

Effects of Cannabis (Marijuana) on Adolescent & Young Adult Brain | Dr. Andrew Huberman

Cannabis is a unique instance in which nowadays we are hearing yes it's becoming legal in a number of areas And we talked earlier about why that's probably a good thing in most circumstances But that we aren't just hearing that cannabis is safe or it's not just being implied that cannabis is safer But many more people are talking about the positive effects of cannabis without a lot of discussion about the negative effects of cannabis And I realized that saying this is going to upset some people out there because I know that there are a number of people who fought very hard for the legalization process And I want to acknowledge that I also want to acknowledge the many known positive effects of cannabis in adults with very occasional use provided it is delivered safely and in the safe context and setting and with legality that is entirely distinct from the issue of whether or not cannabis is safe for the developing brain and body Again I'm not demonizing anybody for using cannabis but I want to make the point very simply and very directly It is far and away a different circumstance for the brain for an individual to be 25 years or older and using cannabis in whatever form occasionally or maybe even frequently Then it is for a young person aged 14 to 25 to be using cannabis either by smoking or vaping or by edible or any other form on the brain and body It's absolutely clear that the brain continues to develop at least until age 25 And that a huge number of systems related to mood regulation so called executive function the ability to organize one's thoughts plan and execute plans essentially to become a functional human being right That's one portion of becoming a functional human being but certainly an essential one All of that relies on the fine tuning of this neural circuitry that we've been talking about up until now And it's abundantly clear that cannabis and THC in particular dramatically disrupt those processes So if this isn't clear enough just from my statements I'd like to point to a particular paper This is one of the more impactful papers in this area in recent years this is a paper published in Lancet Psychiatry in 2022 title is Association of Cannabis Potency with Mental ill health and addiction A systematic review a number of very important points in this very fine paper Lancet Psychiatry is one of the premier medical journals out there and they evaluated a huge number of studies They actually looked at more than 4000 studies They selected the ones that were only the most rigorous in terms of study design and analysis

and rigor of conclusions And they looked at how early use of cannabis impacted later probability of development of psychosis and other psychiatric conditions And the takeaways from this study are very clear First of all chronic cannabis use so more than twice per week has consistently been associated with mental health disorders I'm pulling some phrases directly from the paper heavy cannabis use meaning cannabis use more frequent than twice per week has been associated with four times the risk of psychosis later in life In particular schizophrenia and bipolar like episodes Now we've done an episode on bipolar disorder so called bipolar depression We have not yet done one on schizophrenia but both bipolar disorder and schizophrenia have a very very strong genetic component There's a 33 0 30 times greater likelihood that you have bipolar disorder if you have a first relative who has bipolar disorder And then it's also the case that using cannabis especially during adolescence and the teen years and up until age 25 create a four times greater risk of psychosis for those that have a predisposition to bipolar disorder and or schizophrenia Now I don't hear very much about this in the media This paper got some attention and then it sort of uh got swept away I don't think there was an intentional sweeping way There's just a lot of events in the world as you well know but I think it's a particularly important set of findings because obviously it in looking at so many studies it distills out the strongest findings that are out there and really pulls the the the consistent messages that are arriving from all these different studies And as they point out and again I'm paraphrasing here This is the first systematic review of the association of cannabis potency and all of the data point to a very clear conclusion which is the more potent the THC concentration the higher probability of developing psychosis or a major depressive episode or a major anxiety disorder later in life That should be of particular concern because we know we are absolutely clear about the fact that with the advent of all these new strains of cannabis and with the engineering and availability of cannabis at much higher potency meaning THC potency the risk of psychosis is going up and up and is likely to continue going up unless something is done to reduce the frequency of cannabis use to zero ideally or to very low frequency very low potency in adolescents and teens and people age 25 or younger I know a lot of people don't wanna hear this message because first of all it's alarming And second of all as I mentioned earlier the statistics tell us that the greatest number of people that are starting to use cannabis are in the age bracket of 16 to 24 many of them are functional in other areas of life They are students they are employed et cetera But when you couple that with the

fact that the most frequent adopters of cannabis use are in this age bracket of 16 to 24 they're twice as likely to use as other individuals or to start using cannabis as are other individuals Plus the general perception out there because of the way that cannabis is discussed in the media and by sports figures and by celebrities and by politicians et cetera that it's not as bad as alcohol and maybe not that bad and maybe even has health benefits Then you're essentially setting up a system where young people are far more likely to adopt and continue cannabis use without realizing these serious health consequences that await them later