Name: Date: Class:

**Score: /20**

***Directions:*** Go to my ***Weebly🡪 Biology🡪Unit 7: Circ System🡪 Heart Disease***

Go through the posted powerpoint and complete this handout. Use the blue Coursebook pages 185-194 to supplement information as needed (it can also be accessed online via my Weebly).

**Part 1: Coronary Heart Disease Background Information**

The heart and circulatory system like any organ or system are prone to damage or disease. Unfortunately, if the heart becomes damaged, this can have severe implications for the individual involved.

Coronary Heart Disease (CHD) is currently the biggest killer in the USA, claiming more lives than the likes of cancer and lung disease.

1) Explain the term coronary heart disease.

2) What is a heart attack?

3) What are the deposits on blood vessel walls made up of?

4) Coronary heart disease is the most common cause of premature death in the USA. True/False?

5) List 10 risk factors for coronary heart disease.

6) How can the amount of cholesterol in the diet be reduced?

7) List 5 risk factors for people who may develop high blood pressure.

8) Explain how the distribution of fat in the body affects the risk of coronary heart disease.

9) Explain the impact of a diet high in soluble dietary fiber on cholesterol levels.

10) Which type of fatty acid should be eaten in smaller amounts?

**Part 2: Other Cardiovascular Diseases**

***Atheroma***

This disease may also be known as atherosclerosis and is often linked to other types of heart disease.

1. What is atherosclerosis?
2. Describe how an atheroma can be harmful or dangerous for a person’s health.

***Thrombosis***

1. Thrombosis is the formation of a thrombus, also called a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
2. What are some of the negative consequences of thrombosis? (Why is it a problem?)

***Myocardial infarction***

1. Draw and label a diagram showing an aneurysm.

***Myocardial infarction***

1. What is the common name for a myocardial infarction?
2. How does a myocardial infraction happen? (Biologically, what happens in the circulatory system?)

***Stroke***

1. What is a stroke?

Risk Factors

1. Define the term risk factor. (You may use the internet if needed)
2. For the following risk factors, research and provide mechanisms for how each can increase the risk of a named heart disease (eg: atheroma) and ultimately an early death.

*Hint: use coursebook pages 187 & 190-191, Part 1 of this packet, and the internet*

1. High cholesterol intake
2. Cigarette smoking (discuss both nicotine and carbon monoxide)
3. Lack of exercise
4. In the space below, produce a concept map to identify as many risk factors linked to heart disease as you can. Refer back to Part 1 of this packet to help. Attach additional pages as needed.

**Part 3: Data and Heart Disease**

Use the **data tables and graphs from the powerpoint slide**s to answer the following questions.

* ***Example 1: Figure 1-14***
1. What information does the graph show? (Look at the axes/variables, the key, and the description of the graph)
2. What conclusions can be drawn from the study?
* ***Example 2: Table 1***
1. What information does the graph show? (Look at the axes/variables, the key, and the description of the graph)
2. What conclusions can be drawn from the study? Explain these conclusions you have drawn using biology content.
* ***Example 3: Table 2***
1. What information does the graph show? (Look at the axes/variables, the key, and the description of the graph)
2. What conclusions can be drawn from the above study? Explain these conclusions you have drawn using biology content.
* ***Example 4: Table 13-1***
1. What information does the graph show? (Look at the axes/variables, the key, and the description of the graph)
2. What conclusions can be drawn from the study? Can you explain possible reasons for these conclusions?
* ***Example 5: Fig. 2-2***
1. What information does the graph show? (Look at the axes/variables, the key, and the description of the graph)
2. What conclusions can be drawn from the study? (there are a good number possible here)
* ***Example 6: Figure 1-8***
1. What information does the graph show? (Look at the axes/variables, the key, and the description of the graph)
2. What conclusions can be drawn from this study?

**Part 4: Summary**

Write a paragraph summarizing the most important things you learned through this, the concepts you’d like to learn more about, and how this information is relevant to our lives. **Attach additional pages to this packet.**