Portion Control Diabetes Learning Group January 24, 2018

Monica Esquivel PhD RDN

University of Hawai'i Mānoa

Department of Human Nutrition, Food and Animal Sciences





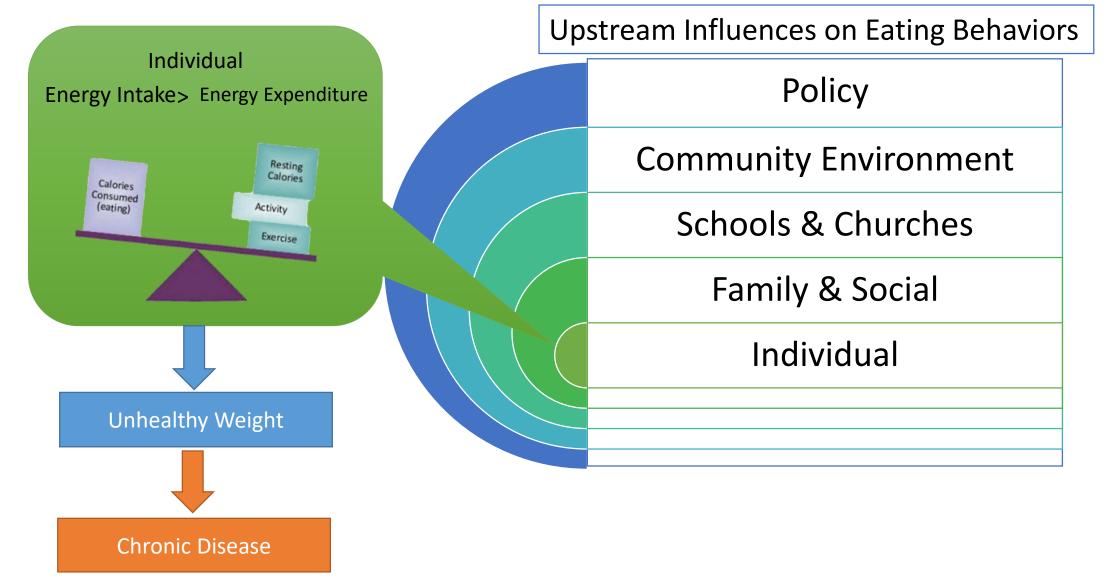
Learning Objectives

- Recall environmental and other factors that influence portion size
- Develop strategies to overcoming commonly reported barriers to exercising portion control
- Give examples of non-food objectives to estimate portion sizes



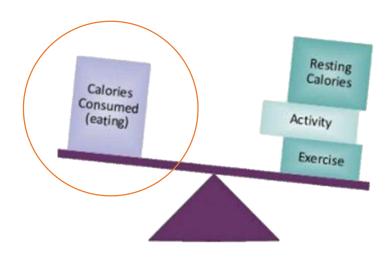


Why portion sizes?



"Portion Distortion"

- Perceiving larger portions as the appropriate amounts of food to consume at one time
- Value for money
- Inability to accurately monitor food intake
- Large packages
- Large servings at restaurants
- Large tableware
- Distracts at eating times



Portion Size and Calorie Intake

- Tendency to eat more when served larger amount of food regardless of socioeconomic status, age, BMI, sex
- Consumers have a tendency to eat all that they are served

Reported Barriers to Practicing Portion Control?

Reported Barriers to Practicing Portion Control?

- Lack of clarity, irrelevance of suggested serving size guidance
- Guiltless eating
- Lack of self-control over food cues
- Distracted eating
- Social pressure
- Emotional eating rewards
- Quantification habits from childhood

Lack of clarity, irrelevance of suggested serving size guidance

- "They're always changing their minds"
- Different suggested serving sizes from different groups and for foods
- "A glass could be a shot glass or a pint glass"
- Serving size suggestions are "too small"
 - "30 g of cereal.... That's like, for a guinea pit! But who is a serving for? You don't know if it's for a small, petite lady or is it for us lads who play rugby?"

Guiltless Eating

- "If it's healthy, I can eat more"
- You can eat "extra" after exercise (even though most know we eat more than burned)
- Healthy foods are exempt from portion control
 - Different factors influence how food is categorized between healthy and unhealthy

Lack of Self-Control over Food Cues

- The availability of large amounts of food triggers overconsumption, perceived ability to consume more
- Larger pack sizes (king size) increased consumption
 - Difficult to close the pack or resist temptation
- Single serving foods designed for two servings not one

Distracted Eating

- Lack of portion control happens when attention is taken away from eating
- Socializing, watching TV, being on the phone lead to over eating
- "I think too it depends on what you are doing, if you're sitting at the table and you're eating, I think you're more inclined to say that I'm full. Whereas if I'm sitting in the living room, and I've a bad habit of that, watching TV and eating, I look down and my plates empty."

Social Pressures

- Larger portions if you are a guest at someone's house, and want to be polite
- "Test of manhood" to eat as much as peers
- Females reported increasing portion sizes to avoid appearing like "calorie counters"

Emotional Eating Rewards

• Comfort foods, boredom, stress, depression lead to over eating

Habits from Childhood

- No food waste, "finish your plate"
- "Probably the reason why I would actually eat more than any other normal person should eat, was, when I was actually younger, even as a child, and my mother used to say I was very, very poorly looking. So, I was the one who was given the plate with everything bunged unto it and I was told 'there's people in Africa starving, don't waste food'. You see, that's where it stems from, and I would still do that yet."

Anything else?

• Other examples of barriers patient state?

Solution

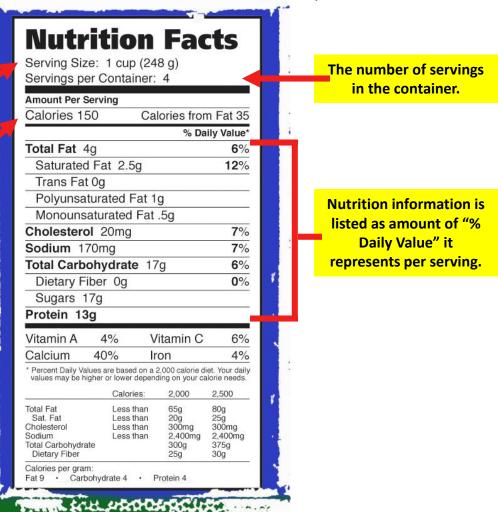
Barrier	Solution
Lack of clarity, irrelevance of suggested serving size guidance	Clear messages Education on reading food labels; estimating portion sizes
Guiltless eating	
Lack of self-control over food cues	
Distracted eating	
Social pressure	
Emotional eating rewards	
Quantification habits from childhood	

The 'Nutrition Facts'

Nutrition information that must be listed on the "Nutrition Facts" panel includes:

Serving size of the food in both a household measuring unit and its metric equivalent.

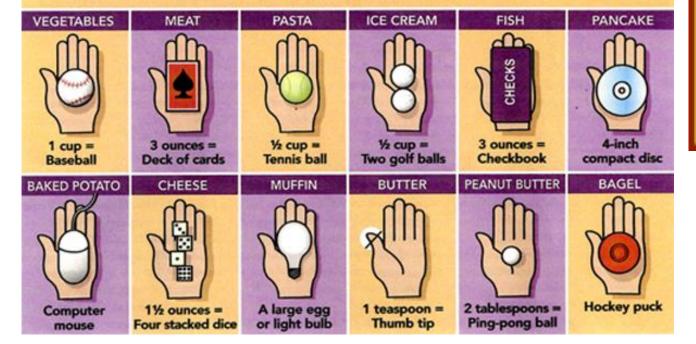
The total calories in each serving and the total calories from fat.



Tools to estimate?

What's a healthy portion?

If you're not sure how much you should eat, everyday objects offer guidance on what makes up a healthy portion size



ELGN Partian Size Guide

The Basics

1 cup = baseball



1 oz or 2 tbsp = golf ball

1 tbsp = poker chip

3 oz chicken or meat = deck of cards

3 oz fish = checkbook

Grains

1 cup of cereal flakes = baseball

1 pancake = compact disc

1/2 cup cooked rice = lightbulb

1/2 cup cooked pasta = lightbulb

1 slice bread = cassette tape

1 bagel = 6 oz can of tuna

3 cups popcom = 3 baseballs

Dairy & Cheese

1 1/2 oz cheese = 3 stacked dice

1 cup yogurt = baseball

1/2 cup of frozen yogurt = lightbulb

1/2 cup of ice cream= lightbulb

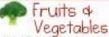
Fats & Oils

1 tbsp butter or spread = poker chip

1 tbsp salad dressing = poker chip

1 tbsp mayonnaise = poker chip

1 tbsp oil = poker chip



1 medium fruit = baseball

1/2 cup grapes = about 16 grapes

1 cup strawberries = about 12 berries

1 cup of salad greens = baseball

1 cup carrots = about 12 baby carrots

1 cup cooked vegetables = baseball

1 baked potato = computer mouse

Meats, Fish & Nuts

3 oz lean meat = deck of cards

3 oz fish = checkbook

3 oz tofu = deck of cards

2 tbsp peanut butter = golf ball

2 tbsp hummus = golf ball

1/4 cup almonds = 23 almonds

1/4 cup pistachios = 24 pistachios

Mixed Dishes

1 hamburger (without bun) = deck of cards

1 cup fries = about 10 fries

4 oz nachos = about 7 chips

3 oz meatloaf = deck of cards

1 cup chili = baseball

1 sub sandwich = about 6 inches

1 burrito = about 6 inches

Barrier	Solution
Lack of clarity, irrelevance of suggested serving size guidance	Clear messages Education on reading food labels; estimating portion sizes
Guiltless eating	
Lack of self-control over food cues	
Distracted eating	
Social pressure	
Emotional eating rewards	
Quantification habits from childhood	

Barrier	Solution
Lack of clarity, irrelevance of suggested serving size guidance	Clear messages Education on reading food labels; estimating portion sizes
Guiltless eating	Remove thought of guilt associated with food first Clarify definition of healthy food
Lack of self-control over food cues	
Distracted eating	
Social pressure	
Emotional eating rewards	
Quantification habits from childhood	

Defining "Healthy" or "Guiltless"

- Nutrient dense vs energy dense
- Sweet Potato (baked) vs Potato Chip

%DV

Vitamins

Amounts Per Selected Serving

Amounts I of Soldated Serving		70D V
Vitamin A	38433 IU	769%
Vitamin C	39.2 mg	65%
Vitamin D	~	~
Vitamin E (Alpha Tocopherol)	1.4 mg	7%
Vitamin K	4.6 mcg	6%
Thiamin	0.2 mg	14%
Riboflavin	0.2 mg	12%
Niacin	3.0 mg	15%
Vitamin B6	0.6 mg	29%
Folate	12.0 mcg	3%
Vitamin B12	0.0 mcg	0%
Minerals		
Amounts Per Selected Serving		%DV
Calcium	76.0 mg	8%
Iron	1.4 mg	8%
Magnesium	54.0 mg	14%
Phosphorus	108 mg	11%
Potassium	950 mg	27%
Sodium	72.0 mg	3%
Zinc	0.6 mg	4%
Copper	0.3 mg	16%
Manganese	1.0 mg	50%
Selenium	0.4	4.07
Scienium	0.4 mcg	1%

Sweet Potato (1 cup/200 g)	Potato Chips (8 oz/227 g)
180 Calories	1242 Calories
41 g Carb (6.5 g Fiber)	113 g Carb (0 fiber)
0.3 g Fat	85 g Fat
4 g Protein	15 g Protein

Source: Nutrient data for this listing from USDA Nutrient Database

Vitamins

Vitaliilis		
Amounts Per Selected Serving		%DV
Vitamin A	0.0 IU	0%
Vitamin C	42.2 mg	70%
Vitamin D	~	~
Vitamin E (Alpha Tocopherol)	15.3 mg	76%
Vitamin K	50.2 mcg	63%
Thiamin	0.1 mg	10%
Riboflavin	0.5 mg	31%
Niacin	9.5 mg	47%
Vitamin B6	1.6 mg	82%
Folate	170 mcg	43%
Vitamin B12	0.0 mcg	0%
Minerals		
Amounts Per Selected Serving		%DV
Calcium	54.5 mg	5%
Iron	3.7 mg	20%
Magnesium	159 mg	40%
Phosphorus	352 mg	35%
Potassium	3727 mg	106%
Sodium	1192 mg	50%
Zinc	5.4 mg	36%

45%

26%

18.4 mcg

Copper

Manganese

Selenium

If I exercise... I can eat!

10 calorie-dense food and drinks and their activity equivalence			
FOOD TYPE	CALORIES APROX.	WALK OFF KCAL (medium walk 3-5mph)	RUN OFF KCAL (slow running 5mph)
Sugary soft drink (330ml can)	138	26 min	13 min
Standard chocolate bar	229	42 min	22 min
Sandwich (chicken & bacon)	445	1 hr 22 min	42 min
Large Pizza (1/4 pizza)	449	1 hr 23 min	43 min
Medium mocha coffee	290	53 min	28 min
Packet Crisps	171	31 min	16 min
Dry roasted peanuts (50g)	296	54 min	28 min
lced cinnamon roll	420	1 hr 17 min	40 min
Cereal (1 bowl)	172	31 min	16 min
Blueberry muffin	265	48 min	25 min



- Reinforce goals of exercise
- Educate patients
- It is a choice and balance

Barrier	Solution
Lack of clarity, irrelevance of suggested serving size guidance	Clear messages Education on reading food labels; estimating portion sizes
Guiltless eating	Remove thought of guilt associated with food first Clarify definition of healthy food
Lack of self-control over food cues	
Distracted eating	
Social pressure	
Emotional eating rewards	
Quantification habits from childhood	

Barrier	Solution
Lack of clarity, irrelevance of suggested serving size guidance	Clear messages Education on reading food labels; estimating portion sizes
Guiltless eating	Remove thought of guilt associated with food first Clarify definition of healthy food
Lack of self-control over food cues	Changing purchasing habits?
Distracted eating	
Social pressure	
Emotional eating rewards	
Quantification habits from childhood	

Self-Control/Food Cues

- Research supports we will eat what is put in front of us-don't feel guilty- we are just set up for failure sometimes.
- Purchase individual servings if possible
- Eating out
 - Split a meal
 - Ask for a small plate (put food from entrée plate on your other plate)
 - Ask for a to go container first
- Dinner at home/parties
 - Don't put food on table in serving dishes- leave on stove or away from table
 - Sit in an area further from the food at parties

Barrier	Solution
Lack of clarity, irrelevance of suggested serving size guidance	Clear messages Education on reading food labels; estimating portion sizes
Guiltless eating	Remove thought of guilt associated with food first Clarify definition of healthy food
Lack of self-control over food cues	Changing purchasing habits?
Distracted eating	
Social pressure	
Emotional eating rewards	
Quantification habits from childhood	

Barrier	Solution
Lack of clarity, irrelevance of suggested serving size guidance	Clear messages Education on reading food labels; estimating portion sizes
Guiltless eating	Remove thought of guilt associated with food first Clarify definition of healthy food
Lack of self-control over food cues	Changing purchasing habits?
Distracted eating	No technology/screens at meal times
Social pressure	
Emotional eating rewards	
Quantification habits from childhood	

Limiting Distractions

- Avoid eating while watching TV, driving, on the phone, at the computer....
- Eat at a table away from distractions
- Eat with family/friends
- Enjoy and taste food
- Mindful eating

6 Ways to Practice Mindful Eating

Mindless Eating

- 1 Eating past full and ignoring your body's signals
- 2 Eating when emotions tell us to eat (i.e., sad, bored, lonely)
- 3 Eating alone, at random times and places
- 4 Eating foods that are emotionally comforting
- 5 Eating and multitasking
- 6 Considering a meal an end product

Mindful Eating

Listening to your body and stopping when full

Eating when our bodies tell us to eat (i.e., stomach growling, energy low)

Eating with others, at set times and places

Eating foods that are nutritionally healthy

When eating, just eating

Considering where food comes from

List created by Christopher Willard PsyD

Barrier	Solution
Lack of clarity, irrelevance of suggested serving size guidance	Clear messages Education on reading food labels; estimating portion sizes
Guiltless eating	Remove thought of guilt associated with food first Clarify definition of healthy food
Lack of self-control over food cues	Changing purchasing habits?
Distracted eating	No technology/screens at meal times
Social pressure	
Emotional eating rewards	
Quantification habits from childhood	

Barrier	Solution
Lack of clarity, irrelevance of suggested serving size guidance	Clear messages Education on reading food labels; estimating portion sizes
Guiltless eating	Remove thought of guilt associated with food first Clarify definition of healthy food
Lack of self-control over food cues	Changing purchasing habits?
Distracted eating	No technology/screens at meal times
Social pressure	"taste foods," reinforce visit is to enjoy company vs food
Emotional eating rewards	
Quantification habits from childhood	

Social Pressures

- Avoid when possible, not always the case
- "I am here to enjoy your company"

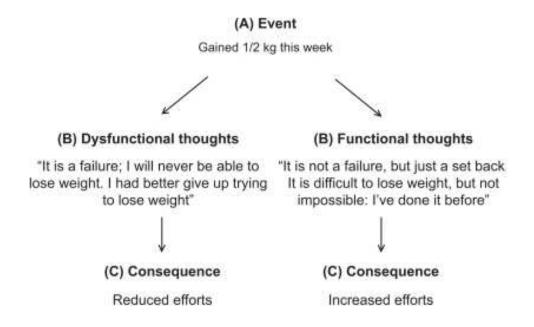
Barrier	Solution
Lack of clarity, irrelevance of suggested serving size guidance	Clear messages Education on reading food labels; estimating portion sizes
Guiltless eating	Remove thought of guilt associated with food first Clarify definition of healthy food
Lack of self-control over food cues	Changing purchasing habits?
Distracted eating	No technology/screens at meal times
Social pressure	"taste foods," reinforce visit is to enjoy company vs food
Emotional eating rewards	
Quantification habits from childhood	

Barrier	Solution
Lack of clarity, irrelevance of suggested serving size guidance	Clear messages Education on reading food labels; estimating portion sizes
Guiltless eating	Remove thought of guilt associated with food first Clarify definition of healthy food
Lack of self-control over food cues	Changing purchasing habits?
Distracted eating	No technology/screens at meal times
Social pressure	"taste foods," reinforce visit is to enjoy company vs food
Emotional eating rewards	Cognitive Restructuring
Quantification habits from childhood	

Cognitive Restructuring/Cognitive Therapy

- Coping technique for many stressful events and conditions
- Difficult to do independently
 - Therapist/professional support/instruction is key to start





Barrier	Solution
Lack of clarity, irrelevance of suggested serving size guidance	Clear messages Education on reading food labels; estimating portion sizes
Guiltless eating	Remove thought of guilt associated with food first Clarify definition of healthy food
Lack of self-control over food cues	Changing purchasing habits?
Distracted eating	No technology/screens at meal times
Social pressure	"taste foods," reinforce visit is to enjoy company vs food
Emotional eating rewards	Cognitive Restructuring
Quantification habits from childhood	

Barrier	Solution
Lack of clarity, irrelevance of suggested serving size guidance	Clear messages Education on reading food labels; estimating portion sizes
Guiltless eating	Remove thought of guilt associated with food first Clarify definition of healthy food
Lack of self-control over food cues	Changing purchasing habits?
Distracted eating	No technology/screens at meal times
Social pressure	"taste foods," reinforce visit is to enjoy company vs food
Emotional eating rewards	Cognitive Restructuring
Quantification habits from childhood	Reframe without discounting

Childhood Habits

- Walk through the "whys"
 - Why were these habits encouraged in childhood
 - Limited food waste, limited resources, etc
 - Why it is OK that we change the habit now while still recognizing the root cause of habits
 - Example: you can still limit food waste but it doesn't mean you have to finish everything on your plate... what ways do you think we can do both?

Conclusion

- Portion control is a tool to support weight control/loss
- Implementation has its barriers but potential solutions we can offer:
 - Clear messages
 - Education and tools
 - Strategies to reducing distractions & mindful eating
 - Cognitive restructuring

Questions and Comments



