

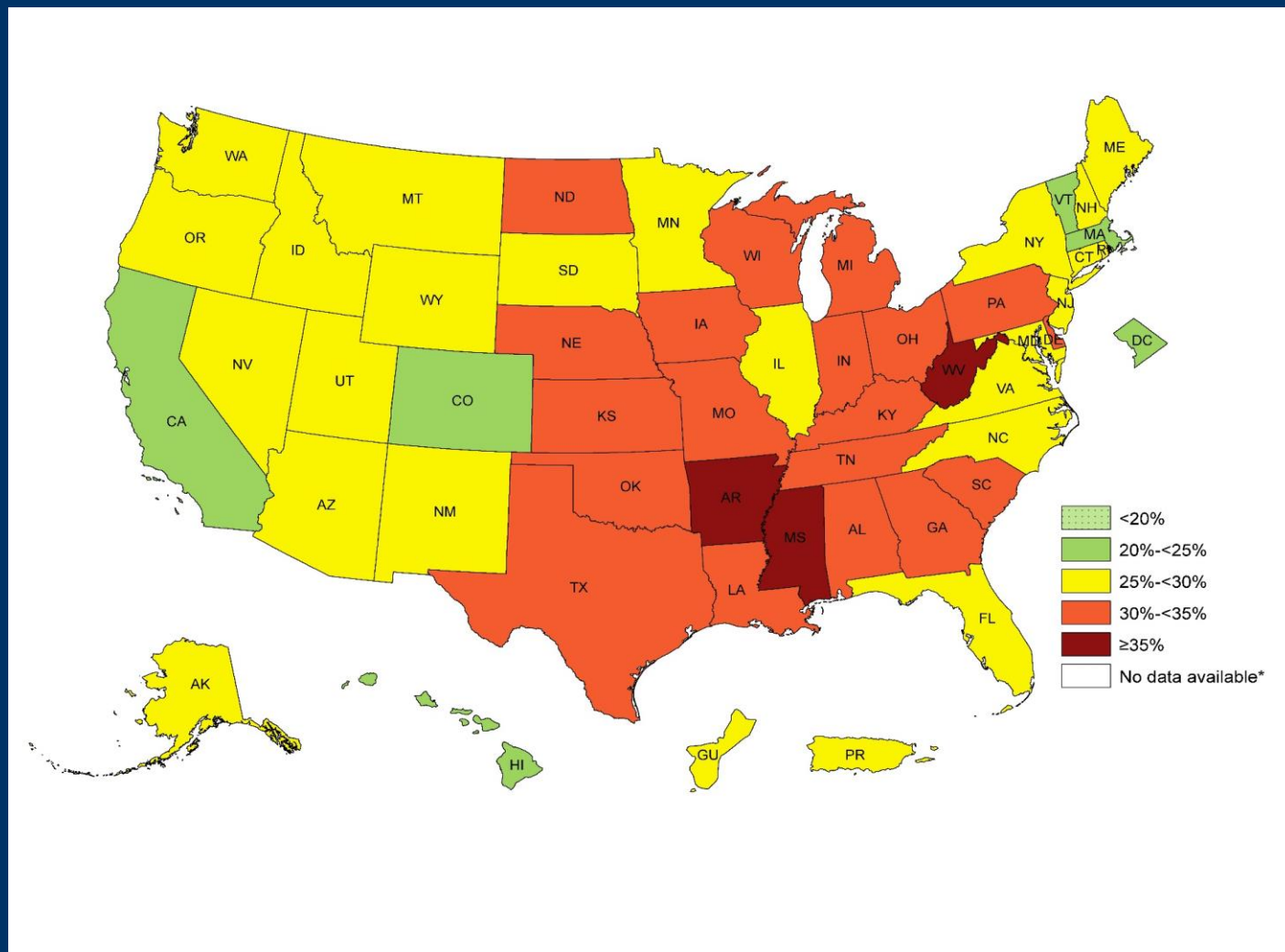
# Weight Management



# Objectives

- Provide obesity statistics
- Discuss evidence-based weight management strategies
- Provide Navy best practices

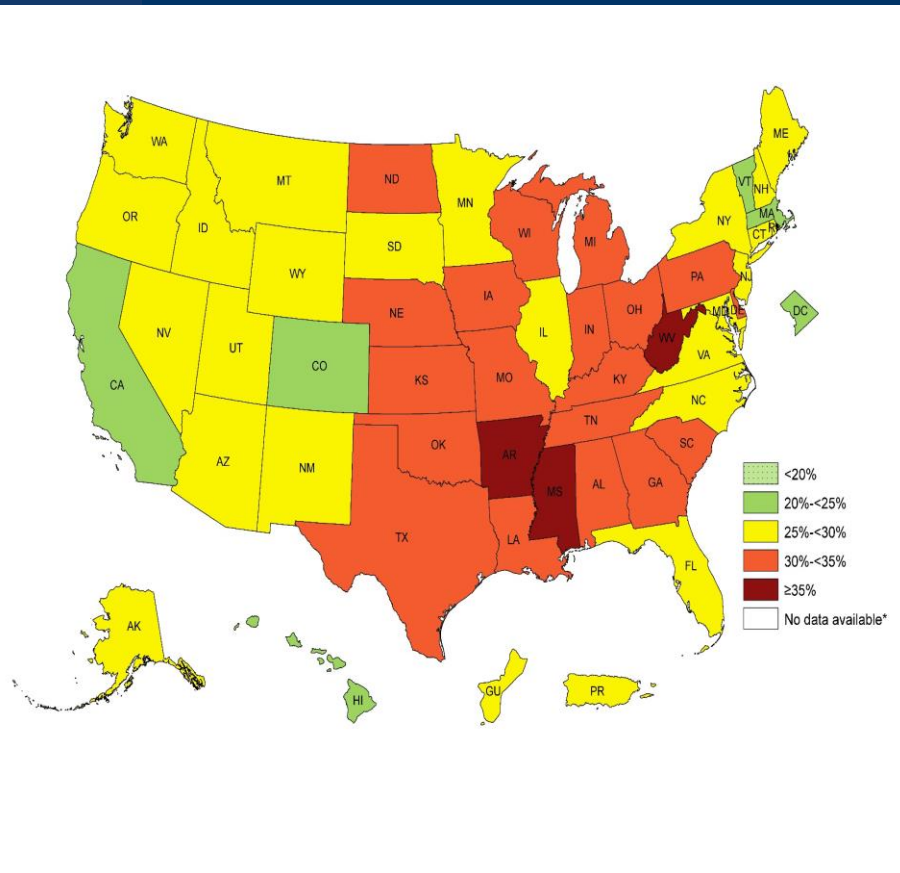
# Prevalence of Self-Reported Obesity Among U.S. Adults 2014



BRFSS, 2014

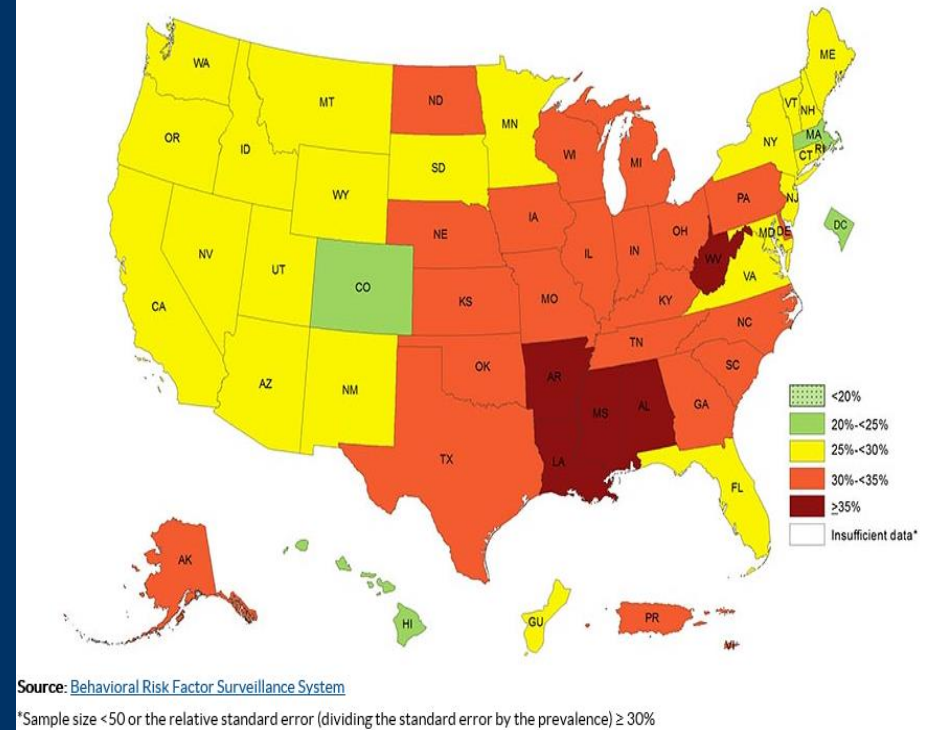
\*Sample size < 50 or the relative standard error (dividing the standard error by the prevalence)  $\geq 30\%$

# 2014 vs 2016



## Prevalence<sup>¶</sup> of Self-Reported Obesity Among U.S. Adults by State and Territory, BRFSS, 2016<sup>¶</sup>

Prevalence estimates reflect BRFSS methodological changes started in 2011. These estimates should not be compared to prevalence estimates before 2011.

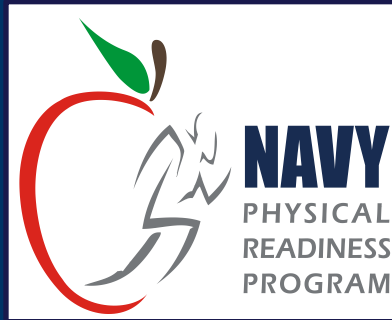


Side by side comparison of increased obesity



# Reasons for Obesity Epidemic?

- The “Big Two”
  1. Food practices
    - Highly processed food/fast food
    - Sugar-sweetened beverages
    - More high-calorie, low nutrient foods around us, everywhere, all the time
  2. Reductions in physical activity
    - Labor-saving mechanical devices
    - The built-environment
- Other factors ? Sleep, stress, ...



# The Big Rocks

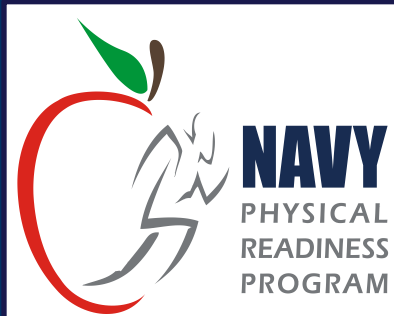
# Lack of Knowledge

- Evidence-based resources
- Many folks (not all) truly have very little knowledge about food and nutrition
  - Label reading
  - Calorie density
  - Food groups
  - Portion sizes



# FEP Nutrition Options

- ShipShape: 8 week group class
- Registered Dietitian: Medical Nutrition Therapy visits
- Evidence-based Commercial Programs



# Calories

# Quick Estimate of Total Needs

	Male			Female		
Activity Level	Sedentary	Moderately Active	Active	Sedentary	Moderately Active	Active
Age						
19-20	2,600	2,800	3,000	2,000	2,200	2,400
21-25	2,400	2,800	3,000	2,000	2,200	2,400
26-30	2,400	2,600	3,000	1,800	2,000	2,400
31-35	2,400	2,600	3,000	1,800	2,000	2,200
36-40	2,400	2,600	2,800	1,800	2,000	2,200
41-45	2,200	2,600	2,800	1,800	2,000	2,200
46-50	2,200	2,400	2,800	1,800	2,000	2,200
51-55	2,200	2,400	2,800	1,600	1,800	2,200
56-60	2,200	2,400	2,600	1,600	1,800	2,200
61-65	2,000	2,400	2,600	1,600	1,800	2,000
66-70	2,000	2,200	2,600	1,600	1,800	2,000

# Question

- How many calories would a 36 year-old, who is moderately active and wants to loose weight, need?
- Calories to maintain weight:  
2,600 calories (from previous slide)
- Hint, you should never eat less than:
  - 1,600 calories for active men
  - 1,200 calories for active women

# Answer

- Anywhere from a minimum of 1,600 calories to something less than 2,600
- - 1000 (1,600 calories) will promote fat loss. Difficult!
- - 500 (2,100 calories ) is achievable
- - 250 (2,350 calories) is relatively easy
  - ChooseMyPlate weight loss meal plan is based on a 250 calorie deficit per day

# 500 Calorie Deficit Example

**Equivalent to 1 lbs of weight loss per week**

Diet:

Bottle of soda

AND

Chocolate bar

Activity:

25 minute run and 20 minute  
weight training session

OR

80 minute brisk walk

**\*500 X 7 = 3500 calories**

**\* Based on 200 pound person**



# Calories Deficit for Fat Loss

- 250 calories =  $\frac{1}{2}$  lb weight loss per week
- 500 calories = 1 lb weight loss per week
- 1000 calories = 2 lb weight loss per week
- Question: Which one is more doable?

Hint: Starving is not the answer

# I thought we are not supposed to give out diet prescriptions?

- Very good. You are not.
- But, you need to have an understanding of why active Sailors should never take in less than 1200 calories
- It happens too often not to discuss

# “Is snacking OK?”

## Discretionary Calories

- Snacks (or mini-meals) provide nourishment to the next meal and can help fuel workouts
- “Treats” can be the discretionary calories for our favorite foods that are not as healthful
- Most discretionary calorie allowances are between 100 and 300 calories per day
  - Many people have used up this allowance before lunch-time!

# ChooseMyPlate Empty Calories

Food	Amount	Est. Total Calories	Est. Empty Calories
Fruit flavored low-fat yogurt	1 cup (8 fl oz.)	250	152
Ground beef, 95% lean	3 oz., cooked	146	0
Ground beef, 80% lean	3 oz., cooked	229	64
Roasted chicken breast (skinless)	3 oz., cooked	138	0
Roasted chicken thigh with skin	3 oz., cooked	209	47
Fried chicken with skin & batter	3 medium wings	478	382
Beef bologna	3 slices (1 oz. each)	261	150
Whole wheat bread	1 slice (1 oz.)	69	0
White bread	1 slice (1 oz.)	69	0
Croissant	1 medium (2 oz.)	231	111
Corn flakes cereal	1 cup	90	8
Frosted corn flakes cereal	1 cup	147	56

# Volumetrics Diet

<https://guidedoc.com/volumetrics-diet-menu-plan-recipes>

- Science-based approach
- Feel full on fewer calories
  - Choose high fiber and high water volume foods such as fruits and vegetables, beans, nuts, seeds and lean proteins

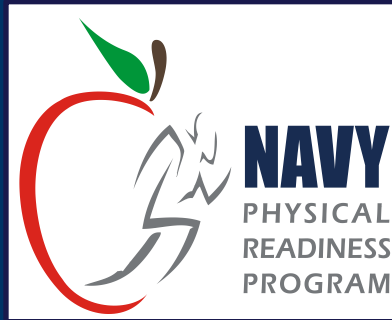


# ***DASH* Diet**

## **National Institute of Health**

- The only “diet” nutrition professionals agree works
- Created to treat high blood pressure, but is a great strategy for anyone to follow
- Focuses on increasing whole grains, lean meats, nuts, seeds, fruit, vegetables and low fat dairy
- PDF Available:  
[www.nhlbi.nih.gov/health/public/heart/hbp/dash/new\\_dash.pdf](http://www.nhlbi.nih.gov/health/public/heart/hbp/dash/new_dash.pdf)





# Studies/Research

# National Weight Control Registry

[www.nwcr.ws](http://www.nwcr.ws) - Today's Dietitian, July 2008

- NWCR Purpose:
  - Identify group of weight losers who maintained the loss
  - Describe the method for loss and maintenance
- Longitudinal, prospective study
- 5,000 adults, 18+ years old
- 44-49 years old average
- Successfully lost 30+ lbs and kept it off for 1+ years

# National Weight Control Registry

- Most report continuing:
  - A low calorie diet (1,200 to 1,600 calories)
  - A low fat diet (15-20% of total calories)
  - High levels of activity (60+ min. per day)
- Additional Habits:
  - 78% eat breakfast every day
  - 75% weigh them self at least once a week
  - 62% watch less than 10 hours of TV per week
  - 90% exercise about 1 hour per day

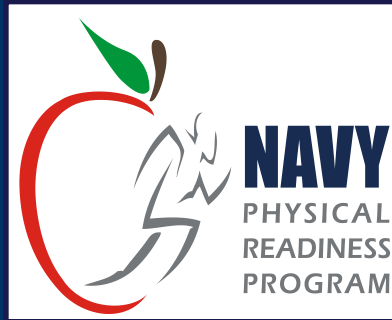
# Secrets of Weight Loss: Keep a Food Journal

American Journal of Preventive Medicine, August 2008 (N=1685 Obese Adults)

- Those who wrote down everything they ate each day lost twice as much weight as those who didn't in 6 months
  - 18 lbs vs. 9 lbs
- Biggest weight losers
  - Attended the most meetings
  - Did most exercise each week
    - 300 minutes vs. 117 minutes

# Example of a Daily Food Journal

Daily Food and Activity Diary							
	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Breakfast							
Lunch							
Dinner							
Activity							
GOALS: DIET		PHYSICAL ACTIVITY					
BEHAVIOR							



**What other aspects of our daily lives can lead to increased weight gain or hinder weight loss efforts?**



# Lack of Sleep → Excess Weight

North American Association for the Study of Obesity, Annual Scientific Meeting, Nov. 14-18, 2004

- Less than 4 hours sleep per night were 73% more likely to be obese
- 5 hours/night had a 50% greater risk
- 6 hours/night were just 23% more likely to be overweight
- Get 7-9 hours/night



# High Stress → Excess Weight

American Journal of Epidemiology, 15 July 2009

- When heavier men and women are stressed, they gain weight
  - Stress changes eating patterns and types of food
  - Stress hormones can lead to weight gain
- Resources
  - Operation Stress Control (OSC)
  - Chaplains, Mental Health Providers, FFSC
  - Military One Source
  - Self-help books/CDs, coaching, counselors

# Ways to Hinder Weight Loss

- Skip meals
- Overdo PT: intense workout 2 times per day
  - ↑ calorie needs that, if not met, hinder weight loss
  - Increases risk of injury
- Drastically reduce calories
  - No less than 1,600 for men and 1,200 for women
    - Decreases metabolism → weight regain
    - Increases muscle breakdown
- Follow fad diets
  - ↑ muscle breakdown and ↓ performance
  - Nutrient deficiency, not sustainable, etc.

# Fad Diets

- 17 Day Diet
- The Zone Diet
- The “New” Atkins Diet
- Raw Food Diets
- The Cabbage Soup Diet
- Sugar Busters
- Blood type
- Grapefruit Diet
- Etc... there are too many to cover



# Questions to Ask

- What are the costs?
- What are the health risks?
- Does it fit your lifestyle?
- Does it avoid healthful foods such as fruits, vegetables, grains?
- Are there “good” and “bad” foods?
- Is exercise considered?
- Is it considered permanent or just a short period of time?

# What to Take Away?

- Exercise daily
  - Resistance training
  - Cardiovascular training
  - Physical activity
- Eat breakfast daily
  - People who maintain a healthy weight eat breakfast just about every day
- Stress and depression
  - Address it
  - Seek mental health as needed
- Eat small frequent meals
  - 3 meals
  - 2-3 snacks
- Sleep 7-9 hours/night
  - Effects insulin sensitivity
  - Suppresses stress hormones
  - Sleep alters appetite hormones
    - Leptin lowers appetite
    - Ghrelin increases appetite



# CFL Nutrition Coaching Dos

- Encourage ALL Sailors to visit reputable nutrition resources
- Defer to Dietary Guidelines and ChooseMyplate for nutrition guidance
- Ask thought provoking questions: What behavior you working on? What are your barriers? What do you think...
- Keep your conversations confidential
- Keep positive-reinforce positive behavior and choices rather than only focusing on negative

# CFL Nutrition Coaching Don'ts

- Make simplifying comments
  - “Don't eat fast food or don't drink soda.”
- Impose your own views/meal plan
- Do individual meal planning/calorie needs
- Expect to have to know everything about nutrition and weight loss
  - Knowing basic resources and listening will take you a long way

# Summary

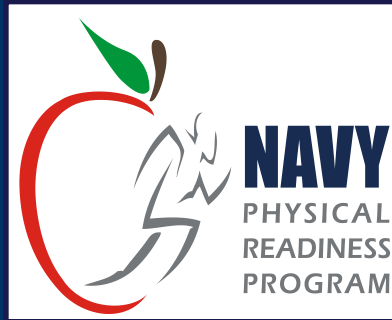
- Weight management is not easy
- Healthy eating plans, activity, and behavior change must be used
- CFL role in nutrition
  - Familiarize with nutrition resources
  - Refer members as needed
  - Do not recommend calorie levels, fad diets, or supplements

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# Questions?

