

Name: _____

Date: _____

CBD and Sports CBDIA Certification Exam

Instructor: Luis Enrique R. Liogier-Weyback, MD

- 1) CBD exhibits an interesting pharmacological property by which it has one effect at a low concentration, but it exerts a different effect on the patient at high concentration. For example, at low doses CBD is alerting, but at high doses it is sedating.
 - a) True
 - b) False

- 2) The absolute most important thing to do when evaluating your customer or patient is:
 - a) Find out how much money they have
 - b) Ask how many goals they scored in their most recent game
 - c) Ask detailed questions about their medical history, medications, and symptoms
 - d) Don't ask them questions; just make money!

- 3) Which **best** describes the biological process of homeostasis?
 - a) A static process by which the body's systems keep things at a happy medium
 - b) A dynamic process by which any number of our body's systems actively fight pathophysiological changes to return back to a physiological norm
 - c) A conspiracy propagated by Scientologists
 - d) I don't know why I'm here

- 4) Activation or agonism of a CB1 receptor at a specific tissue type has what type of action?
 - a) The intended action of that tissue type
 - b) The opposite action of that tissue type
 - c) Psychotropic action (making you high)

- 5) CB2 receptors are typically found on all of the following tissue types **EXCEPT:**
 - a) Microglia
 - b) Osteoblasts/osteoclasts
 - c) Basal ganglia and cerebellum
 - d) Immune cells

- 6) The vast majority of scientific evidence for using CBD in the treatment for muscle spasm and spasticity comes from translational and clinical research in which disease state:
 - a) Multiple sclerosis
 - b) Parkinson's Disease
 - c) Hepatitis C
 - d) Duchenne muscular dystrophy

- 7) CBD is primarily metabolized by which of the following liver cytochrome complexes?
- CYP450, CYP2C19, CYP3A4
 - Cytochrome C
 - CYP450, CYP2C, CYP2S1
 - None of the above
- 8) What happens when a patient takes their CBD with another medication metabolized by the liver?
- The blood levels of the other medication potentially decrease
 - The blood levels of the other medication are unaffected
 - The blood levels of the other medication potentially increase
 - There is no appreciable interaction
- 9) In rat models of traumatic brain injury and stroke, what was observed to happen to the amount of injured/dead brain when the rat was administered cannabidiol?
- Nothing
 - Dramatic increase in stroke/injury burden
 - Dramatic decrease in stroke/injury burden
 - Don't pick this one
- 10) In models of Parkinson's Disease and chronic traumatic encephalopathy (CTE), neurofibrillary tangles secondary to tau proteins are observed to form as a result of neuroinflammation. Studies using synthetic cannabinoids have been shown to not only slow down progression of this process but also potentially reverse it.
- True
 - False
- 11) Patients with repeated head trauma routinely develop dementia from multiple etiologies. Among these are amyloid-beta plaque deposition which is similar to the process seen in Alzheimer's Disease. Cannabinoids do not inhibit the neuroinflammatory process that form these plaques nor are they involved in their degradation.
- True
 - False
- 12) When administering CBD through a topical route, stimulation of which receptor in the skin are most responsible for pain relief?
- TRPV1 (vanilloid receptor)
 - CB1
 - CB2
 - PPAR γ

- 13) In rat models of bone fracture, administration of which compound or combination of compounds showed best bone healing (total callus volume and mineralized callus volume)?
- a) Vehicle
 - b) THC + CBD
 - c) CBD alone
 - d) THC alone
- 14) What should be the **number one** question you should ask every one of your athletes when initially evaluating them?
- a) What's your favorite color?
 - b) Where are you from?
 - c) Have you been evaluated by your team trainer/doctor/surgeon yet?
 - d) Do you like my shirt?
- 15) When in doubt, what phrase should you never be afraid to say to any athlete or their family member?
- a) "Cool story, bro."
 - b) "I remember my first beer"
 - c) "That's a question better suited for your healthcare provider"
 - d) "I bet if coach put me in in 1984, we would've won state"