Everyday Chemicals Cost US Billions in Health Care

Discussion > Advanced 8

Exercise 1 – Vocabulary

exposure	The state of being in a place or situation where there is no protection from something harmful or unpleasant.
[noun]	*Ex: **Exposure** to radiation can cause cancer.*

flame-retardant	That makes a fire burn more slowly.
[adjective]	*Ex: The house was built using **flame-retardant** materials.*

disrupt	To make it difficult for something to continue in the normal way.
[verb]	*Ex: The protestors will try to **disrupt** the meeting.*

handle	To deal with a situation, a person, an area of work or a strong emotion.
[verb]	*Ex: I can't **handle** the stress of this project any longer.*

conservative	Lower than what is probably the real amount or number (in this case).
[adjective]	*Ex: Please keep in mind that the initial expense report we have provided is very **conservative** and the total amount may increase.*

Exercise 2 – Reading

Read the text aloud with your tutor and discuss the key points.

Everyday Chemicals Cost US Billions in Health Care

Daily exposure to low levels of chemicals found in everyday objects costs the United States billions of dollars in health care and disability. That is the conclusion of a new study on the effects of so-called endocrine-disruptors.

These small amounts of harmful chemicals are found in items such as plastic water bottles, metal food cans, toys, cosmetics and flame-retardants.

The new study conducted by researchers at New York University, published online in the journal The Lancet Diabetes and Endocrinology, reports annual health-care costs associated with exposure to these chemicals is more than $340 billion. That is 2.3 percent of the country's gross domestic product.

Experts say the endocrine-disrupting chemicals disrupt hormones in the body, and their accumulation can result in neurological and behavioral disorders, such as attention deficit hyperactivity disorder and autism in children, infertility, birth defects, and some cancers.

E-Ds, as they are known, can also disrupt how the body handles calories, leading to obesity and diabetes, according to Leonardo Trasande, a professor of environmental medicine at NYU School of Medicine.

Trasande co-authored the study projecting the health-care costs of E-Ds by using a computer model to make the economic calculations. He and his colleagues used data from the results of urine and blood samples of participants in a large study that looked for the presence of E-Ds. Trasande says the $340 billion figure is probably conservative because researchers only calculated the cost of 5 percent of known endocrine-disrupters.

But there is some good news. Trasande says there are a number of things people can do to limit their exposure to endocrine-disrupting chemicals.

"Families can eat organic. They can avoid the use of pesticides in their homes to prevent unwanted creatures. They can avoid microwaving plastic, limit the use of aluminum canned food. They can avoid dishwashing plastic; plastic water bottles with the numbers 3, 6 and 7."

The authors got the idea for the study from a similar one conducted in Europe. Trasande says the health-care costs of endocrine-disrupting chemicals in Europe are less because of stronger regulations of the chemicals, something he says is needed in the United States.

Exercise 3 – Discussion

Discuss the following questions with your tutor.

1. What do you think about the results of the study?

2. Why do you think we have come to rely upon so many unwholesome products on a daily basis?

3. Do you think that plastic is the most hazardous material that we use on a regular basis?

4. Plastic is not biodegradable and contains lots of chemicals, why do you think it is still widely used?

5. Do you think that you would be able to only eat organic food? Why or why not?

6. Do you think that everyone should know how to grow some basic crops? Why or why not?

7. What are some healthy foods that you consume regularly?

8. Do you think that using microwave ovens is harmful to your health? If so, in what way?