Insects could be the planet’s next food source

Level 2 • Intermediate

1 Key words

Fill the gaps in the sentences using these key words from the text. The paragraph numbers are given to help you.

- fermented
- bug
- larvae
- methane
- locust
- maggot
- plentiful
- edible
- nutrient

1. If a foodstuff is _____________, a chemical change happens to it and the sugar in it produces alcohol. (para 3)
2. _____________ are insects that have left the egg and look like short thick worms before they change into insects with wings. (para 3)
3. A _____________ is a type of grasshopper that flies over wide areas in very large groups called swarms, often destroying crops. (para 4)
4. If something is _____________, it is safe or good enough to eat. (para 5)
5. If something is _____________, it is present or available in large quantities. (para 6)
6. If something is described as _____________, people do not do it or talk about it because it is offensive or shocking. (para 6)
7. _____________ is an informal word for insect. (para 6)
8. A _____________ is a substance in food that plants, animals and people need to live and grow. (para 9)
9. _____________ is a gas with no colour or smell that is used as a fuel. (para 10)
10. A _____________ is a small soft creature with no arms or legs that later changes into a fly. It can often be found in old meat and dead bodies. (para 11)

2 Find the information

Find the following information in the text as quickly as possible.

1. How many edible species of insect are there on the Food and Agriculture Organization’s list?
2. What weight of insects is there for every human on earth?
3. What will the world population be in 30 years’ time?
4. What percentage of the world’s methane is produced by livestock farming?
5. What percentage of carbon dioxide is produced by livestock farming?
6. By what percentage would greenhouse gas emissions fall if we gave up meat and started eating insects?
Insects could be the planet’s next food source ... even if that gives you the creeps

Tracy McVeigh
2 March, 2013

1 Insects are not usually seen as food except in a few regions of the world – but now they are crawling closer and closer to our plates. In spring 2013 there will be an effort to show people that eating insects is not disgusting and also an attempt to put insects on supermarket shelves.

2 In April, there will be a festival in London, Pestival 2013, where the consumption of creepy-crawlies will be discussed. The festival will include a restaurant by the Nordic Food Lab, the Scandinavian team behind the Danish restaurant Noma, which brought dishes that included ants to Claridge’s hotel in Mayfair in 2012, an event that was mostly sold out.

3 Noma has been named the world’s best restaurant by Restaurant magazine for three years. Its chef, René Redzepi, says that ants taste like lemon, and a purée of fermented grasshoppers and moth larvae tastes like sweet mayonnaise used instead of eggs and scientists are constantly finding new ways to use insects.

4 In March, a BBC documentary will show food writer Stefan Gates looking for and eating deep-fried locusts and barbecued spiders. But, behind all the jokes there is a very serious message. Many experts believe there is a very serious message. Many experts believe there is a very serious message. Many experts believe there is a very serious message.

5 The UN’s Food and Agriculture Organization (FAO) has been funding projects since 2011 that aim to promote the eating and farming of insects in south-east Asia and Africa, where an estimated two billion people already eat insects and larvae as a regular part of their diet. In 2012, the FAO published a list of 1,909 edible species of insect and plans a major international conference on “this valuable food source” in 2013.

6 Insects are plentiful – globally, for every human there are 40 tonnes of insects – so there is not too much chance that they will become endangered. “I know it’s taboo to eat bugs in the western world, but why not?”, Redzepi has said. “You go to south-east Asia and this is a common thing. You read about it from all over the world, that people are eating insects. If you like mushrooms, you’ve eaten so many worms you cannot imagine. But also we eat honey, and honey is the vomit of a bee. Think of that next time you put it into your tea.”

7 He said that the basic idea behind Nordic Food Lab was: “Nothing is not edible.”

8 Insects are critical to life on Earth and, with more than a million species, are the most diverse group of creatures on the planet, but they are misunderstood, hated and often killed by humans just because they are there.

9 Over the next 30 years, the planet’s human population will increase to nine billion. Already one billion people do not get enough food. The increase will put more pressure on agricultural land, water, forests, fisheries and resources, as well as nutrients and energy supplies.

10 The cost of meat is rising, not just in terms of money but also in terms of the amount of rainforest that is destroyed for fields or to grow food for cattle. There is also the issue of methane produced by cows. In terms of greenhouse gas emissions, the contribution by livestock farming is enormous – 35% of the planet’s methane, 65% of its nitrous oxide and 9% of the carbon dioxide.

11 Edible insects produce fewer gases, contain high-quality protein, vitamins and amino acids, and need only a quarter of the food that sheep need, and half that of pigs and chickens, to produce the same amount of protein. They produce fewer greenhouse gases and less ammonia than cows and can be grown on organic waste. China is already successfully setting up huge maggot farms. Zimbabwe has a thriving caterpillar industry and Laos was given nearly $500,000 by the FAO to develop an insect-harvesting project.

12 A study by FoodServiceWarehouse.com suggested that giving up pork and beef and eating crickets and locusts instead could help to reduce greenhouse gas emissions by up to 95%. But perhaps the fairest thing about eating worms and insects comes when we are dead – then they get a chance to eat us.

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3 Comprehension check

Are these statements true (T) or false (F) according to the text?

1. Experts believe that it would be good for the environment if people ate insects.  
2. There is a strong possibility that insects will become endangered.  
3. No-one anywhere in the world eats insects.  
4. Livestock produce large amounts of greenhouse gases.  
5. Insects produce a lot of protein without needing much food.  
6. Insects produce more gases than animals.

4 Find the word

Find the following words and phrases in the text.

1. a verb used to describe how insects move forwards using their legs (para 1)
2. a two-word noun phrase meaning insects (para 2)
3. a noun meaning food that has been mixed or crushed to form a thick smooth sauce (para 3)
4. a noun meaning food that comes up from your stomach and out through your mouth (para 6)
5. an adjective meaning very different from each other (para 8)
6. a noun meaning animals such as cows, pigs and sheep that are kept on farms (para 10)
7. an adjective meaning very successful (para 11)

5 Creepy-crawlies

Match the words in the left-hand column with the definitions in the right-hand column.

1. caterpillar  a. a small red insect that lives under the ground in large organized groups called colonies
2. cricket    b. a creature similar to a butterfly that flies mostly at night
3. grasshopper c. a creature with a long soft body and no bones or legs
4. moth       d. a large insect with long back legs that moves by jumping and makes short high sounds
5. ant        e. a small long thin insect with many legs that eats plants and develops into a butterfly or moth
6. worm       f. a small brown insect that moves by jumping and makes a loud noise by rubbing its front wings together
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6 Word-building

Complete the table with words from the text.

<table>
<thead>
<tr>
<th>noun</th>
<th>adjective</th>
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<tbody>
<tr>
<td>value</td>
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<td>agriculture</td>
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<td>diversity</td>
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7 Discussion

Would you eat insects? Why? Why not?