Pre-Reading Activities

A: Discussion
Discuss these questions in small groups.

1. Are there any health problems that are common in your family over two or three generations? That is, are there any diseases (e.g. certain types of cancer, heart disease, etc.) that have passed on from generation to generation in your family?

2. What health problems are common in your country? Can any of these be linked to lifestyle? For example, lung cancer, skin cancer, liver cancer, heart attacks, diabetes, obesity.

B: Vocabulary
Match the following words from today's article with their meanings.

<table>
<thead>
<tr>
<th>Words</th>
<th>Meanings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. irrespective</td>
<td>a. ancestry, family origin</td>
</tr>
<tr>
<td>2. descent</td>
<td>b. how often something happens</td>
</tr>
<tr>
<td>3. abstract (n.)</td>
<td>c. the state of not having enough of something important</td>
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<tr>
<td>4. incidence</td>
<td>d. bringing (blame, punishment or danger) on yourself</td>
</tr>
<tr>
<td>5. incurring</td>
<td>e. likely to suffer from something</td>
</tr>
<tr>
<td>6. deficiencies</td>
<td>f. without being influenced by something else</td>
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<tr>
<td>7. prone</td>
<td>g. a summary</td>
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Reading Activities

A: Predicting
Read the headline of today's article and try to predict what the article will be about. Share your ideas with another student.

**Study: First 20 Years in Life Key to Cancer Risk**

B: True or False
Read the following statements and then read the article to see if they are true or false.

1. The way you live before you are twenty has a major effect on your risk of cancer.
2. Where your parents grow up makes little difference to your risk of cancer.
3. Moving to another country when you are over twenty doesn't change your risk of cancer.
4. Where you live makes no difference to your risk of cancer.
5. The two Swedish studies compared the same groups of people.
6. It is recommended that possible means of cancer prevention be targeted for the first 20 years of people's lives.
Study: First 20 Years in Life Key to Cancer Risk

STOCKHOLM, Sweden, Monday April 22 (Reuters) - Lifestyle during the first 20 years of life is a more important factor than one's origin when defining the risk of cancer, two Swedish studies on first- and second-generation immigrants show.

"Birth in Sweden sets the Swedish pattern for cancer development irrespective of the nationality of descent," said the abstract of one of the studies due to be published on May 10 in the International Journal of Cancer.

The survey of some 600,000 immigrants, who came to Sweden in their 20s and became parents in this country, showed that their cancer risks did not differ significantly from the cancer risks of the populations in their native countries.

But second-generation immigrants born in Sweden had a different risk profile than their parents and had a similar cancer incidence to native Swedes, another study of some 600,000 immigrants, mainly from Europe and North America, showed.

"Internationally, there are clear differences between cancer risks. But these differences disappear within one generation, so environment must clearly be a significant cancer factor," Professor Kari Hemminki of the Karolinska Institute university hospital told Reuters Monday.

As the first 20 years of a person's life were so important in defining the risk of incurring cancer, possible preventive means should be aimed during that period, he said. (Continued...)

C: Cause and Effect

Read the second part of the article and complete the following table. What are the causes of the changes in the incidence of these diseases? Write them in the table.

<table>
<thead>
<tr>
<th>Causes</th>
<th>Effects on Second Generation Immigrants</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Less lung cancer</td>
</tr>
<tr>
<td></td>
<td>Less stomach cancer</td>
</tr>
<tr>
<td></td>
<td>More skin cancer</td>
</tr>
</tbody>
</table>

(.../Continued) In some types of cancer it was clear why the risks were different between the generation who spent their first 20 years outside Sweden and their children born in Sweden.

For example, the risk of lung cancer decreased among second-generation immigrants because Swedes tended to smoke less than people in many other countries.

The higher risk of stomach cancer among first-generation immigrants compared with their children and native Swedes could be linked to eating habits, vitamin deficiencies and use of salt -- all factors linked to this type of cancer, Hemminki said.

Darker skinned second-generation immigrants were as prone to contract skin cancer as blond Swedes, and much more so than their own parents, due to a similar sun bathing style among youths regardless of origin.

The studies were made using the Swedish Family Cancer Database which has information on all people born in Sweden after 1931 and their parents.

Glossary: first generation immigrants - the people who immigrate to a new country  second generation immigrants - the children of the people who immigrated  significantly - in a way that is large enough to have an effect on something or be noticed

D: Language

Taking information from Activity C, use therefore and as a result to link ideas across sentences to show cause and effect. Look at the following examples.

He had too much fatty food. He developed heart disease.

He had too much fatty food. Therefore he developed heart disease.

He had too much fatty food. As a result, he developed heart disease.

1.

2.

3.
E: Scanning
Read the following questions and quickly find the answers in the article.

1. How many people were studied in the two surveys?
2. What was the name of the journal which published the survey results?
3. Where does Professor Hemminki work?
4. What does he think must be a significant cancer factor?
5. Where did the information about Swedish families come from?
6. For how long has Sweden been keeping detailed health information on people born in the country?

F: Summarizing
Complete this sentence with suitable words to sum up the main idea of the article.

The risk of _____ is different for the children of _____ to Sweden compared to _____ _____ because their _____ is different during the first _____ years of life.

Post-Reading Activities
You may do one or more of these.

A: Discussion
Discuss the following questions in small groups.

Professor Hemminki talked about how "the first twenty years of life were so important in defining the risk of incurring cancer." Do you think young people in your country have a healthy or unhealthy lifestyle? In what ways would their lifestyle be considered unhealthy? How about you? What are your healthy and unhealthy lifestyle habits?

B: Writing
Imagine that you are Professor Hemminki and Sweden’s Health Minister has asked you to produce a pamphlet (a piece of folded paper containing information) to encourage young people to follow a healthy lifestyle to reduce their risk of getting cancer. Work with a partner to produce your pamphlet.

C: Debate
You are going to prepare to debate the following topic:

Everyone is the product of his or her environment.

• Divide into teams.
• Work together to prepare your arguments and discuss what your different roles are.
• Debate the topic with an opposing team.
TEACHERS’ NOTES AND ANSWER KEY

Pre-Reading Activities

A: Discussion - Notes
2. The diseases listed could be linked with the following lifestyle problems:
   lung cancer - smoking; skin cancer - excessive exposure to the sun; liver cancer -
   excessive alcohol intake; heart attacks - a diet with too much fat and a lack of
   exercise; diabetes - poor diet with a lack of fiber and complex carbohydrates, and a
   lack of exercise; obesity - overeating, a diet high in fat and sugar, and a lack of
   exercise.

B: Vocabulary - Answers
1. f; 2. a; 3. g; 4. b; 5. d; 6. c; 7. e.

Reading Activities

A: Predicting - Answers
Answers may vary but students should generally be able to guess that the article will
discuss the link between a person’s first 20 years of life and their chances of getting
cancer.

B: True or False - Answers
1. True (The first 20 years of a person’s life were very important in defining the
   risk of incurring cancer.)
2. True (“But these differences disappear within a generation.”)
3. True (A survey of immigrants who came to Sweden in their 20s showed that
   their cancer risks did not differ significantly from the cancer risks of the
   populations in their own countries.)
4. False (“Internationally there are clear differences between cancer risks.”)
5. False (The first study compared immigrants to people from their own countries,
   while the second compared immigrants to their children.)
6. True (“...Possible preventative means should be aimed during that period (the
   first 20 years of a person’s life),” Professor Hamming said.)

C: Cause and Effect - Answers

<table>
<thead>
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<th>Causes</th>
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<td>Swedes tended to smoke less than people in many other countries.</td>
<td>Less lung cancer</td>
</tr>
<tr>
<td>Children of first-generation immigrants and native Swedes had better eating habits, fewer vitamin deficiencies and used less salt than first-generation immigrants.</td>
<td>Less stomach cancer</td>
</tr>
<tr>
<td>Swedes spent more time sun bathing than first-generation immigrants.</td>
<td>More skin cancer</td>
</tr>
</tbody>
</table>

D: Language - Notes
The full stop can be replaced by a semicolon as the adverbs join two independent
clauses.

D: Language - Sample Answers
- Swedes had better eating habits. Therefore, second generation migrants
developed less stomach cancer.
- Swedes spent more time sun bathing. As a result, second generation migrants
developed more skin cancer.

E: Scanning - Answers
1. 1,200,000
2. International Journal of Cancer
3. Karolinska Institute university hospital
4. environment
5. the Swedish Family Cancer Database
6. since 1931

F: Summarizing - Answers
The risk of cancer is different for the children of immigrants to Sweden
compared to their parents because their lifestyle is different during the first 20
years of life.

Post-Reading Activities

B: Writing - Notes
Encourage students to consider the visual aspect of their pamphlet and include
appropriate drawings or pictures. They should avoid trying to include too much
detail. Ideally, provide the students with some examples, particularly pamphlets with
a health message.

C: Debate - Notes
The purpose of this debate is to expand on the argument of genetics vs environment
to include not only health, but other things such as intelligence, athletic ability and
musical ability.