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# Measuring Nutrition Literacy Among Participants Enrolled in a Weight Management and Chronic Disease Prevention Program

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**Title:** Measuring Nutrition Literacy Among Participants Enrolled in a Weight Management and Chronic Disease Prevention Program

**Purpose:** Type II diabetes, hypertension, and overweight/obesity are three of the most common diet-related health conditions and are closely linked to negative health outcomes. Limited nutrition knowledge is associated with inadequate preventative care and poor diet quality, which may exacerbate the development of these conditions. Research suggests that targeted nutrition education increases nutrition literacy and thus is an important component of diet-related chronic disease prevention programs. Despite its importance, nutrition literacy tools are not widely available and/or routinely used in practice. **Program/Participants:** A total of seven 15-20-minute focused nutrition classes were incorporated into an existing wellness program offered through the Summa Health Equity Center. Pre and post-program measures of nutrition literacy were conducted using the Nutrition Literacy Assessment Instrument, a newly developed tool, to assess feasibility of use and changes in nutrition knowledge. **Evaluation:** Participants started with a high nutrition literacy score (88%), which changed little over the course of programming. Through incorporating this tool, a number of limitations were noted that suggest this tool may not be appropriate for this population. Additional research would be beneficial to further refine the tool and to develop methods of assessing nutrition literacy for use among audiences of varying pre-existing knowledge.



# Measuring Nutrition Literacy Among Participants Enrolled in a Weight Management and Chronic Disease Prevention Program

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## INTRODUCTION

Type II diabetes, hypertension, and overweight/obesity are three of the most common diet-related health conditions and are closely linked to negative health outcomes.<sup>1</sup> Limited nutrition knowledge is associated with inadequate preventative care and poor diet quality, which may exacerbate the development of these conditions.<sup>2</sup> Research suggests that targeted nutrition education increases nutrition literacy and thus is an important component of diet-related chronic disease prevention programs.<sup>2</sup> Despite its importance, nutrition literacy tools are not widely available and/or routinely used in practice.

## PURPOSE OF INTERVENTION

- Determine the effects of targeted nutrition education classes on nutrition literacy among individuals at risk for diet-related chronic diseases
- Further validate the Nutrition Literacy Assessment Instrument as a method of accurately measuring nutrition literacy

## NUTRITION LITERACY ASSESSMENT INSTRUMENT

- Newly developed (2012)<sup>3</sup>
- 18 multiple-choice questions on nutrition and health, energy sources in food, household food measurement, food label and numeracy, food groups, and consumer skills
- Written at a 9<sup>th</sup>-grade reading level<sup>3</sup>
- Limited research exists on the validity of this tool
- One of the only nutrition literacy assessment tools available

## PROGRAM/PARTICIPANTS

- A total of seven 15-20-minute focused nutrition classes were incorporated into an existing wellness program offered through the Summa Health Equity Center
- The goal of this program was to help participants maintain a healthy weight and prevent diabetes and hypertension through behavior modification
- Participants had a wide variety of pre-existing knowledge about nutrition
- Each class had a unique theme and included verbal education, handouts, and activities
- Pre and post-program measures of nutrition literacy were then assessed for changes in nutrition knowledge
- Class topics included:
  - Planning a Healthy Meal (MyPlate)
  - Portion Control
  - Nutrition Fact Label Reading
  - Nutritious Snacking
  - Dining Out Healthfully
  - Fad Diets

## QUANTITATIVE FINDINGS

- 13 participants completed both pre and post-assessments
- Average pre-programming scores
- 88.14%
- Scores ranged from 69% to 98%
- Higher than expected, suggesting that this tool may be too basic for this population to accurately assess a change in nutrition knowledge
- Average post-programming scores
- 88.78%
- Scores ranged from 75% to 96%
- Many of the wrong answers were for questions that participants had initially marked correctly
- These findings were unexpected

## QUALITATIVE FINDINGS

Participants responded positively to the nutrition classes:

“This class made me think – I used to just eat boxed macaroni and cheese or ramen noodles without a thought, but now I’m choosing healthier options like salad or black beans.”

“Loved the class! MyPlate was helpful, I liked seeing the food portions.”

“The information that I received was very helpful to start a healthy lifestyle.”

“I would recommend this class to peers.”

These findings suggest that classes did increase nutrition awareness, which was not captured through the nutrition literacy assessment tool.

## Conclusion

Nutrition education plays a key role in increasing nutrition literacy and thus decreasing the risk of developing a diet-related chronic health condition. However, it is difficult to measure nutrition literacy across a broad audience using a single assessment tool. The Nutrition Literacy Assessment Instrument may not be appropriate for all populations, so additional research would be beneficial to further refine this tool and develop methods for assessing nutrition literacy for use among audiences of varying pre-existing knowledge.

## References

1. Health and Economic Costs of Chronic Disease. Centers for Disease Control and Prevention. Web site: [https://www.cdc.gov/chronicdisease/about/cdc\\_costs/index.htm](https://www.cdc.gov/chronicdisease/about/cdc_costs/index.htm). Updated February 19, 2019. Accessed March 15, 2019.
2. Gibbs RD, Fairbrock EF, Gofferski B, Zhang C, Swanson DE. The Nutrition Literacy Assessment Instrument is a valid and reliable measure of nutrition literacy in adults with chronic disease. *J Nutr Educ Behav*. 2015;50(1):24-7.
3. Gibbs RD. *Measuring Nutrition Literacy: Foundations and Development of an Instrument for Assessment* (doctoral dissertation). Urbana: University of Illinois; 2012.



# ***SWEET** Life Nutrition Schedule*

## **November 27th**

Back to the Basics: Building a Healthy,  
Balanced Meal

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## **December 11th**

Navigating the Holidays: Perfecting  
Portion Control

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## **January 8th**

Mindful Eating: The Secret to  
Enjoying What You Eat

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## **January 22nd**

Take-Out Makeover: Healthier Versions of the  
Foods You Love

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## **February 5th**

Salads for Supper: Building Blocks for a  
Healthy Salad

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## **February 12th**

Smart Snacking: Keeping Hunger at Bay  
the Healthy Way

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## **February 19th**

Fad Diets: Avoiding the Trap of a "Quick Fix"

**Questions?**

# BACK TO THE BASICS



**What Does a Healthy Meal Look Like?**

## WHY DOES NUTRITION MATTER?



- **Good nutrition is essential for a healthy body and mind!**
- **Eating a nutritious, balanced diet will help you stay at a healthy weight and lower your risk for certain diseases such as:**
  - Diabetes
  - Heart Disease
  - Cancer
  - Osteoporosis

***YOU CAN DO THIS!***

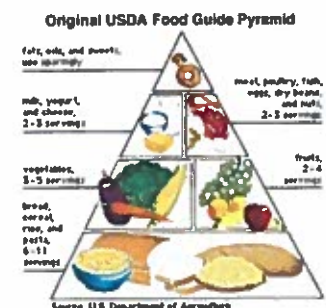
## THE BASICS OF A HEALTHY DIET



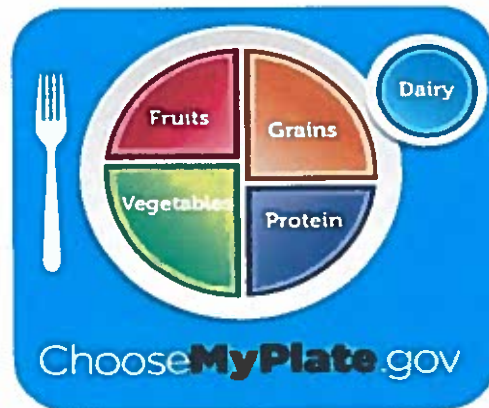
- **The key is to eat a variety of nutritious foods from all five food groups**
  - Fruits
  - Vegetables
  - Grains
  - Protein foods
  - Dairy
- **A diet that restricts any of these food groups is not healthy and keeps you from getting all the nutrients you need**



## REMEMBER THIS?



## WHAT WE RECOMMEND NOW

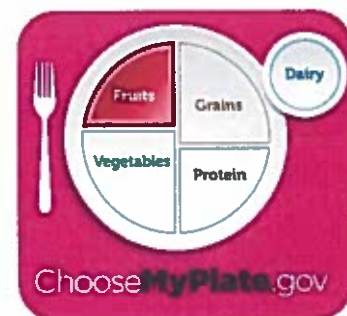


## FRUITS



- **Fruits are great sources of nutrients such as potassium, vitamin C, and fiber**
- **Fruits are naturally low in fat, sodium, and calories**

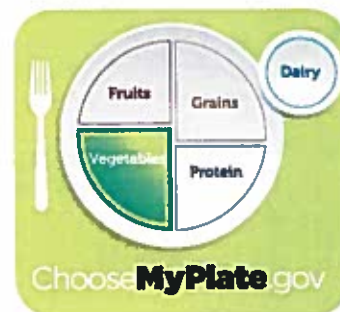
*Best choices: The more colorful a fruit is, the more nutrients it has! Some great choices are berries, oranges, or apples*



## VEGETABLES

- Like fruits, vegetables are a great source of vitamins and fiber
- Filling up on vegetables will keep you from snacking on less healthy foods

*Best choices: All vegetables are great, but the brighter they are, the better!*

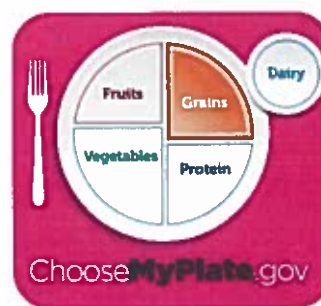


## GRAINS



- Grains (pasta, bread, rice) are made up of carbohydrates, which turn into energy when digested
- They are also good sources of vitamins/minerals and fiber (especially when whole-grain)

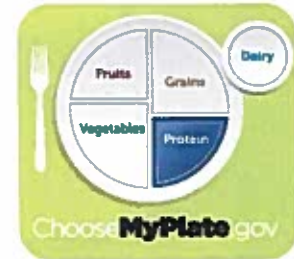
*Best choices: 100% whole wheat bread, brown rice, whole wheat pasta, and oatmeal*





## PROTEIN

- Protein is the building block of the body
- We need to eat protein so that we can repair cells and build new ones
- Food sources of protein
  - Meat, poultry, seafood, dairy products, beans, eggs, nuts/seeds



*Best choices: Lean meats (chicken, fish), low-fat dairy, and nuts/seeds*

## DAIRY

- Dairy products such as milk, cheese, and yogurt provide calcium, vitamin D, potassium, and protein
- Getting enough calcium and vitamin D helps decrease your risk for osteoporosis



*Best choices: Greek yogurt, low-fat milk*

## WHAT ABOUT FATS/OILS?

- Even though they are not represented on MyPlate, we still need some fat in our diet!

Choose liquid oils  
(unsaturated fat) such  
as:



Olive oil  
Canola oil

Limited solid fats  
(saturated fat) such  
as:

Butter  
Crisco  
Coconut oil



## ENERGY-DENSE VS NUTRIENT-DENSE...

### WHAT DOES THIS MEAN???



## THE ANSWER...

- **Energy-dense**

- A lot of calories per serving
- Also called “empty calories”
- Example: soda, potato chips, white bread, sugar

- **Nutrient-dense**

- Low in calories but high in vitamins, minerals, fiber, and other healthy nutrients
- Examples: Whole-grain bread, fruits, vegetables, lean meats

*Eat a lot of nutrient-dense foods and limit energy-dense foods!*



1575 Kcal  
High Energy Density



1575 Kcal  
Low Energy Density

Used with permission from Dr. Barbara Rolls, Penn State University

## TO RECAP...

- For a healthy diet, choose a variety of nutrient-dense foods
- Try to make most of your meals a MyPlate meal!
- Don't try for a "quick fix" - find a sustainable eating pattern that you can do for the rest of your life

*"You don't have to eat less, you have to eat right"*

HEALTHY  
AND  
HAPPY :)

# *Nut N' Honey Smoothie*



## **Ingredients**

- 1 tablespoon organic peanut butter
- 2 teaspoons honey
- 1/2 cup vanilla yogurt (light or Greek)
- 1 small banana, peeled and sliced
- 1 cup almond milk
- 1/2 cup ice (omit if using frozen banana)

## **Preparation**

Add ingredients to a blender and blend on high until creamy and smooth. For a thicker smoothie, add more ice. For a thinner smoothie, add more liquid.

---

**Makes 2 servings**

### **Nutrition Facts Per Serving:**

Calories: 177   Total Fat: 5 gm  
Total Carbs: 27 gm   Protein: 8 gm  
Sodium: 136 mg   Fiber: 4.4 gm

# *TropGREENcal Sunrise*



## **Ingredients**

- 1 large handful swiss chard or spinach, chopped
- 1/2 cucumber, sliced
- 1 small banana, sliced
- 1 cup pineapple, cubed
- 1 cup fresh orange juice
- 1 small lime, zested and juiced
- 1/2 cup ice (omit if using frozen fruit)

## **Preparation**

Add ingredients to a blender and blend on high until creamy and smooth. For a thicker smoothie, add more ice. For a thinner smoothie, add more liquid.

---

**Makes 2 servings**

### **Nutrition Facts Per Serving:**

Calories: 166	Total Fat: 0.2 gm
Total Carbs: 42 gm	Protein: 2.9 gm
Sodium: 14 mg	Fiber: 3.5 gm

# *Navigating the Holidays*

## *Healthy Eating Strategies*



## Why It's Important



- For most people, holidays = food
  - Christmas office parties, family get-togethers, community events, gifts
- Holiday meals often contain thousands of calories
  - Most people gain an average of five pounds between Thanksgiving, Christmas, and New Year's Day
- Often we feel guilty for "over-eating", which takes away from the joy of the holiday season

*You can still eat a healthy diet that includes all your favorite foods during the holidays!!*

## Strategy #1- Moderation

- Everything is okay in moderation!
  - The high-calorie pecan pie your grandma always makes, your classic roast turkey with gravy, Christmas cookies
- One meal or even one day's worth of meals is not going to have a big impact



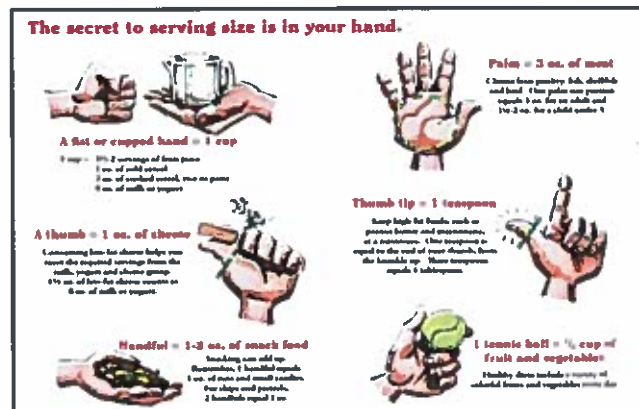
## Strategy #2 - Tweaking Classic Recipes

- Consider adjusting classic holiday recipes to be more nutritious
  - Load up on fruits and vegetables
  - Make it a Myplate meal
  - Use whole-wheat flour instead of regular flour
  - Use less sugar
  - Go for lean protein - chicken, turkey, fresh ham





## Strategy #3 - Portion Control is Key



## Other Strategies to Stay on Track

- Stay physically active
  - Helps relieve stress and boosts your metabolism
- Be picky - only eat foods that you actually enjoy
  - "Eat the best, leave the rest"
- Choose to eat mindfully
- Drink plenty of water
- Eat regular meals and snacks to prevent bingeing



## “Rules” to Keep in Mind

- No matter what happens this holiday season in terms of food, you are not a failure!
- Banish negative thoughts about yourself
  - This is never helpful, and often leads to unhealthy eating behaviors
- Enjoy every bite you take!!



# Cranberry Orange Sauce

## Ingredients

- 1 package (12 oz.) fresh cranberries
- 1 cup honey
- 1 cup water (or fruit juice)
- 2 teaspoons orange zest
- 1-2 teaspoons of spices such as cinnamon, allspice, nutmeg, etc.
- Pecans or walnuts (optional)

## Preparation

Rinse cranberries in a colander. Pick out damaged or bruised cranberries. In a medium saucepan, add cranberries and liquid and stir on high heat until it is boiling. Reduce the heat, and simmer for about 10-15 minutes until the cranberries burst. After the cranberries have burst, add zest, honey, spices, and nuts (optional). Stir, then remove from heat. Cool at room temperature or in the refrigerator. The sauce will thicken as it cools.

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### Makes 6 servings

#### Nutrition Facts Per Serving (without nuts):

Calories: 198	Total Fat: 0 gm
Total Carbs: 54 gm	Protein: 0.4 gm
Sodium: 4 mg	Fiber: 2.8 gm



# *Pan-Roasted Brussels Sprouts*

## **Ingredients**

- 1.5-2 lbs. Brussels sprouts
- 1-2 garlic cloves, minced
- 1/4 onion, thinly sliced
- 1/4 cup raisins
- 1/4 cup crumbled feta or goat cheese (optional)
- 2 tablespoons extra-virgin olive oil
- Salt and pepper

## **Preparation**

Trim end of sprouts and pull off any loose leaves. Slice in half or thinly slice lengthwise. In a large bowl, add garlic, onions, and sprouts and coat with a tablespoon of EVOO. Add seasonings and mix well. In a large pan add remaining EVOO over medium high heat. Add sprouts mixture. Stir and cook until they are tender and golden brown. Remove from heat to cool. In a bowl, mix sprouts mixture with raisins and cheese.

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**Makes 6 servings**

### **Nutrition Facts Per Serving:**

Calories: 140	Total Fat: 7 gm
Total Carbs: 17 gm	Protein: 7 gm
Sodium: 128 mg	Fiber: 5.2 gm



# Winter Root Mash

## Ingredients

- 2-3 lbs. of mixed root vegetables (potatoes, carrots, yams, parsnips, turnips, celery root, beets, etc.)
- 1/2 cup unsalted broth
- 2 tablespoons butter
- Salt and pepper to taste
- Garlic salt

## Preparation

Peel and cut vegetables into equal sized chunks. In a large pot, cover the vegetables in cold, salted water and bring water to a boil. Cook vegetables until they can be pierced through, roughly 15-20 minutes. Drain vegetables well and return to the pot. Mash vegetables, then add liquid, butter, and seasonings. Continue to add more seasonings and/or liquid if needed.

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### Makes 6 servings

**Nutrition Facts Per Serving (using 1 lb. of potatoes and 1 lb. of carrots, without seasonings):**

Calories: 126	Total Fat: 4 gm
Total Carbs: 21 gm	Protein: 2 gm
Sodium: 81 mg	Fiber: 3.6 gm

# MINDFUL EATING

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MAKING PEACE WITH FOOD

## DO YOU EVER...

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- Munch on pretzels or chips while watching your favorite TV show?
- Eat a meal while driving because you are too busy to eat otherwise?
- Snack on whatever food is available because you are bored?
- Keep eating even though you are full?
- Feel guilty about eating certain foods?
- Experiment with a variety of diets, trying to find the perfect plan to lose weight or feel better?

## WHAT IS MINDLESS EATING?

***“Mindless eating = eating foods without concentrating on what we’re eating or how much we’re eating.”***

## WHAT IS MINDFUL EATING?

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- Using all your senses in choosing to eat food that is both satisfying to you and nourishing to your body.
- Acknowledging responses to food (likes, dislikes, or neutral) without judgment.
- Becoming aware of physical hunger and satiety cues to guide your decisions to begin and end eating.

~ Megrette Fletcher, RD, LD

LET'S TAKE A LOOK  
AT OUR HANDOUT

LET'S PRACTICE!

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# MINDFUL EATING



## SLOW DOWN

Put your fork or sandwich down between bites. This is easier when eating in a group, so encourage your family and friends to join you for meals



## BE PRESENT

Minimize distractions by putting away electronic devices, not eating while driving or watching TV, and choosing a quiet, comfortable environment for meals



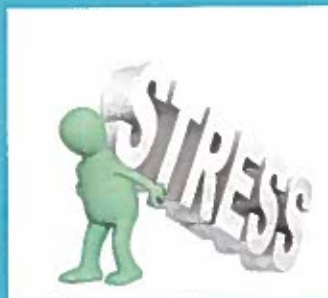
## LISTEN TO YOUR BODY

Eat when you're comfortably hungry and stop eating when you are comfortably full - don't eat until you feel "stuffed"



## DON'T LABEL

It is common to crave foods that we think we shouldn't have. To avoid this, don't label foods as "bad" or "forbidden" as you will only want them more!



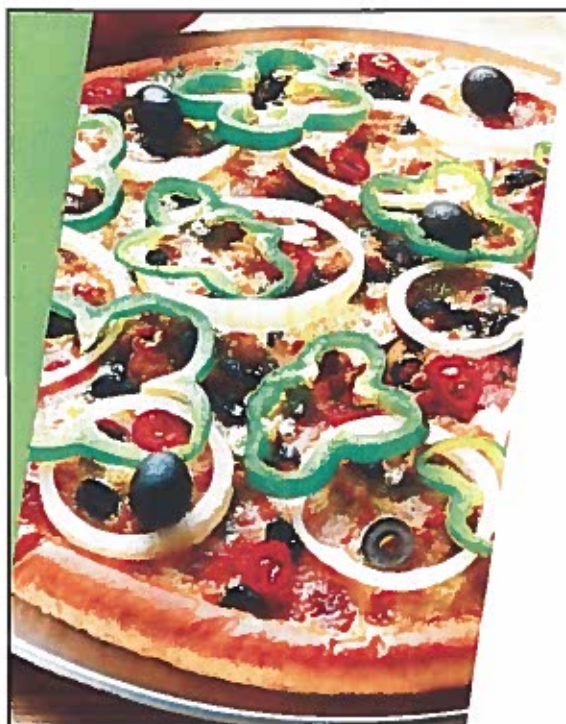
## BE AWARE

Food cravings can be caused by emotions rather than hunger. If you are stressed or upset, try taking a walk or calling a friend instead of raiding the refrigerator



## ENJOY WHAT YOU EAT

Food is not the enemy! Eat with enjoyment, pleasure, and gusto! And remember, all food may be eaten in moderation



## Takeout Makeover

Healthier Versions of the  
Foods You Love

### Dining out Statistics

- ▶ The average person in the United States eats a commercially prepared meal four to five times a week
  - ▶ 159 visits to fast food restaurants per year on average!
- ▶ The average U.S. household spends half of its food budget on eating out
- ▶ From 2015-2016, people in the United States spent around \$55 billion at restaurants



## The Truth About Eating Out



- ▶ Many menu items at restaurants contain thousands of calories and are high in saturated fat, sodium, and sugar
- ▶ When eating out regularly, people are more likely to take in more calories than they can burn
  - ▶ This can have a significant effect on our health - weight gain, high blood pressure, etc.

## Example - KFC's Chicken Pot Pie



<b>Nutrition Facts</b>	
Serving Size: 1 Chicken Pot Pie	
Amount Per Serving	
Calories 720	
	% Daily Value
Total Fat 41g	83%
Saturated Fat 25g	123%
Trans Fat 0g	
Cholesterol 80mg	37%
Sodium 1760mg	73%
Total Carbohydrates 60g	30%
Dietary Fiber 7g	28%
Sugars 5g	
Protein 26g	

\*Percent Daily Values are based on a 2000 calorie diet.  
**INGREDIENTS:** Chicken Pot Pie (Chicken Pot Pie: Processed From: Cream, Food Starch-Modified, Wheat... [View All Ingredients](#))

## So how do we fit our favorite restaurant meals into a healthy diet?



### Strategy #1 - Make Healthier Versions at Home

- ▶ **Use the same main ingredients/flavors, but put a healthier spin on it!**
  - ▶ More fruits and/or vegetables
  - ▶ Whole-wheat bread and grains
  - ▶ Lower-fat meats, cheese, and dairy products
- ▶ **Be creative - you may need to experiment several times with a recipe**
- ▶ **Look for shortcuts whenever possible**
  - ▶ Pre-cut vegetables
  - ▶ Pre-made whole wheat pizza crust

## Chipotle Burrito Bowl Makeover



### What you need:

- Brown rice
- Grilled chicken
- Low-sodium black or pinto beans
- Fresh tomatoes, onions, cilantro
- Frozen corn, thawed
- Shredded lettuce
- SMALL amounts of shredded mozzarella cheese, light sour cream, and/or guacamole

### How is this healthier?

- Lower in sodium and calories
- A more balanced meal with additional vegetables and less rice

## Strategy #2 - Choosing Wisely When Dining Out

- ▶ **If you still decide to go out to eat, choose healthier items from the menu!**
  - ▶ Check out the restaurant's menu online in advance so you know what you want to order
  - ▶ Grilled meats instead of breaded or fried
  - ▶ Start with a salad or bowl of soup
  - ▶ Sip water instead of sugary beverages
  - ▶ Request extra vegetables as a side instead of French fries
  - ▶ For dessert, try low-fat frozen yogurt with fresh fruit



*Eat slowly and enjoy the experience!*



### Healthy Eating Doesn't Have To Be Boring!

- ▶ Choose foods that get their flavor from spices/herbs
- ▶ Fruits, vegetables, and nuts are nutritious additions that also add texture and color

**And don't forget, it's totally okay to occasionally treat yourself to whatever you're craving - everything in moderation!**

### Healthy Highlight - Chick-fil-A

Grilled Chicken Cool Wrap



## Healthy Highlight - Panera Bread

Spicy Thai Salad with Chicken



I want to hear from you!

Questions?

What have you found to be helpful  
when dining out?

# Veggie Pizza with Cauliflower Crust



## Ingredients

- 1 head cauliflower, stalk removed
- 1/2 cup shredded mozzarella cheese
- 1/3 cup grated Parmesan cheese
- 1/2 teaspoon dried oregano
- 1/2 teaspoon dried basil
- 1/2 teaspoon sea salt
- 1/4 teaspoon garlic powder
- 2 eggs, lightly beaten

## Preparation

Break the cauliflower into florets and pulse in a food processor until fine. Steam in a steamer basket and drain well. Lay on a towel or cheese cloth to drain excess moisture and let cool. In a bowl, combine the cauliflower with cheeses, seasonings, and eggs. Transfer to the center of a baking sheet and spread into a circle, resembling a pizza crust. Bake at 400 degrees for 20-25 minutes. Add your favorite toppings (meats, veggies) and bake for an additional 10 minutes.

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**Makes 8 servings**

**Nutrition Facts Per Serving (without additional toppings):**

Calories: 71	Total Fat: 3.7 gm
Total Carbs: 4 gm	Protein: 5.8 gm
Sodium: 277 mg	Fiber: 1.8 gm







# Vary your protein routine

Protein foods include both animal (meat, poultry, seafood, and eggs) and plant (beans, peas, soy products, nuts, and seeds) sources. We all need protein—but most Americans eat enough, and some eat more than they need. How much is enough? Most people, ages 9 and older, should eat 5 to 7 ounces\* of protein foods each day depending on overall calorie needs.

**1 Vary your protein food choices**  
Eat a variety of foods from the Protein Foods Group each week. Experiment with beans or peas, nuts, soy, and seafood as main dishes.

**2 Choose seafood twice a week**  
Eat seafood in place of meat or poultry twice a week. Select a variety of seafood, including those that are higher in oils and low in mercury, such as salmon, trout, and herring.



**3 Select lean meat and poultry**  
Choose lean cuts of meat like round or sirloin and ground beef that is at least 93% lean. Trim or drain fat from meat and remove poultry skin.

**4 Save with eggs**  
Eggs can be an inexpensive protein option and part of a healthy eating style. Make eggs part of your weekly choices.

**5 Eat plant protein foods more often**  
Try beans and peas (kidney, pinto, black, or white beans; split peas; chickpeas; hummus), soy products (tofu, tempeh, veggie burgers), nuts, and seeds. They are lower in saturated fat and some are higher in fiber.



**6 Consider nuts and seeds**  
Choose unsalted nuts or seeds as a snack, on salads, or in main dishes. Nuts and seeds are a concentrated source of calories, so eat small portions to keep calories in check.

**7 Keep it tasty and healthy**  
Try grilling, broiling, roasting, or baking—they don't add extra fat. Some lean meats need slow, moist cooking to be tender—try a slow cooker for them. Avoid breading meat or poultry, which adds calories.

**8 Make a healthy sandwich**  
Choose turkey, roast beef, canned tuna or salmon, or peanut butter for sandwiches. Many deli meats, such as regular bologna or salami, are high in fat and sodium—make them occasional treats only.



**9 Think small when it comes to meat portions**  
Get the flavor you crave but in a smaller portion. Make or order a small turkey burger or a “petite” size steak.

**10 Check the sodium**  
Check the Nutrition Facts label to limit sodium. Salt is added to many canned foods—including soups, vegetables, beans, and meats. Many processed meats—such as ham, sausage, and hot dogs—are high in sodium. Some fresh chicken, turkey, and pork are brined in a salt solution for flavor and tenderness.

\* What counts as an ounce of protein foods? 1 ounce lean meat, poultry, or seafood; 1 egg; ¼ cup cooked beans or peas; ½ ounce nuts or seeds; or 1 tablespoon peanut butter.

# Salad Mix & Match

Do you want to start using salads more in your diet, but don't know how to build appetizing and healthy options? Is the garden side salad getting a bit boring these days?

Try these mix and match options to add some variety! Start with unlimited vegetables and your choice of protein. Then add your fresh or dried fruits (optional) and healthy fats!

## Vegetables



## Protein



## Fresh or Dried Fruit



## Fats



Romaine	Chicken	Strawberries	Walnuts
Arugula	Shrimp	Mandarin oranges	Pecans
Spinach	Lean steak	Pineapple	Almonds
Kale	Ground beef	Sliced apples	Cashews
Herbs (cilantro, parsley, etc)	Baked fish	Mango	Olives
Bell peppers	Tuna	Sliced plums	Cheddar cheese
Cucumbers	Pulled pork	Sliced pears	Mozzarella cheese
Carrots	Sardines	Kiwi	Feta cheese
Tomatoes	Hard-boiled eggs	Grapes	Avocado
Roasted squash or sweet potatoes	Black beans	Raisins (regular, golden)	Oil dressings
Beets	Kidney beans	Dried cranberries	Yogurt dressings
Radishes	Chickpeas	Dried apricots	Tahini
	Lentils		Hummus

# Ideas to Get You Started!



## Tropical Steak Salad

Combine romaine lettuce with chopped bell peppers and thinly sliced red onion. Add chopped pineapple and mango. Top with grilled steak and a balsamic vinaigrette.



## Autumn Bliss

Mix baby kale and arugula, and add in some roasted sweet potatoes and butternut squash. Top with grilled chicken, sliced apple, pecans, and a dressing of your choice.



## Summer Vibes

Toss spring mix with sliced strawberries and dried cranberries. Add grilled chicken, feta cheese, and a raspberry vinaigrette dressing.

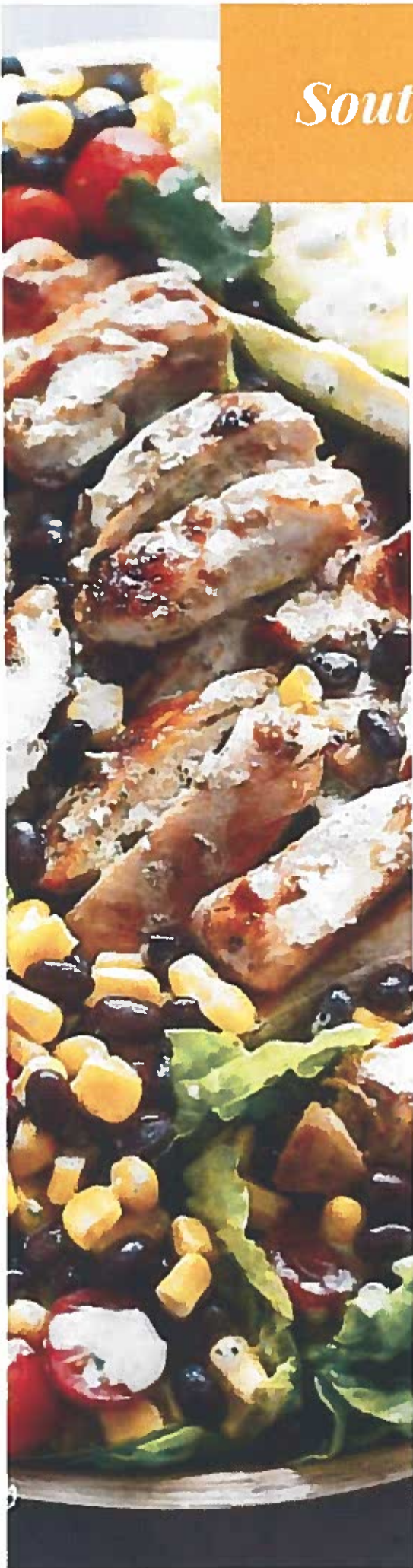


## Southwestern Style

Combine romaine lettuce with chopped bell peppers, tomatoes, and corn. Add in black beans and pulled pork. Top with a yogurt-based dressing that's mixed with taco seasoning.



# Southwestern Chicken Salad



## Ingredients

- ½ lb. chicken breast or tenders, diced
- 1 container Spring Mix salad
- 1 cup frozen corn, thawed and drained
- 1 can black beans, drained
- 1 medium tomato, diced
- 2 avocados, diced
- 1 small red onion, diced
- 1 cup shredded Mexican cheese
- 1 taco seasoning packet
- 1 tablespoon water
- 2 Tsp Ranch Dressing, light

## Preparation

In a large skillet, combine 2 tablespoons of olive oil and chicken. Cook until brown on both sides with no pink in the middle, about 12-15 minutes. Add taco seasoning and water and stir. Set aside. Drain beans and place in a bowl, set aside. Cut vegetables and place in separate bowls, set aside. Add toppings to salad. Serve immediately.

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**Makes 4 servings**

### Nutrition Facts Per Serving:

Calories: 528	Total Fat: 28 gm
Total Carbs: 49 gm	Protein: 30 gm
Sodium: 1,203 mg	Fiber: 14.5 gm

## SMART SNACKING

### BENEFITS OF HEALTHY SNACKING

- Keeps blood sugar levels steady
- Provides energy
- Prevents mood swings related to feeling hungry (that “hangry” feeling)
- Reduces over-eating at meals
- Provides opportunities to meet the recommended daily intake of fruits, vegetables, dairy products, and whole grains

The average American eats 2.2 snacks per day, which accounts for a quarter of their daily calorie intake!

## DANGERS OF SNACKING

- Excess calories → weight gain
- Many people snack on foods with little nutritional value – potato chips, desserts, soda, etc.
- Snacking often becomes mindless



## CHOOSING HEALTHY SNACKS

1. Watch portion size – aim for 100-200 calories per snack
2. The best snack is one that combines protein, fiber, and healthy carbohydrates
  - a) Apple with peanut butter
  - b) Greek yogurt with berries
  - c) A low-sugar protein bar
3. Incorporate fruits and vegetables as much as possible
4. Don't forget to hydrate with water or another healthy beverage!

Hummus with Baby Carrots	Open-face Turkey Sandwich
Celery sticks with Peanut Butter	Smoothies
Trail Mix	Baked Tortilla Chips and Salsa
Whole-grain Crackers	Dried Fruit
Fruit and Nut Bars	String Cheese
Low-fat Greek or Regular Yogurt	Sliced Cucumber with Ranch
Unsalted Nuts	Hard-boiled Eggs
Popcorn (hold the butter!)	Rice Cakes with Cream Cheese

## EASY SNACK IDEAS

### SAVE MONEY ON SNACKS

- Don't feel like you need to buy "snack packs" of your favorite foods – these are often much more expensive
- Buy snacks in regular amounts and pre-measure them into sandwich bags or containers
  - Yogurt
  - Pretzels
  - Nuts



## BONUS SECTION – LABEL READING

### BASICS OF THE NUTRITION FACT LABEL

- Required by the Food and Drug Administration (FDA) to be on most food packages
- Provides detailed information on a food's nutrient content, such as calories, fat, sodium, and sugar
- Lists ingredients and allergy information as well
- These labels can be extremely helpful when deciding whether a food is healthy or not



**SAMPLE NUTRITION FACTS LABEL**

**1 Start Here** →

**2 Check Calories**

**3 Limit these Nutrients**

**4 Get Enough of these Nutrients**

**5 Footnote**

**6 Quick Guide to % DV**

- 5% or less is Low
- 20% or more is High

Nutrition Facts	
Serving Size 1 cup (225g)	
Servings Per Container 2	
Amount Per Serving	
Calories 250	Calories from Fat 110
% Daily Value*	
Total Fat 12g	24%
Saturated Fat 3g	6%
Trans Fat 0g	0%
Cholesterol 30mg	6%
Sodium 470mg	9%
Total Carbohydrate 31g	6%
Dietary Fiber 0g	0%
Sugars 5g	10%
Protein 6g	12%
Vitamin A	6%
Vitamin C	2%
Calcium	6%
Iron	4%

\* Percent Daily Values are based on a diet of other people's secrets. 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
Total Carbohydrate		300g	375g
Dietary Fiber		7g	10g

**LET'S PRACTICE**

**Question #1** – if you ate the whole container, how many calories would you be eating?

**Question #2** – If you are trying to limit your fat intake to 60 grams per day, and you eat one serving of this food, how much fat would you have left for the rest of the day?

**Question #3** – If you are trying to limit your fat intake to 60 grams per day, and you eat one serving of this food, what percentage of your day's intake of fat will you have eaten?

Nutrition Facts	
Serving Size 1/2 cup (115g)	
Servings Per Container About 4	
Amount Per Serving	
Calories 250	Calories from Fat 130
% Daily Value*	
Total Fat 14g	28%
Saturated Fat 9g	45%
Cholesterol 55mg	11%
Sodium 75mg	3%
Total Carbohydrate 28g	6%
Dietary Fiber 0g	0%
Sugars 26g	
Protein 4g	
Vitamin A 10%	Vitamin C 0%
Calcium 10%	Iron 0%

\* Percent Daily Values are based on a diet of other people's secrets.

## TIPS FOR USING THE NUTRITION FACTS LABEL

- Always, always, always check portion size first
- Don't just look at one line on the label – skim the whole label to get a general idea of the nutritional value of a product
- A product may be marketed as “healthy” or “natural,” but the nutrition facts label reveals the truth!
- Remember that the Daily Value percentages are for a 2,000 calorie diet



WHAT QUESTIONS DO YOU HAVE FOR ME?





# How to Read a Nutrition Facts Label

Understanding what the Nutrition Facts Label means can help you make smart food choices that are best for your health.

## 1 Serving Size & Servings Per Container

We're used to saying "portion" or "helping" when we talk about how much we eat. "Serving size" is the official term used on food labels. Nutrition facts given on the food label are based on one serving.

Be sure to look at the number of servings in the container. Even small containers may have more than one serving. If you eat the whole container, then you must multiply the nutrition values by the number of servings in the container.

## 2 Amount of Calories

The calories listed are for one serving of the food. Keep in mind your total daily calorie needs. "Calories from fat" tells how many fat calories there are in one serving. Remember, a product that is fat-free isn't necessarily calorie-free.

## 3 \*Percent Daily Values (DV)

This section tells you how the nutrients in one serving of the food contribute to your total daily diet. Use it to choose foods that are high in the nutrients you should get more of, and low in the nutrients you should get less of.  
**Tip:** 5% DV or less is low, 20% or more is high. You will not find a % DV for trans fat, Sugars, or Protein (refer to the bottom box for Percent Daily Values for a 2,000 and 2,500 calorie diet).

## 4 Limit these Nutrients

Eating too much total fat (especially saturated fat and trans fat), cholesterol, or sodium may increase your risk of certain chronic diseases, such as heart disease, some cancers, or high blood pressure. Limit these nutrients.

### Nutrition Facts

Serving Size 1 cup (228g)  
Servings Per Container 2

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**Amount Per Serving**

**Calories 260 . . . . Calories from Fat 120**

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**% Daily Value\***

<b>Total Fat 13g</b>	<b>20%</b>
Saturated Fat 5g	<b>25%</b>
Trans Fat 0g	
<b>Cholesterol 30mg</b>	<b>10%</b>
<b>Sodium 660 mg</b>	<b>28%</b>
<b>Total Carbohydrate 31g</b>	<b>10%</b>
Dietary Fiber 1g	<b>4%</b>
Sugars 5g	
<b>Protein 5g</b>	

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Vitamin A 4%	• Vitamin C 2%
Calcium 15%	• 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:	2000	2500
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 Carbohydrates		300g	375g
Dietary Fiber		25g	30g

## 5 Get Enough of These Nutrients

Americans often don't get enough dietary fiber, Vitamin A, Vitamin C, Calcium, and Potassium in their diets.

- Look for choices that have at least 1 gram of fiber.
- Aim for 20–35 grams of fiber per day.
- Compare the number of grams (g) of sugars to the number given for Total Carbohydrate. Unless this food has natural sugar, like that in fruit or milk, these sugars are added.

# Healthy Trail Mix



## Ingredients

- 1 cup Wheat Chex cereal
- 1 cup almonds
- 1 cup cashews
- ½ cup sunflower seeds
- 1 cup raisins
- 1 cup dark chocolate chips
- ¼ tsp sea salt

## Preparation

Preheat oven 350°F. Spread cereal, nuts and seeds in an even layer on a cookie sheet. Sprinkle sea salt on top. Bake for 5 to 7 minutes, until fragrant and lightly toasted. Set aside to cool. Place cool ingredients into a large bowl. Add remaining ingredients and stir gently to combine. Store in an airtight container.

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**Makes 10 servings**

**Nutrition Facts Per Serving (1/4 cup):**

Calories: 342   Total Fat: 22 gm  
Total Carbs: 36 gm   Protein: 8.6 gm  
Sodium: 266 mg   Fiber: 5 gm