• SMART Goal Assignment
• Chapter 14: Cardiovascular Health and Diabetes
Cardiovascular Health & Diabetes
Group Work: Risk Factors

• Name 3 cardiovascular disease (CVD) risk factors that you CANNOT control

• Name at least 3 risk factors that you CAN control

• Which of those that you can control is likely the most important?
Blood Pressure

Pressure blood exerts against vessel walls

- Systolic pressure = peak of pressure in aorta
- Diastolic pressure = lowest pressure in aorta

<table>
<thead>
<tr>
<th>Category</th>
<th>Systolic</th>
<th>Diastolic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal</td>
<td>Less than 120 and</td>
<td>Less than 80</td>
</tr>
<tr>
<td>Prehypertension</td>
<td>120–139 or</td>
<td>80–89</td>
</tr>
<tr>
<td>Hypertension</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stage 1</td>
<td>140–159 or</td>
<td>90–99</td>
</tr>
<tr>
<td>Stage 2</td>
<td>160 and above or</td>
<td>100 and above</td>
</tr>
</tbody>
</table>

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Effects of High Blood Pressure
How to control blood pressure

- Weight management
- Eat heart-healthy foods
- Reduce sodium intake
- Exercise!
- Medication may be required
Lipoprotein Profile

- Lipoprotein (Cholesterol) Levels
  - Total cholesterol (=HDL + LDL, under 200)
  - HDLs = “good” cholesterol (over 40)
  - LDLs = “bad” cholesterol (under 100)
  - Triglycerides = fat in blood after meals (under 150)
How to lower cholesterol

- Eat a low-fat diet with cholesterol-lowering foods
- Weight management
- Exercise
- Medications – statins block cholesterol production in liver so it is pulled from blood
Cardiovascular (Heart) Disease

- Heart Attack (Myocardial Infarction)
- Arrhythmia / Sudden Cardiac Death
- Congestive Heart Failure
- Coronary Artery Disease
Coronary Artery Disease

- Blocked flow of blood in coronary arteries due to atherosclerosis
• LDL penetrates artery wall & causes inflammation
• Cells cap inflammation with plaque
How to unclog your arteries

- Very low-fat, vegetarian diet
- Moderate exercise
- Stress counseling
- Yoga, meditation, or breathing exercises
Stroke

- Interruption of blood supply to the brain

Ischemic Stroke

Hemorrhagic Stroke

Blood clot stops the flow of blood to an area of the brain

Weakened/diseased blood vessels rupture.

Blood leaks into brain tissue
Diabetes

• What is diabetes?
• What is the difference between type 1 diabetes and type 2 diabetes?
• What is gestational diabetes?
• How is each of the above treated?
How to lower diabetes risk:

- Exercise 30 min/day, 5 days/wk
- Weight management
- Diet rich in complex carbs, high in fiber, low in sodium and fat
- Eat fruit and veggies rich in antioxidants
Things You Can Do

• Today (or tomorrow):
  - Eat a healthy breakfast
  - Go for a walk
  - Eat 1 more serving of fruit / veggies
  - Drink 1 more glass of water
  - Get 7-8 hrs of sleep
  - Don’t smoke

• This week
  - Check your BP
  - Check your lipoproteins
  - Reduce stress (yoga, music, meditate)

• This semester
  - Learn family history
  - Establish exercise routine
  - Stop smoking for good