

Study says fructose is a major cause of obesity

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Scientists have discovered that fructose, a naturally occurring sugar, is a major driver of obesity. Fructose is also known as "fruit sugar". It occurs to varying degrees in fruit and vegetables. It is also used in

processed form in high fructose corn syrup, which is in a lot of the food we eat, and promotes obesity. A study led by Dr Richard Johnson at the University of Colorado found that although fructose isn't the biggest source of calorific intake, it stimulates an urge to eat fatter food. Researchers posited a shift of focus on what we eat. They wrote: "All hypotheses recognize the importance of reducing 'junk' foods, [however] it remains unclear whether the focus should be on reducing [fructose] intake."

Dr Johnson and his colleagues conducted an exhaustive study of all known contributors to obesity. They found that the process of our body converting fructose into energy causes a drop in the levels of a compound called ATP. When ATP falls, our body tells us to eat more. Researchers call this process the fructose survival hypothesis. Johnson said: "Fructose is what triggers our metabolism to go into low power mode and lose our control of appetite, but fatty foods become the major source of calories that drive weight gain." Scientists have attributed the consumption of high amounts of fructose to health issues. The most common of these is non-alcoholic fatty liver disease.

Sources: sciencealert.com / earth.com / cuanschultz.edu

Writing

Processed foods should be banned. Discuss.

Chat

Talk about these words from the article.

scientists / fructose / sugar / obesity / fruit / vegetables / urge / fatter food / focus / colleagues / energy / body / survival / metabolism / appetite / calories / liver disease

True / False

- 1) Fructose is also called sugar fruit. T / F
- 2) High fructose corn syrup helps people to lose weight. T / F
- 3) Fructose can make us want to eat fatty food. T / F
- 4) A researcher stressed the need to focus on reducing our fructose intake. T / F
- 5) Researchers looked into all the things they know that leads to obesity. T / F
- 6) When fructose turns into energy, levels of a compound called ATP fall. T / F
- 7) Fructose can make us lose control of our appetite. T / F
- 8) Too much fructose can lead to liver problems. T / F

Synonym Match

(The words in **bold** are from the news article.)

- | | |
|-----------------------|----------------------|
| 1. discovered | a. in doubt |
| 2. major | b. desire |
| 3. source | c. problems |
| 4. urge | d. carried out |
| 5. unclear | e. big |
| 6. conducted | f. prompts |
| 7. converting | g. found |
| 8. triggers | h. eating / drinking |
| 9. consumption | i. changing |
| 10. issues | j. root |

Discussion – Student A

- a) What do you think about what you read?
- b) Would you like to know more about food and nutrition?
- c) What do you know about metabolism?
- d) How would you describe your appetite?
- e) Do you worry about your weight?
- f) Where do most of your calories come from?
- g) Should the government regulate processed food?
- h) What questions would you like to ask the researchers?

Phrase Match

- | | |
|--|-------------------------------|
| 1. the focus should be on reducing | a. source of calorific intake |
| 2. It occurs to varying | b. of reducing 'junk' foods |
| 3. fructose isn't the biggest | c. mode |
| 4. it stimulates an urge | d. degrees |
| 5. All hypotheses recognize the importance | e. contributors to obesity |
| 6. exhaustive study of all known | f. our metabolism |
| 7. the process of our body converting | g. fructose intake |
| 8. Fructose is what triggers | h. liver disease |
| 9. go into low power | i. to eat fattier food |
| 10. non-alcoholic fatty | j. fructose into energy |

Discussion – Student B

- What do you know about fructose?
- What do you know about obesity?
- How many sugary things do you eat?
- Why do we like sugary and fatty food?
- How much of a problem is obesity in your country?
- What do you think of junk food?
- How healthy is the food you eat?
- How could you change your diet to be healthier?

Spelling

- a naturally ncrrcguoi sugar
- It occurs to vniygra degrees
- It is also used in sreoecdsp form
- the biggest source of lofiricca intake
- it mtsailsteu an urge to eat
- All psyeeetoshh recognize the importance
- Dr Johnson and his eelsgoualc
- all known orttrocscnbiu
- a drop in the levels of a oocumpdn
- Fructose is what triggers our tealbmomis
- lose our control of iteeappt
- atrietdbut the consumption of high amounts

Answers – Synonym Match

1. g	2. e	3. j	4. b	5. a
6. d	7. i	8. f	9. h	10. c

Role Play

Role A – Potatoes

You think potatoes are the best vegetables. Tell the others three reasons why. Tell them what is wrong with their vegetables. Also, tell the others which is the worst of these (and why): cabbage, onions or carrots.

Role B – Cabbage

You think cabbage is the best vegetables. Tell the others three reasons why. Tell them what is wrong with their vegetables. Also, tell the others which is the worst of these (and why): potatoes, onions or carrots.

Role C – Onions

You think onions are the best vegetable. Tell the others three reasons why. Tell them what is wrong with their vegetables. Also, tell the others which is the worst of these (and why): cabbage, potatoes or carrots.

Role D – Carrots

You think carrots are the best vegetables. Tell the others three reasons why. Tell them what is wrong with their vegetables. Also, tell the others which is the worst of these (and why): cabbage, onions or potatoes.

Speaking – Vegetables

Rank these with your partner. Put the best vegetables at the top. Change partners often and share your rankings.

- | | |
|------------|-------------|
| • Potatoes | • Carrots |
| • Cabbage | • Onions |
| • Spinach | • Asparagus |
| • Broccoli | • Peppers |

Answers – True False

1	F	2	F	3	T	4	F	5	T	6	T	7	T	8	T
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Answers to Phrase Match and Spelling are in the text.