

Supplemental information for

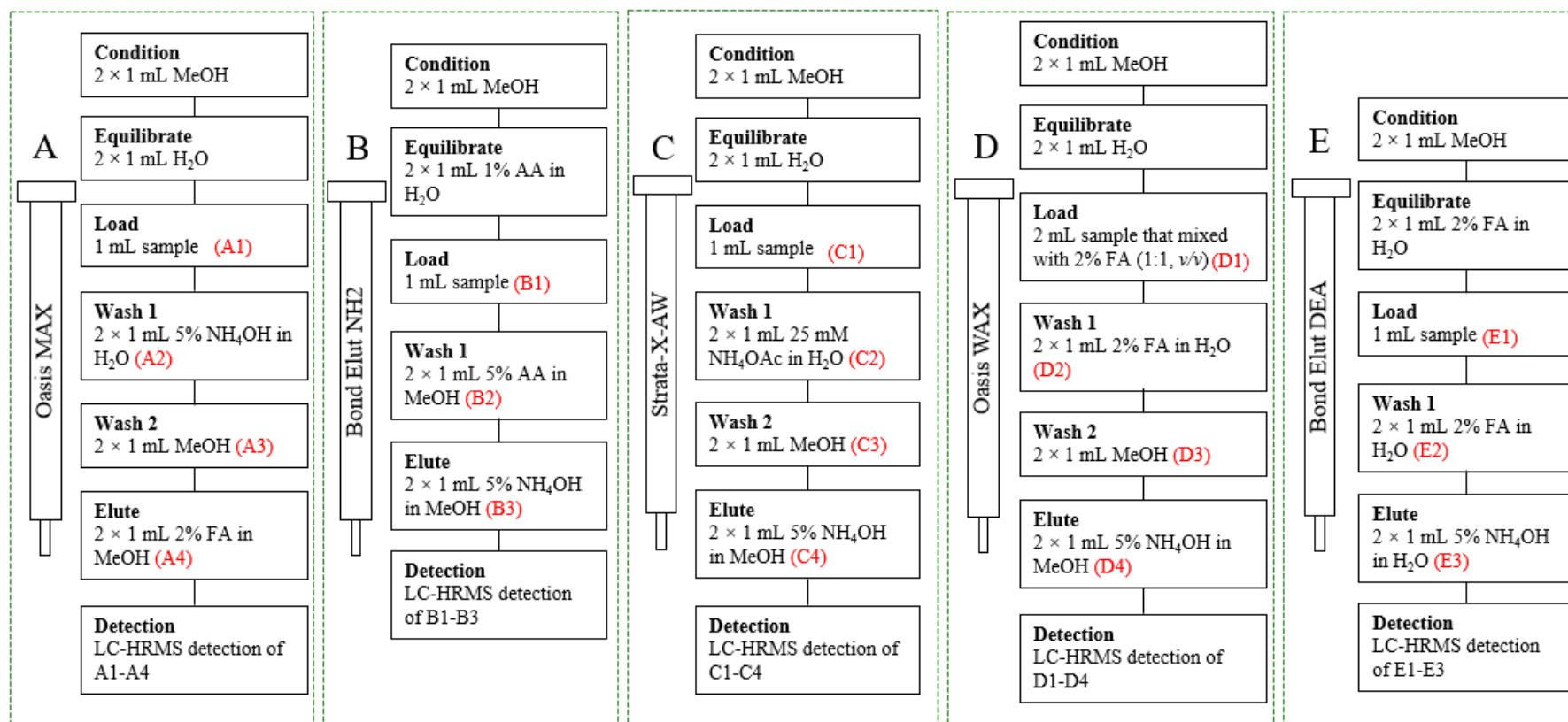
# **A Fast and Simple Solid Phase Extraction-Based Method for Glucosinolate Determination: An Alternative to the ISO-9167 Method**

**Yanfang Li <sup>1,2</sup>, Mengliang Zhang <sup>2</sup>, Pamela Pehrsson <sup>1</sup>, James M. Harnly <sup>1</sup>, Pei Chen <sup>1</sup> and Jianghao Sun <sup>1,\*</sup>**

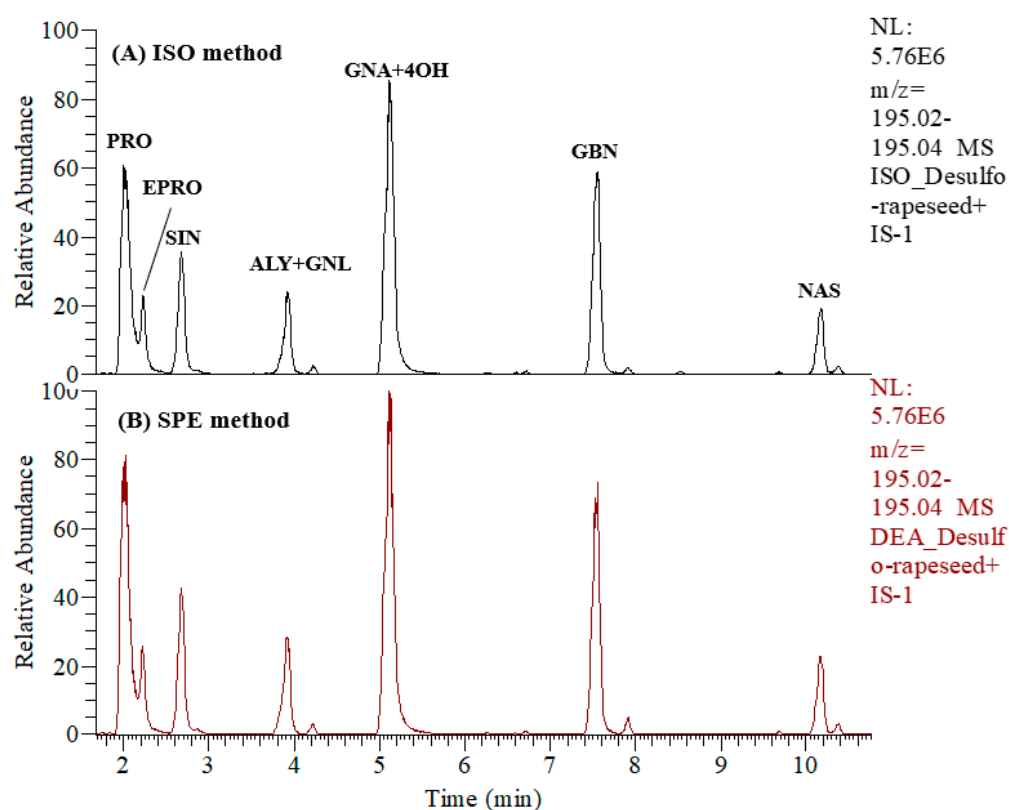
<sup>1</sup> Methods and Application of Food Composition Laboratory, Beltsville Human Nutrition Research Center, Agricultural Research Service, U.S. Department of Agriculture, Beltsville, MD 20705, USA; yanfang.li@usda.gov (Y.L.); pamelapehrsson@usda.gov (P.P.); james.harnly@usda.gov (J.M.H.); pei.chen@usda.gov (P.C.)

<sup>2</sup> Department of Chemistry, Middle Tennessee State University, Murfreesboro, TN 37132, USA; mengliang.zhang@mtsu.edu

\* Correspondence: jianghao.sun@usda.gov



**Figure S1.** Scheme of purification of glucosinolates extracted from certified rapeseeds (ERM-BC367) with different commercial SPE cartridges: (A) Oasis MAX; (B) Bond Elut NH<sub>2</sub>; (C) Strata-X-AW; (D) Oasis WAX; (E) Bond Elut DEA. FA, formic acid; AA, acetic acid; MeOH, methanol; NH<sub>4</sub>OH, ammonium hydroxide; NH<sub>4</sub>OAc, ammonium acetate.



**Figure S2.** Extracted ion chromatogram (EIC) ( $m/z$  195) of certified rapeseed reference (ERM-BC367) follow (A) the ISO method and (B) SPE method. Progoitrin (PRO); epiprogoitrin (EPRO); glucoalyssin (ALY); gluconapoleiferin (GNL); gluconapin (GNA); 4-hydroxyglucobrassicin (4OH); glucobrassicinapin (GBN); gluconasturtiin (NAS).