



## SHIP Statewide Health Improvement Program

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## **Overview of Presentation**

- Overview of SHIP
- Obesity: Epidemiology and Clinical Guideline
- Primary Prevention: Why it matters and Clinical Guideline
- Provider's role nutrition and physical activity
- Clinic Specific Interventions

## SHIP

- 2 year grant from MDH (Minnesota Dept of Health)
- Identify, implement and evaluate key activities for obesity and tobacco prevention in the community
- Clinics will use health care guidelines
- Unprecedented state funding for Primary Prevention Intervention

## Hennepin County Human Services and Public Health Key SHIP Interventions

### **<u>Clinics</u>**

- Systems Change
- Connect Clinics to Community Resources

### Worksites

- Increase opportunities for physical activity
- Systems to support employees in maintaining healthy weights
- Increase options for healthy eating

### Community

- Smoke-free housing policies
- Tobacco-free parks
- Modify environments to promote exercise

### Schools

- Tobacco-free policies
- Comprehensive nutrition policies K-12
- Increase opportunities for physical activity

## ICSI

## Institute for Clinical Systems Improvement

- Is an independent, non-profit organization
- Guidelines are evidence-based recommendations for prevention, detection, or treatment of specific health conditions.
- Guidelines improve the effectiveness, efficiency and consistency of patient care.

## **SHIP Grant Directed Intervention**

- Uses ICSI Guidelines:
  - Prevention and Management of Obesity (mature adolescents and adults) (Jan 2009)
  - Primary Prevention of Chronic Disease Risk Factors (May 2009)

## Intended Population for these Guidelines

- Adults age 18 and older
- Mature adolescents
- But...most screening and intervention strategies in guidelines easily translate to children and families



the big picture (pun intended)

## Definitions

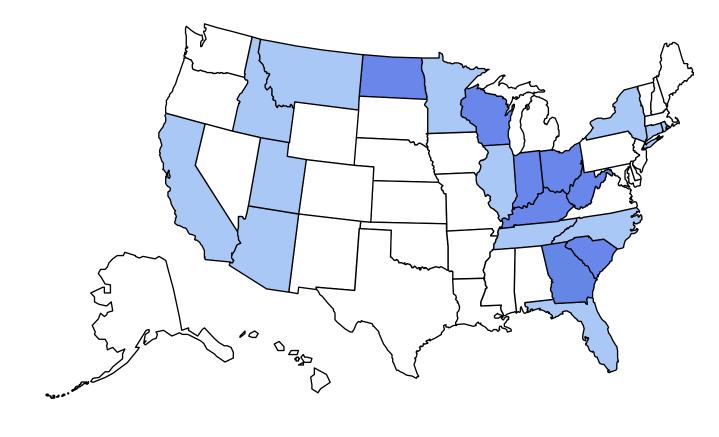
## Classifications for weight status by BMI (Body Mass Index) according to National guidelines\* are:

Underweight:	BMI < 18.5
Normal weight:	BMI = 18.5 to 24.9
Overweight:	BMI = 25.0 to 29.9

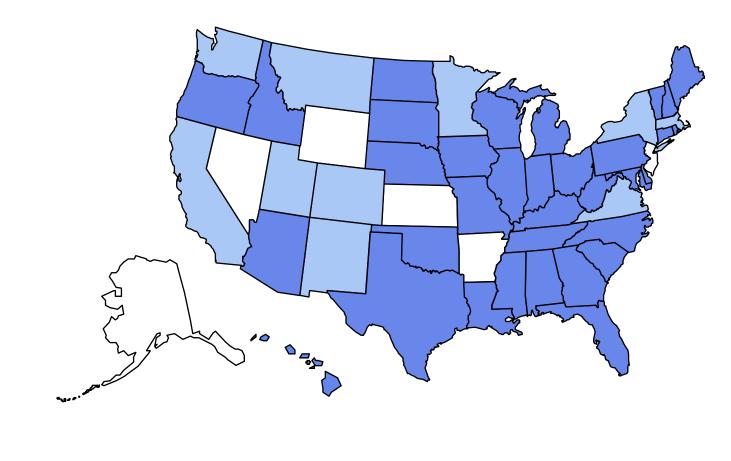
Obese:  $BMI \ge 30.0$ 

\*National Heart Lung and Blood Institute, NIH

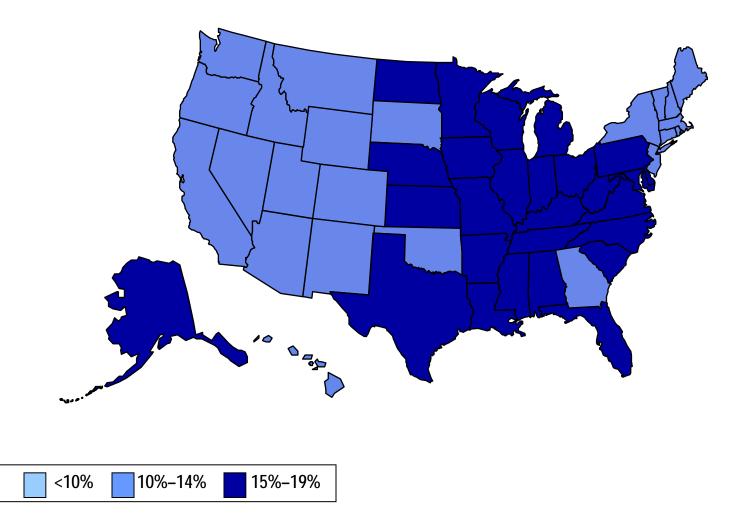
(BMI  $\geq$  30, or ~ 30 lbs. overweight for 5' 4" person)

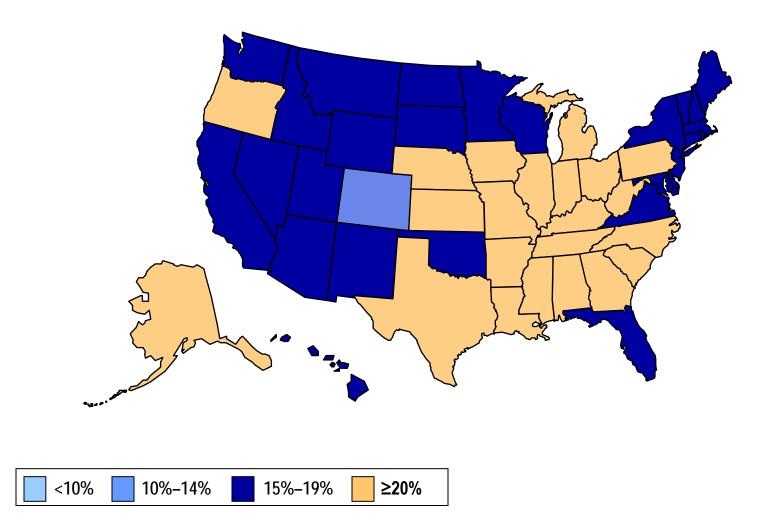


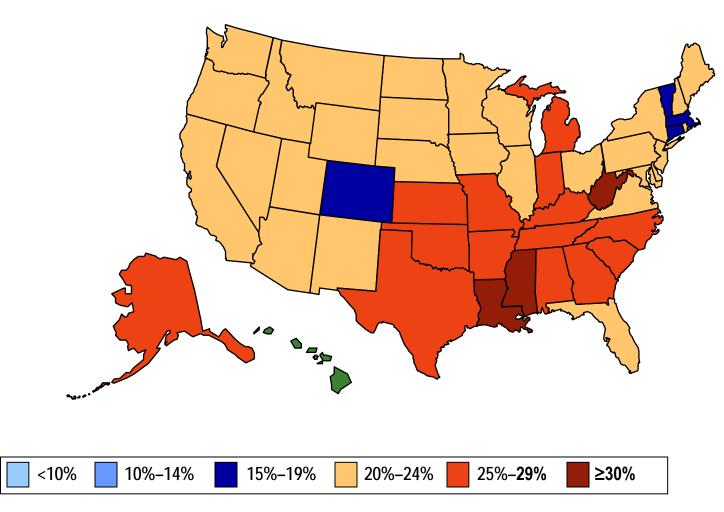
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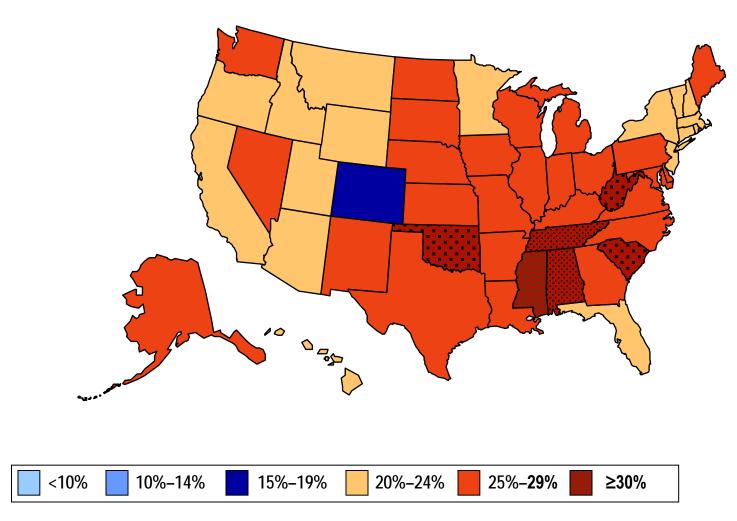


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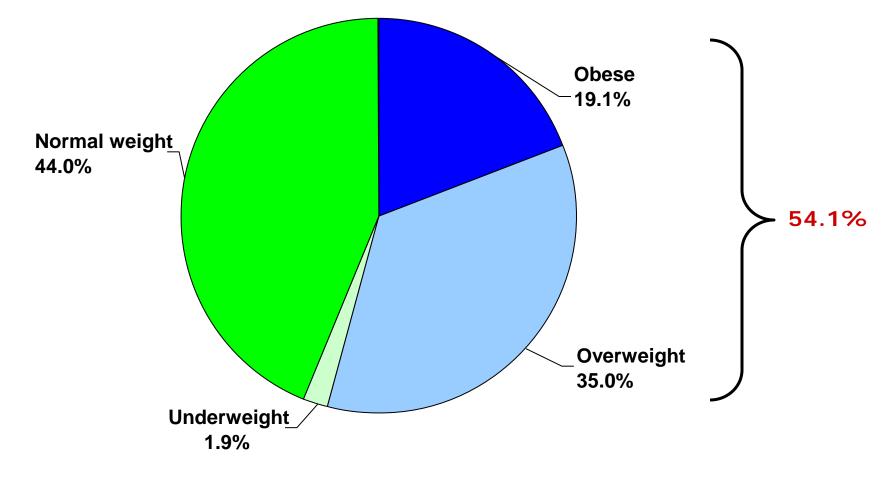


## Closer to home...

### Hennepin County data from 2006 SHAPE\* study

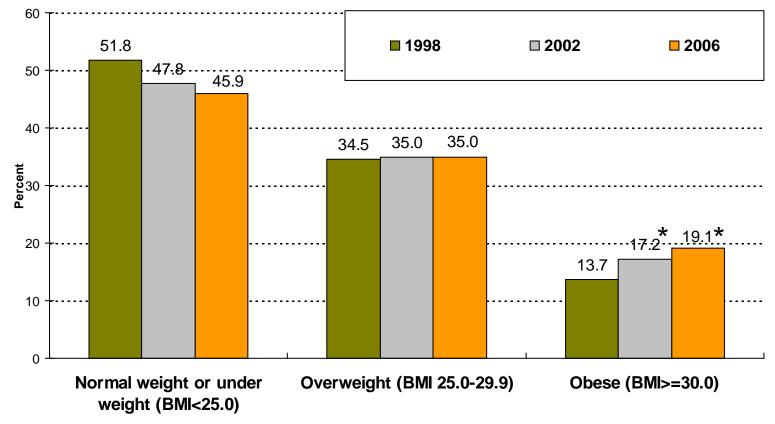
\*The Survey of the Health of All the Population and the Environment

## Weight status of Hennepin County adults 2006\*



\*SHAPE data

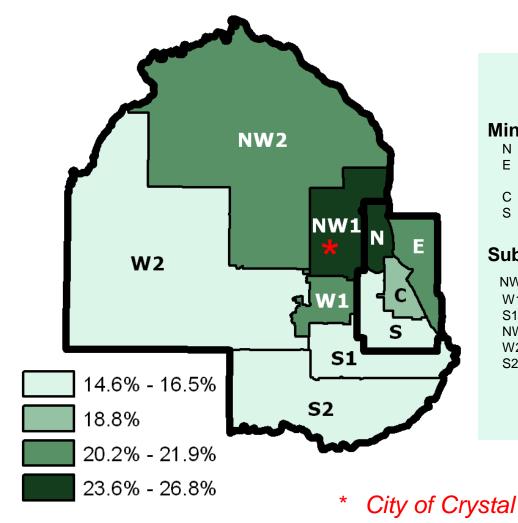
# Weight status of Hennepin County adults 1998, 2002 & 2006



5.4% increase in obesity equals 43,521 adults

\* Difference in rates between this and rate for 1998 is statistically significant. Sources: SHAPE 1998, SHAPE 2002 & SHAPE 2006

## Percent of obesity (BMI≥30.0) by geographic areas Hennepin County adults, 2006\*



Geographic	areas

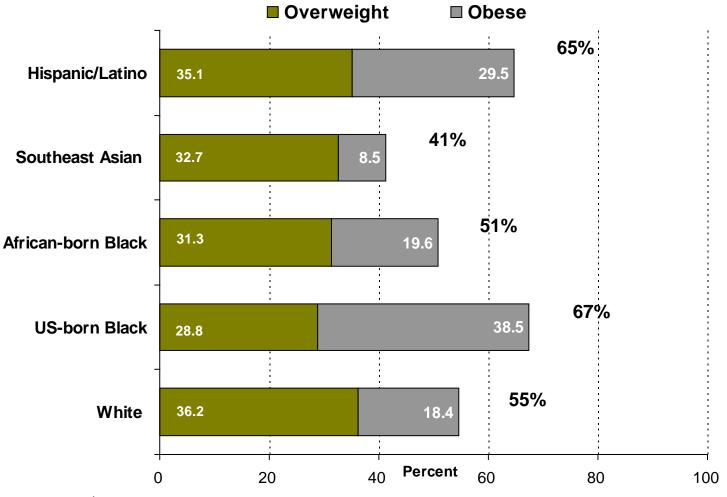
#### **Minneapolis**

- N Near-North, Camden
- E Northeast. University, Longfellow City of St. Anthony
- C Central, Phillips, Powderhorn
- S Calhoun-Isles, Southwest, Nokomis

#### Suburban Hennepin

- NW1 Northwest Inner Ring Suburbs
- W1 West Inner Ring Suburbs
- S1 South Inner Ring Suburbs
- NW2 Northwest Outer Ring Suburbs
- W2 West Outer Ring Suburbs
- S2 South Outer Ring Suburbs

## Weight status by race and ethnicity Hennepin County adults, 2006\*

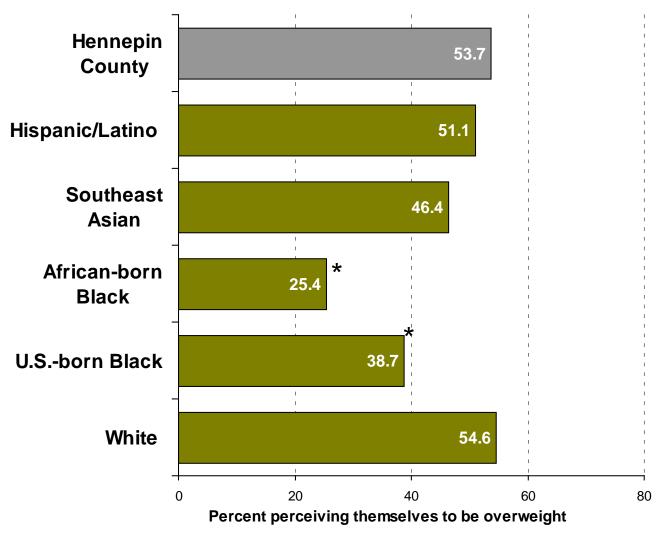


\* Source: SHAPE 2006.

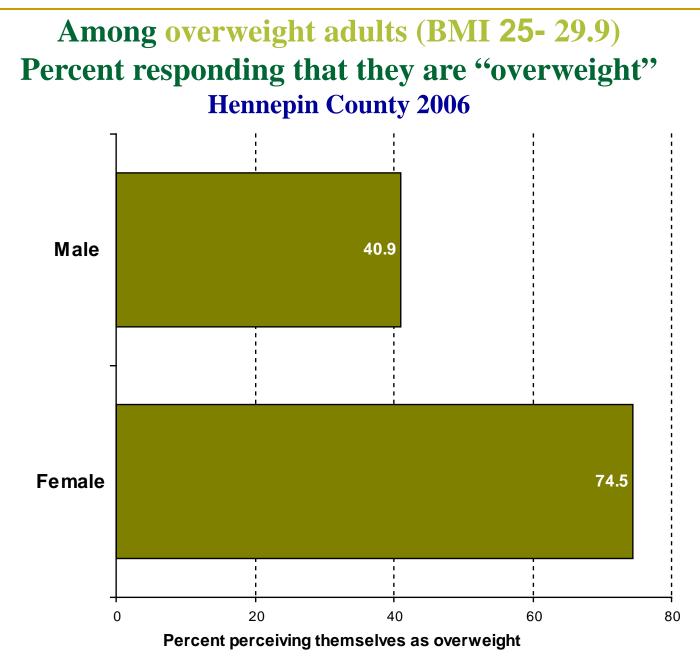
## SHAPE respondents were asked:

- Do you consider yourself to be
  - Underweight
  - Normal weight/about right
  - Overweight

### Among overweight adults (BMI 25- 29.9) Percent responding that they are "overweight" Hennepin County 2006



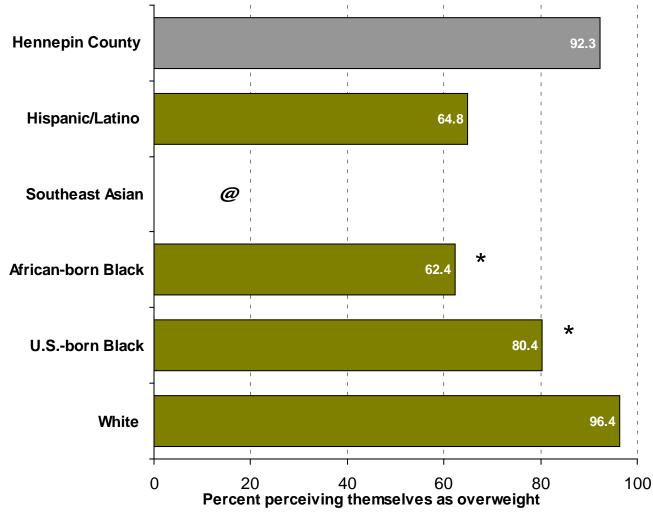
- \* Difference in rates between this group and White is statistically significant at p < 0.05.
- Source: SHAPE 2006



•Difference in rates between genders is statistically significant at p < 0.05.

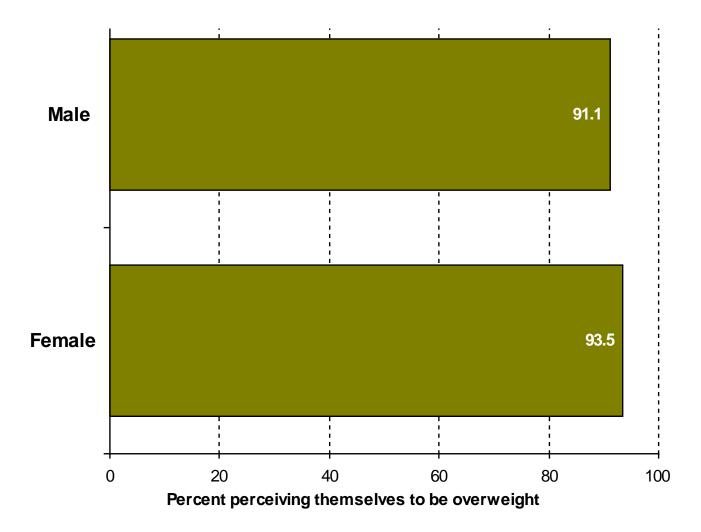
•Source: Shape Data 2006

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Difference in rates between this group and White is statistically significant at *p*<0.05.</li>
 @ Sample size is too small to provide statistically reliable data.
 Source: Shape Data 2006

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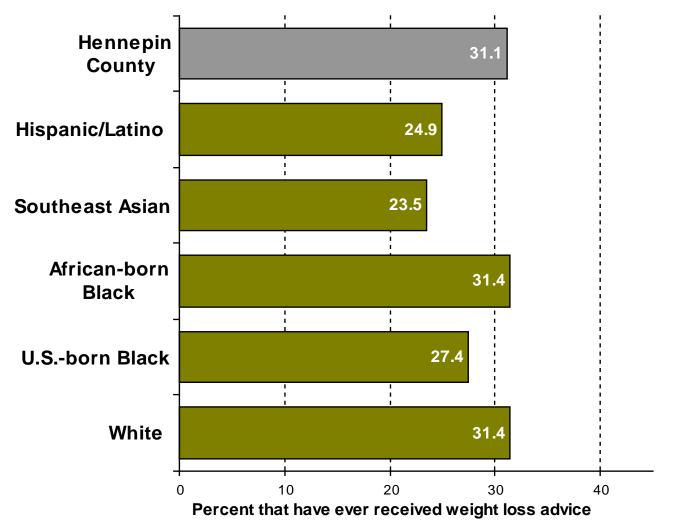


Source: SHAPE data 2006

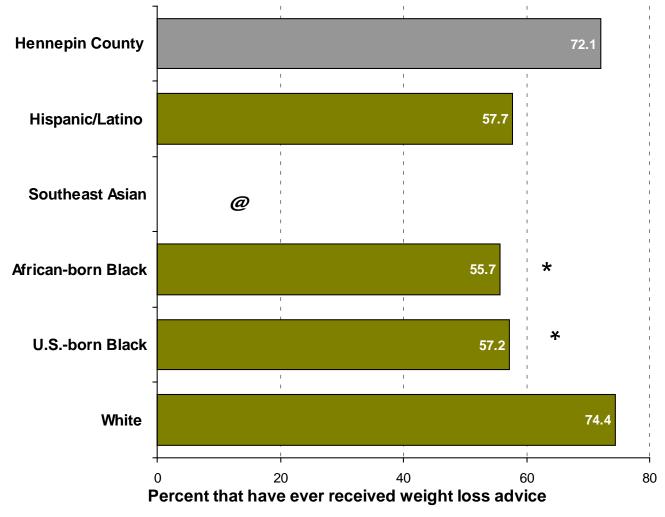
## Lesson from SHAPE study

- Disconnect exists between actual weight and perception of weight in several groups of patients
  - How did providers do in addressing this?

#### Percent of overweight adults (BMI 25.0-29.9) that have ever received weight loss advice Hennepin County 2006



### Percent of obese adults (BMI≥30.0) that have ever received weight loss advice Hennepin County 2006



\* Difference in rates between this group and White is statistically significant at p < 0.05.

@ Sample size is too small to provide statistically reliable data.

Source: Shape Data 2006

## Key results from the SHAPE study

- Only 31.1% of overweight adults in Hennepin County have ever received weight-loss advice from a healthcare professional.
- Only 72.1% of obese adults reported that they had received weight-loss advice.
- Obese Hispanics/ Latinos and African Americans (both US-born & African-born) reported much lower rates of receiving weightloss advice as compared to obese Whites.

## Prevention and Management of Obesity Guideline topics

- Nutrition-balanced healthy eating plan or lower calorie balanced eating plan
- Physical activity
- Behavioral management
- Medication
- Surgery

## Prevention and Management of Obesity Guideline aims:

- Increase awareness of BMI (Body Mass Index)
- Increase percent of patients with elevated BMI who have received education and counseling regarding weight loss
- Improve the outcome of treatment for overweight and obesity
- Improve community involvement in prevention and treatment of overweight and obesity

## Health Risks of Overweight and

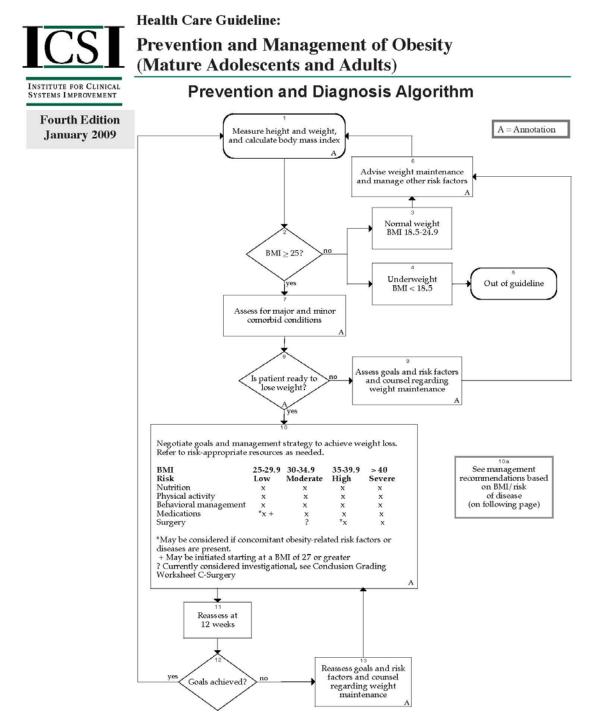
## Obesity

- Hypertension
- Type 2 diabetes
- Coronary heart disease
- High cholesterol
- Stroke
- Osteoarthritis
- Sleep apnea

## Health Risks of Overweight and

## Obesity

- Cancers:
  - Breast cancer (post-menopause)
  - Uterine/endometrial cancer
  - Colon cancer
  - Kidney cancer
  - Esophageal cancer (adenocarcinoma)
  - Gallbladder cancer
- Liver and Gallbladder disease
- Abnormal Menses
- Infertility
- Pregnancy Complications



## **ICSI Obesity Guideline**

### negotiate goals/refer to appropriate resources

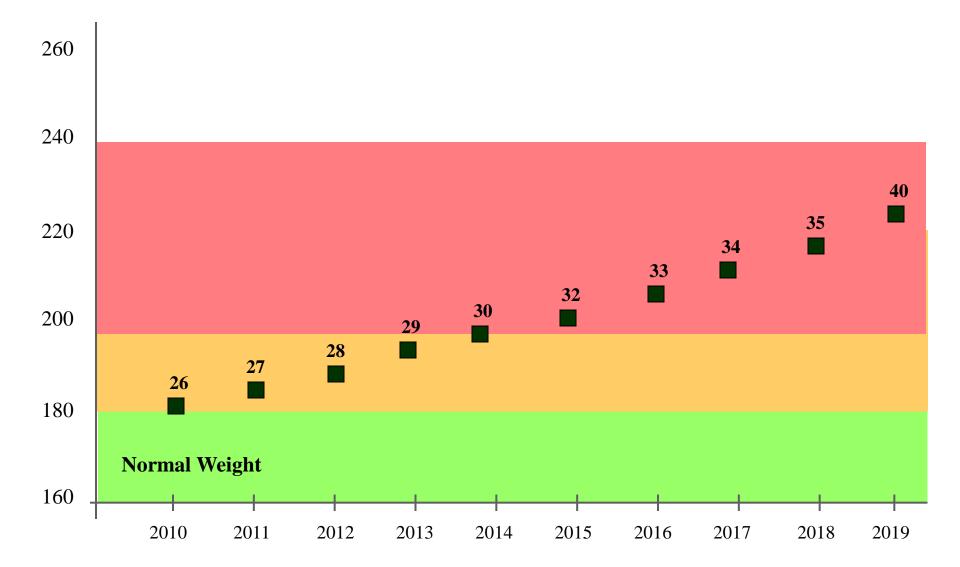
BMI	25-29.9	30-34.9	35-35.9	>40
Risk	Low	Moderate	High	Severe
Nutrition	Х	Х	Х	Х
Physical Activity	Х	Х	Х	Х
Behavior Management	X	X	X	X
Medications	X*	X	X	Х
Surgery		? Investigational	X If concomitant risk factors	X

\* May be considered if concomitant obesity risk factors or at BMI >27

# Strategy for patients with BMI over 25

- Nutrition
- Physical Activity
- Behavior Management
- Medications (concomitant risk or BMI over 27)
- Reassess at 12 weeks

#### 38 year old male: 6 feet, 181 lbs



Primary Prevention of Chronic Disease Risk Factors Guideline Targets 4 key behaviors

- Increase Physical Activity
- Improve Nutrition
- Decrease Tobacco Use and Exposure
- Decrease Hazardous Alcohol Use

#### Why?

- 40% of all deaths in US attributed to four behaviors
  - Poor nutrition
  - Inadequate levels of physical activity
  - Smoking and exposure to tobacco
  - Hazardous drinking

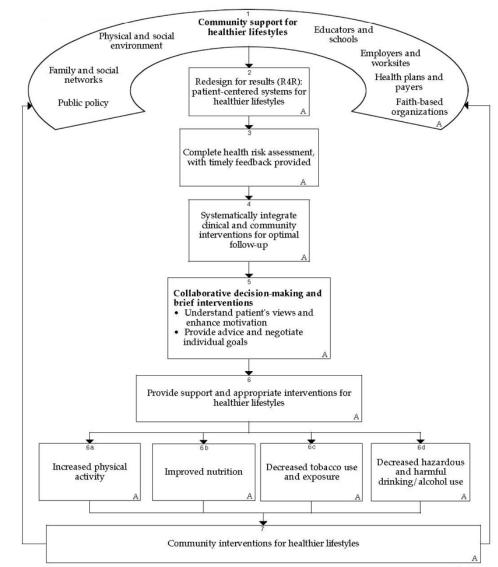
# Healthy lifestyle - the best medicine!

- Changing behaviors in previous slide in middle age provides a 40% reduction in mortality compared to those who continue behaviors
- Correlates with an extra decade of life expectancy

#### Chronic Disease risk factors among Hennepin County Adults

- 17% current cigarette smokers
- 15.5% no leisure time physical activity
- 67% consume less than five fruits and vegetables per day
- 54% are overweight or obese
- 19% are obese
- 85 % of residents have <u>at least</u> one of these risk factors
  - SHAPE data 2006

#### **ICSI Primary Prevention of Chronic Disease Guideline**



#### Redesign For Results (R4R)

Goal: productive interactions between patients and providers

- Delivery system design
- Different staff have roles in process
- Rooming staff has BMI available on chart/in record
- Use MA/LPN to distribute educational materials
- Staff to help with referrals
- Use RNs & Health Educators to teach patients and follow-up
- Systematic follow-up
- We already do this with Well Child Checks and other visits
- Public Health team will work with clinic to create systems that support providers in positive patient interactions

#### Health Risk Assessment

#### Identify health risk factors

- Screen patients for target behaviors
  - Questionnaire
  - Discussion
  - Checklist
- Calculate BMI
- Obtain smoking status
- Timely information and feedback to patients (tailored treatment plans and behavior changes and self-management)

#### **Feedback Matters!**

- Individualized feedback and health education improve health behaviors and conditions such as:
  - measurements of physical activity
  - reducing dietary intake of fat
  - decreasing tobacco use
  - reducing overall (median) blood pressure measurements
  - reducing overall (median) cholesterol measurements

The Influence of Physician Acknowledgment of Patient's Weight Status on Patient Perceptions of

**Overweight and Obesity in the United States** Conclusion: Among patients who were overweight or obese, patient reports of being told by a physician that they were overweight were associated with more realistic perceptions of the patient's own weight, desire to lose weight, and recent attempts to lose weight.

Arch Intern Med. 2011;171(4):316-321

## Integrating clinical and community interventions for risk factor reduction

- One of main goals of SHIP project
- Hennepin County Public Health team will work with your clinic to identify local resources to which you can refer your patients
  - Physical activity
  - Nutrition/healthy eating counseling
  - Smoking cessation

#### Algorithm

## Collaborative decision-making and brief interventions

- Understand patient's views and enhance motivation
- Provide advice and negotiate individual goals

#### Your role as a provider: name the problem; help make a plan

- Collaborative decision-making and brief, combined interventions are effective in helping motivate and engage patients in healthier lifestyles
- Patients see providers as experts
- Patients assume if we don't mention a problem, it isn't a problem
- "No message" sends the wrong message

#### You are the Coach!

- Don't give up!
  - Deliver consistent health messages
  - May take several visits before patient ready to make a change
  - Think small steps for success
- Celebrate successes with your patients
- Primary Care Providers are uniquely positioned to help
  - We have a relationship with patient/family
  - We know:
    - social situation
    - cultural factors
    - family and health history
- Leverage your advantage!

#### Ask/address topic

"You've gained a little weight since your last visit"

 "We use weight and height to calculate BMI, yours puts you in the "overweight" category.
 I'd like to help you make a plan to get that weight off before it causes you health problems"

#### Uncomfortable?

- Remember, only 53 % of overweight patients perceived themselves to be overweight.
- Many overweight adults become obese.
- Many patients will not follow through with a referral.
- We need to diagnose and address the problem and come up with solutions together with the patient.

#### We Are All on a Continuum

- Optimal Health Goals:
  - don't smoke
  - eat 5 servings fruits and veggies a day
  - exercise 5+ days/week
  - do not consume excessive alcohol
- Please consider if all of these are true for you
- If not, will you commit to one small step to improve your health?
- What feelings does this raise?

#### Goal setting

- Listen to patient
- Ask for input from patient
- Discuss possible small steps for patient to improve health
- Ask patient which one he/she would like to do first
- Document plan and set follow-up plan



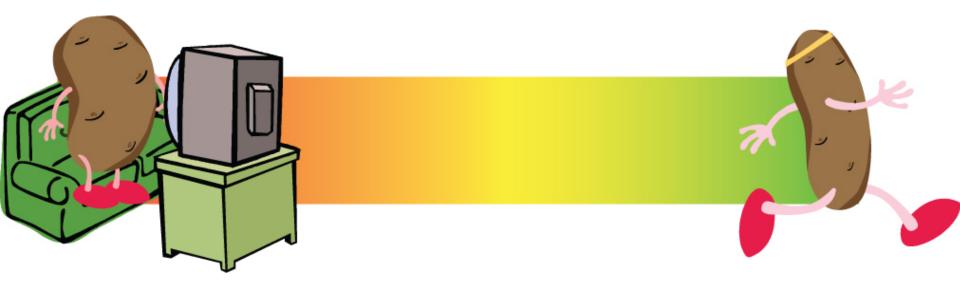
#### Provide support and appropriate interventions for healthier lifestyles

#### Algorithm now branches into:

- Increased Physical Activity
- Improved Nutrition
- Decreased Tobacco Use and Exposure
- Decreased hazardous and harmful drinking/alcohol use

#### Moving our patients along

- Each patient is somewhere on a continuum from couch potato to active lifestyle
- Our job is locate their current status and help them improve a little at a time
- Patients greatly overestimate the amount of exercise that will make a difference



### Possible Barriers to Physical Activity

- Weather
- Transportation
- Motivation
- Lack of confidence
- Child care
- Access to facility in which to exercise
- Cultural constraints
- Perceived safety
- Health conditions

#### **Physical Activity**

- Start by encouraging 10 minutes more per day physical activity
- Goal 30 minutes of moderate-intensity activity
  5 days per week
- Provide tips for adding small bouts of activity

#### **Small Bouts of Activity**

- Take the stairs
- Play with your kids
- Park further away
- Activity breaks from TV (during commercials) or computer
- Start wearing a pedometer
- Walk 10 minutes a day
- Get off one bus stop earlier and walk
- Take an exercise class or join the Y

#### **Physical Activity Patient Resources**

- Community ed classes
- Parks and Recreation
- Health Clubs
- YMCA/YWCA

#### Nutrition - what to eat?

balanced healthy eating plan\* or lower calorie balanced eating plan

- At least 5 servings fruits and vegetables daily
- Whole grains instead of refined grains
- Fiber intake 35+ grams per day
- <30% calories from fat</li>
  <7% saturated fat</li>
  no trans fat
- Lean sources of protein
  - Low fat dairy
  - Eat more fish
  - Limit red meat

\*goals merged from obesity and chronic disease prevention guidelines

#### Nutrition-Healthy Choices

- Encourage fruit and vegetable intake
- Eliminate saturated and trans fat
- Portion control
- Mediterranean diet
- Create individual meal plan mypyramid.gov



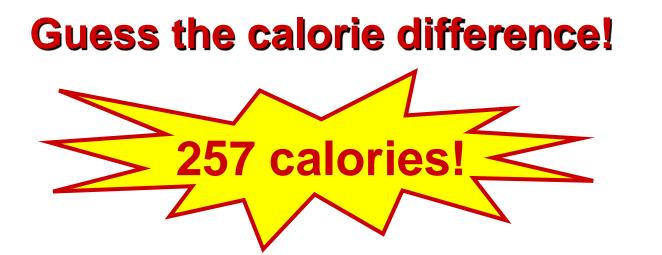






#### Cheeseburger





## Spaghetti and Meatballs20 Years AgoToday

c. spaghetti
 with sauce &
 3 small
 meatballs





2 c. spaghettiwith sauce &3 largemeatballs

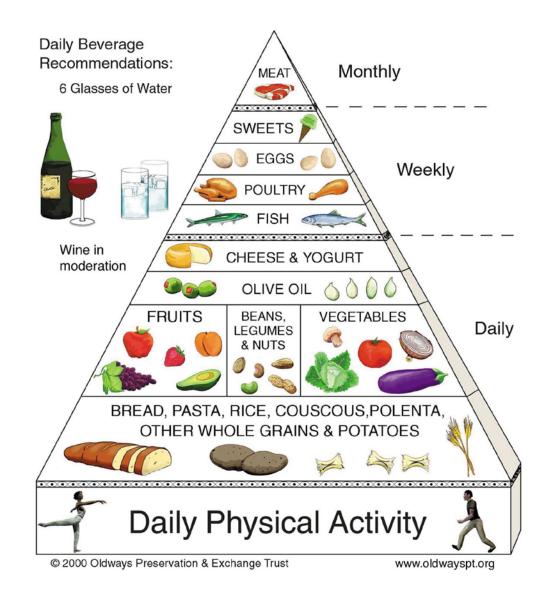
**500 calories** 

1,025 calories

#### **Guess the calorie difference!**

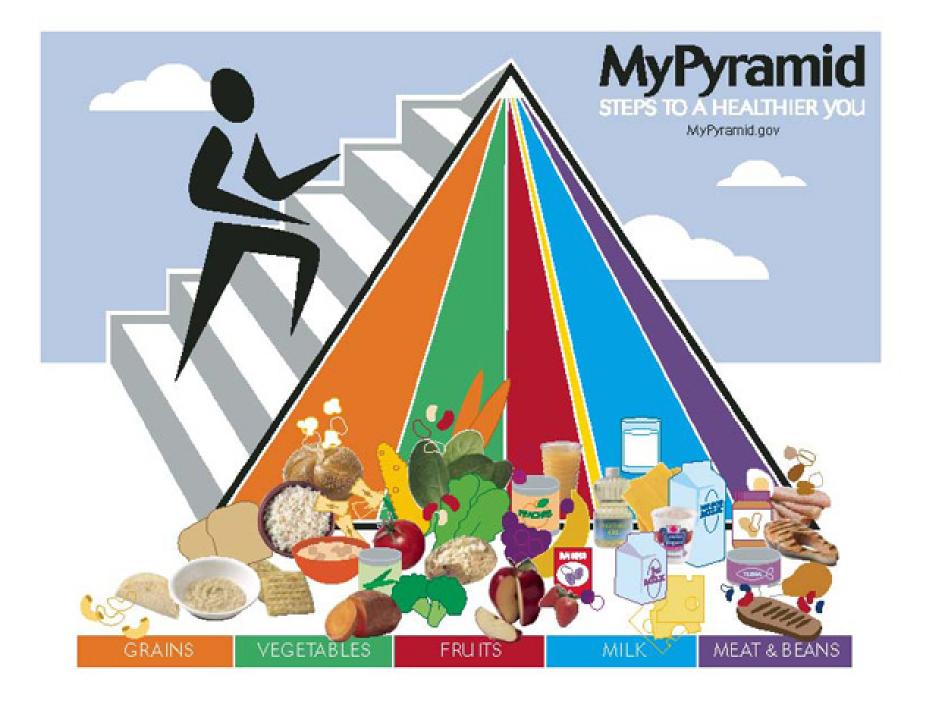


#### The Traditional Healthy Mediterranean Diet Pyramid



#### Mediterranean Diet

- Delicious foods
- High in fruits and vegetables
- Healthy fats olive and canola oil
- Small portions of nuts
- Very little red meat
- Eat fish on regular basis
- Drink red wine in moderation (5 oz serving 1/day women 1-2/day men)



### Helping patients choose healthy foods - the big picture

- Eat fewer processed foods
- Eat in moderation
- Portion control
- Eat a variety of foods
- Smaller, more frequent meals
- Learn to read food labels

#### Setting small goals with patients

- Pack lunch instead of fast food
- Eat a healthy breakfast
- Review portion size
- Add 1 fruit or vegetable per day

#### Nutrition - referral resources

- Nutritionists/dieticians
- Diabetes educators
- Insurance phone-based programs
- Community based healthy weight loss programs
- Structured medically supervised nutrition program

### **Behavioral Management**

- Identify behaviors/conditions that lead to weight gain
  - Stress
  - Emotional eating
  - Boredom
  - Depression
- Help patient set specific goals to decrease calories and increase activity
- Suggest recording weekly weights and daily eating/activity log
- Provide support and help patient maintain weight
- Have patient seek support from family, friends and professionals

#### Tobacco use

### High readiness to change

- Positive reinforcement
- Set a quit date
- Prescription medication
- Refer to telephone coach or support group
- Schedule follow-up

#### Tobacco

#### Low readiness to change

- Stage-based approaches/advice
  - Stop smoking in car
  - Cut down on cigarettes
  - Discuss quitting with partner
  - Keep track of cigarettes smoked each day
  - Buy 1 pack at a time (not carton)

Identify/treat depression as contributing factor







The Statewide Health Improvement Program (SHIP), an integral part of Minnesota's nation-leading 2008 health reform law, strives to help Minnesotans lead longer, healthier lives by preventing the chronic disease risk factors of tobacco use and exposure, poor nutrition and physical inactivity. For more information, visit http://www.health.state.mn.us/healthreform/ship.