

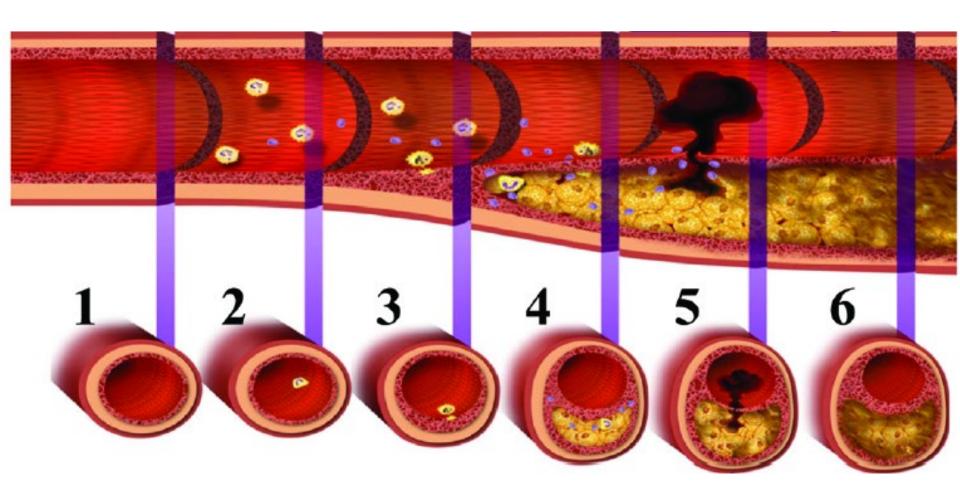
Recognizing and Treating Heart Disease in Women

Richard A. Lange, M.D.

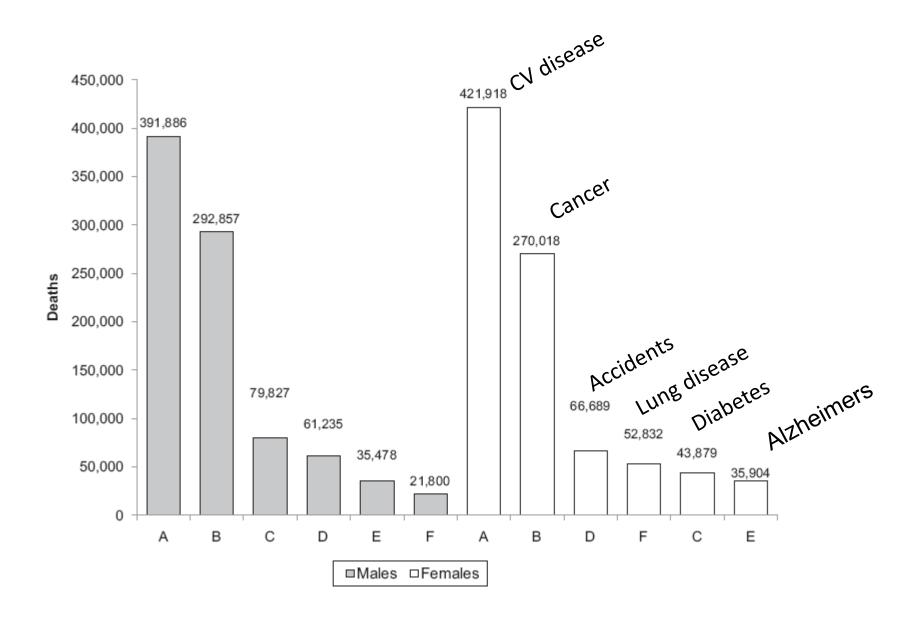
President

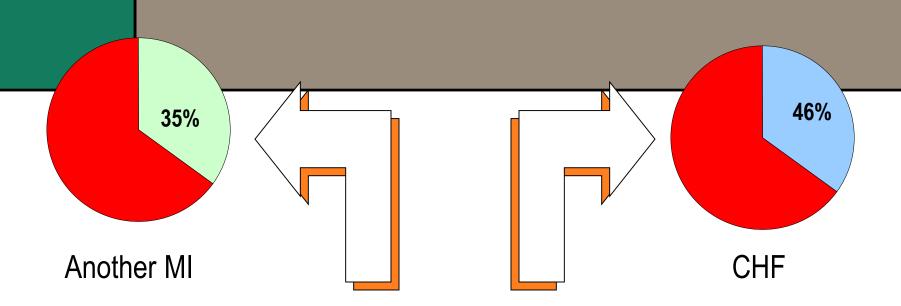
Texas Tech Univ Health Sciences Center

El Paso

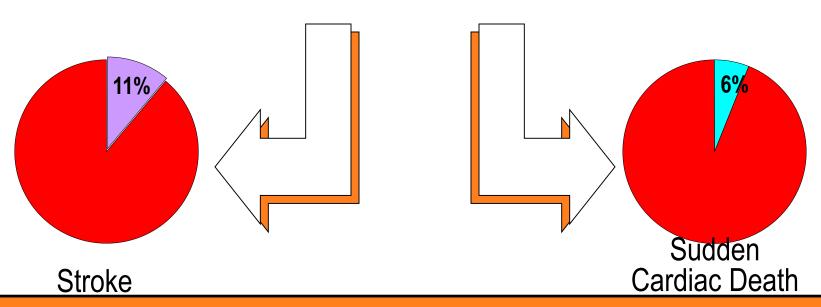


Heart Disease and Stroke Statistics





Within 6 years of MI in Women

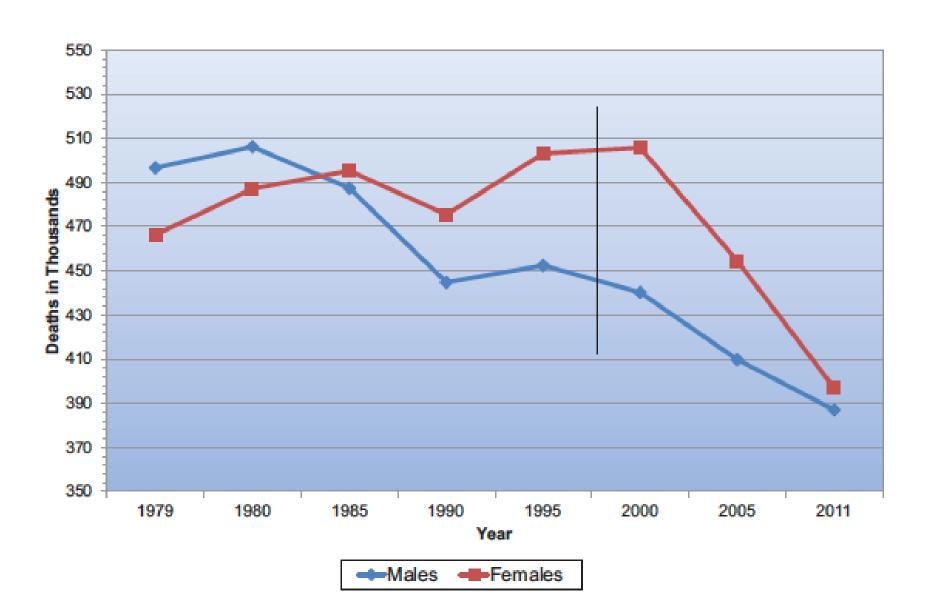


Heart Disease Is the #1 Killer of American Women



- Cardiovascular disease kills more women than the next 7 causes of death combined
- Cardiovascular disease is estimated to claim the life of 1 in 3 women
- Over 400,000 American women die annually from CV disease
- More women than men die each year from cardiovascular disease

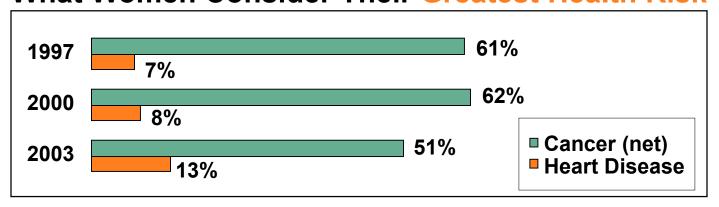
Cardiovascular Disease Mortality for Men and Women in the United States from 1979 to 2011



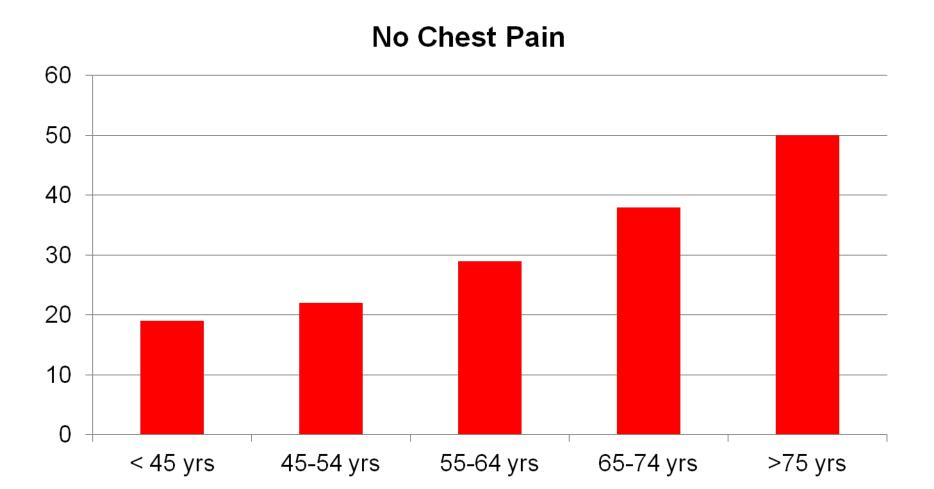
But Most Women Are Not Aware of Their Risk

Women still fear cancer

What Women Consider Their Greatest Health Risk



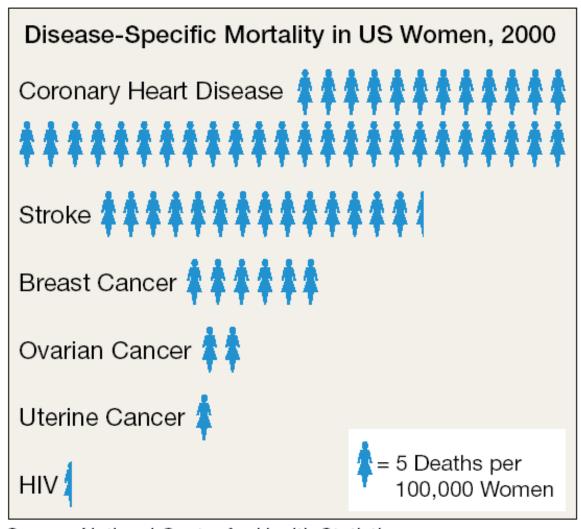
MI Presentation In Women By Age



JAMA. 2012;307(8):813-822

Heart Disease Is the #1 Killer of American Women

CHD afflicts 6.6 million US women annually



Source: National Center for Health Statistics

ALOHA

Say Farewell to Heart Disease



AHA Evidence Based Guidelines For CVD Prevention in Women

 Risk assessment (10 yr likelihood of having death, MI, heart failure or stroke)

High
 Intermediate
 Low
 20%
 10-20%
 <10%

What are the risk factors for CHD?

Coronary Heart Disease in Women

 Risk factors for heart disease are the same for women as for men

Hypertension Age

Diabetes Family history

High cholesterol Obesity

Cigarette smoking Sedentary lifestyle

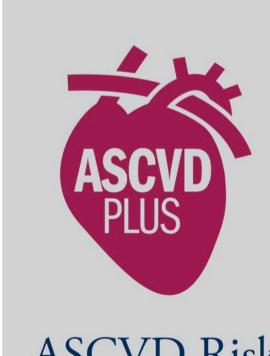
Depression

 Women who have hypertension, diabetes, smoking history, elevated triglycerides, or obesity are <u>more likely</u> than men with these risk factors to develop coronary heart disease

Risk Factors

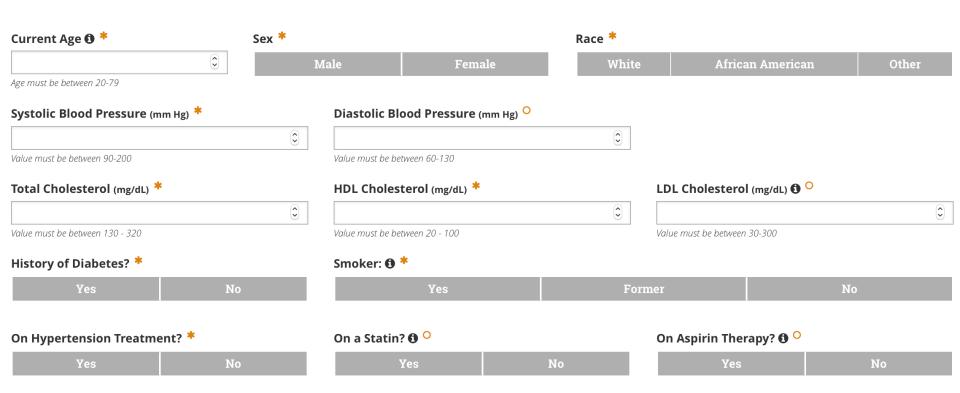
- Most commonly identified risk factors
 - Diet high in saturated fat
 - Lack of exercise
 - Family history of CHD
- Least commonly identified risk factors
 - Obesity
 - Diabetes
 - Smoking

Women underestimate their risk of CHD and do not view themselves at risk even when personal risk factors are present!!



ASCVD Risk Estimator Plus







ASCVD Risk Estimator Plus

Estimate Risk

Therapy Impact

Advice

8.8%

Current 10-Year ASCVD Risk

Lifetime Risk Calculator only provides lifetime risk estimates for individuals 40 to 59 years of age.

Optimal ASCVD Risk: 6.1%

Modifiable Risk Factors

- Smoking
- Hypertension
- Diabetes
- Waist-to-hip ratio

- Dietary patterns
- Physical activity
- Alcohol consumption
- Cholesterol
- Psychosocial factors

Account for **96%** of the population attributable risk of MI in women

AHA Evidence Based Guidelines For CVD Prevention in Women

 Risk assessment (10 yr likelihood of having death, MI, heart failure or stroke)

– High 20%

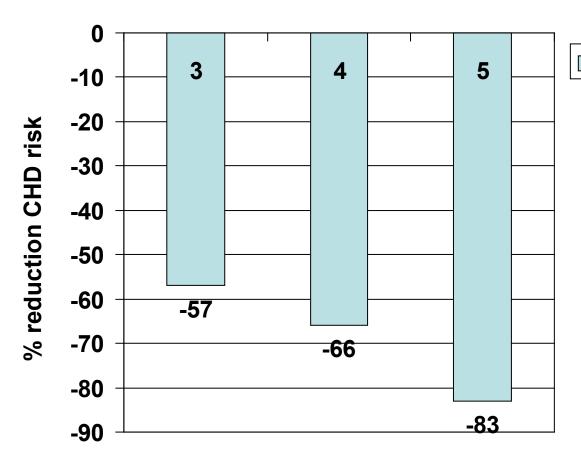
Intermediate10-20%

– Low <10%

Clinical Recommendations

- Lifestyle recommendations
- Major risk factor intervention
- Preventive drug intervention

Importance of Lifestyle in Preventing Heart Disease in Women



■ No. protective factors

3 protective factors

- nonsmoking
- healthy diet
- regular exercise

4 protective factors

- nonsmoking
- healthy diet
- regular exercise
- healthy body weight

5 protective factors

- nonsmoking
- healthy diet
- regular exercise
- healthy body weight
- moderate alcohol use

Health Promoting Behavior

- Diet
- Exercise
- Smoking cessation
- Know your numbers
 - BP
 - Cholesterol
 - Glucose
 - Personal/individual risk
- Know symptoms of heart attack and stroke

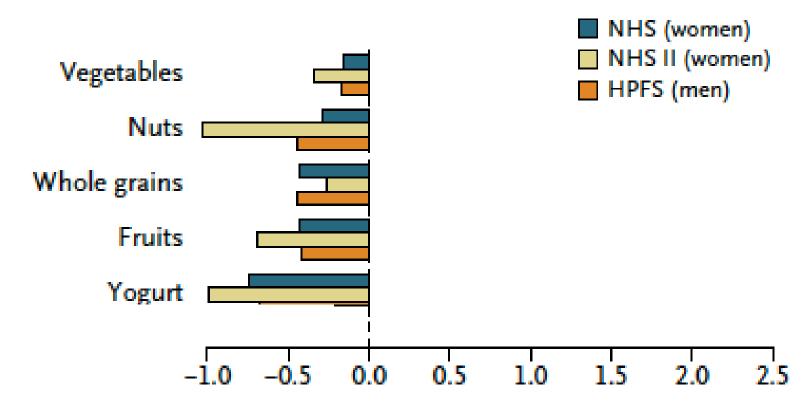
Heart Healthy Diet

- Fruits, vegetables, whole grains, low-fat or non-fat dairy products, fish, nuts, legumes, and other sources of protein low in saturated fat such as poultry and lean meats
- Avoid "trans" fat (stick margarine, hydrogenated or partially hydrogenated vegetable oil)
- Limit saturated fat to 10% of calories and cholesterol to 300 mg/d
- For women who need lipid-lowering, saturated fat should ≤ 7% of calories, and cholesterol should be limited to 200 mg/d
- Drink modest amounts of alcohol (one glass of wine or one 12ounce beer/day)



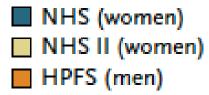
My doctor says I have to give up those intimate dinners for two....unless someone else is with me

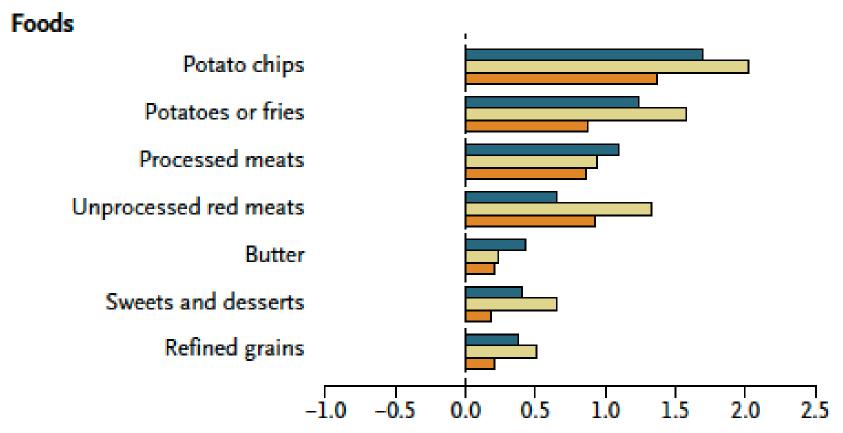
Relationships between Changes in Food and Beverage Consumption and Weight Changes Every 4 Years



Weight Change Associated with Each Increased Daily Serving, per 4-Year Period (lb)

Relationships between Changes in Food and Beverage Consumption and Weight Changes Every 4 Years



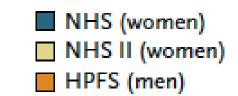


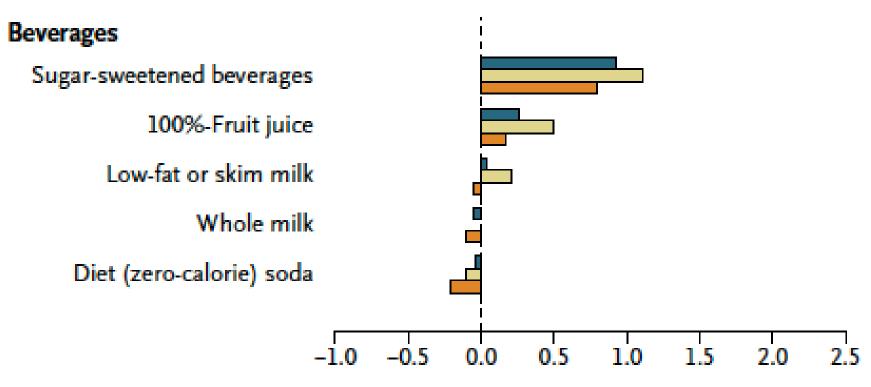
Weight Change Associated with Each Increased

Daily Serving, per 4-Year Period (lb)

N Engl J Med 2011;364:2392-404.

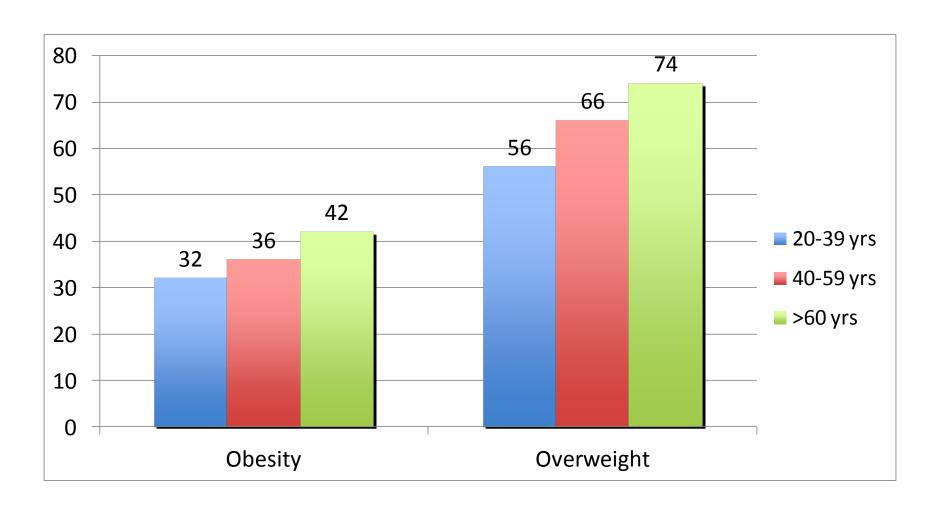
Relationships between Changes in Food and Beverage Consumption and Weight Changes Every 4 Years



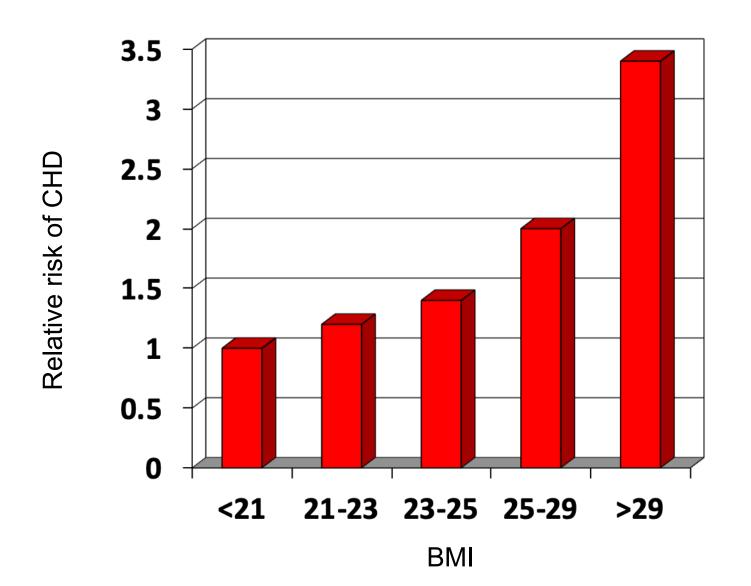


Weight Change Associated with Each Increased Daily Serving, per 4-Year Period (lb)

Prevalence of Obesity (BMI \geq 30) and Overweight (BMI \geq 25) for Women by Age



BMI And Relative Risk Of CHD Over 14 Years: Nurses Health Study

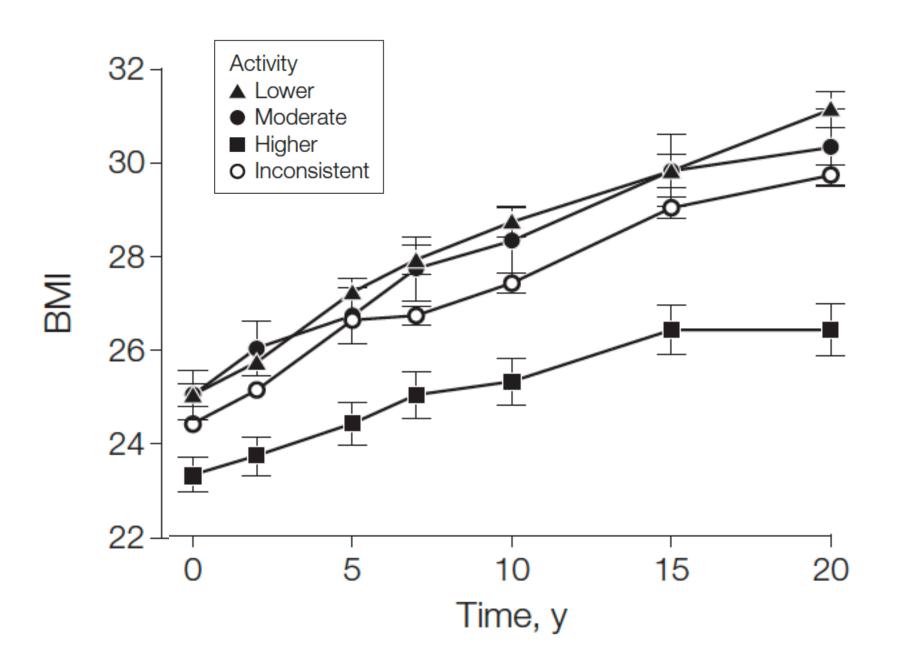


Exercise

 At least 30 minutes of moderate-intensity aerobic exercise on most – and preferably all – days of the week



BMI for 25 y/o Woman By Habitual Activity Category





We told my mother, you have to stay in shape. So my mother started walking five miles a day when she was 60. She's 97 now.... and we have no idea where she is.

Women & Cigarette Smoking

- Smoking and risk of heart attack
 - doubles if you smoke 1 to 4 cigarettes daily
 - increased 600% for heavy smokers
- Stop smoking and risk of heart attack
 - decreases 50% within 1 year
 - approaches nonsmoker after 5 years



Reduce Stress and Treat Depression

- Chronic stress and depression
 - Associated with 75% increase in heart attack
- To manage stress
 - Physical activity
 - Adequate sleep
 - Relaxation techniques (not smoking or eating)
 - Healthcare professional



After twelve years of therapy

my psychiatrist said something that brought tears to me eyes.

He said, "No hablo inglés."

Ronny Shakes

Know Your Numbers!!

Blood pressure

Cholesterol

Glucose (sugar)

Body measurements

Body Mass Index (BMI) Risk Levels (for adults)

Height	Minimal Risk (BMI under 25)	Moderate risk (BMI 25-29.9) Overweight	High risk (BMI 30 and above) Obese
4'10"	118 lbs. or less	119–142 lbs.	143 lbs. or more
4'11"	123 or less	124–147	148 or more
5'0"	127 or less	128-152	153 or more
5'1"	131 or less	132–157	158 or more
5'2"	135 or less	136-163	164 or more
5'3"	140 or less	141–168	169 or more
5'4"	144 or less	145-173	174 or more
5'5"	149 or less	150–179	180 or more
5'6"	154 or less	155–185	186 or more
5'7"	158 or less	159–190	191 or more
5'8"	163 or less	164-196	197 or more
5'9"	168 or less	169–202	203 or more
5'10"	173 or less	174-208	209 or more
5'11"	178 or less	179–214	215 or more
6'0"	183 or less	184-220	221 or more
6'1"	188 or less	189-226	227 or more
6'2"	193 or less	194-232	233 or more
6'3"	199 or less	200-239	240 or more
6'4"	204 or less	205–245	246 or more

Know your numbers

		<u>Goal</u>	<u>Frequency</u>
Blood pressure		120/80	every year
Cholesterol	Total LDL Triglycerides HDL	<200 mg/dL <100 mg/dL <150 mg/dL >60 mg/dL	every 5 yrs
Glucose (sugar)		<110 mg/dL	every 3 yrs
Body measurements	Waist BMI	<35 inches <25	every visit every visit

Physician Self-Reporting

 Average 8 minutes spent counseling pts on lifestyle changes at routine annual visit



- <5% of physicians advised patients to engage in physical activity ≥ 6 days/wk
- Dietary counseling for low and moderate-risk patients done by physician, not nutritionist
- Most physicians do not discuss "trans" fats or target for saturated fat intake

Prevention of CHD

- Beneficial
- Exercise
- Diet
- Cholesterol reduction
- Modest alcohol intake
- Smoking cessation

- Not Beneficial
- Folic acid
- Vitamin C
- Vitamin E
- Hormone replacement therapy
- Omega-3 FA
- Phytoestrogens
- Aspirin (low risk pts)

Heart Attack Warning Signs

- Pressure, burning, squeezing in the center of the chest
- Discomfort in one or both arms, shoulders, neck, jaw, stomach or back
- Shortness of breath
- Fatigue, cold sweat, nausea, weakness

Less Typical Symptoms of Heart Disease in Women

- Pain in upper back, jaw, or neck
- Shortness of breath
- Flu-like symptoms: nausea or vomiting, cold sweats
- Fatigue or weakness
- Feelings of anxiety, loss of appetite, discomfort

Hispanic Women and Heart Disease



- Risk factors more likely

 (i.e., diabetes, hypertension, obesity)
- Higher rates of heart attack (MI)
- Present later to hospital with heart attack
- Secondary prevention measures (preventing another MI) less likely

Health Promoting Behavior

- Diet
- Exercise
- Smoking cessation
- Know your numbers
 - BP
 - Cholesterol
 - Glucose
 - Personal/individual risk
- Know symptoms of heart attack and stroke



