

## **Cannabis use for pain in a large population-based survey of adult athletes**

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Little is known about use of and benefits and harm from cannabis for pain in athletes.

**Purpose:** To determine tetrahydrocannabinol (THC) and cannabidiol (CBD) use for pain in adult athletes.

**Methods:** The Athlete PEACE Survey used mainly social media and email blasts to recruit and SurveyGizmo to collect data. 1,161 (91.1%) of the 1,274 athletes taking the survey completed it. Current cannabis use was evaluated by asking “In the past two weeks, have you used marijuana (including THC and/or CBD)?” and cannabis type used was assessed by asking “What do you primarily use THC, CBD, or both?”. Cannabis use, benefits, and adverse effects were reported.

**Results:** The cohort was majority male (62.3%) and Caucasian (89.8%) across mainly 3 sports: triathlon (34.4%), running (25.8%), and cycling (22.2%). More than 75% were athletes for  $\geq 11$  years and about 75% exercised  $\geq 5$  days/week with 46.1% exercising  $\geq 11$  hours/week. Pain was noted in 49.0%. Cannabis was currently used by 26.0% with 61.1% using it for pain (Table). Almost half used cannabis for  $\geq 3$  years at a frequency of  $\geq 4$  days/week. Cannabis was used more often in athletes with pain (32.3% vs. 19.9%,  $p < 0.001$ ), athletes younger than 40 (32.6% vs. 22.9%,  $p < 0.001$ ), and those who exercised 1-4 days per week (36.2% vs. 22.3%,  $p < 0.001$ ). Common benefits from cannabis were improved sleep (71.4%), less pain (68.8%), and calm (58.5%); no benefits were reported by 2.3%. The most common negative effects were increased appetite (24.3%), anxiety (20.9%), and difficulty concentrating (16.6%); 54.8% reported no adverse effects. From 74-85% of athletes who used cannabis for specific pain reported it as ‘very much’ or ‘moderately’ effective.

**Conclusions:** About 26% of adult athletes use cannabis. Athletes use cannabis to alleviate pain and to improve sleep. Beneficial effects were reported markedly more frequently than adverse effects.

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