Rolling the Dice

Imagine that you are going to live your entire life—your teen years, your adult years, and your senior citizen years—in the next 10 minutes and that your choices in life are going to be made by a roll of the dice. Begin with your teen years and roll one die to discover your behavioral choices in each category for each life stage. Use the information provided to determine how many points you receive for each behavior. Record the result in the blanks provided.

By the way, the object of this game is to stay alive to a ripe old age. You do this by keeping your "heart points" below the threshold level of 85. Once you exceed 85 points at any life stage, you're out (you've had a fatal heart attack).

Life Stage 1: Choices as a Teenager			
1. Diet. Roll one die. If you rolled:			
1 or 2 You eat a well-balanced, low-fat diet (subtract 10 points).			
3 or 4 You eat some high-fat fast food and junk food (add 5 points).			
5 or 6 You eat a lot of high-fat fast food and junk food (add 10 points).			
2. Exercise. Roll the die again. If you rolled:			
1 or 2 You're a couch potato! You get little or no exercise beyond walking from the TV to the refrigerator (add 15 points).			
3 or 4 You get a moderate amount of exercise (subtract 5 points).			
5 or 6 You exercise regularly (subtract 15 points).			
3. School/Job/Relationships. Roll the die again. If you rolled:			
1 You feel that your life is pretty stress free (subtract 10 points).			
6 You are under a great deal of stress at home, at school, and at work (add 10 points).			
For any other rolls, add no points.			
4. Smoking. Roll the die again. If you rolled:			
1 or 2 You don't smoke and are rarely exposed to those who do (subtract 20 points).			
3 or 4 You don't smoke, but you are around many people who smoke (add 10 point	s)		
5 or 6 You smoke one or more packs of cigarettes a day (add 20 points).			
Total risk points from choices made as a teenager: If the total is more than 85, you've had a fatal heart attack.			

Life Stage 2: Choices as an Adult (Ages 20-50)

(Start from zero points.)

1. Diet. Ro	ll one die. If you rolled:	
1 or 2	You eat a well-balanced, low-fat diet (subtract 10 points).	
3 or 4	You eat some high-fat fast food and junk food (add 5 points).	
5 or 6	You eat a lot of high-fat fast food and junk food (add 10 points).	
2. Exercise.	Roll the die again. If you rolled:	
1 or 2	You're a couch potato! You get little or no exercise beyond walking from the TV to the refrigerator (add 20 points).	
3 or 4	You get a moderate amount of exercise (subtract 5 points).	
5 or 6	You exercise regularly (subtract 15 points).	
3. Job/Rela	tionships. Roll the die again. If you rolled:	
1	You feel that your life is pretty stress free (subtract 10 points).	
6	You are under a great deal of stress at home and at work (add 10 points).	
For any	v other rolls, add no points.	
4. Smoking	. Roll the die again. If you rolled:	
1 or 2	You started smoking during your teen years (add 20 points). You did not start smoking during your teen years (add no points).	
3 or 4	You smoked during your teen years, but you have stopped smoking (subtract 20 points).	
	You did not smoke during your teen years (subtract 5 points).	<u> </u>
5 or 6	You smoke one or more packs of cigarettes a day (add 20 points).	
-	points from choices made as an adult:	
Total risk p	points from choices made as a teenager:	
Total Point	S	

If the total is more than 85, you've had a fatal heart attack.

Life Stage 3: Choices as a Senior Citizen (Over Age 50)

(Start from zero points.)

1. Diet. Rol	l one die. If you rolled:	
1or 2	You eat a well-balanced, low-fat diet (subtract 10 points).	
3 or 4	You eat some high-fat fast food and junk food (add 5 points).	
5 or 6	You eat a lot of high-fat fast food and junk food (add 10 points).	
2. Exercise.	Roll the die again. If you rolled:	
1 or 2	You're a couch potato! You get little or no exercise beyond walking from the TV to the refrigerator (add 20 points).	
3 or 4	You get a moderate amount of exercise (subtract 5 points).	
5 or 6	You exercise regularly (subtract 15 points).	
3. Retireme	nt/Relationships. Roll the die again. If you rolled:	
1	You feel that your life is pretty stress free (subtract 10 points).	
5 or 6	You are under a great deal of stress (add 10 points).	
For any	other rolls, add no points.	
4. Smoking	, Roll the die again. If you rolled:	
1 or 2	You smoked before, but you stopped smoking (subtract 20 points). You did not smoke before (subtrat no points).	
3, 4, 5, or 6	You started smoking as a teenager or an adult (add 20 points). You did not start smoking as a teenager or an adult or you stopped smoking as an adult (add no points).	
Total risk p	oints from choices made as a senior citizen:	
Total risk p	oints from choices made as an adult:	
Total risk p	oints from choices made as a teenager:	
Total Points	S	
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If the total is more than 85, you've had a fatal heart attack.

Thinking About the Game

Complete the following steps to compare the results of the game with and without considering genetic factors.

- 1. Transfer your heart points from *Rolling the Dice* into the left-hand column below.
- 2. Your relevant genes envelope contained heart points related to your genetic risk. Enter that number in the right-hand column below and recalculate your total points for each life stage.

Review - Risk from Behavioral Choices Only		Recalculate - Risk from Genes and Choices	
		Relevant genes	
Life Stage 1: Teen years		Life Stage 1: Teen years	+
		Subtotal	
Life Stage 2: Adult years	+	Life Stage 2: Adult years	+
Subtotal		Subtotal	
Life Stage 3: Senior citizen years	+	Life Stage 3: Senior citizen years	+
Total		Total	

- 3. Remember, if you exceeded 85 points in any life stage, you have had a fatal heart attack. What effect did including your points for genetic risk have on your outcome?
- 4. Think about the behavioral choices you made in each life stage.
 - a. Did everyone make the same choices?
 - b. Were all of the choices equally risky?
 - c. Were the risk factors associated with the choices reversible?
 - d. Were the choices under personal control?

- 5. Now, think about the effects of the genetic risk factors in each life stage.
 - a. Does everyone have the same genes?
 - b. Did all of the genetic factors have the same effect?
 - c. Were the genetic factors reversible or under personal control?
- 6. Assume that genetic testing showed that you were at increased risk for a fatal heart attack 20 years from now. Would you want to know? Why or why not? Would that information cause you to change your behavior? If not, what kind of information or event would cause you to change your behavior?
- 7. We know about only a few genes that affect the likelihood of a heart attack, and we have the ability to test for even fewer of them. In the future, we certainly will learn about more of these genes. How will an increased knowledge of the genetic factors associated with heart disease have a positive impact on individuals and society? How will it have a negative impact?
- might that ability shift some of the responsibility for health care from physicians to individuals?

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High Genetic Risk

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High Genetic Risk

You have a parent or sibling who had a fatal heart attack. ADD 40 HEART POINTS.

High Genetic Risk

You have a parent or sibling who had a fatal heart attack. ADD 40 HEART POINTS.

High Genetic Risk

You have a parent or sibling who had a fatal heart attack. ADD 40 HEART POINTS.

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High Genetic Risk

You have a parent or sibling who had a fatal heart attack. ADD 40 HEART POINTS.

Moderate Genetic Risk

Moderate Genetic Risk

You have an aunt or uncle who had a fatal heart attack. ADD 10 HEART POINTS.

Moderate Genetic Risk

You have an aunt or uncle who had a fatal heart attack. ADD 10 HEART POINTS.

Moderate Genetic Risk

You have an aunt or uncle who had a fatal heart attack. ADD 10 HEART POINTS.

Moderate Genetic Risk

You have an aunt or uncle who had a fatal heart attack. ADD 10 HEART POINTS.

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Low Genetic Risk

Low Genetic Risk

There is no history of fatal heart attacks among your close relatives. ADD NO HEART POINTS.

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Low Genetic Risk

There is no history of fatal heart attacks among your close relatives. ADD NO HEART POINTS.

Low Genetic Risk

There is no history of fatal heart attacks among your close relatives. ADD NO HEART POINTS.

Low Genetic Risk

There is no history of fatal heart attacks among your close relatives. ADD NO HEART POINTS.

Genetic Protection

Genetic Protection

You have high HDL cholesterol levels. SUBTRACT 10 HEART POINTS. BUT IF YOU SMOKE, SUBTRACT NO POINTS.

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Genetic Protection You have high HDL cholesterol levels. SUBTRACT 10 HEART POINTS. BUT IF YOU SMOKE, SUBTRACT NO POINTS.

Genetic Protection

You have high HDL cholesterol levels. SUBTRACT 10 HEART POINTS. BUT IF YOU SMOKE, SUBTRACT NO POINTS.

Genetic Protection You have high HDL cholesterol levels. SUBTRACT 10 HEART POINTS. BUT IF YOU SMOKE, SUBTRACT NO POINTS.

use.