The Cannabis Papers: a citizen's guide to cannabinoids by Publius

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Sporting cannabinoids

Sweating ourselves high

Wow. I just got back from a run and feel great. Not a difficult run - just wanted to break a sweat.

It seems that everyone advocates exercise. Few people argue against being active – but what is it that makes us feel so good? – And does us so much good? What chemicals in our body put a bounce in our step and a smile on our face? Try it – try bringing this up in a discussion and see how many people guess wrong. Ask them what chemical compound in the body accounts for the "runner's high"? – Those moments of time, both during and after physical activity, when one feels good and high.

People will typically guess endorphins as the answer. Say yes, endorphins are good, but have problems crossing the all-important "blood-brain barrier." So if endorphins can't get into the brain, they can't account for the high. But before the answer, let's have some fun and listen to POTUS 43, George W. Bush, and see how he describes the benefits of running. In an October 2002 interview for *Runner's World*, POTUS 43 was asked, "What role does running play in your mental and physical fitness?" He said it was very important and that he runs five or six times a week. President Bush went on to say that running:

- "helps me sleep at night"
- "keeps me disciplined"
- "breaks up my day"
- "allows me to recharge my batteries"
- "enables me to set goals "
- "- and push myself toward those goals"
- "in essence, it keeps me young"
- "adds a little bounce to my step"
- "I get a certain amount of self-esteem from it "
- "I just look and feel better"

Later in the interview President Bush is asked about running and how it helped him to quit drinking alcohol. POTUS 43 responded:

"Definitely. As a runner, I quickly realized what it felt like to be healthy and I already knew what it felt like to be unhealthy. If you're drinking too much and you're running to cure a hangover, pretty soon you have to make a choice. *Do you want to keep getting a hangover or do you want* *to feel the way you do after a run? So running is a way to heal people.* Running is something that just makes you feel fantastic."

Yes, the ECS is a wonderful thing, and thank you for saying so President Bush – just like the 2003 research from the *NeuroReport: Cognitive Neuroscience and Neuropsychology.* This research from Georgia Tech and the University of California, Irvine, showed that a "class of chemicals known as cannabinoids may be the missing piece of the 'runner's high' puzzle long sought by scientists."

That's right – the new runner's high theory is that the internal chemical system responsible is – the ECS.

Surprised? Well, you shouldn't be. Cannabinoids modulate the other systems in one's body. For example, breaking a sweat is an obvious bodily marker of this transition. In the moments when the body begins to adjust to the stress of running, the ECS is activated. In the 2003 research, 24 male participants exercised for 45 minutes. They ran or cycled while the control group was at rest. All the runners and cyclists had "dramatically" elevated anandamide levels after 45 minutes of moderate exercise. From the *NeuroReport*: "Anandamide crosses the blood-brain barrier readily, avoiding the principal problem that plagued the endorphin hypothesis."

We will discuss the blatant irony of arresting over 800,000 fellow citizens for "exercising" their individual ECS by modulating their health with herbal cannabinoids – which is commonly referred to as "getting high." We'll discuss "high" as a concept later in the book, in the parts on Liberty and the Pursuit of Happiness. *For now, think of the foolishness of a sports dominated culture, one built on sweat and dependent on the ECS, and our herbal cannabinoid prohibition*. If humans did not have a cannabinoid system, we could not modulate the other systems. In playing a role in the modulation of other systems, the ECS helps our bodies adjust to changing circumstances – from heart-pumping running to chill-relaxing massage. Simply stated, cannabinoids work by adjusting the amplitude, frequency, and/or intensity of a nerve impulse.

- And POTUS 43 was a promoter of personal cannabinoid use, i.e., running, to the end. In 2007, Fred Barnes, executive editor of *The Weekly Standard*, wrote that President Bush stays healthy because of "his really good physical shape" and that exercise and sleep help to "keep his spirits **high**."

Yes, POTUS 43, we agree – and keep exercising! As POTUS 44 is also an advocate of exercise and physical activity – which has always been a pro-cannabinoid position!

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Search terms

Cannabinoids and exercise; runner's high; blood-brain barrier; Presidential physical fitness; POTUS 43 and alcohol.

Research and selected readings

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