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SHORT COMMUNICATION

Anti-Inflammatory and Neuroactive Properties of Selected Fruit Extracts

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ABSTRACT Epidemiological evidence supports inverse associations between fruit and vegetable intake and incidence of cardiovascular disease and neurodegeneration. Dietary botanicals with salient health benefits include berries and leafy vegetables. Molecular pharmacology research has ascribed these benefits primarily to phenolic constituents and antioxidant activity. The current investigation sought to eluicidate pharmacologic activity of two novel preparations of berry and spinach extracts *in vitro*. Blueberry and cranberry exhibited the greatest antioxidant activity. In a dose-dependent manner, a proprietary mixture of cranberry and blueberry extracts inhibited inhibitor of κB kinase β, a central node in inflammatory signal transduction. A proprietary mixture of blueberry, strawberry, and spinach extracts inhibited prolyl endopeptidase, a regulator of central neuropeptide stability and an emerging therapeutic target in neurology and psychiatry. These results indicate specific molecular targets of blended dietary plants with potential relevance to inflammation and neurological health.

KEY WORDS: • ***anti-inflammatory*** • ***antioxidant*** • ***cranberry*** • ***polyphenol*** • ***strawberry***