

Effects of hydrothermal processing duration on the texture, starch and protein *in vitro* digestibility of cowpeas, chickpeas, and kidney beans

Prit Khrisanapant ^{1,2}, Sze Ying Leong ^{1,2}, Biniam Kebede ¹, and Indrawati Oey ^{1,2 *}

¹ Department of Food Science, University of Otago, PO Box 56, Dunedin 9054, New Zealand; prit.khrisanapant@outlook.com (P.K.); biniam.kebede@otago.ac.nz (B.K.); sze.leong@otago.ac.nz (S.Y.L.)

² Riddet Institute, Private Bag 11 222, Palmerston North 4442, New Zealand

* Correspondence: indrawati.oey@otago.ac.nz; Tel: +64-3-479-8735



Figure S1. Picture of stainless-steel sieves used during hydrothermal processing of legumes.

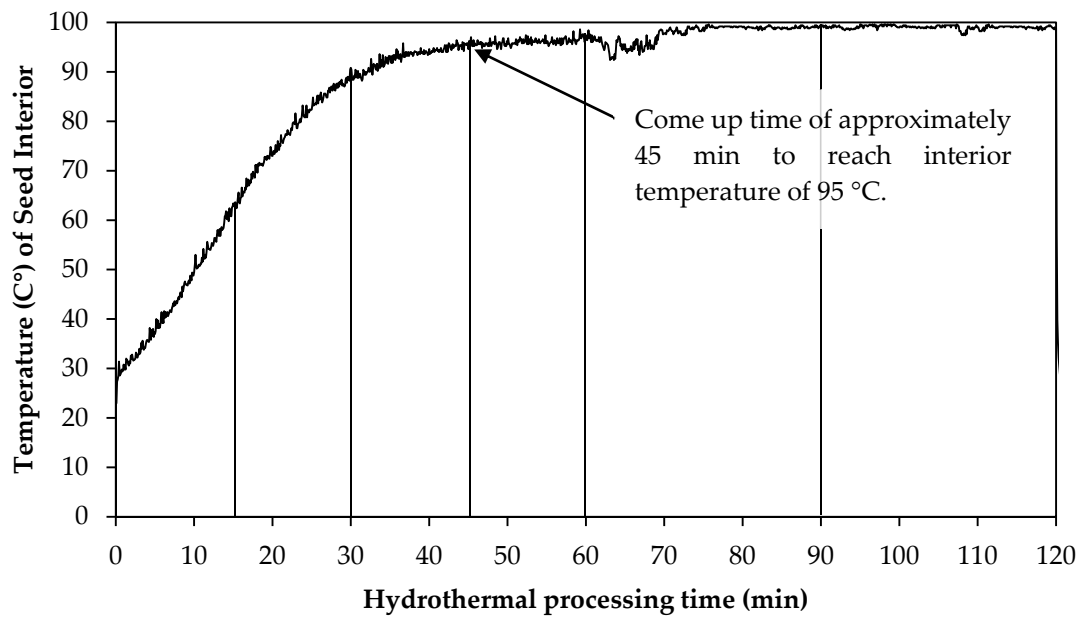


Figure S2. Time-temperature profile of seed interior during hydrothermal processing.



Figure S3. From left to right: soaked cowpeas, boiled chickpea and boiled kidney bean after compression to 90% of its strain using a texture analyser (TA.HDplus texture analyser platform using a 50 mm diameter cylinder probe (P/50)).



Figure S4. Picture of cowpea (left), kidney bean (middle), and chickpea (right) with different sizes used in this study.

Table S1. Starch, protein, lipid and moisture content of chickpeas, cowpeas and kidney beans.

Legume	Starch (% DW)	Protein (% DW)	Lipid (% DW)	Moisture (% FW)
Cowpeas	49.49	21.58	3.46	9.13
Chickpeas	47.25	16.74	7.73	8.27
Kidney beans	51.07	16.39	3.59	12.52

% DW represents % value in dry weight. % FW represents % value in fresh weight.