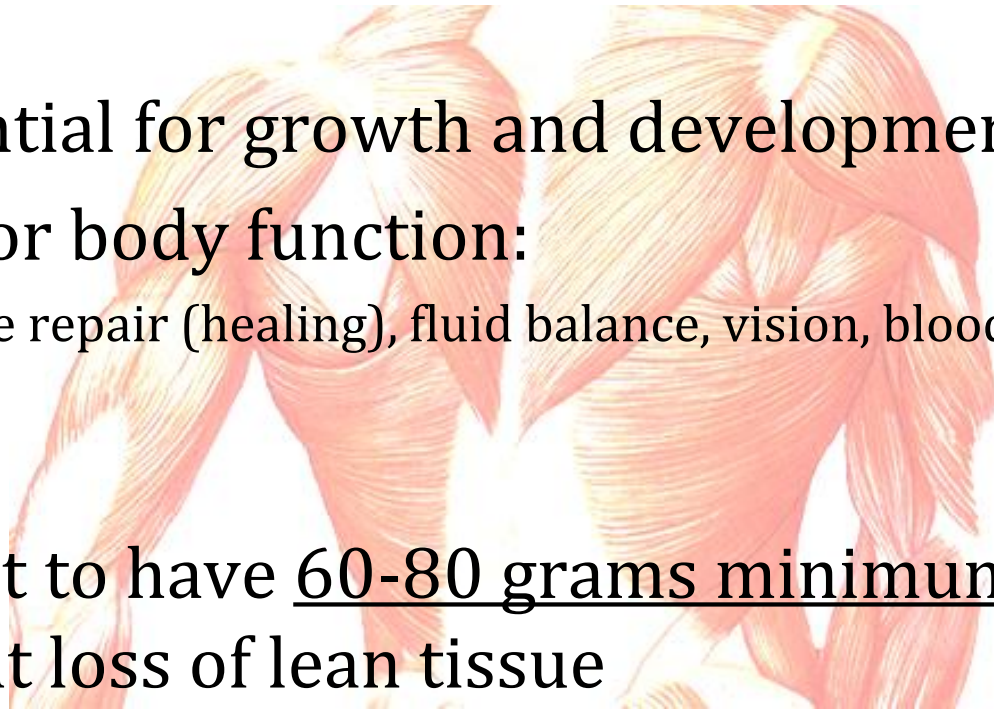


How Many Carbohydrate Servings are Recommended for Weight Loss?

- 6-8 total servings/day
- Break it down by meal
 - Breakfast: (1) Whole wheat toast
 - Snack: (1) 6 oz (3/4 cup) yogurt
 - Lunch: (1-2) 1 6-inch whole wheat tortilla
 - Snack: (1) 1 Fruit
 - Dinner (1-2) ½ large sweet potato with skin
 - Snack: (1) 1 cup milk

Protein

- The body's architect.
- $\frac{3}{4}$ of the body (excluding water) is composed of protein.
- It is essential for growth and development.
- Needed for body function:
 - Tissue repair (healing), fluid balance, vision, blood clotting
- Important to have 60-80 grams minimum everyday to prevent loss of lean tissue
 - For optimum weight loss, 1.5 g per kg of IBW (ideal body weight)



Protein

- 1 serving of protein= 1 ounce by weight = 7 grams protein.
- 35-100 Kcal per 1 ounce.
- Protein foods include:
 - Meat
 - Eggs
 - Cheese or cottage cheese
 - Nuts or nut butters
 - Poultry
 - Tofu
- Lentils, beans, milk and yogurt are a protein and a carbohydrate.

How to Make Wise Protein Choices

- **Poultry:** Are naturally low in fat, but the skin and cooking method can add fat. For a healthy meal, bake, broil, stir fry or grill poultry, and remove the skin.
- **Fish:** Are naturally low in fat, but cooking method can add fat. Best to bake, broil, or steam. Avoid pan-fried or breaded fish sticks.
- **Beef:** Limit intake. Choose lean cuts of beef, remove visible fat. Sirloin, flank steak, tenderloin.



How to Make Wise Protein Choices

- **Dairy Products:** Milk, yogurt and soft cheeses such as feta, buffalo mozzarella are a good source of protein, but can be high in fat. Choose low-fat yogurt and milk products labeled skim, part skim, reduced fat or low fat.
- **Pork:** Choose low-fat or medium fat choices such as, loin or leg meat.



Fats

- Needed to supply the body with the essential fatty acids
- Various types
 - Saturated
 - Unsaturated
 - Trans Fats/Hydrogenated oils



Fats

- Sources include bacon, nuts, egg yolk, butter, margarine, cheese, oils, cocoa butter (found in chocolate), red meat, avocado
- Limit processed fats
- 1 serving of fat = 1 teaspoon = 5 grams
- 45 kcal per serving of fat
- Choose unsaturated over saturated



3 Types of Fats



- **Unsaturated** (more): liquid at room temperature
 - Canola oil, olive oil.



- **Saturated** (less): solid at room temperature
 - Butter, Crisco.



- **Trans Fats** (avoid): Partially hydrogenated oil.
 - Found in baked goods, chips, candy

Non Starchy Vegetables

- They contain 0-25 kcal per serving and can be consumed liberally. **If hungry grab a non-starchy vegetable.**
- They include all vegetables except for corn, green peas, potatoes, yucca, yams, beans, plantain, butternut squash and acorn squash.
- Non starchy Vegetables: artichoke, asparagus, green beans, bean sprouts, beets, broccoli, Brussels sprouts, cabbage, cauliflower, celery, cucumber, eggplant, onions, leeks, mushrooms, okra, pea pods, peppers, radishes, green leafy vegetables, summer squash, tomato, turnips, water chestnuts, zucchini.



Water

- Second to oxygen in keeping us alive.
- 60-70% of the body's weight is water!



How Much Water do we Need?

- The Institute of Medicine advises
- Men -- 3.0 liters (about 13 cups)
- Women -- 2.2 liters (about 9 cups)

**Total fluids per day



Benefits of Water

- Acts as a natural appetite suppressant.
- Assists the body in metabolizing stored fat.
 - Your liver metabolizes fat and it can't do that at 100% if it is doing the kidney's job. Your liver is overloaded when your kidneys don't get enough water.
- Relieves fluid retention problems. If you don't give your body water, it will hold it so as not to lose it.
- Rids the body of waste and toxins.
- Aids in digestion and proper bowel function.

Ideas to get Your Recommended Fluids

- Fill a 32 oz water bottle with plain water in the morning and strive to finish one before lunch and one before bed
- Carry a water bottle with you and take small sips throughout the day
- Flavor your water with a slice of orange, cucumber, mint, frozen fruit, or lemon
- Drink unsweetened iced tea, black coffee, or water products with fruit essence (like: Hint Water)



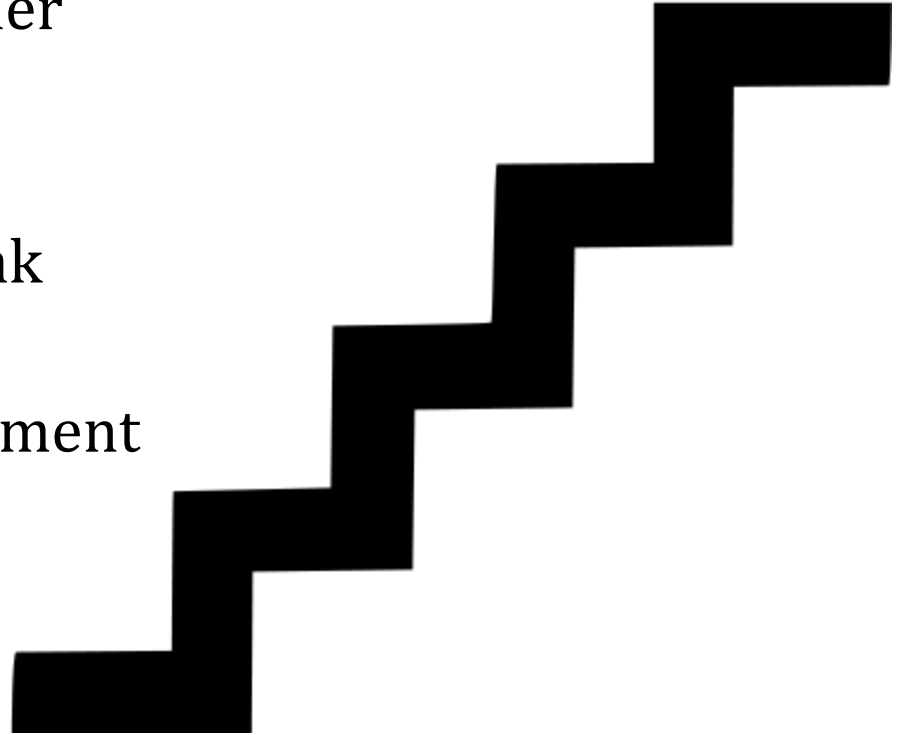
Benefits of Physical Activity

- Improves your mood
- Combats chronic diseases
- Helps you manage your weight
- Strengthens your heart and lungs
- Helps promote better sleep
- Reduces stress
- Improves your body shape
- Improve self-esteem



Simple Steps to Becoming More Active

- Take the stairs instead of the elevator
- Park your car farther away from the building and walk
- Play with your kids or pets
- Get off the bus a few stops earlier
- Garden
- Clean your house
- Take a walk on your lunch break
- Dance around the house
- Contact local recreation department for exercise classes
- Walk at the mall
- Swimming



Goals to Achieve Weight Reduction

- Eliminate sugar sweetened beverages (soda, fruit juice, frappuccinos)
- Start cutting out added salt and processed foods
- Start limiting solid and added fats, and choose healthier oils
- Start practicing portion control
- Start cutting out sugary sweets, and replace with complex carbohydrates
- Eat lean proteins at each meal.

More Goals to Achieve Weight Reduction

- Drink plenty of water (8 cups at least).
We often mistake thirst for hunger.
- Eat at regular intervals and avoid grazing.
- Spend 20-30 minutes at each meal and enjoy every bite.
- Chew your food. Make sure it is a mushy consistency before swallowing. **Chew! Chew! Chew!**
- Set utensils down between bites.
- Cut food into small bite size pieces.
- Start an exercise routine



Even More Goals to Achieve Weight Reduction

- Eat 2-5 servings of fruits and vegetables/day
 - Plenty of vitamins/minerals and antioxidants
 - Fiber helps you feel and stay full longer
 - Prevents constipation
- Eat plenty of non-starchy vegetables
 - Low in calorie and can add bulk to your meals
 - ***Except*** potatoes, yams, beans, corn, peas and other starchy vegetables



Foods to Limit and or Avoid

- Fried Foods
- Alcohol
- Full Fat meats
- Full fat dairy products
- Sugar
- Full-fat Salad dressings
- *Sugar-free products*
- Soda and other carbonated beverages
- Baked Goods
 - Chips, baked chips, sugary cereals, muffins, cakes, cookies, croissants, doughnuts and bagels
- Sugary drinks
 - Fruit juice, soda
- Sugary marinades or sauces
 - Teriyaki sauce, barbeque sauce and marinara sauces



Dining out Tips

- ✓ Skip the mayo on all sandwiches to save you 100 calories
- ✓ Skip the cheese on all sandwiches to save you 100-150 calories
- ✓ Substitute the bun or bread on some sandwiches for vegetables to save you 160-200 calories
- ✓ Add non-starchy vegetables to all of your meals for bulk. They are low in calorie and will provide you with fiber, vitamins and minerals.

Dining out Tips

- ✓ Choose a grilled/baked/steamed protein options (sandwiches, plates, bowls, etc)
- ✓ Always avoid the fried fish and fried chicken sandwiches which add an extra 200 calories and tend to be 5-10 grams lower in protein than the other grilled alternatives.
- ✓ Avoid the fries! They have *no nutritional value* to you other than adding 300-600 calories per serving to your meal
- ✓ Ask for a to go box at the start of your meal. Portion out what you want to eat and put the rest away to enjoy later
- ✓ Don't be afraid to ask questions!

Portion Sizing Visual

Two cupped hands ≈ 1 ounce

Thumb ≈ 1 teaspoon

Palm ≈ 3-4 ounces

One cupped hand ≈ 1/2 cup

Fist ≈ 1 cup

Thumb ≈ 1-2 tablespoons

HELPING HANDS

HELPING HANDS

Use this "handy" chart to visualize approximately sized portions for meals, snacks and recipes (examples are provided for each corresponding measurement).

	Palm ≈ 3-4 ounces (meat, fish, & poultry)
	Thumb ≈ 1 teaspoon (butter, margarine, mayonnaise, & oils)
	Thumb ≈ 1-2 Tablespoons (salad dressing, sour cream, cream cheese, peanut butter & hard cheeses)
	Fist ≈ 1 cup (cereal, soup, casseroles, fresh fruit, raw vegetables or salads)
	One cupped hand ≈ 1/2 cup (pasta, rice, beans, potatoes, cooked vegetables, pudding, & ice cream)
	Two cupped hands ≈ 1 ounce (chips, crackers & pretzels)

Try the leader in perfectly portioned meals created for healthy living.

Healthy Choice

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≈ indicates approximate size of serving

Balanced Plate Method





Get Fit
Perfect Portion
Portion Control

SEEDS & DRESSING

SEEDS & DRESSING

PROTEINS

HEALTHY FATS

CARBS

FRUITS

VEGGIES

1200 Kcal Sample Meal Plan

Meal	Kcal	Sample
Breakfast	250	½ cup cooked oatmeal 4 egg whites
Snack	150	6 oz plain lowfat yogurt – no flavor 10 almonds
Lunch	300	Chicken Fajitas <ul style="list-style-type: none">• 4 ounces of lean chicken• 1 6-inch whole wheat tortilla• Unlimited non starchy vegetables
Snack	150	½ cup cottage cheese 1 small fruit (1 cup)
Dinner	350	Turkey with vegetables <ul style="list-style-type: none">• 4 ounces of lean turkey• ½ sweet potato with skin• Unlimited non-starchy vegetables
Snack	60	• 1 cup berries

Healthy Snack Choices (~150 calories)

- 1 Fresh fruit with $\frac{1}{4}$ cup raw nuts.
- 3 cups air-popped or light microwave popcorn (w/o butter).
- 6 oz low-fat yogurt (100 calories) with $\frac{1}{2}$ cup berries.
- 1 oz low fat or non-fat cheese with 5 small crackers.
- $\frac{1}{2}$ cup cottage cheese with non-starchy vegetables.
- 2 oz beef or turkey jerky with non-starchy vegetables.



“Unlimited” Snack choices

- Non-starchy vegetables (steamed, grilled, raw or make a soup with low sodium broth and non-starchy vegetables)
- Salsa, lemon juice to add flavor

Emotional vs. Physical Hunger

Emotional Eating:

- Is sudden
- Crave a specific food item
- Urgent
- Mindless eating
- Do not stop when full
- Feeling of guilt, regret or shame
- Not satisfied when full
- Involved with an upsetting emotion

Physical Hunger:

- Stop when you are full
- Involves awareness
- There is a physical need
- Choose a variety of foods
- Physical hunger is gradual

Are you an Emotional Eater?

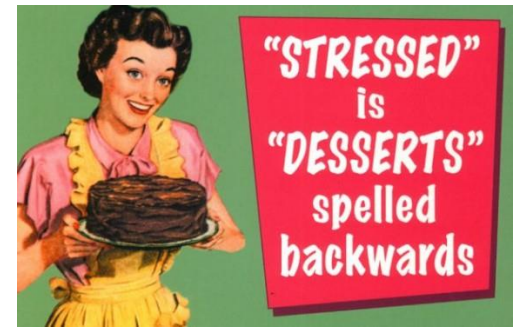
To know if you are an emotional eater, ask yourself:

- Do I eat when I feel sad, bored, anxious or upset?
- Do I eat to feel calm?
- Are you rewarding yourself with food?
- Does food make you feel loved, safe or replace the need of a friend?
- Does food make you feel powerless or controlled?

End the Cycle of Emotional Eating:

- Do not skip meals. Skipping meals will cause your body to starve and overeat at your next mealtime.
- Take a moment to appreciate your food and where it comes from.
- Activate all 5 senses; touch, smell, vision, hearing and taste.
- Keep a food diary. Record everything you eat including the time, how long you spent, the food item, and portion size.
- Get rid of temptation. Don't keep foods around your home that are hard to resist.
- Snack healthy. Have healthy snacks around the house including fresh fruit and vegetables.

Emotional Eating Tips



- Focus your attention away from food by involving yourself in activities
- Remember food won't fix the problem
- Don't eat with distractions (TV, radio, iPad, book)
- Don't eat meaninglessly
 - Eat when you are hungry
- Listen to your hunger cues
 - This is an innate ability which tells us when we are physically hungry and full
 - If you are physically hungry you will crave a meal
 - If you are emotionally hungry you will crave sweets or salty snacks

The Hunger Scale

Try to stay between levels 4-6 throughout the day



- 1: Weak and light-headed.** Your stomach acid is churning.
- 2: Very uncomfortable.** You feel irritable and unable to concentrate.
- 3: Uncomfortably hungry.** Your stomach is rumbling.
- 4: Slightly uncomfortable.** Beginning to feel signs of hunger.
- 5: Comfortable and satisfied.**
- 6: Comfortable and slightly full.** You feel satisfied and a little more.
- 7: Full.** A little bit uncomfortable.
- 8: Uncomfortably full.** You feel bloated.
- 9: Very uncomfortably full.** You need to loosen your clothes.
- 10: Stuffed.** You are so full you feel nauseous.

Start Here

Check Serving Size

Check Calories

Limit These Nutrients

Get Enough of These Nutrients

Nutrition Facts

Serving Size 1/2 cup (114g)
Servings Per Container 4

Amount Per Serving

Calories 90 **Calories from Fat 30**

	% Daily Value*
Total Fat 3g	5%
Saturated Fat 0g	0%
Cholesterol 0mg	0%
Sodium 300mg	13%
Total Carbohydrate 13g	4%
Dietary Fiber 3g	12%
Sugars 3g	
Protein 3g	

Vitamin A 270%	•	Vitamin C 10%
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	65g	80g
Sat Fat	Less than	20g	30g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Quick Guide to % Daily Value

5% or less is low
20% or more is high

Footnotes

<400 calories
<10 g sugar
<5% fat

Per serving, look for:
<300 mg sodium
>15 g protein
>5 g fiber

Avoid trans fats
Avoid hydrogenated oils

Kashi®

7 Whole Grain Flakes

Nutrition Facts

Serving Size 1 Cup (50g)

Amount Per Serving

Calories 170 Calories from Fat 5

% Daily Value*

Total Fat 0.5g **1%**

Saturated Fat 0g **0%**

Trans Fat 0g

Polyunsaturated Fat 0g

Monounsaturated Fat 0g

Cholesterol 0mg **0%**

Sodium 150mg **6%**

Potassium 120mg **3%**

Total Carbohydrate 41g **14%**

Dietary Fiber 6g **24%**

Soluble Fiber 0g

Insoluble Fiber 6g

Sugars 6g

Protein 6g **4%**

Vitamin A 0% • Vitamin C 0%

Calcium 0% • Iron 8%

*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 65g	80g
Sat. Fat	Less than 20g	25g
Cholesterol	Less than 300mg	300mg
Sodium	Less than 2,400mg	2,400mg
Potassium	3,500mg	3,500mg
Total Carbohydrate	300g	375g
Dietary Fiber	25g	30g
Protein	50g	65g

Calories per gram:

Fat 9 • Carbohydrate 4 • Protein 4

INGREDIENTS: KASHI SEVEN WHOLE GRAIN BLEND (WHOLE: ORGANIC HARD RED WHEAT, OATS, BROWN RICE, TRITICALE, RYE, BARLEY, BUCKWHEAT), ORGANIC LONG GRAIN RICE, ORGANIC DRIED CANE SYRUP, ORGANIC WHEAT BRAN, OAT FIBER, BARLEY MALT EXTRACT, BROWN RICE SYRUP, SALT, SESAME SEEDS.

CONTAINS WHEAT INGREDIENTS.

Kellogg's®

Smart Start® Healthy Heart

Nutrition Facts

Serving Size 1 1/4 Cups (60g/2.1 oz.)

Servings Per Container About 7

Cereal with
1/2 Cup
Vitamins A&D
Fat Free Milk

Amount Per Serving

Calories 230

Calories from Fat 20

% Daily Value**

Total Fat 3g* **5%** **5%**

Saturated Fat 0.5g **3%** **3%**

Trans Fat 0g

Cholesterol 0mg **0%** **0%**

Sodium 140mg **6%** **8%**

Potassium 400mg **11%** **17%**

Total Carbohydrate 46g **15%** **17%**

Dietary Fiber 5g **23%** **23%**

Soluble Fiber 2g

Insoluble Fiber 3g

Sugars 17g

Other Carbohydrate 24g

Protein 7g

Ingredients: Oat bran, rice, sugar, oat clusters (sugar, toasted oats [rolled oats, sugar, high fructose corn syrup, partially hydrogenated soybean oil, molasses, honey], wheat flakes, crisp rice [rice, sugar, malt, salt], corn syrup, polydextrose, honey, cinnamon, BHT for freshness, artificial vanilla flavor), high fructose corn syrup, malt flavoring, potassium chloride, salt, baking soda, ascorbic acid (vitamin C), niacinamide, zinc oxide, reduced iron, calcium pantothenate, pyridoxine hydrochloride (vitamin B₆), riboflavin (vitamin B₂), thiamin hydrochloride (vitamin B₁), BHT (preservative), vitamin A palmitate, folic acid, vitamin B₁₂, vitamin D.

CONTAINS WHEAT INGREDIENTS.

Exchange: 3 Carbohydrates

The dietary exchanges are based on the *Exchange Lists for Meal Planning*, ©2003 by The American Diabetes Association, Inc. and The American Dietetic Association.

How many calories are in this package?

Is this a low fat food?

Is this a good source of protein?

Is this a good source of iron?

Nutrition Facts			
Serving Size 2/3 cup (55g)			
Servings Per Container About 8			
Amount Per Serving			
Calories 230		Calories from Fat 40	
			% Daily Value*
Total Fat 8g		12%	
Saturated Fat 1g		5%	
Trans Fat 0g			
Cholesterol 0mg		0%	
Sodium 160mg		7%	
Total Carbohydrate 37g		12%	
Dietary Fiber 4g		16%	
Sugars 1g			
Protein 3g			
Vitamin A		10%	
Vitamin C		8%	
Calcium		20%	
Iron		45%	
* Percent Daily Values are based on a 2,000 calorie diet. Your daily value may be higher or lower depending on your calorie needs.			
	Calories:	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Thank You!

Emails:

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