Risk Continuum

Activity Overview
A group kinesthetic demonstration of what it means to be in a “risk group” for developing heart disease based on family history/genetics.

Logistics
Time Required
Activity Time: 15 minutes
Prep Time: 10 minutes
Materials
Paper
Prior Knowledge Needed
None

Learning Objectives
People can be assigned to a risk group for developing heart and other diseases based on family history/genetics.
Lifestyle choices can positively or negatively influence the risk of developing heart disease.
A higher risk means a greater chance of developing heart disease, not an inevitability of developing it.
Though a lower risk means there is a reduced chance, it is still possible for members of this risk group to develop heart disease.

Special Features You’ll Find Inside
Diagrams to help set up the demonstration.
Activity Instructions

Leader Action

1. Line your participants up standing in a single row, shoulder to shoulder, and facing the same direction.
2. Mark off two spots so that the line of participants are roughly divided into thirds.
3. Explain that the participants now represent a continuum ranging from those at the left who are genetically most at risk for developing heart disease, and those at the right who are least at risk. The “thirds” represent the broader categories of high, medium and low risk groups.
4. Explain that each risk group correlates with a certain probability of developing heart disease based on family history. Lifestyle choices involving diet, exercise and smoking can influence this risk.

Participant Action

1. Starting with the participant most at risk (left) have each person choose a Lifestyle Choice card without looking.

Quantities

Per Group of 30

- 10 copies of Lifestyle Choice Cards, cut to form individual cards, (30 total). Shuffle them and place them in a bag or other container.
Participant Action (cont.)

2. Adjust the continuum to reflect lifestyle choices:

A. Complete the following calculation:
   \[
   \text{Total # of participants} = \# \text{ of spaces to move}
   \]

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B. Ask the first participant to read his or her Lifestyle Choice card and move the designated number of spaces (calculated above) in the following manner:
   - **Healthy** = move the \# spaces to the right
   - **Neutral** = remain where you are
   - **Negative** = move the \# spaces to the left

3. Have each participant repeat the above process until all persons are arranged into the newly formed continuum.

4. Have the participants reform into the divisions outlined in leader action steps 1-3 and note how their risk has changed after factoring in lifestyle choices.

5. Within each of the thirds, the participants will count off 1 to 4.

6. In the “high-risk” group on the left, those who counted a 1 will be asked to sit down.

7. In the “medium-risk” group, those who counted a 1 or 2 will be asked to sit down.

8. In the “low-risk” group on the right, those who counted a 1, 2, or 3 will be asked to sit down.

9. Those standing represent the people that developed heart disease.
Risk Continuum

Discussion Points

- People in all risk groups develop heart disease with the largest percentage being from the “high” risk group.
- Not all people in the high risk group develop heart disease.
- Making positive or neutral lifestyle choices can influence your risk enough to prevent developing heart disease. (Ask participants for which this was true to raise their hands).
- Sometimes, people who make positive or neutral lifestyle choices still develop heart disease (Ask participants for which this was true to raise their hands).
- Some people who make negative lifestyle choices do not develop heart disease, even though their risk is increased.

Adaptations

You can create a risk continuum for other diseases such as diabetes or cancer. Visit learn.genetics.utah.edu/units/health for information about these diseases as well as more about heart disease.

Credits

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**Estilo de Vida POSITIVO**

- Mucha actividad
- Dieta Saludable

**Estilo de Vida NEUTRAL**

- Actividad Moderada
- Dieta Balanceada

**Estilo de Vida NEGATIVO**

- Inactividad Negativa
- Tumador

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