

Fasting may lead to health benefits

27th February, 2017



Scientists have conducted tests on mice showing that fasting could have many health benefits. Fasting is eating or drinking very little or nothing for a short period of time. It is usually

around 24 hours but can be for a few days. The tests were carried out by scientists at universities in the USA and Italy. They found that occasional fasting in mice could reduce the risk of diabetes, heart disease, cancer and other diseases. The scientists fed mice for four days on a low-calorie, low-protein and low-carbohydrate but high-fat diet. They then gave the mice just 10% of their normal calorie intake for three days. The scientists found this diet made the pancreas in the mice work better.

The pancreas is an organ in the body that uses special cells called beta cells to produce the hormone insulin. The body uses insulin to break down glucose (a kind of sugar) in the blood. People with diabetes have trouble producing enough insulin so they have health problems because there is too much sugar in their blood. This can cause death. In type 1 diabetes, the pancreas stops producing insulin. In type 2 diabetes, either not enough insulin is produced or the insulin that is produced has no effect. Scientists said the mice on the fasting diet produced increased amounts of beta cells and insulin. They said their results were very promising and that tests now need to be done on humans.

Sources: nhs.uk / sciencealert.com / Wikipedia.org

Writing

We all need to have training on how to eat healthily. Discuss.

Chat

Talk about these words from the article.

scientists / tests / mice / health benefits / fasting / diabetes / heart disease / calorie / organ / cells / body / insulin / sugar / health / blood / diet / promising / humans

True / False

- Scientists did tests on monkeys to show the effects of fasting. T / F
- The tests were conducted by universities in two different countries. T / F
- Scientists found that occasional fasting could cut the risk of cancer. T / F
- Scientists found that fasting made the pancreas in the body work better. T / F
- The pancreas is an organ that produces alpha cells to make insulin. T / F
- Insulin helps to break down glucose in the blood. T / F
- In type 2 diabetes, too much insulin is produced. T / F
- Scientists made promises to each other because of their test results. T / F

Synonym Match

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

- | | |
|----------------------|---------------|
| 1. conducted | a. quantities |
| 2. short | b. usual |
| 3. occasional | c. discovered |
| 4. normal | d. brief |
| 5. found | e. problems |
| 6. produce | f. done |
| 7. trouble | g. good |
| 8. cause | h. periodic |
| 9. amounts | i. lead to |
| 10. promising | j. make |

Discussion – Student A

- What do you think about what you read?
- What do you know about insulin?
- What are the dangers of eating too much sugary food?
- How much do you worry about your health?
- What food would you eat first after fasting and why?
- Can you think of any risks of fasting?
- Do you think scientists will find a cure for all diseases?
- What questions would you like to ask the scientists?

Phrase Match

- | | |
|--|--------------------------|
| 1. Scientists have conducted | a. normal calorie intake |
| 2. Fasting is eating or drinking very | b. promising |
| 3. reduce the risk | c. work better |
| 4. gave the mice just 10% of their | d. in the body |
| 5. this diet made the pancreas in the mice | e. little or nothing |
| 6. The pancreas is an organ | f. in their blood |
| 7. The body uses insulin to break | g. tests on mice |
| 8. there is too much sugar | h. no effect |
| 9. the insulin that is produced has | i. of diabetes |
| 10. They said their results were very | j. down glucose |

Discussion – Student B

- Why do scientists always do tests on mice?
- What do you think of fasting?
- What's the longest you could go without food?
- What are you like if you have no food?
- Why can fasting be good for your health?
- What do you know about diabetes?
- Should we all have regular training on healthy eating?
- How healthy is your diet?

Spelling

- tcdnocude tests on mice
- a short piroed of time
- carried out by scsiesntit
- oalcisaonc fasting
- heart saeside
- their normal oecailr intake
- produce the oemnh insulin
- too much sugar in their dbool
- This can cause ehadt
- has no ffteec
- produced increased nsamuot of beta cells
- their rstleus were very promising

Answers – Synonym Match

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

Role Play

Role A – Sleep

You think the healthiest thing to do is sleep. Tell the others three reasons why. Tell them what is wrong with their things. Also, tell the others which is the least healthy of these (and why): laugh with friends, go hiking or eat vegetables.

Role B – Laugh With Friends

You think the healthiest thing to do is laugh with friends. Tell the others three reasons why. Tell them what is wrong with their things. Also, tell the others which is the least healthy of these (and why): sleep, go hiking or eat vegetables.

Role C – Go Hiking

You think the healthiest thing to do is go hiking. Tell the others three reasons why. Tell them what is wrong with their things. Also, tell the others which is the least healthy of these (and why): laugh with friends, sleep or eat vegetables.

Role D – Eat Vegetables

You think the healthiest thing to do is eat vegetables. Tell the others three reasons why. Tell them what is wrong with their things. Also, tell the others which is the least healthy of these (and why): laugh with friends, go hiking or sleep.

Speaking – Health

Rank these with your partner. Put the healthiest things to do at the top. Change partners often and share your rankings.

- sleep
- meditate
- exercise
- go hiking
- take a long bath
- avoid fast food
- eat vegetables
- laugh with friends

Answers – True False

a	F	b	T	c	T	d	T	e	F	f	T	g	F	h	F
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Answers to Phrase Match and Spelling are in the text.