

## Scientists make wooden knife that is sharper than steel

25th October, 2021



In the near future, the world's top chefs may be using knives made from wood. This may seem somewhat counter-intuitive, but materials scientists have created a wooden knife that is three times sharper than the stainless steel knives we use for dinner. The

scientists are from the University of Maryland in the USA. Researcher Teng Li said wooden knives would complement the assortment of wooden utensils currently found in kitchens across the world. He said: "In our kitchen, we have many wooden things that we use for a very long time, like a cutting board, chopsticks, or a rolling pin. These new knives can also be used many times if you resurface them, sharpen them and perform the same regular upkeep."

Traditionally, knives have been made of steel or ceramics. The scientists improved the strength of the wood in their knives by enhancing the cellulose it contains. Cellulose is the main constituent of wood. It has a higher ratio of strength to density than most engineered materials, like steel and ceramics. Teng Li said the new cutting material is hardened to the extent that it can effortlessly slice through the toughest steak. There is an added advantage of wooden knives – they are environmentally friendly. They could end our dependence on plastic cutlery. The scientists have also developed wooden nails, which could be a boon to the building industry as they will not rust and weaken like conventional nails.

Sources: [cnet.com](http://cnet.com) / [slashgear.com](http://slashgear.com) / [iflscience.com](http://iflscience.com)

## Writing

Wooden knives are better than steel knives. Discuss.

## Chat

Talk about these words from the article.

future / chefs / wood / knives / dinner / kitchens / chopsticks / rolling pin / sharpen / steel / ceramics / strength / cellulose / density / ratio / steak / plastic / cutlery / rust

## True / False

- 1) All chefs will be using wooden knives from later this year. T / F
- 2) A new wooden knife is three times sharper than steel knives. T / F
- 3) A researcher said all kitchen utensils will be made from wood. T / F
- 4) The researcher said wooden knives would not last a long time. T / F
- 5) Knives are usually made of steel or ceramics. T / F
- 6) The main constituent of wood is something called cellulose. T / F
- 7) Wooden knives are not environmentally friendly. T / F
- 8) The researchers have also developed wooden nails. T / F

## Synonym Match

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

- |                         |                |
|-------------------------|----------------|
| 1. <b>top</b>           | a. tools       |
| 2. <b>counter</b>       | b. increasing  |
| 3. <b>complement</b>    | c. maintenance |
| 4. <b>utensils</b>      | d. contrary to |
| 5. <b>upkeep</b>        | e. traditional |
| 6. <b>enhancing</b>     | f. reliance    |
| 7. <b>density</b>       | g. leading     |
| 8. <b>dependence</b>    | h. corrode     |
| 9. <b>rust</b>          | i. accompany   |
| 10. <b>conventional</b> | j. solidity    |

## Discussion – Student A

- a) What do you think of wooden knives?
- b) Would you prefer to use a wooden or a steel knife?
- c) What do you think of wooden knives being sharper than steel ones?
- d) What kinds of kitchen utensils do you have?
- e) How often do you use a cutting board or rolling pin?
- f) How do you look after your knives?
- g) How important is a sharp kitchen knife?
- h) Which is better - chopsticks or a knife and fork?

## Phrase Match

- |                                    |                          |
|------------------------------------|--------------------------|
| 1. In the                          | a. the building industry |
| 2. This may seem somewhat counter- | b. of wooden utensils    |
| 3. complement the assortment       | c. upkeep                |
| 4. a rolling                       | d. weaken                |
| 5. perform the same regular        | e. intuitive             |
| 6. There is an added               | f. friendly              |
| 7. they are environmentally        | g. near future           |
| 8. end our dependence              | h. advantage             |
| 9. a boon to                       | i. on plastic cutlery    |
| 10. rust and                       | j. pin                   |

## Discussion – Student B

- What do you think about what you read?
- What do you know about cellulose?
- Do you think we will stop using stainless steel in the future?
- Are wooden knives environmentally friendly?
- Do you need a very sharp knife when you eat?
- What do you think of plastic cutlery?
- Would you trust wooden nails?
- What questions would you like to ask the researchers?

## Spelling

- This may seem somewhat counter-tveintiui
- sstesalni steel knives
- complement the sanotmsret
- wooden sneilsut
- if you uesarcefr them
- perform the same regular epekup
- made of steel or arcsecmi
- enhancing the oeleulcls it contains
- a higher ratio of strength to dytisen
- They could end our npnddeeeec
- plastic tucreyl
- weaken like ietcoanonvln nails

### Answers – Synonym Match

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

## Role Play

### Role A – Knife

You think a knife is the most essential utensil. Tell the others three reasons why. Tell them what is wrong with their utensils. Also, tell the others which is the least essential of these (and why): chopsticks, a corkscrew or a can opener.

### Role B – Chopsticks

You think chopsticks are the most essential utensil. Tell the others three reasons why. Tell them what is wrong with their utensils. Also, tell the others which is the least essential of these (and why): a knife, a corkscrew or a can opener.

### Role C – Corkscrew

You think a corkscrew is the most essential utensil. Tell the others three reasons why. Tell them what is wrong with their utensils. Also, tell the others which is the least essential of these (and why): chopsticks, a knife or a can opener.

### Role D – Can Opener

You think a can opener is the most essential utensil. Tell the others three reasons why. Tell them what is wrong with their utensils. Also, tell the others which is the least essential of these (and why): chopsticks, a corkscrew or a knife.

## Speaking – Utensils

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

- |              |                 |
|--------------|-----------------|
| • Knife      | • Egg slicer    |
| • Chopsticks | • Corkscrew     |
| • Colander   | • Can opener    |
| • Spoon      | • Potato peeler |

### Answers – True False

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