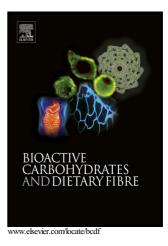
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In Vivo Digestibility of Cross-Linked Phosphorylated (RS4) Wheat Starch in Ileostomy Subjects

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Keywords Resistant starch (RS) *In vitro* Type 4 resistant starch *In vivo* Type 4 resistant starch Cross-linked phosphorylated wheat starch

Highlights

- The ileostomy model was used to measure *in vivo* RS in a Type 4 RS.
- *In vitro* assay of cross-linked phosphorylated wheat starch gave 25-92% dietary fiber (RS).

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- In vivo assay of cross-linked phosphorylated wheat starch gave 84.0% RS4.
- The effective dietary fiber level of the cross-linked phosphorylated wheat starch *in vivo* was 89.0% in admixture with unmodified wheat starch.

1 Abstract

An intervention study was conducted to determine the *in vivo* digestibility of a commercial Type 4 resistant starch, namely, cross-linked phosphorylated (0.4% P) wheat starch (CLP wheat starch). Commercial unmodified (native) wheat starch was the negative control. Eleven ileostomy subjects participated in a randomized,

Abbreviations: AOACI = Association of Official Analytical Chemists International; CLP=cross-linked phosphorylated; DF=dietary fiber; DMSO=dimethylsulfoxide; DS=dry solids; LDL=low density lipoprotein; PPA=porcine pancreatic α -amylase; RS = resistant starch. *Correspondence to: Jane Muir, jane.muir@monash.edu , or Paul A. Seib, paseib@ksu.edu

double-blinded, cross-over design with a one-week washout period between test meals. Subjects consumed a plant-free breakfast including 26.8g CLP wheat starch which was Download English Version:

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