

# Aged 45-55? Non smoker?

## Help our research and get pictures of your brain in action! (and £50)

### What's it all about?

Funded by the BBSRC, we are looking at how a small amount of nicotine (via nasal spray) can affect the way you process information. We are also looking at how a particular gene influences this.

### Why Nicotine ?

Nicotine stimulates the brain's chemical system. It stimulates pathways known to be involved in memory and attention, pathways particularly affected in Alzheimer type dementia. New compounds that mimic nicotine are being developed to treat dementia. By using small amounts of nicotine in controlled conditions in healthy adults, we are providing a detailed picture of how nicotine analogues are likely to act on the brain. The nasal sprays we use contain less than 1 cigarette's worth of nicotine.

### Can I take part?

#### YES if you are:

Healthy and 45 - 55 years old  
Right-handed  
Speak English as your mother-tongue  
Nonsmoker, or nonsmoking for at least 5 years  
BMI within the normal range (18 – 30)  
Normal blood pressure

#### NO if you:

Have a history of psychiatric problems  
Are a regular user of cannabis  
Are currently taking medication  
Are pregnant or breastfeeding  
Have any metal implants, or a pacemaker  
Are very claustrophobic

### What does it involve?

We'll send you a quick and easy cheek swab for DNA analyses (we're only interested in a SINGLE gene)  
Then three short visits to the Sussex Uni campus (we can arrange parking if necessary):  
Session 1: Some quick and fun cognitive tests, and a few measurements (height/weight/blood pressure) (~1 hour)  
Session 2 and 3: Nasal spray, followed by about 50 mins in the fMRI scanner. (so less than 1.5 hour each)

### What's in it for me?

Digital movie and images of your brain  
Plus £50 towards expenses  
And of course, the satisfaction of helping our important research!

### Would you like to take part? Then send me an email:

Dr Simon Evans ([S.L.Evans@sussex.ac.uk](mailto:S.L.Evans@sussex.ac.uk))

This study is approved by the Research Ethics & Governance Committee, Brighton and Sussex Medical School, and by the Research Governance Committee of the School of Psychology, University of Sussex.