

TRIAL  
VERSION

# IS SCIENTIFIC RESEARCH ON MONKEYS JUSTIFIED?



- To explore the arguments
  - To expand your understanding
  - To express your views
- ... all in 15 minutes

*Open Up!* has been produced by the Democracy and Participation programme at **nef** (the new economics foundation). It is one of a range of practical tools developed by **nef** to re-engage people with democracy and decision-making. It has been funded by the Wellcome Trust, which wants to help people to grapple with complex scientific issues.

# background

We start with some background on the issue.  
When you have read it, ***Open Up!***

Whether scientific research on monkeys is justified is a hotly contested question – which is again in the headlines, as MEPs consider calls for a phasing out of the use of monkeys in research, under revisions to EU law.

Each year in British laboratories around 3,000 monkeys are used in scientific research and testing. These have to be licensed under the Animals (Scientific Procedures) Act because they have the potential to cause the monkeys pain, suffering, distress or lasting harm. These 3,000 monkeys are around 0.1% of the total annual use of laboratory animals in Britain.

**Two species of monkeys are used: macaques and marmosets**



Macaque: 3092 used in 2008

Marmoset: 262 used in 2008

Monkeys, like humans and great apes (such as chimpanzees and orang-utans), are members of the biological group known as primates.

Great apes have not been used in biomedical research in the UK for at least 25 years; and the Government formally banned their use in 1997. Modern methods of housing and care of monkeys in the laboratory aim to meet the animals' behavioural and psychological needs. In best practice they are housed in groups with plenty of environmental enrichment, space to play and exercise, opportunities for all normal social interactions and foraging.

## Housing for macaques in the UK



Picture source: Understanding Animal Research

# what is ?

'Where is the wisdom we have lost in knowledge, Where is the knowledge we have lost in information? asked the poet T S Eliot. The amount of information we have just keeps on growing, and it becomes harder and harder to make sense of it.

**Open Up!** is designed to help. It provides:

- Some background (which you have probably just read)
- Stories to get you thinking about the issue
- A series of arguments (when you open up again). These are divided up into sections, each with a question, and a set of paired 'yes' and 'no' arguments.
- Many opportunities for you to engage with the arguments and have your say – you'll need a pen or pencil.

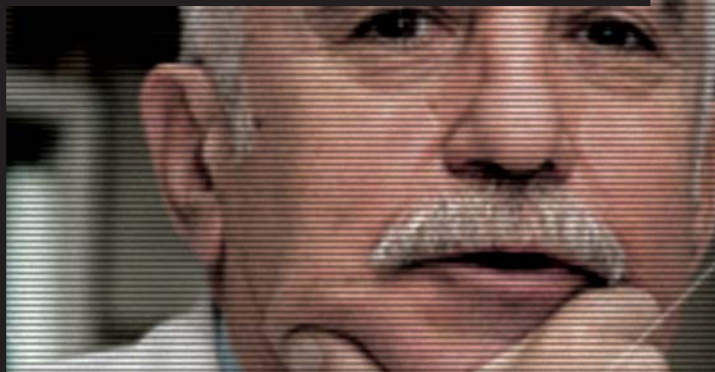
The arguments are simplified, to contrast the 'yes' view and the 'no' view. But they are not meant to force you into an extreme position – you can choose from a range of options when giving your views.

How you use the *Open Up!* is up to you. Write as much or as little as you like. But if you can send in your feedback, it will affect *Open Up!*. This second edition of *Open Up!* has different arguments from the first edition because of feedback from readers'.

So, when you are ready, read the stories to the right of this page, and then... **Open Up!**

## A SCIENTIST'S QUESTION

**'Do you agree that my research justifies the use of monkeys?'**



**I am a surgeon and also a scientist**, and part of my work has involved inducing Parkinson's disease in monkeys. My research showed that an area in the brain never previously associated with Parkinson's was overactive, and that operating on it to reduce its activity very significantly reduces the symptoms of Parkinson's. To date around 40,000 people have been helped, following further international research using about 100 monkeys.

My question is, do you agree with me that the benefits of my work justify the use of monkeys? Would it have made a difference if many more, or many fewer, monkeys had been used?

My research led directly to a new treatment. How would you feel if the outcome had been a gain in knowledge about how the brain works, without a direct link to a human disease or treatment?

Source: Professor Tipu Aziz (Monkeys, Rats and Me, BBC2, 27.9.06, slightly edited)

## A MEAT-EATER'S QUESTION

**'Am I a hypocrite if I worry about experiments on monkeys but eat meat?'**



**I am worried by the use of animals, including monkeys, in experiments.** But I am not a vegetarian and don't feel the same concern about eating meat.

I am not alone in this: around 5% of the UK population say that they are wholly or partly vegetarian<sup>1</sup>, whereas more than half say that they are 'very' or 'fairly' worried by the use of animals in research that aims to cure diseases.<sup>2</sup>

Why do I feel this unease – especially since, for every animal used in research and testing in the UK, at least 700 are killed and eaten as meat?<sup>3</sup>

For me, a big part of it is the possibility that laboratory animals might suffer more than farm animals. How do you feel about this?

Source: 1. Food Standards Agency 2008. 2. RCUK Public Attitudes to Science Survey 2008. 3. Understanding Animal Research 2009.

## A MEDICINE TRIAL PARTICIPANT'S QUESTION

**'How reliable is research using monkeys – would I trust my health/life on it?'**



**I am thinking of volunteering for a 'Phase 1' trial of a new medicine to treat cancer.** A Phase 1 trial is the first time that a new medicine is tried in humans, and usually involves a few healthy volunteers.

The medicine has been tested in test-tube and animal experiments. These include tests in monkeys, which are the only animals with chemical 'receptor' sites for the medicine that are similar enough to humans for the medicine to work. These tests have revealed only minor side effects.

My question is, can I trust the monkey experiments enough? I am reassured that the medicine has been tested in animals, but I also remember media stories about people suffering unexpected, and very serious, side effects in a recent trial. Do you think I should volunteer?

# what to do

**Can scientific research on monkeys be justified?**  
First, record where your initial view lies, by marking a cross on the line opposite.

Can scientific research on monkeys be justified?

Definitely 'yes' \_\_\_\_\_ Definitely 'no'

Now go through the arguments below. Tick the ones you agree with and put a cross against those that you disagree with. Fill in the 'Your argument' boxes if you wish. Record your views at the end of each section. Then go to the Final Conclusion section.

# MORALS

**facts**

- Monkeys are similar to humans in ways that other laboratory animals (such as rodents) are not. For example, they are similar in their brain structure, thinking ability, behaviour and immune system.
- Monkeys can suffer (e.g. pain, stress and anxiety) like humans.
- Monkeys' thinking abilities are not as developed as humans'. For example there are differences in level of understanding, communication and problem solving.

Is it acceptable to use monkeys in research that would not be allowed on humans?

<b>YES</b>	<b>NO</b>
A1 Humans matter more (to humans) than monkeys do. <input type="checkbox"/>	A2 Humans and monkeys matter equally. <input type="checkbox"/>

A3 There are significant differences (e.g. in thinking ability) that can justify treating monkeys differently from humans. <input type="checkbox"/>	A4 The similarities between humans and monkeys (e.g. ability to suffer) make it wrong to treat monkeys differently from humans. <input type="checkbox"/>
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READERS TOP 3 ARGUMENT

A5 It is sometimes acceptable to do things to monkeys that we would not be prepared to do to humans, when this is the only way to reduce or prevent human suffering (e.g., when developing and testing new medicines). <input type="checkbox"/>	A6 We should not do things to monkeys that we are not prepared to do to ourselves. To do so is 'speciesist' (just as treating people of a different race differently from ourselves is 'racist'). <input type="checkbox"/>
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A7 Your argument	A8 Your argument
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**So, is it acceptable to use monkeys in research that would not be allowed on humans?**

Mark a cross on the line below

Definitely 'yes' \_\_\_\_\_ Definitely 'no'

# BENEFITS

**facts**

- In the UK, 90% of research using monkeys is to develop new medicines. 10% is to gain scientific knowledge, for example about the nervous system. Monkeys are never used to test cosmetics.
- Scientists used monkey experiments in developing (for example): anti-rejection drugs for organ transplants; life-support systems for premature babies; medicines for asthma; and advanced methods of kidney dialysis.
- There is little systematic information on the overall impact of monkey studies on scientific and medical advances.

Are monkey experiments worth it?

<b>YES</b>	<b>NO</b>
B1 New medicines sometimes have to be tested in monkeys before regulators will allow the medicines to be tested in humans and later sold. <input type="checkbox"/>	B2 The information required by the medicines regulators should be gained in other ways - e.g. using cells, tissues or computer models. <input type="checkbox"/>

B3 Using monkeys to gain scientific knowledge is acceptable because the knowledge may lead to new treatments. <input type="checkbox"/>	B4 Using monkeys simply to gain scientific knowledge is unacceptable. If experiments on monkeys are to be done at all, they should at least have direct health care benefits. <input type="checkbox"/>
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B5 The laboratory's ethics committee + the government + the funder of the research all have to agree that the likely benefits from the research justify using monkeys. <input type="checkbox"/>	B6 There is not enough independent assessment of the benefits of and justification for research on monkeys. <input type="checkbox"/>
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B7 Your argument	B8 Your argument
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**So, do the benefits justify using monkeys in research?**

Mark a cross on the line below

Definitely 'yes' \_\_\_\_\_ Definitely 'no'

**facts**

- UK law says that animals must not be used in research if there is an alternative method that could achieve the objective of the experiment. Monkeys should only be used when no other species of animal will do.
- Alternatives to monkeys could include: cells; tissues; computer modelling; and studies using human volunteers.

Is the use of monkeys necessary to achieve the benefits claimed?

<b>YES</b>	<b>NO</b>
B9 Monkeys are valuable in research because they are so similar to humans. <input type="checkbox"/>	B10 Differences between humans and animals, including monkeys, make many animal tests unreliable. <input type="checkbox"/>

B11 Scientists accept that animal tests may not show up all the side effects. Monkey experiments can help to weed out unsuitable medicines before they progress to human trials. <input type="checkbox"/>	B12 Sometimes medicines have side effects that tests in animals, including monkeys, do not show up. <input type="checkbox"/>
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B13 Scientists already use alternatives wherever possible, so a ban on the use of monkeys in research would slow medical progress and could drive work abroad, to countries where animal welfare conditions are poor. <input type="checkbox"/>	B14 Banning the use of monkeys in research would force scientists to think of other methods, and so lead to the development of more, and better, alternatives. <input type="checkbox"/>
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B15 Your argument	B16 Your argument
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**So, do the benefits justify using monkeys in research?**

Mark a cross on the line below

Definitely 'yes' \_\_\_\_\_ Definitely 'no'

# HARMS

**facts**

- UK law on animal experiments requires that the suffering of animals, and the number used, must be minimised. For example, anaesthetics and pain relief are used wherever appropriate.
- Currently, there are no published data on the level of suffering that monkeys actually experience in experiments.

Can the level of harm caused to the monkeys be justified?

<b>YES</b>	<b>NO</b>
C1 Any substantial suffering caused to monkeys must be matched by high benefits (e.g. monkeys given Parkinson's Disease in order to develop new treatments for the disease). <input type="checkbox"/>	C2 No amount of benefit to humans can outweigh the fact that monkeys regularly suffer substantially in experiments (for example due to brain surgery). <input type="checkbox"/>

C3 The harms are minimised as far as possible, and modern methods of laboratory housing and care of monkeys ensure high standards of welfare. <input type="checkbox"/>	C4 Monkeys also suffer as a result of being kept in laboratory caging (however well designed) and, in some cases, during long journeys to the UK from suppliers abroad. <input type="checkbox"/>
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READERS TOP 3 ARGUMENTS

READERS NEW ARGUMENTS

C5 Monkeys can be trained to co-operate in experiments (e.g. to present their arm for blood sampling). <input type="checkbox"/>	C6 Monkeys do not choose to be involved in experiments. <input type="checkbox"/>
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C7 Your argument	C8 Your argument
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**So, can the level of harm caused to the monkeys be justified?**

Mark a cross on the line below

Definitely 'yes' \_\_\_\_\_ Definitely 'no'

# YOUR FINAL CONCLUSION

Review your findings so far. Tick one of the boxes opposite to show your overall conclusion. Previous reader's results are indicated below in percentages.

Can scientific research on monkeys be justified?

Definitely 'yes'              Definitely 'no'

5 13 17 23 12 17 13 % previous readers

Which one or two arguments or questions most contributed to your conclusion?

Which one or two arguments or questions most challenged to your conclusion?

and

and

thank you for...



You might like to know what the people who tried out the first edition thought. Their top three arguments taking Support and Challenge together were A6, C3 and C4.

The initial text for this version of *Open Up!* was developed by Jane Smith, Secretary of the Boyd Group. The Boyd Group is a forum that brings together a wide range of perspectives on animal experiments. Jane was working in a personal capacity.

The text was amended – and reduced – in several rounds of testing, using feedback from both topic experts and general readers’.

It’s new and it’s work in progress, so we’d appreciate any comments. Send them to: [Perry.Walker@neweconomics.org](mailto:Perry.Walker@neweconomics.org) or contact him on 0207 820 6360

Where next? We haven’t space here, but if you want some sources of information to explore further, links will be available in future on our website at [www.neweconomics.org/amap](http://www.neweconomics.org/amap)