

## Laboratory-created eggs and sperm

URL: <http://www.breakingnewsenglish.com/0506/050621-clonedeggs-e.html>

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**21 June, 2005**

## THE ARTICLE

### Laboratory-created eggs and sperm

**BNE:** British scientists\* have announced that it may soon be possible to clone human eggs and sperm from stem cells. Human life could be created in a science laboratory. This could provide more options for couples unable to have children of their own. It could also mean same sex couples could have children. The baby would share the genetic code of both partners. A further benefit would be to increase the supply of eggs and sperm for childless couples.

British Fertility Society secretary Dr. Allan Pacey described the research as an “exciting step forward”. He said the latest findings could greatly increase our understanding of how eggs and sperm are developed. He stressed that we are still in the early stages of fully understanding the biology of conception: “We still don’t really understand why some men and women can’t produce sperm and eggs of their own, and sadly for them that leads to infertility.”

\*University of Sheffield Centre for Stem Cell Biology  
<http://cscb.shef.ac.uk/News/Article275.htm>

## WARM-UPS

**1. CLONING:** Talk to your partner(s) about scientists. Should they clone human beings or make body parts? Is cloning OK? Is it OK to clone animals? Are scientists close to producing a Frankenstein's monster? Write down five reasons why cloning is a good or a bad thing. Change partners and explain your reasons.

**2. CHAT:** In pairs / groups, decide which of these topics or words are most interesting and which are most boring.

*Scientists / stem cells / stem cell research / human eggs / sperm / same sex parents / childless couples*

**3. EGGS:** Spend one minute writing down all of the different words you associate with eggs. Share your words with your partner(s) and talk about them. Together, put the words into different categories.

**4. TWO-MINUTE DEBATES:** With a partner, take part in these fun 2-minute debates. Students A strongly believe in the opinions on the left, Students B support the opinions on the right. Change partners often.

- a. Cloning is wrong. vs. Cloning is part of science and scientific research.
- b. Cloning is dangerous. vs. Scientists know what they are doing.
- c. Stem cell eggs are great news for childless couples. vs. There are other ways.
- d. Human egg cloning is great news for same sex couples. vs. It's totally unnatural.
- e. Anyone will soon be able to have children. vs. The world is already overpopulated.
- f. It is wrong to create and then destroy life. vs. A fertilized egg isn't a person.
- g. Scientists will change humans. vs. Scientists will improve the human race.
- h. I want to be cloned. vs. The thought of a cloned me is too terrible to think about.

## 5. CLONING USES:

In which of these situations is it OK to use stem cells or cloning techniques?

- a. So a childless couple can start a family.
- b. So scientists can research into deadly diseases.
- c. To bring back to life extinct animal and bird species (like Jurassic Park).
- d. So same sex couples can have children.
- e. To grow replacement body parts to use in life-saving transplants.
- f. To make sure your children look exactly the same as you.
- g. To increase the population in underpopulated countries.
- h. Other.

## BEFORE READING / LISTENING

**1. TRUE / FALSE:** Look at the article's headline and guess whether these sentences are true (T) or false (F):

- |  |       |
|--|-------|
| a. Scientists can use chemicals to reproduce human eggs and sperm. | T / F |
| b. The process from conception to birth could take place in a lab. | T / F |
| c. Two men could provide the genetic code for their own baby.      | T / F |
| d. Childless couples may be very happy with this news.             | T / F |
| e. A British doctor was angry because of the new research.         | T / F |
| f. The findings are very important for us to understand biology.   | T / F |
| g. Scientists understand everything about sperm and eggs.          | T / F |
| h. Some men and women can't produce eggs and sperm of their own.   | T / F |

**2. SYNONYM MATCH:** Match the following synonyms from the article:

- |                |                            |
|----------------|----------------------------|
| a. announced   | choices                    |
| b. created     | advantage                  |
| c. options     | research                   |
| d. same sex    | declared                   |
| e. benefit     | totally                    |
| f. forward     | homosexual / gay / lesbian |
| g. findings    | emphasized                 |
| h. stressed    | sterility                  |
| i. fully       | made                       |
| j. infertility | ahead                      |

**3. PHRASE MATCH:** Match the following phrases from the article (sometimes more than one combination is possible):

- |                        |                        |
|------------------------|------------------------|
| a. scientists          | code                   |
| b. it may soon         | the early stages       |
| c. created in a        | couples                |
| d. genetic             | be possible            |
| e. childless           | forward                |
| f. an exciting step    | produce sperm and eggs |
| g. greatly increase    | have announced         |
| h. we are still in     | conception             |
| i. the biology of      | our understanding      |
| j. men and women can't | science laboratory     |

## WHILE READING / LISTENING

**WHICH WORD?:** Circle the correct word in each of the pairs in *italics*.

### Laboratory-created eggs and sperm

**BNE:** British scientists have announced that it may *never / soon* be possible to clone human eggs and *spam / sperm* from stem cells. Human life could be created in a science *laboratory / lavatory*. This could provide more *opinions / options* for couples unable to have children of their *own / owners*. It could also mean same sex *duos / couples* could have children. The baby would *share / shape* the genetic code of both partners. A further benefit would be to *increase / decrease* the supply of eggs and sperm for childless couples.

British Fertility Society *receptionist / secretary* Dr. Allan Pacey described the research as an "exciting step *backwards / forward*". He said the *latest / earliest* findings could greatly increase our understanding of how eggs and sperm are *developed / enveloped*. He stressed that we are *still / stall* in the early stages of fully understanding the biology of *conception / concepts*: "We still don't really understand why some men and women can't *provide / produce* sperm and eggs of their own, and sadly for them that leads to *infertility / fertility*."

## AFTER READING / LISTENING

**1. WORD SEARCH:** Look in your dictionaries / computer to find collocates, other meanings, information, synonyms ... for the words 'stem' and 'cell'.

- Share your findings with your partners.
- Make questions using the words you found.
- Ask your partner / group your questions.

**2. ARTICLE QUESTIONS:** Look back at the article and write down some questions you would like to ask the class about the text.

- Share your questions with other classmates / groups.
- Ask your partner / group your questions.

**3. WHICH WORD?:** In pairs / groups, compare your answers to this exercise. Check your answers. Talk about the relationships between the correct and incorrect words from the activity.

**4. VOCABULARY:** Circle any words you do not understand. In groups, pool unknown words and use dictionaries to find their meanings.

**5. STUDENT STEM CELL SURVEY:** In pairs / groups, write down questions about stem cells, ethics, playing God, etc.

- Ask other classmates your questions and note down their answers.
- Go back to your original partner / group and compare your findings.
- Make mini-presentations to other groups on your findings.

**6. TEST EACH OTHER:** Look at the words below. With your partner, try to recall exactly how these were used in the text:

- announced
- laboratory
- options
- same sex
- genetic code
- supply
- secretary
- step
- understanding
- early stages
- conception
- infertility

## DISCUSSION

### STUDENT A's QUESTIONS (Do not show these to student B)

- a. What did you think this article was about when you saw the headline?
- b. Did the headline make you want to read the article?
- c. Are you interested in stem cell research and cloning?
- d. Do you know what stem cells are?
- e. What is the difference between stem cell research and cloning?
- f. Will this research change society?
- g. Do you think scientists are playing the role of God?
- h. Do you think cloning will change human beings?
- i. What are the dangers of this kind of research?
- j. Did you like biology at school?

### STUDENT B's QUESTIONS (Do not show these to student A)

- a. Did you like reading this article?
- b. What did you think about this story?
- c. Are you happy this research is being carried out?
- d. What do you think of the idea of scientists making babies?
- e. What do you think of the idea of babies from same sex couples?
- f. Would you like there to be a clone of yourself?
- g. Is a fertilized cloned egg and sperm real human life?
- h. Would you have a heart transplant using a heart that has been grown from stem cells?
- i. Do you think babies in the future can be born without women?
- j. Did you like this discussion?

**AFTER DISCUSSION:** Join another partner / group and tell them what you talked about.

- a. What question would you like to ask about this topic?
- b. What was the most interesting thing you heard?
- c. Was there a question you didn't like?
- d. Was there something you totally disagreed with?
- e. What did you like talking about?
- f. Do you want to know how anyone else answered the questions?
- g. Which was the most difficult question?

## SPEAKING

**FUTURE HUMANS:** In pairs / groups, decide on how valuable (1 = highly valuable, 10 = not at all valuable) are the options listed in the table. These options may one day be part of our everyday lives. Write down some advantages and disadvantages for each option. Decide whether you would be interested in the options.

OPTIONS	1 - 10	ADVANTAGES	DISADVANTAGES
Clones of living people.			
Clones of dead people.			
Choice of baby's IQ, height, eye color, etc.			
Reproducing human organs for transplants.			
A "home shopping" baby production center.			
Same sex couples having their own babies.			

Change partners and share what you discussed with your previous partner(s).

Return to your original partner(s) and talk about the things you heard that were (1) shocking, (2) very interesting, (3) totally crazy, (4) horrific or any other adjective you choose.

## LISTENING

Listen and fill in the spaces.

### Laboratory-created eggs and sperm

**BNE:** British scientists \_\_\_\_\_ it may soon be possible to clone human eggs and sperm \_\_\_\_\_. Human life could be created in a science laboratory. This could provide more options for \_\_\_\_\_ have children of their own. It could also mean same sex couples could have children. The baby would share the \_\_\_\_\_ of both partners. A \_\_\_\_\_ would be to increase the supply of eggs and sperm for \_\_\_\_\_.

British Fertility Society secretary Dr. Allan Pacey \_\_\_\_\_ as an "exciting step forward". He said the \_\_\_\_\_ could greatly increase our understanding of how eggs and sperm \_\_\_\_\_. He stressed that we are still in \_\_\_\_\_ of fully understanding the biology of conception: "We still don't really understand why some men and women \_\_\_\_\_ sperm and eggs of their own, and sadly for them that \_\_\_\_\_."

## **HOMEWORK**

**1. VOCABULARY EXTENSION:** Choose several of the words from the text. Use a dictionary or Google's search field (or another search engine) to build up more associations / collocations of each word.

**2. STEM CELL EGGS AND SPERM:** Search the Internet and find more information on the latest in stem cell research and human reproduction. Share your findings with your class in the next lesson.

**3. HUMAN FUTURE:** Imagine you are a science fiction writer. Write a short essay on what our future will look like. Will we be living among clones? Will everyone look beautiful and be highly intelligent? Explain the main points of your essay to your classmates in your next lesson. Did everyone imagine a similar future?

**4. LETTER:** Write a letter to the scientists who are working on this research. Explain your views on what they are doing. Read your letter to your classmates in the next lesson. Did you all write about similar things?

## ANSWERS

### TRUE / FALSE:

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

### SYNONYM MATCH:

- |                |                            |
|----------------|----------------------------|
| a. announced   | declared                   |
| b. created     | made                       |
| c. options     | choices                    |
| d. same sex    | homosexual / gay / lesbian |
| e. benefit     | advantage                  |
| f. forward     | ahead                      |
| g. findings    | research                   |
| h. stressed    | emphasized                 |
| i. fully       | totally                    |
| j. infertility | sterility                  |

### PHRASE MATCH:

- |                        |                        |
|------------------------|------------------------|
| a. scientists          | have announced         |
| b. it may soon         | be possible            |
| c. created in a        | science laboratory     |
| d. genetic             | code                   |
| e. childless           | couples                |
| f. an exciting step    | forward                |
| g. greatly increase    | our understanding      |
| h. we are still in     | the early stages       |
| i. the biology of      | conception             |
| j. men and women can't | produce sperm and eggs |

### WHICH WORD?:

#### Laboratory-created eggs and sperm

**BNE:** British scientists have announced that it may *soon* be possible to clone human eggs and *sperm* from stem cells. Human life could be created in a science *laboratory*. This could provide more *options* for couples unable to have children of their *own*. It could also mean same sex *couples* could have children. The baby would *share* the genetic code of both partners. A further benefit would be to *increase* the supply of eggs and sperm for childless couples.

British Fertility Society *secretary* Dr. Allan Pacey described the research as an "exciting step *forward*". He said the *latest* findings could greatly increase our understanding of how eggs and sperm are *developed*. He stressed that we are *still* in the early stages of fully understanding the biology of *conception*: "We still don't really understand why some men and women can't *produce* sperm and eggs of their own, and sadly for them that leads to *infertility*."