MOTION:

“WE SHOULD EMBRACE THE USE OF SMART DRUGS”
INTRODUCTION

You might be forgiven for thinking that the 2011 blockbuster film Limitless in which protagonist Eddie Morra pops a pill that transforms his powers of concentration, memory, and stamina is the stuff of fantasy, but you’d be wrong [Ref: Independent]. Across the UK students and high-achieving professionals are popping pills. These drugs aren’t being taken recreationally, but instead to get ‘brainier’. In the United States, where the use of ‘smart drugs’ or ‘chemical cognitive enhancers’ is most prevalent, studies suggest that between 7-25% of college students are reaching for pills to aid study and academic performance [Ref: Wellcome Trust Blog]. Whilst in the UK numbers are lower, the use of smart drugs appears to be on the up and the issue has been the topic of heated debate following a provocative article by bioethicist John Harris in the British Medical Journal arguing that their use should be embraced.

However, little is known of the long term health effects of smart drugs, leading a group of senior scientists to call for an urgent government inquiry. The scale of their use has also caused the UK’s leading expert on ‘cosmeceutical’ brain treatments, Barbara Sahakian, to speculate that students might soon have to take part in pre-exam drug tests to prevent wide-spread ‘cheating’ [Ref: Daily Mail]. The turn towards ‘cosmetic neurology’, that is the use of drug treatments by people without disease to enhance normal cognitive abilities, marks an important shift in medicine and raises difficult questions about their use. Should medicine be used to improve the quality of life of those who are healthy as well as those who are sick? More specifically in relation to smart pills, does their use by knowledge-cramming students amount to cheating? Is the trend towards chemical enhancement something to be embraced as an exciting step towards ‘better brains’? Or are we in danger of undermining something of ourselves in the quest for perfection?
THE SMART DRUGS DEBATE IN CONTEXT

Which drugs and for what?
In the effort to develop treatments for conditions including Alzheimer’s and Parkinson’s, researchers have discovered that drugs intended for those with serious degenerative and developmental cognitive disorders can also be used by healthy individuals to improve their mental abilities. These drugs are available on prescription for those suffering from such medical conditions, but are also being purchased over the internet and elsewhere by healthy individuals (the legality of such purchases varies from country to country and from drug to drug). Smart drugs work on the neural processes underlying attention, perception, learning, memory, language, planning and decision-making, usually by altering the balance of the chemical neurotransmitters involved in these processes. Some examples include Modafinil (Provigil) commonly used to treat the sleep disorder narcolepsy, now widely used to increase attention and replace sleep; the drug Donezepil (Aricept) designed for Alzheimer’s sufferers but being used to boost memory; and Methylphenidate (Ritalin), intended for the treatment of attention deficit hyperactivity disorder but now being used to improve attention and lessen distractibility. Proponents argue that their use is just a step-on from the more conventional use of nicotine, caffeine and alcohol which people have used for centuries to boost mood, memory and performance. But others argue that we should be more wary of the potential risks posed by disrupting ‘benign interdependencies’ [Ref: Prospect]. For example, tinkering with ‘long-term memory’ may disorientate another cognitive ability such as ‘working memory’ [Ref: Discover]. For some, though, the growing use of smart pills provides good reason to press for regulatory authorities to allow pharmaceutical companies to market cognitive enhancers to adults, and to commit to further research in this area [Ref: Nature].

Are smart drugs dangerous?
Because smart drugs have already been judged to be safe enough to be used in different contexts (for example the widespread use of Ritalin amongst children suffering from ADHD) we can reasonably assume that they are safe enough to be used amongst a healthy adult population for the purposes of enhancement, say proponents [Ref: BMJ]. But others warn that the infancy of smart drugs mean that it is as yet too early to assume that they are safe. In the field of human memory in particular, scientists warn of irreversible transformations to the human character. They suggest that there are significant risks posed by disrupting ‘benign interdependencies’ [Ref: Prospect]. For example, tinkering with ‘long-term memory’ may disorientate another cognitive ability such as ‘working memory’ [Ref: Discover]. For some, though, the growing use of smart pills provides good reason to press for regulatory authorities to allow pharmaceutical companies to market cognitive enhancers to adults, and to commit to further research in this area [Ref: Nature].

Drugs, coercion and inequity
Specialists across the world warn of the profound inequalities that could result from the marketing of smart drugs in societies where significant socio-economic disparities already exist [Ref: Times Educational Supplement]. But others disagree. Technological advancement often begins with the wealthy, but then filters down to benefit wider society, some suggest, becoming more widely dispersed across society and indeed nations. But, say experts such as Martha Farah, a professor of psychology at Pennsylvania University, more worrisome than
questions of equality is the implicit coercion associated with the widespread use of smart drugs. As their use becomes more ubiquitous what was a matter of individual choice can become one of collective coercion, where people feel compelled to use drugs to gain a competitive advantage.

Are we cheating ourselves if we use smart drugs?
Painting a picture of less than diligent university students, taking pills to compensate for a lack of hard work, some suggest that the use of smart pills allows the lazy to cut corners or worse to cheat their way to success. Some academics have also raised concerns that the use of smart drugs is symptomatic of a broader ‘managerial’ and ‘reductive’ approach to scholarship that promotes rote learning over creativity and underplays the importance of a critical engagement with difficult ideas [Ref: THES]. In their influential 2003 report on enhancement, the President’s Council of Bioethics concluded that the drive towards perfectibility represents a hyperactive aspiration to remake nature which undermines our appreciation of the ‘giftedness’ of human traits and the need for greater humility [Ref: The Atlantic]. But others argue that it is exactly the drive to enhance, to transcend our natural limits and to self-improve that defines the human character. From this perspective support for smart drugs and other forms of enhancement becomes a moral imperative [Ref: Philosophers’ Magazine].
HEAD TO HEAD: IS IT ACCEPTABLE FOR PEOPLE TO TAKE METHYLPHENIDATE TO ENHANCE PERFORMANCE?

No
Anjan Chatterjee BMJ 2009

Yes
John Harris BMJ 2009

SHALL WE ENHANCE? A DEBATE

Arthur L. Caplan and Paul R. McHugh, M.D. The Dana Foundation
1 October 2004

FOR

Are Smart Drugs the Answer to Bad Moods—and a Bad Economy?
Sherry Baker Discover Magazine April 2009

Popping Smart Pills: The Case for Cognitive Enhancement
Maia Szalavitz Time 6 January 2009

The cleverness pill
Adam Rutherford Guardian 12 December 2008

Smart drugs
Economist 28 May 2008

The Battle for Your Brain
Ronald Bailey Reason February 2003

AGAINST

A Pandora’s box full of smart drugs
Ann Robinson Guardian 23 February 2010

The smart drugs won’t work
Paul Cooper Times Higher Education 25 June 2009

They were great at first – but then the creativity dries up
Johann Hari Independent 19 June 2009

Brain Gain: The underground world of neuroenhancing drugs
Margaret Talbot New Yorker 27 April 2009

Slippery slopes, wonder drugs, and cosmetic neurology
Richard H. Dees Neurology 2004

IN DEPTH

The age of enhancement
David Edmonds Prospect 3 September 2009

Towards responsible use of cognitive enhancing drugs by the healthy
Henry Greely et al Nature December 2008

This is your brain on Smart Drugs
Lara Crigger Escapist 18 March 2008

Cosmetic neurology: The controversy over enhancing movement, mentation and mood
Anjan Chatterjee Neurology 63 September 2004

The case against perfection
Michael Sandel The Atlantic April 2004
**BACKGROUNDERS**

Pills that keep your mind afloat: What is the downside of brain-enhancing drugs?
Jeremy Laurance *Independent* 15 April 2011

Ideas of the century: Human enhancement
John Harris *Philosopher’s Magazine* 13 September 2010

Smart drugs, smarter students?
Mun-Keat Looi *Wellcome Trust Blog* 12 May 2010

Mind enhancing drugs: are they a no-brainer?
Jeremy Laurance *Independent* 19 June 2009

Brain boosting and Cheating in Exams: Four Responses
Practical Ethics *Ethics in the News* 22 May 2008

Give your intellect a boost
Mathew Honan *Wired* 21 April 2008

Smart drugs – a lecture by Prof Barbara Sahakian
*Royal Institution of Great Britain* 22 February 2008

Artificial intelligence
Madeline Brettingham *TES* 1 February 2008

Smart Pills
The Big Picture *Wellcome Trust* 1 January 2008

Smart Drugs for Straight A’s
Peta Dee *The Times* 14 May 2007

The Neuroethics of Enhancement: How Smart Are Smart Drugs?
*The Dana Centre* 14 May 2007

Better Humans?
*Demos* 2006

Reports: Supercharging the brain
*Economist* 16 September 2004

**ORGANISATIONS**

- Academy of Medical Sciences
- Neuroethics Society
- Oxford Centre for Neuroethics

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**SMART DRUGS:**

“We should embrace the use of smart drugs”
**IN THE NEWS**

Clever smart drug thriller excites  
*Sydney Morning Herald* 21 March 2011

Adderall doesn’t Make You Smarter, Faster, or Better  
*Atlantic Wire* 21 December 2010

Students and academics increasingly using ‘smart drugs’ to boost performance  
*Telegraph* 6 July 2010

NHS spending on ‘chemical cosh’ child-calming drugs soars by 60% to £31m  
*Daily Mail* 8 May 2010

Illegal ‘smart drugs’ bought online by teenagers before exams could have catastrophic effect  
*Daily Mail* 10 March 2010

Bring smart drugs out of the closet, experts urge Government  
*The Times* 27 February 2010

‘Test students for smart drugs’ before university exams, says expert  
*Metro* 21 February 2010

“Smart Pills” herald new direction for drugs companies  
*Star Tribune* 18 January 2010

Narcolepsy Pill Used as Smart Drug May Be Addictive  
*Bloomberg* 17 March 2009

More students turning illegally to ‘smart drugs’  
*NPR* 5 February 2009

Let students take drugs to boost brainpower, says leading academic  
*The Times* 1 January 2009

Scientists find key brain circuits for attention  
*Reuters India* 16 July 2008

Smart drugs  
*Channel 4 News* 22 May 2008

Professionals use drugs to sharpen the mind  
*Washington Post* 9 April 2008

Parents accused of exam drug use  
*BBC News* 29 May 2007

No 10 scientist urges brain pills for all  
*The Times* 4 June 2006

**SMART DRUGS:**

“We should embrace the use of smart drugs”
ABOUT DEBATING MATTERS

Debating Matters because ideas matter. This is the premise of the Institute of Ideas & Pfizer Debating Matters Competition for sixth form students which emphasises substance, not just style, and the importance of taking ideas seriously. Debating Matters presents schools with an innovative and engaging approach to debating, where the real-world debates and a challenging format, including panel judges who engage with the students, appeal to students from a wide range of backgrounds, including schools with a long tradition of debating and those with none.

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- I am interested in becoming a Debating Matters judge
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“TEENAGE CITIZENS THINKING DEEPLY ABOUT...SOCIAL ISSUES”

IAN GRANT, CEO, BRITANNICA