

Vetenskapsrådet

## PUBLIC OPINION IN SWEDEN ON THE USE OF ANIMALS IN RESEARCH

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## VETENSKAPSRÅDET

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## SUMMARY

The Swedish Research Council, on behalf of the Swedish Government, monitors issues concerning the use of animals in research and also provides information and promotes discourse on research and research ethics. This opinion survey is part of that work.

The opinion survey describes how the public views the use of laboratory animals, both in general and in relation to medical objectives. A sample including just over rooo individuals representing the national Swedish population aged i6 years and older was surveyed in January 2008. Some of the questions were given only to part of the group.

Vetenskap \& Allmänhet (Public and Science) conducted the study on behalf of the Swedish Research Council.

The findings indicate that although most people spontaneously think of medical research when they hear the term "animal experiments", many respondents also associate it with makeup and hygiene products.

Most - 7 in io - Swedes indicate that the use of animals in research is acceptable for medical research aimed at finding cures for diseases. Young people are most negative.

Among the $30 \%$ of respondents who find animal experiments to be unacceptable in medical research aimed at finding cures for disease, nearly one third respond that some animal experiments could, nevertheless, be acceptable in certain situations.

## FOREWORD

The Swedish Research Council, on behalf of the Swedish Government, monitors issues concerning the use of animals in research. Through its Committee for Laboratory Animal Science, the Swedish Research Council promotes ongoing development in the field, including alternatives to animal experiments. The Swedish Research Council also has a responsibility to provide information about issues concerning research and research ethics and to promote discourse on the topic. In collaboration with Karolinska Institutet and the universities in Göteborg, Linköping, Lund, Uppsala, Umea and the Swedish University of Agricultural Sciences, the Research Council manages the djurforsok.info website.
The opinion survey presented in this report is part of the effort to inform people and create opportunities for scientific discourse. The survey shows that 7 in io Swedes can accept the use of animals in medical research if its aim is to acquire more knowledge about diseases and how they can be prevented and cured. This ratio is the same as that reported in a 1992 study, when attitudes of Swedes towards laboratory animals were last measured. It is interesting to note that 3 in io respondents believe that cosmetics are tested on animals in Sweden, even though this has been banned since 2004.

Medical research attempts to answer questions about the causes behind disease and how diseases can be prevented, relieved, and cured, with the aim to improve health among both animals and humans. Animal experiments are part of medical research, but also an issue that touches and engages many. It is important to be aware of people's attitudes towards issues that generate debate and require taking a position on ethics.

For the Scientific Council on Medicine
Swedish Research Council
Stockholm, May 2008


## Håkan Billig

Secretary General

## 1. THE STUDY

This study describes public opinion on the use of animals in research in general and for specific medical purposes, i.e. to treat diseases. Vetenskap \& Allmänhet, VA (Public and Science) conducted the study on behalf of the Swedish Research Council. VA is a Swedish association aimed at promoting dialogue and openness between the public and researchers. VA and the Swedish Research Council collaborated in developing the survey questions.

The market research agency Synovate interviewed io26 Swedish respondents by phone from January i4 through January 17, 2008. The respondents comprise a representative national sample of the Swedish public aged 16 years and older. The survey questions, some of which were open-ended or multiple choice, are presented at the end of this report. The open-ended questions were included only during one day of the survey to a representative national sample of the Swedish public, and hence were given to approximately one fourth (273 individuals) of the total sample.

### 2.1 Spontaneous attitudes towards the term "animal experiments"

To test spontaneous attitudes, the first question was open-ended: "What is the first thing you think of when I say the words, animal experiments?" This question was asked during one day, i.e. to 273 individuals, whereof $86 \%$ gave an open response. No major differences in the tendency to respond were observed among the different groups of respondents.

Examples of responses include:

- I think about research. It's both good and bad.
- Medicines/medical research
- It's necessary for research
- It is terrible/disgusting
- Cruelty to animals/that animals are tortured
- Make up/cosmetics and soaps
- Rats in cages

The general impression from the open-ended responses is that when people hear the term animal experiments they usually think of research, science, medicine, and drugs. Approximately 4 in io respondents use one or more of these words. Seldom are such associations expressed negatively. Many also associate animal experiments with development of cosmetics, which more often raises negative feelings. A few associate the terms with furs, monkeys, minks, dogs, etc. Negative associations are common; approximately 4 in io respondents give negative answers, but some of them view animal experiments as a necessary evil. Others are totally negative, e.g. they call animal experiments unethical or unnecessary, and many mention cruelty to animals.

### 2.2 Information sources

Six in io have seen or heard something about animal experiments during the past year. Nearly all who have seen or heard something report that it was through the mass media, i.e. newspapers, radio, or TV. Other sources, e.g. special interest groups, corporations, agencies, or in class, are much less common.


Figure i. During the past year have you seen or heard anything about animal experiments through any of the following alternatives? (Several responses possible)

Multiple responses could be given to this question. Hence, the sum of all bars in the graph above exceeds the net percentage of respondents reporting they had seen or heard something about animal experiments.

Several pronounced differences are found among different respondent groups regarding how common it is to have seen or heard something about animal experiments. Young people (aged i6-29 years) have seen/heard something more frequently than other groups (Figure 2). Young women most frequently report having received information from one or more of the sources, while men aged 45 to 59 years least frequently report having heard/seen something. Among the other age groups, gender differences are negligible.


Figure 2. During the past year have you seen or heard anything about animal experiments in any of the following contexts? Percent responding yes.

Individuals with higher education have seen or heard something about animal experiments more frequently than others (Figure 3). The most common source for all groups is the mass media. However, those with higher education, substantially more frequently than others, mention information from special interest groups or voluntary associations.


Figure 3. During the past year have you seen or heard anything about animal experiments through any of the following alternatives? Percent responding yes.

### 2.3 Knowledge of animal experiments

To study the knowledge that people have about the use of animals in research, the question was asked: "Do you know of one or more contexts where you think that animal experiments are conducted in Sweden today?" This question was asked during one day only, i.e. to 273 individuals.

Six in io respond yes ( 174 individuals), i.e. they think they know of a context in which animal experiments are conducted in Sweden. Respondents that most frequently say they know of such contexts are those with higher education and those aged 30 to 44 years. Nearly the same percentage of men $(63 \%)$ and women ( $65 \%$ ) respond yes. One fourth ( $25 \%$ ) respond no. Young people respond no more frequently; 4 in io respondents aged i6 to 29 years say they are not aware of such contexts.


Figure 4. Do you know one or more contexts where you think that animal experiments are conducted in Sweden today? (Percentage responding yes in the respective groups)

Those responding yes to this question were allowed to give open-ended responses about the contexts concerned.

It is most common to believe that animals are used in medical research. Nearly all respondents mention words such as research or medicine. Of the 174 individuals responding yes, approximately 3 in io (equally as many men as women) mention makeup, cosmetics, shampoo, etc.

Somemention specific corporations or universities, e.g. Astra or Karolinska. Very few mention other contexts, e.g. defence or behavioural research.

Examples of responses, ranked by their frequency, include:

- Research purposes
- Medicine/drugs/when developing new medicines
- In cancer research
- In hospitals/health services
- Cosmetics/makeup/shampoo, soap, etc
- Astra conducts animal experiments


### 2.4 Attitudes towards the use of animals in medical research

Seven in ten Swedes can accept the use of animals in medical research aimed at learning more about diseases and how to cure them. The question was: "Today in Sweden, animals are used in medical research. The aim is to enable researchers to learn more about how diseases develop and how they can be cured. Do you think it is acceptable to conduct experiments on animals for such purposes, or do you think it is not?" This question does not measure spontaneous attitudes, but should be viewed as a test of arguments. The question reminds the interviewee of "good arguments", so the answer should be viewed as a response from someone who had been given these arguments.
Several differences appear among different groups. Young people are more sceptical than older people towards the use of animals in research - and the younger the person, the more negative the attitude. Twice as many young people ( $36 \%$ ) as people aged 30 years and older ( $18 \%$ ) respond no to the question. Of those younger than 23 years, more than half ( $56 \%$ ) respond no. The youngest women appear to be the most negative, but confirmed conclusions cannot be drawn due to the rather small number of young respondents.


Figure 5. Today in Sweden, animals are used in medical research. The aim is to enable researchers to learn more about how diseases develop and how they can be cured. Do you think it is acceptable to conduct experiments on animals for such purposes?

Men are more positive than women towards animal experiments in this particular context. Although gender differences are approximately equally great, regardless of age, they are somewhat greater among young men and women (aged 16-29 years) than among men and women above 30 years of age.


Figure 6. Today in Sweden, animals are used in medical research. The aim is to enable researchers to learn more about how diseases develop and how they can be cured. Do you think it is acceptable to conduct experiments on animals for such purposes, or do you think it is not?

Respondents with higher education have the most positive attitudes, while those with compulsory school education only are the most negative (Figure 7). There are also differences depending on the place of residence in Sweden. Among rural residents, i in 3 responds no versus i in 5 urban residents or residents elsewhere in the country.

Differences related to the level of education are in line with results from VA's annual survey of public attitudes towards research and researchers. ${ }^{1}$ Here too, the level of education is a strongly distinguishing factor, i.e. respondents with higher education are more positive towards research and have greater confidence in researchers than are respondents with compulsory school education only.


Figure 7. Today in Sweden, animals are used in medical research. The aim is to enable researchers to learn more about how diseases develop and how they can be cured. Do you think it is acceptable to conduct experiments on animals for such purposes, or do you think it is not?

To further study the reasoning among those with negative attitudes towards the use of animals in medical research, respondents who answered no to the above question received a follow-up question on whether there were any contexts in which the use of animals in research could be acceptable. Of the $21 \%$ responding no to the first question, 3 in io could think of contexts in which animal experiments could be acceptable (Figure 8). This corresponds to $7 \%$ of the total sample. More of the young respondents ( $41 \%$ of the $26 \%$ responding no to the original question, i.e. just under ${ }_{1} \%$ of all young respondents) could think of such contexts. Likewise, more respondents with upper secondary school or higher education could imagine such contexts.

[^0]

Figure 8. Are there any contexts in which you think animal experiments could be acceptable? (Percent responding yes from among respondents who answered no to the previous question)

When asked this follow-up question, more urban residents (44\%) than others (31\% in rural areas, $20 \%$ elsewhere in Sweden) think there could be contexts in which animal experiments are acceptable. Differences by gender, however, are not significant.

Adding the percent responding yes to the first question ( $7 \mathrm{7} \%$ ) and the percent responding yes to the second question $(7 \%)$ yields a measure of the percentage ( $78 \%$ ) who think that the use of animals could be acceptable in medical research under certain conditions. By adding these percentages, the age differences become less than those shown in the first question (Figure 9). Gender differences in the youngest age group now become lower than in the other age groups.


Figure 9. Combined percentages responding $y$ es to one of the questions on whether the use of animals in research are acceptable.

Following this question, those responding yes were given an opportunity to give an open-ended answer with examples of potentially acceptable contexts. Most of the responses include either medical research where no alternative is available, or situations where it could be guaranteed that animals would not receive cruel treatment and would not suffer. Some indicate that animal experiments are acceptable on rats or mice, but not on other animals (a few respondents specify pigs and monkeys as non-acceptable).

In total, nearly 8 in io of the respondents think that animal experiments could be acceptable in certain contexts and under certain conditions. The contexts and conditions involved can be summarized as follows:

- If it involves medical research
- If it involves very serious/severe diseases
- If there are no other options, i.e. animal experiments are "the last resort"
- If the animals do not suffer


### 2.5 Previously, what was public opinion towards animal research?

The last public survey of attitudes towards the use of animals in research, conducted within the public sector, was conducted in 1992 by the Medical Research Council in collaboration with the Swedish Broadcasting Corporation. ${ }^{2}$ The questions are not identical to those in the current survey, so it is difficult to draw any conclusions regarding changes in attitudes over time. However, the results that are most comparable to the above question - where today nearly 8 in io indicate that the use of animals in research could be acceptable in certain medical contexts and under certain conditions - come from the following question in the 1992 survey: "What are your personal views on the use of laboratory animals in medical research? Do you think it can be permitted, or should it be prohibited?" In answering this question, $60 \%$ responded that it could be permitted, or permitted with certain reservations. Further, io\% responded that the use of animals in research generally should not be permitted, with the reservation that under certain conditions it could be accepted. Hence, 7 in io of the respondents in 1992 indicated that the use of animals in research could be acceptable in some contexts and under certain conditions.

### 2.6 What are the opinions in other European countries?

It is difficult to make direct comparisons with other surveys and international studies since the questions are formulated differently, and the surveys have been conducted in different ways. Two studies in Europe, however, provide interesting perspectives:

Ipsos MORI (UK) has studied public opinions towards animal experiments on several occasions. ${ }^{3}$ In 2005, $89 \%$ (increased from $84 \%$ in 1999) of

[^1]British people indicated that animal experiments were acceptable under certain conditions, specifically for medical applications, if they addressed lifethreatening diseases, if the animals did not suffer unnecessarily, or if other options were used when possible. The percentage of British people who acceptanimalexperimentswithout these"conditions" hasincreasedmarkedly since 1999 ( $32 \%$ ), reaching $56 \%$ in 2005 . Rats and mice were the animals that British people viewed to be the most acceptable in animal experiments. The conditions that MORI identified largely agree with the points summarized in section 2.4 above. Since different research methods and questionnaires were used, the percentages are not directly comparable.

People in Sweden and the UK have very similar attitudes towards the use of animals in research, as reflected by results from the Eurobarometer on Science on Technology 2005. The same percentage ( $40 \%$ ) of people in Sweden and the UK agreed to animal experiments on monkeys and dogs if it contributes towards solving human health problems, while $45 \%$ in Sweden and $43 \%$ in the UK were opposed. ${ }^{4}$

These responses placed Sweden in 18th place among the 25 EU nations, ranked according to the percentage that agreed. Within EU, $45 \%$ of people on average viewed the use of animals in research to be acceptable under the conditions specified, while $34 \%$ were opposed. The authors noted an EastWest difference in attitudes; residents in the former East European countries were more positive towards the use of animals in research than residents in the former West European countries. People in Lithuania, Cyprus, and Bulgaria were the most positive, while people in Luxemburg, Austria, and Ireland were the most negative.

[^2]
## 3. REFLECTIONS

Most people think spontaneously of medical research when they hear the term animal experiments, but many also associate it with makeup and hygiene products. A rather high percentage have negative associations, but many believe that the use of animals in research is necessary, nevertheless. Most ( 7 in io) Swedes indicate that the use of animals is acceptable in medical research for purposes of finding cures for diseases. Young people are the most negative. Of those who do not think that animal experiments are acceptable, approximately 3 in io ( $7 \%$ ) of all respondents indicate that there could be situations where such experiments would be acceptable - in medical research, in situations where no other alternative is available, and/or in research guaranteeing that animals will not suffer. Overall, this means that nearly 8 in io indicate that animal experiments could be acceptable in certain contexts.

Most people find it unacceptable to test cosmetics and similar products on animals. Although this is reflected in Swedish legislation, many seem to believe that testing of makeup is still permitted. Presumably, many people are not aware how the laws are formulated. Furthermore, different laws may apply in other countries that sell their products in Sweden.

Most of those who received information about animal experiments in recent years were informed via the mass media. Only a few were informed by public agencies. Young people and people with higher education are primarily the ones who have seen or heard something about animal experiments. This survey does not show whether there is a demand for more information and knowledge, but we can report there is a potential to broaden the scope of sources.

## 4. QUESTIONS

## Question 1

ONE DAY, 273 INTERVIEWS
What is the first thing you think of when I say the words animal experiments?

SPONTANEOUS! Question: Can you think of anything else?

Yes, namely (OPEN-ENDED RESPONSE):
Nothing
Don't know/no response

## Question 2

During the past year, have you seen or heard anything about animal experiments in any of the following contexts?

## READ A - E, ROTATE! SEVERAL RESPONSES POSSIBLE

A.In newspapers, radio or TV
B. Information from public agencies
C. Information from a special interest groups or voluntary association
D. Information from a corporation
E. In class
F. Other
G. Don't know (DO NOT READ)

## Question 3

ONE DAY, 273 INTERVIEWS

Do you know of one or more contexts where you think that animal experiments are conducted in Sweden today?

SPONTANEOUS! Question: Can you think of anything else?

Yes, namely (OPEN-ENDED RESPONSE):
No
Don't know/no response

## Question 4

Today in Sweden, animals are used in medical research. The aim is to enable researchers to learn more about how diseases develop and how they can be cured. Do you think it is acceptable to conduct experiments on animals for such purposes, or do you think it is not?

Yes, namely (OPEN-ENDED RESPONSE):
No
Don't know/no response

## Question 5

IF UNACCEPTABLE IN QUESTION 4
Are there any contexts in which you think animal experiments could be acceptable?

SPONTANEOUS! Question: Can you think of anything else?
Yes, namely (OPEN-ENDED RESPONSE):
No
Don't know/no response

## SAMMANFATTNING

Vetenskapsrådet har regeringens uppdrag att bevaka djurförsöksfrågor inom forskningen och även ett ansvar för att informera om forskning och forskningsetiska frågor samt stimulera till debatt. Denna opinionsundersökning är ett led i detta arbete.

Opinionsundersökningen beskriver allmänhetens inställning till djurförsök på ett allmänt plan men också då det kopplas ihop med medicinska ändamål. Drygt ett tusen personer i ett riksrepresentativt urval av Sveriges befolkning 16 år och äldre tillfrågades i januari 2008. Några frågor ställdes bara till en del av gruppen.

Vetenskapsrådet uppdrog åt Vetenskap \& Allmänhet att genomföra undersökningen.

Resultaten visar att de flesta människor spontant tänker på medicinsk forskning när de hör ordet djurförsök, men många associerar också till smink och hygienprodukter.

De flesta - sju av tio - svenskar menar att djurförsök är acceptabelt i medicinsk forskning i syfte att finna bot för sjukdomar. Ungdomar är mest negativa. Av de $30 \%$ av de tillfrågade som var negativa till djurförsök anser 3 av io att det ändå kan finnas vissa tillfällen då det vore acceptabelt.

This study describes public opinion on the use of animals in research in general and for specific medical purposes. Vetenskap \& Allmänhet (Public and Science) conducted the study on behalf of the Swedish Research Council.

The Swedish Research Council, on behalf of the Swedish Government, monitors issues concerning the use of animals in research and also provides information and promotes discourse on research and research ethics. This opinion survey is part of that work.


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The Swedish Research Council is a government agency funding basic research of the highest scientific quality in all disciplines. The Swedish Research Council has a national responsibility to support and develop basic research and promote research innovation and


[^0]:    I See, e.g. VA reports 2007:2 and 2007:3.

[^1]:    2 (In Swedish) Animal trials - a study of public attitudes towards using animal experiments in medical research. Collaboration between the Swedish Broadcasting Corporation and the Swedish Medical Research Council, 1992. ISBN 91-7552-738-3.
    3 Use of Animals in Medical Research, Ipsos MORI, United Kingdom, 1999, 2002, and 2005. The reports from 1999 and 2002 can be obtained from http://www.ipsos-mori.com/polls/2002cmp.shtml and the 2005 report from http://www.ipsos-mori.com/polls/2005/cmp.shtml

[^2]:    4 Europeans, Science and Technology, Special Eurobarometer 224, June 2005, page 8o. http://ec.europa. euu/public_opinion/archives/ebs/ebs_224_report_en.pdf

