

Battling Heart Disease: The Heart of Health

Molly Ware, MD
Boulder Heart
303-816-3345



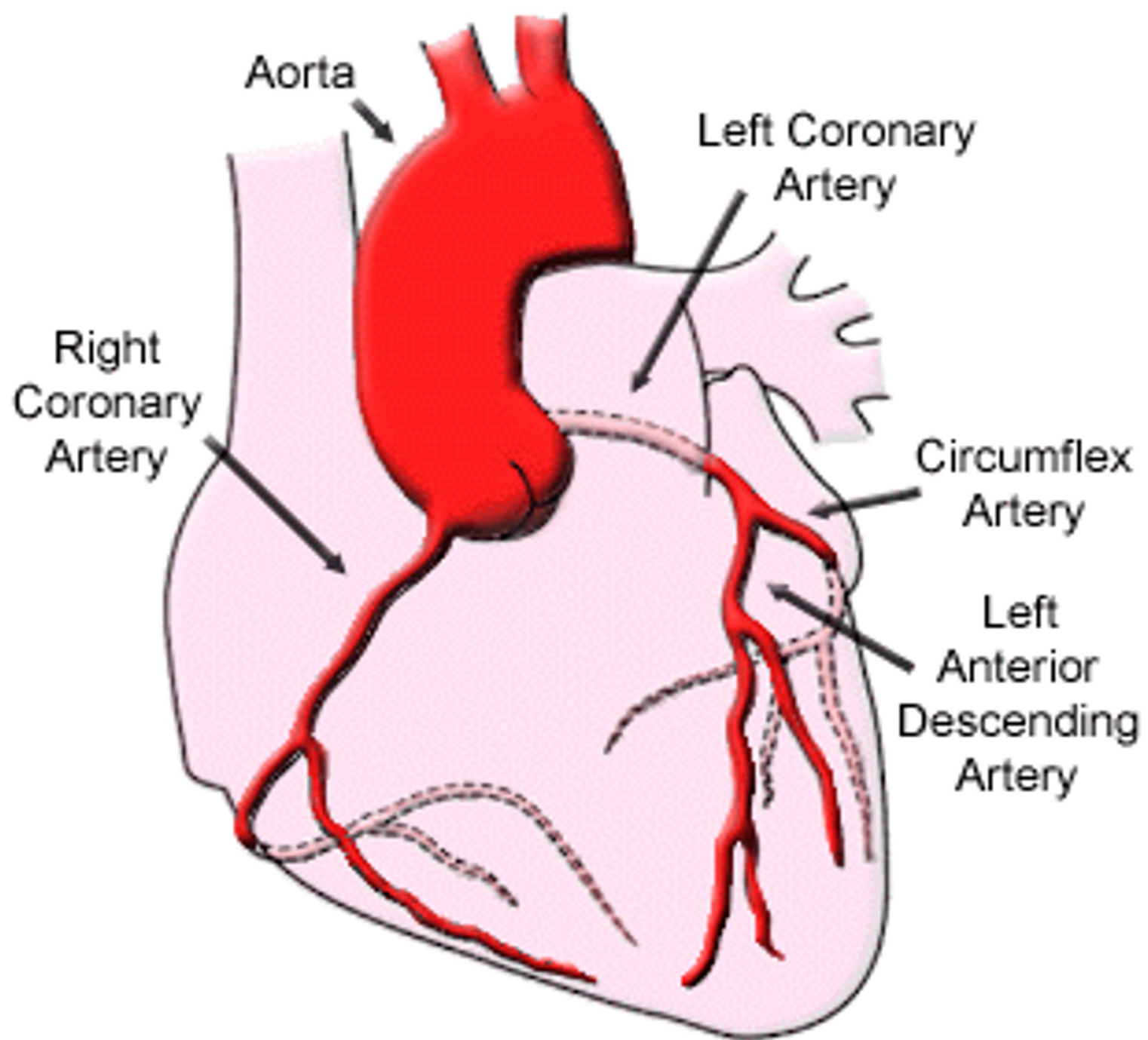
Boulder
Community
Health 

- Epidemiology
- What is Heart Disease?
- Screening: classic and newer risk factors and tests
- Prevention: **the importance of lifestyle**

- Heart disease is the most common cause of death in the U.S.
- 18.2 million people have coronary disease.
 - One death every 36 seconds.
 - 1 out of 4 deaths related to heart disease.
 - Over age 40, risk of developing disease is 49% in men, 32% in women.
 - These statistics apply to most racial and ethnic groups.

- Since 1984, more cardiovascular deaths in women than in men.
- 80% of people with sudden cardiac death had no prior symptoms.
- Younger people are affected too!

- Problems with the arteries
- Problems with the valves
- Problems with the rhythm
- Problems with the heart muscle function (usually caused by one of the above)



Symptoms




- Chest pain: pressure, tightness, burning
- Shortness of breath
- Jaw, neck, arm, back pain
- Nausea/vomiting
- Sweating
- Fatigue, weakness, lightheadedness
- Trouble sleeping, uneasiness

What Is a Heart Attack?

<http://vimeo.com/10063636>

What Is a Heart Attack?

- Inflammation
 - Unstable plaque
 - Triggering event
 - Spike in blood pressure
 - Toxic insult
 - Mental stress
 - Physical stress
-  **STRESS HORMONES**

Screening = detection of disease before
it causes an event

Goal: prevent events



"I'll have an ounce of prevention."

Classic cardiac risk factors:

- High blood pressure (even if treated)
- High cholesterol
- Diabetes
- Smoking
- Family history of early heart disease
- Age > 55 for women, >45 for men
- Obesity
- Lack of exercise and poor exercise tolerance
- Chronic kidney disease

Other Links to Heart Disease

- Low Vitamin D
- Obstructive Sleep Apnea
- Other vascular disorders:
 - Raynaud's, migraine
 - Autoimmune

Other Links to Heart Disease

- HIV infection
- History of chest radiation and certain chemotherapies
- Gout
- History of pregnancy complications: high blood pressure, pre-eclampsia, gestational diabetes
- Polycystic ovarian disease

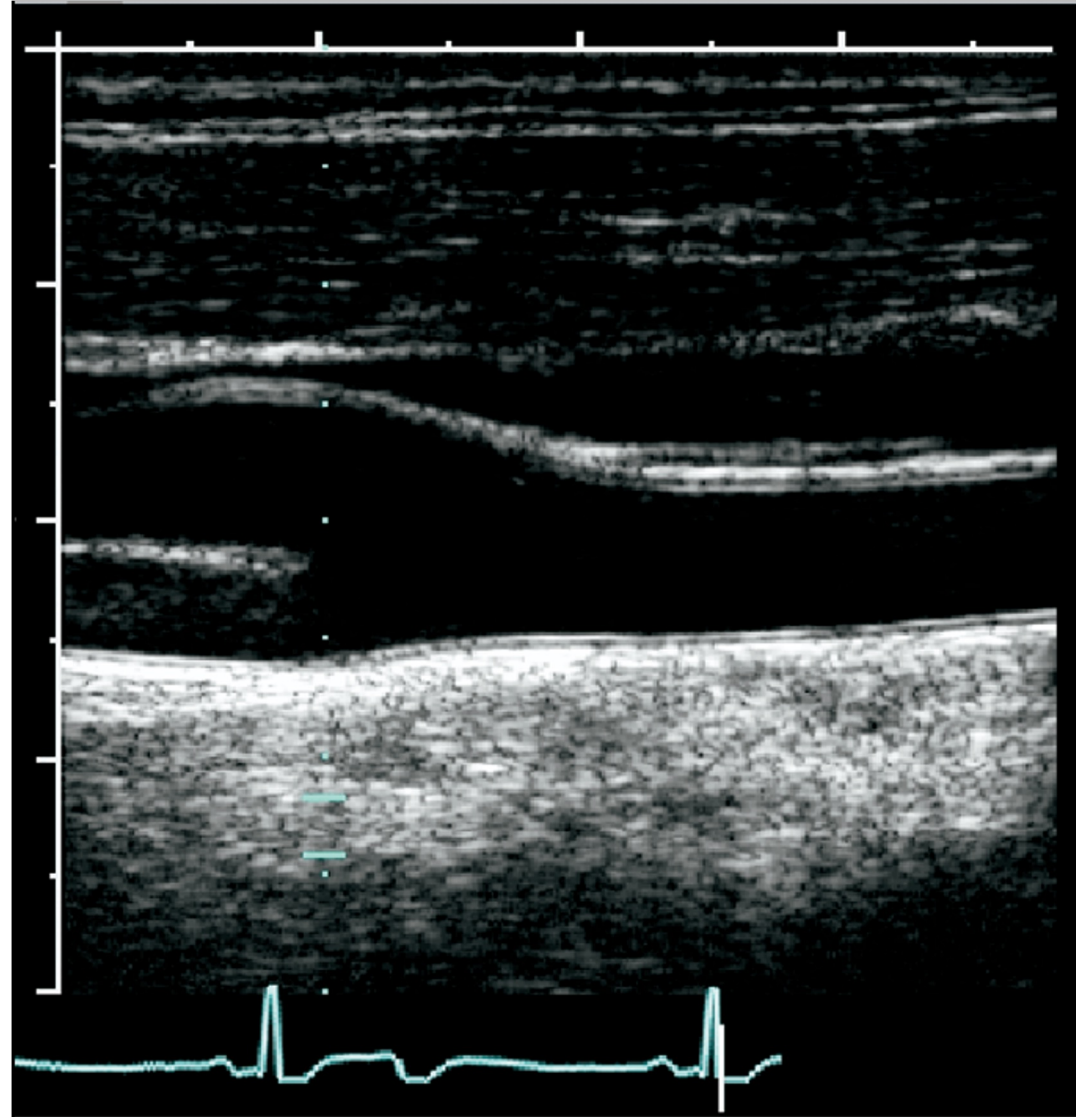
- Coronary artery calcium scoring
- Advanced cholesterol testing
 - Lp(a), particle size/particle number
- Measures of inflammation (hs-CRP)
- Carotid artery thickness by ultrasound



Ultrasound of the Carotid Artery



Image of Carotid Artery



Who Should Be Screened?

- Everyone should know their numbers!
- All people should be asked about classic risk factors.
- “In the middle” people could consider additional screening.
- We ALL need to focus on primary prevention!

Know Those Numbers

- Blood pressure 120/80
- LDL cholesterol <100
- HDL cholesterol > 50/40
- Triglycerides < 150
- BMI 18.5-24.9 (kg/m²)
- Waist < 35 inches female or 40 male
- Diabetes: hemoglobin A1C < 7%

The Pillars of Health

- Nutrition
- Exercise
- Sleep
- Stress

What Should I Eat?

Mediterranean diet



 ADAM.

Diet Evidence: Benefits of Fruits and Vegetables

Nurses' Health Study and Health Professional's Follow-up Study

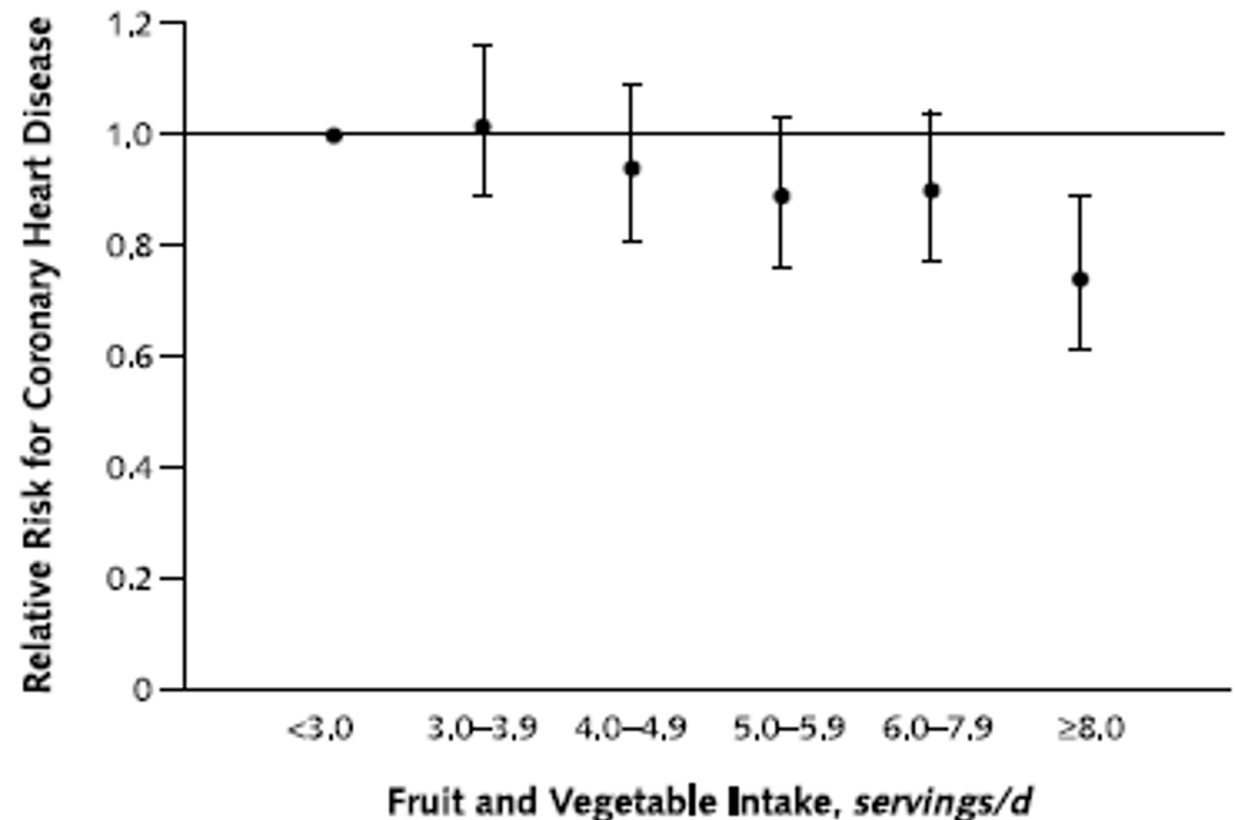
126,399 persons followed for 8-14 years to assess the relationship between fruit and vegetable intake and adverse CV outcomes*

Increased fruit and vegetable intake reduces CV risk.

*Includes nonfatal MI and fatal coronary heart disease

CV=Cardiovascular

Joshipura KJ et al. *Ann Intern Med* 2001;134:1106-1114



ENHANCEMENT
(not deprivation)

Keep it Simple

- Reach for: vegetables and fruit
- Think: high fiber
- Think: unprocessed
- Think: good fats
- Think: high-quality protein



Fat is Not the Enemy

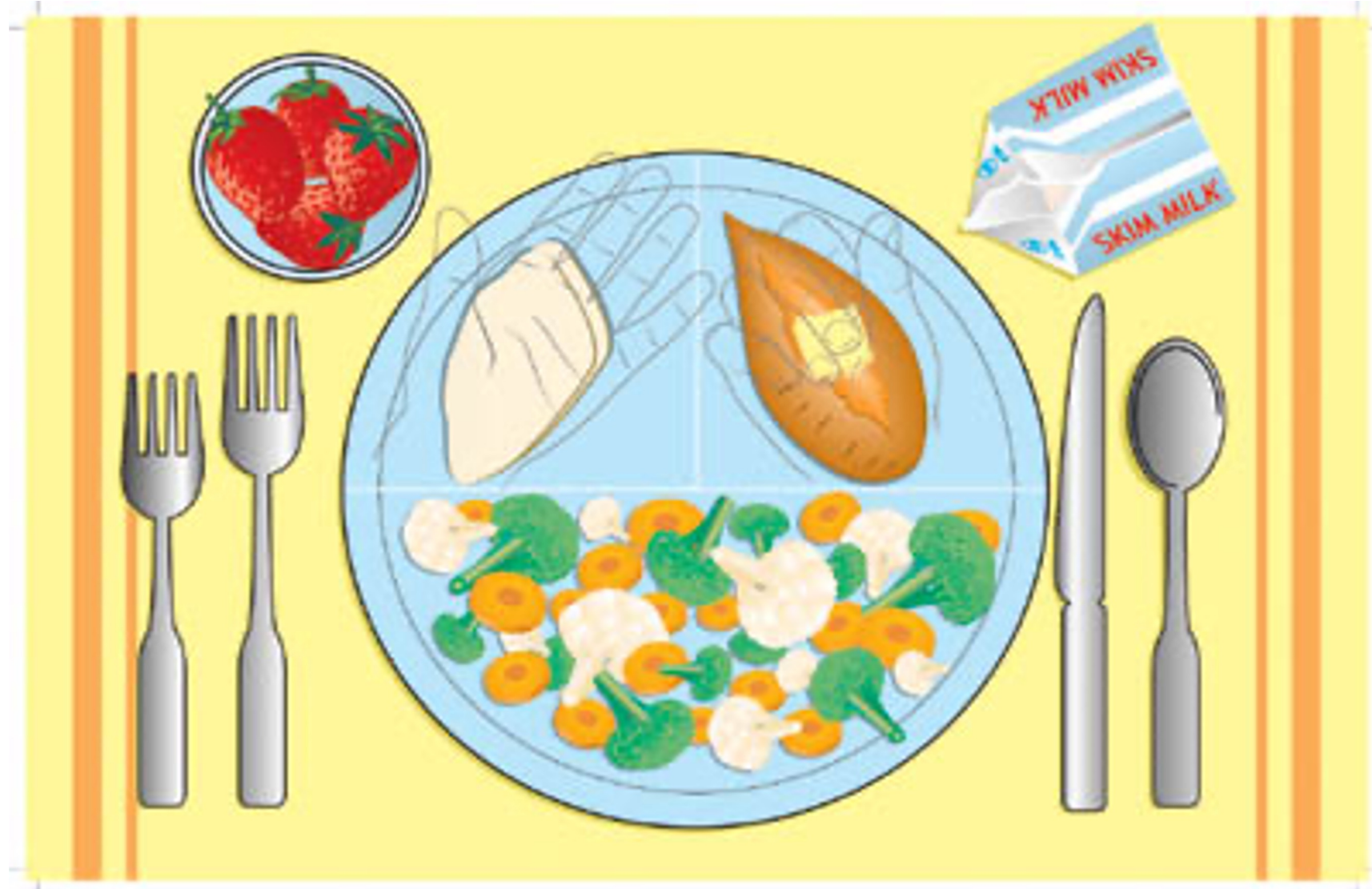


I bought my husband
a set last year and
he gained 30 pounds.

**VANITY
PLATES**

REGULAR CHINA

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- A varied diet rich in plants, lean protein, good fats is the foundation of health.
- Vitamin D – possibly
- Calcium: 700 -1,000 mg daily
- Vitamin E, high dose Vitamin C, beta carotene, and folate no clear benefit
 - Folate is important for women who are pregnant or may become pregnant.

Our Bodies are Meant to Exercise

- Check with your doctor. . .
- Then go for it! At least 30 minutes of moderate activity MOST days of the week.
- Some is better than none.
- More is better than less.
- Strength training has a BIG role.

Move It or Lose It!

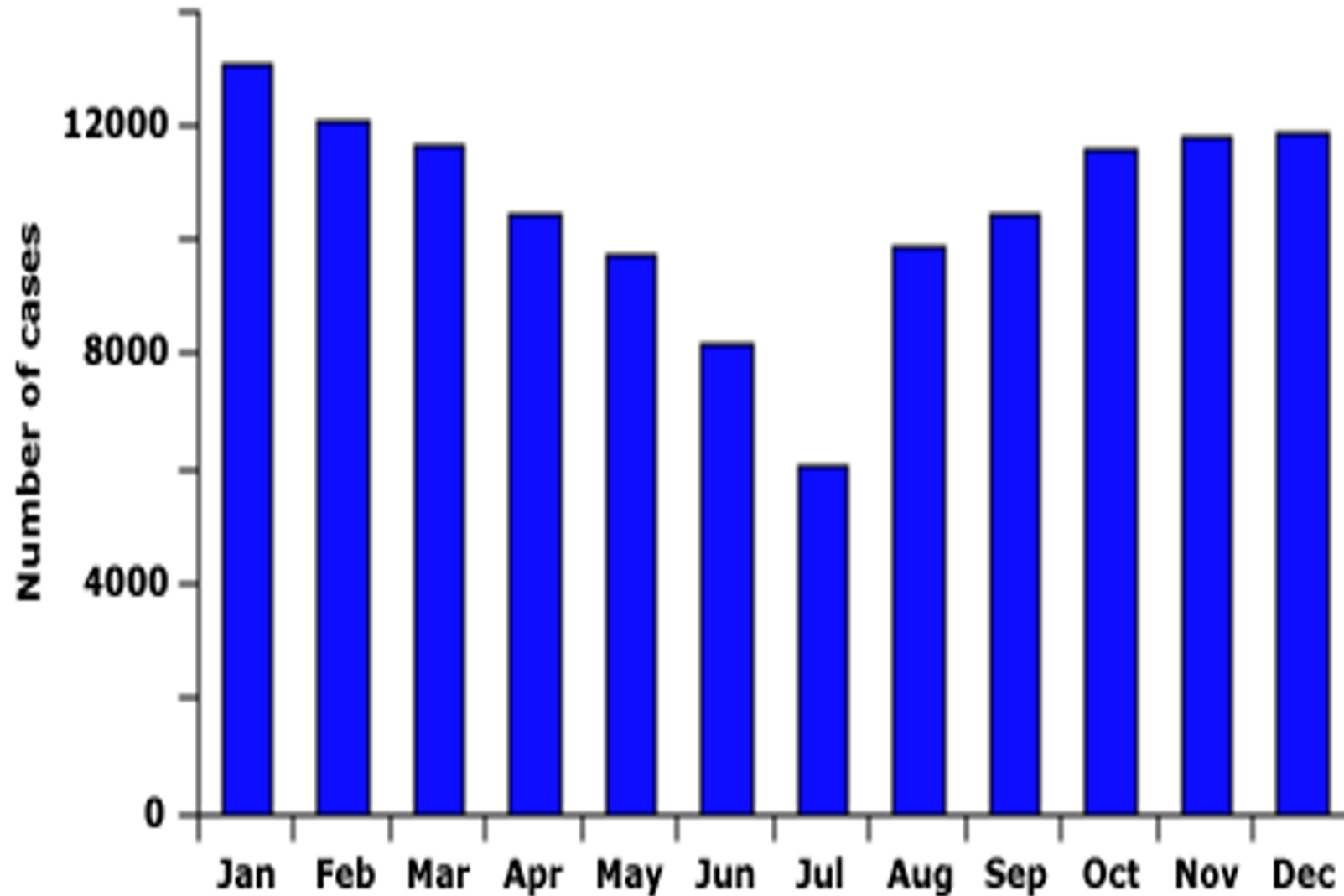




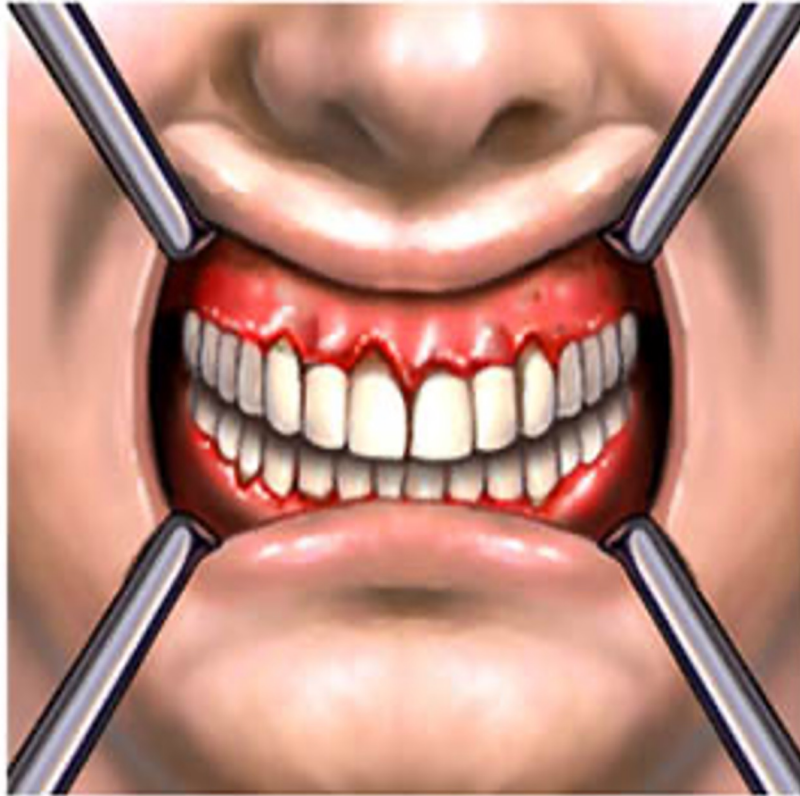
- Sleep quality affects ALL aspects of health.
- Less than 8 hours/night increases heart disease risk.
- Poor sleepers tend to gain weight and have worse physical/mental performance, more inflammation, and increased risk of depression.

Less Stress = Big Plus

Heart attacks are less frequent in the summer.



Visit Your Dentist



And your heart will
be happy!





- Do something because you feel better short term AND there are long term benefits.
- More fun with friends.
- Good for heart = good for overall health.

For Some People Prevention Includes:

- Statins and other cholesterol medications
- Blood pressure medications
- Diabetes medications
- Aspirin
 - High risk: 81 mg daily
 - Low risk: probably not

If You Have Heart Disease

- Keep working on your risk factors!
 - Lifestyle change is as important as medications
- Regular follow up with your doctor
- Cardiac rehabilitation programs -- great confidence builders

- **Your primary health care professional**
- American Heart Association website: **www.americanheart.org**
- **Younger Next Year** by Henry Lodge, MD, and Chris Crowley
- **Eat to Live** by Joel Furhman, MD
- #800 gram challenge: **<https://optimizemenutrition.com/>**
- **Why We Sleep.** by Matthew Walker, PhD

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