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INDEPENDENT, OBJECTIVE AND EVIDENCE-BASED

## Quitting smoking: Can an antidepressant improve the success rate?



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Many smokers want to quit smoking, or they have already tried to quit once or even often. The problem is, it is not easy to stay off cigarettes. There are some ways to increase the chances of success, though, especially using nicotine replacement therapy (NRT) such as nicotine patches or gum. You can read more about NRT in our Fact Sheet (URL:

<http://www.informedhealthonline.org/index.222.en.html>) and research summary (URL: <http://www.informedhealthonline.org/index.220.en.html>) . Because NRT also has limited success, researchers have tried to find other options.

One of these options is the group of drugs called antidepressants. They are drugs that are used to try to reduce depression. Some of these drugs have been tested to see if they can help people quit smoking. To see what the state of the evidence is, researchers from the Cochrane Collaboration looked for trials where anti-depressants were tested for quitting smoking.

After evaluating 36 trials, the researchers came to the conclusion that there is no evidence to show that most types of antidepressants are suitable for quitting smoking. They did find some trials that provided evidence that two types might be able to help people give up smoking. However only one of those, bupropion, is widely approved for use for quitting smoking internationally, including in Germany.

The results: out of 10 smokers who used bupropion, about 8 went back to smoking (80%). In comparison, out of 10 smokers who did not use bupropion, about 9 had started smoking again after 6 to 12 months. In other words, the drug had helped an extra 1 out of 10 smokers to quit. This means that the drug doubled the chances of successfully quitting.

In deciding whether or not to use antidepressants, though, the question of adverse effects plays an important role. The use of bupropion caused insomnia in about 1 in 10 people (10%). Other adverse effects were dry mouth and nausea. There is also a small increased risk of seizures. Using this drug might be dangerous for people at a high risk of having seizures. Because there can sometimes be serious adverse

effects, the Cochrane researchers suggest that the use of bupropion for quitting smoking needs to be carefully considered.

## Glossary

### Cochrane Collaboration

The Cochrane Collaboration is an international network of thousands of researchers and others. They work together in teams called Cochrane Review Groups to answer questions about health care by doing systematic reviews of evidence. To achieve this, the members of the Collaboration have developed systems and methods for systematically finding and analysing the results of trials of health care interventions. The goal of the Cochrane Collaboration is to help patients, health care practitioners and others make more informed decisions about health care. You can read more about the Cochrane Collaboration at their website.

### evidence

Evidence is what we call scientific proof from well-conducted, good-quality scientific trials that have been carefully designed to answer specific questions. Depending on the types of questions, different scientific research methods (types of study) are most appropriate to find reliable answers to these questions. Randomized controlled trials (RCTs), for example, are the best way to get reliable evidence on the effectiveness of medical treatments (interventions). This type of study, however, is not the best form of evidence for all possible questions, and does not provide the best answers to all kinds of questions, either. Epidemiological studies, for example, are very suitable for establishing well-founded proof for the spreading of a disease in the population.

### depression

Depression is one of the most common mental illnesses, and it can be mild, moderate or serious. There are several different types of depression that can be recognised by different signs. Which symptoms of depression occur and how strong and frequent they are vary from person to person. People in any social or age group can be affected, both women and men. If someone has had at least two of the following symptoms for longer than two weeks, it might mean that they are depressed: deep sadness; listlessness; loss of interest in the things they usually care about.

## **Sources**

Hughes JR, Stead LF, Lancaster T. Antidepressants for smoking cessation. *Cochrane Database of Systematic Reviews* 2004, Issue 4. [Cochrane Database (URL: <http://www.mrw.interscience.wiley.com/cochrane/clsysrev/articles/CD000031/frame.html>) ]

## **The German Institute for Quality and Efficiency in Health Care (IQWiG)**

The German Institute for Quality and Efficiency in Health Care (IQWiG) was established by legislation to provide evaluations of the effectiveness, quality and efficiency of healthcare services. This includes the assessment of medicines as well as the publication of health information for consumers and patients.

## **Evidence basis of our health information**

Our information is based primarily on systematic reviews of the effects of health care. Systematic reviews are necessary to gain an objective picture of health care. In order to do this, a clear question is formulated. Researchers then find all the relevant studies that could answer this question. They then evaluate those studies.

You can find a list of the evidence and other scientific literature on which this information is based at [\*\*www.informedhealthonline.org\*\*](http://www.informedhealthonline.org)

## **Disclaimer**

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