

**Nitric Oxide Report: Bioesse Technologies**  
**Four Product Sample**  
**Completed by CRG, L.L.C.**  
**September 11, 2016.**

**Results:**

CRG, L.L.C, completed human subject testing of four samples from Bioesse Technologies, containing CBD Oil to ascertain if nitric oxide was elicited in the human subjects, individuals who agreed to participate in this assessment. At baseline, all subjects were depleted of nitric oxide in saliva according to the assessment tool.

Subjects received assessment initially, which confirmed a depleted or negative status, and then adhered the product according to manufacturer directions. At fifteen, thirty, forty-five, and sixty minute intervals, retesting was completed. The subjects were sedentary and there was no additional influence, including ingestion of food, beverage, aromatherapy, or performance of any activity by the subjects.

All four products elicited a positive response within thirty minutes of application. The product containing lavender elicited a positive response within fifteen minutes. At one hour the responses were in the optimal range in the salivary test for all products.

**Significance:**

Nitric oxide in the human body is essential for cellular function in the human body which affects cerebral nerve conduction, cardiovascular health, reduction of inflammation, sexual function, sleep patterns, mood and emotional stability, endurance and strength, and gastric function. Dietary increase of l-arginine and l-citrulline found in fruits and meat and dairy foods increase nitric oxide levels in humans. Poor nutritional intake of these foods reduces nitric oxide levels, placing the individual at greater risk for disorders associated with suboptimal nitric oxide levels. Over sixty thousand studies have been conducted pertaining to nitric oxide in the human body and associated research of nitric oxide was the topic for which the Nobel Prize was awarded in 1998.

Absorption of derivatives of the hemp plant which are high in cannabinoids have been associated with an increase in nitric oxide levels, indicated via salivary testing in human subjects (CRG, LLC, Patent, 2016). Inhalation, ingestion, and absorption of phytocannabinoids, such as CBD from industrial hemp increase nitric oxide levels in human subjects, correlate with the l-arginine and l-citrulline content in the hemp plant suggesting an additional dietary source.

**Results of these tests and statements herein have not been evaluated by the FDA and are not intended to diagnose, treat, or cure any disease. Always check with your physician before starting a new dietary supplement program.**

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