



### **Focus Words**

compile | odds | predominantly | widespread | regulation



### Weekly Passage

The <u>odds</u> are high that you have eaten many foods with transfats, a kind of oil, in the last few days. The use of transfats is <u>widespread</u>. Predominantly found in fried and baked foods, such as French fries, doughnuts, cookies, pizza, and pastries, transfats give these foods their delicious flavor and appealing texture.

Manufacturers use transfats because they help foods stay fresher longer. Researchers estimate that the average American consumes 5.8 grams of transfats per day.

Transfats are inexpensive to produce, so using them can lower the cost of producing food. But researchers say that people who eat foods with transfats are more likely to have heart disease, strokes, and diabetes. The American Heart Association recommends we each limit the transfats we consume to 2 grams per day. They say that the complete elimination of transfats from the American diet would reduce heart disease by 10-20%.

In the U.S., big food chains like Starbucks and Wendy's have already stopped using

transfats. The city of New York passed a regulation banning transfats from restaurants. Some countries, like Denmark, have banned transfats from all foods. Some people say the U.S. should ban all transfats, too.

Others are against banning transfats. They argue that it is the consumer's responsibility to decide what to eat and what to avoid eating. They think people are capable of using their own discretion. They say the government should compile data about transfats to help educate consumers about this health issue, but let consumers make their own choices. People who are opposed to banning transfats also point out that if people limit themselves to 2 grams per day, transfats may not be a major health risk. Besides, these people say, Americans value freedom and their freedoms should include freedom to choose the treats you like.

What do you think? Should the government ban transfats?

Unit 3.19 - Shou in foods be regul Focus Word Chart	on gul	ld the use of transfats ated?	ransfats	
Word	Meaning	Forms	Examples of Use	Notes
widespread	(adj.) - found over a wide area			
predominantly	(adv.) - greater in number or influence			
regulation	(n.) - order telling how something is to be done			
odds	(n.) - the probability or chance that something will happen or be so			
compile	(v.) - collect			

# Unit 3.19 - Should the use of transfats in foods be regulated?

### **Problem of the Week**



**Option I:** When scientists and researchers **compiled** data about the dangers of transfats, fast food restaurants got worried! They wanted to avoid legal **regulation**, so they began working to find alternatives to transfats. Today, many fast food restaurants have menus that are **predominantly** transfat-free. So, the **odds** are good that your fast food meal has only a few grams of transfats, and it may even be transfat-free Still, most fast foods are high in calories, salt, sugar, and saturated fats.

Today, the Kentucky Fried Chicken (KFC) Chicken Pot Pie is transfat-free.\* But before worries about transfats became **widespread**, a Chicken Pot Pie contained 14 grams of transfats. The American Heart Association recommends that a person eat only 2 grams of transfats each day. How many days worth of transfats were in one of the old KFC Chicken Pot Pies?

- **A)** 10
- B) 5
- C) 7
- D) 14

**Option 2:** Concern about the American diet is **widespread**. We all know that we should **regulate** our junk food intake. Jerrod, a sixth grader, eats **predominantly** at fast-food restaurants. He has **compiled** nutritional information from his favorite restaurants, and tries to make healthy choices. On Tuesday, he will choose one of two McDonald's breakfasts and one of three McDonald's lunches from the tables below.

Possible Breakfasts	Grams of Transfats
McSkillet Burrito with Steak	I
Sausage Burrito	.5

Possible Lunches	Grams of Transfats
Quarter Pounder	I
Double Cheeseburger	1.5
Angus Bacon & Cheese	2

Assuming that all combinations are equally likely, what are the **odds** that Jerrod will eat more than the American Heart Association's (AHA) daily recommendation of 2 grams of transfats on Tuesday?

- **A)** 1/6
- B) 1/3
- C) 1/4
- D) 1/2

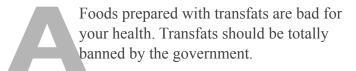
**Math Discussion Question:** Why did fast food restaurants cut back on transfats? Was it the **widespread** worries about the American diet? Was it **predominantly** a desire to avoid **regulation**? What are the **odds** that fast food restaurants just wanted to help people be healthier? If you **compiled** a list of reasons for the change, what reasons would be on the list?

<sup>\*</sup>However, KFC's Chicken Pot Pie has a 790 calorie count, 410 of which are from fat. They contain 37 grams of saturated fats.

# Should the use of transfats in foods be regulated? Debating the Issue

### I. Get ready...

Pick one of these positions (or create your own).



Transfats should not be banned.
Consumers should make their own choices about what they eat. The government should educate the population about the risks of eating foods with trans fats but then let people make their own decisions.

Transfats should be banned, but the government should find ways to make healthy foods more affordable.

The government should not ban transfats. It should issue a regulation taxing the industries that produce food with transfats. In this way, the government can help pay for the medical expenses of people who suffer the consequences of including transfats in their diets.

## E \_\_\_\_

### 2. **Get set...**

Be ready to provide evidence to back up your position during your class discussion or debate. Jot down a few quick notes:



Be a strong participant by using phrases like these.

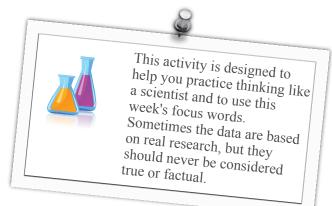
I think it's more accurate to say...

That's interesting - can you tell why you think that?

I think the evidence is contrary to what you're saying because. . .

Let me share something from the reading that will help us...

# Unit 3.19 - Should the use of transfats in foods be regulated? Science Activity



Professor Seemy and Professor Kahn were discussing the increasing **predominance** of obesity in America. How much has the **widespread** use of transfats contributed to this problem? Does eating transfats increase the **odds** that a person will become obese? They decided to do an experiment by finding 200 volunteers and asking half of them to stop eating transfats for one month. The professors **compiled** data about each volunteer's body mass index (BMI), which represents how healthy a person's weight is. People with a BMI of 30 or higher are considered obese.

### **Question**:

How does eliminating transfats from a diet affect a person's BMI?

### **Hypothesis**:

Eliminating transfats from your diet will lower your BMI.

### Materials:

- Transfat Recording Form
- ▶ Body Mass Indicator (BMI)

### Procedure:

- 1. Recruit a group of 200 volunteers.
- 2. Measure and record each volunteer's BMI.
- 3. Choose 100 volunteers and ask them to eliminate transfats from their diet for the next month. Everything else must stay the same: the amount they exercise, the other kinds and amounts of food they eat.
- 4. At the end of the month, compile and analyze the data.

### Data

	Average BMI <b>before</b> experiment	Average BMI <b>after</b> experiment
People who did NOT eat transfats	$26.32 \text{ kg/m}^2$	22.26 kg/m <sup>2</sup>
People who did eat transfats	25.81 kg/m <sup>2</sup>	26.09 kg/m <sup>2</sup>

BMI:

18.5-24.9 - *Normal* 25-29.9 - *Overweight* 30 and above - *Obese* 

### **Conclusion:**

Is the hypothesis supported or not by the data?

What evidence supports your conclusion?

How would you make this a better experiment?

