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# Functional and technological potential of dehydrated *Phaseolus vulgaris*

## L. flours

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## Abstract

The effect of cooking followed by dehydration was evaluated on the bioactive composition, antioxidant activity and technological properties of two varieties (Negro 8025 and Bayo Madero) of common beans. Quercetin, rutin, and phenolic acids were the most abundant phenolics found. Cooking processes resulted in decreased values of some phenolic compounds and antioxidant capacity. A subsequent dehydration increased TEAC values, resistant starch content and decreased starch digestibility. Oligosaccharides and dietary fiber were preserved in both treatments. Variety had a strong impact on phytochemical profile, being Negro 8025 that exhibited the highest content of most of the compounds assessed. Water absorption index (WAI) and oil absorption capacity (OAC) were determined in order to measure technological suitability. Dehydration produced flours with stable WAI and low oil pick up. The results suggest that the flours of Negro 8025 beans have a good potential to be considered as functional ingredient for healthy food products.

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