

Over-the-counter medicine may shrink brain

21st April, 2016



Over-the-counter (OTC) medicine is a common part of our lives. Many of us pop into the local pharmacy for cold and headache tablets, cough syrups or allergy treatments. Over-

the-counter drugs save the need to go to the doctor's. However, we may be causing ourselves more harm than good with these convenient cures. A new study published in the journal JAMA Neurology suggests that many of these handy medicines have unwanted, and sometimes serious, side effects. Researchers say that such side effects in older adults who often take widely available OTC medicines for asthma, aches and pains, insomnia and allergies, etc. include cognitive impairment, dementia and even brain shrinkage.

The study was conducted by the Indiana University School of Medicine. Researchers examined the link between OTC medications and cognition in "cognitively normal" older people who did not have Alzheimer's disease or dementia. The scientists found that OTC drugs led to a lower glucose metabolism, which is crucial for the brain to be healthy and function properly. Dr. Shannon Risacher said: "These findings provide us with a much better understanding of how this class of drugs may act upon the brain in ways that might raise the risk of cognitive impairment and dementia." She added: "I certainly wouldn't advise my grandparents or even my parents to take these medications unless they have to."

Sources: *Medical Daily / Independent / Health Newsline*

Writing

Medicine should only be prescribed by a doctor and not be over-the-counter. Discuss.

Chat

Talk about these words from the article.

medicine / common / pharmacy / headache tablets / convenient / side effects / insomnia / researchers / dementia / function / scientists / understanding / risk / parents

True / False

- Few people pop into pharmacies for cough syrups. T / F
- Over-the-counter drugs mean we go to the doctor's more. T / F
- Many OTC medicines have serious side effects. T / F
- Researchers said OTC drugs can lead to dementia. T / F
- The research is from a university in India. T / F
- The research looked at OTC drugs in people in their 20s and 30s. T / F
- The research means we know more about OTC drugs and dementia. T / F
- A researcher would not advise her parents to take OTC medicines. T / F

Synonym Match

- | | |
|---------------|------------------|
| 1. common | a. carried out |
| 2. treatments | b. useful |
| 3. handy | c. category |
| 4. serious | d. normal |
| 5. insomnia | e. key |
| 6. conducted | f. sleeplessness |
| 7. link | g. suggest |
| 8. crucial | h. medication |
| 9. class | i. connection |
| 10. advise | j. bad |

Discussion – Student A

- What should people do to keep dementia away?
- What do you do to keep your brain healthy?
- Have you ever had any side effects to medicine?
- What are the differences between drugs and medicine?
- How safe do you think over-the-counter medicines are?
- Should all medicine be only prescribed by a doctor?
- Do you ever take medicine and it doesn't work?
- What questions would you like to ask the researchers?

Phrase Match

- | | |
|-----------------------------|----------------------------|
| 1. OTC medicine is a common | a. syrups |
| 2. pop into | b. act upon the brain |
| 3. cough | c. and pains |
| 4. side | d. of cognitive impairment |
| 5. aches | e. the local pharmacy |
| 6. OTC drugs led to a lower | f. have to |
| 7. function | g. glucose metabolism |
| 8. this class of drugs may | h. part of our lives |
| 9. raise the risk | i. properly |
| 10. unless they | j. effects |

Discussion – Student B

- What do you think about what you read?
- How often do you take medicine?
- Do you think over-the-counter medicines work?
- What do you do if you have a headache or cold?
- Would you prefer medicines prescribed by a doctor?
- Will you be using OTC medicines less after reading this?
- How healthy are you?
- What do you know about dementia?

Spelling

- pop into the local camahpyr
- cough susypr
- gyalerl treatments
- nntenevoic cures
- medicines for ahmast
- brain ngreahisk
- the link between OTC cisentoidam
- Alzheimer's disease or aetmnieid
- a lower glucose memlaitbos
- rucialc for the brain
- function rpleyopr
- raise the risk of niovegcti impairment

Answers – Synonym Match

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

Role Play

Role A – Sleep

You think sleep is best for when you are ill. Tell the others three reasons why. Tell them why their things aren't as good. Also, tell the others which is the worst of these (and why): time, healthy food or acupuncture.

Role B – Time

You think time is best for when you are ill. Tell the others three reasons why. Tell them why their things aren't as good. Also, tell the others which is the worst of these (and why): sleep, healthy food or acupuncture.

Role C – Healthy food

You think healthy food is best for when you are ill. Tell the others three reasons why. Tell them why their things aren't as good. Also, tell the others which is the worst of these (and why): time, sleep or acupuncture.

Role D – Acupuncture

You think acupuncture is best for when you are ill. Tell the others three reasons why. Tell them why their things aren't as good. Also, tell the others which is the worst of these (and why): time, healthy food or sleep.

Speaking – Cures

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

- | | |
|------------|-------------------|
| • medicine | • acupuncture |
| • sleep | • aromatherapy |
| • time | • healthy food |
| • massages | • herbal medicine |

Answers – True False

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| a | F | b | F | c | T | d | T | e | F | f | F | g | T | h | T |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

Answers to Phrase Match and Spelling are in the text.