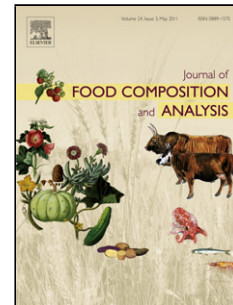


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(Original Research Article)

Folate stability and method optimization for folate extraction from seeds of pulse crops using LC-SRM MS

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Highlights

- Stability of 12 folate monoglutamates were systematically studied
- Folate interconversion networks were built at three pH values
- Simplified one-step folate extraction for pulse seeds needing only two enzymes
- Revised method eliminates heating thereby improving folate monoglutamate stability
- MeFox, a microbiologically inactive folate, was detected in all pulses seeds

Abstract

Folates are essential co-factors for one-carbon metabolism and are needed in human diets.

Pulses, such as common bean, lentil and chickpea contain significant amounts of folates. Ultra-performance liquid chromatography coupled with selective reaction monitoring mass spectrometry was used to study the stability of twelve folate monoglutamates at three pHs (5, 7

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