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# Using Family History to Improve Your Health

Log on to : <http://learn.genetics.utah.edu/content/history> and explore this module to find the answers to the questions below.

Hint: the Search feature on this website may or may not help you find what you are looking for; it is best to go through the module to find the answers.

1. What does it mean to be "at risk" for developing a disease?

2. Why is it important to know your family health history?

3. What two factors contribute to a person's risk?

4. Why is it important to make healthy choices and take good care of your body?

5. When talking to parents and grandparents about your family's health history, which diseases should you ask about?

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6. What "features" of a family health history are most informative when it comes to assessing disease risk?

## Learn more: Calculating Genetic Risk

7. Compare and contrast diseases caused by a single gene with more complex diseases influenced by multiple genes. (Fill in the answers to complete the table below.)

Disease caused by:	Rare or common?	Possible inheritance patterns?	Risk is very predictable?
Single gene			
Multiple genes			

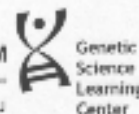
8. Heart disease, stroke, cancer and diabetes are all examples of which type of disease: a single gene disease or a complex disease? *Circle the row on the table above that describes the characteristics of these diseases.*

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## **Learn more: Lifestyle Choices and Risk**

9. State the two leading causes of preventable death in the United States.

10. What are the three types of fuel the human body uses to get energy?

11. Most people know that smoking cigarettes is bad for your lungs, but smoking also affects your heart. How?

## **Learn more: Nutrition and Physical Activity**

12. State the two requirements for a healthy diet.

13. Healthy foods are low in \_\_\_\_\_ and high in \_\_\_\_\_.

14. How many grams of fiber should a person get every day?

15. If fiber comes from plants, which foods do you think contain the most fiber?

16. Define physical activity. Give two examples of physical activity not already provided.

17. How much physical activity per day is recommended for teens?



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## Learn More: Most Common Complex Diseases

18. Match the disease with its correct definition and/or symptoms:

A. Heart Disease/Stroke	Uncontrolled cell growth resulting in tumor formation
B. Asthma	Contributes to the formation of plaques on the inner walls of blood vessels (called atherosclerosis)
C. Diabetes	Having too little bone mass and easily broken bones, most commonly hip fractures
D. Osteoporosis	Narrowing of airways in the lung causing difficulty breathing
E. Cancer	Excessive force on walls of blood vessels, over-working the heart and kidneys
F. High Blood Pressure	Inability to produce or use the hormone insulin, resulting in toxic accumulation of sugar in the blood
G. High Cholesterol	A narrowing of the blood vessels that restricts blood flow to the heart or brain

## Learn More: Heart Disease and Stroke

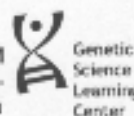
19. What are the top three causes of death in America?

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## Learn More: Blood Pressure and Cholesterol

20. Imagine you are a doctor visiting with a patient who has high cholesterol. What lifestyle changes would you recommend to help him lower his cholesterol? Why?

## Learn More: Diabetes

21. How does overweight and obesity increase a person's risk of developing type 2 diabetes? (Your brief answer should include the following key words: insulin, hormone, glucose, type 2 diabetes.)



## Learn More: Osteoporosis

22. You have a friend who struggles with an eating disorder and is underweight. While researching ways to help her, you find out that teens with eating disorders are at increased risk of developing osteoporosis in later years. Why? (Your brief answer should include the following key words: calcium, bone tissue, osteoporosis.)



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## Learn More: Cancer

23. How can damage to a growth control gene in a single cell in the body sometimes lead to cancer?

(Your brief answer should include the following key words: cell growth, genes, mutation, tumor, metastasize.)

24. When talking to your family about their health history, what are the four most common cancers that you want to ask them about?

25. Define what is meant by a "close relative" and state what is considered an "early age" at diagnosis.