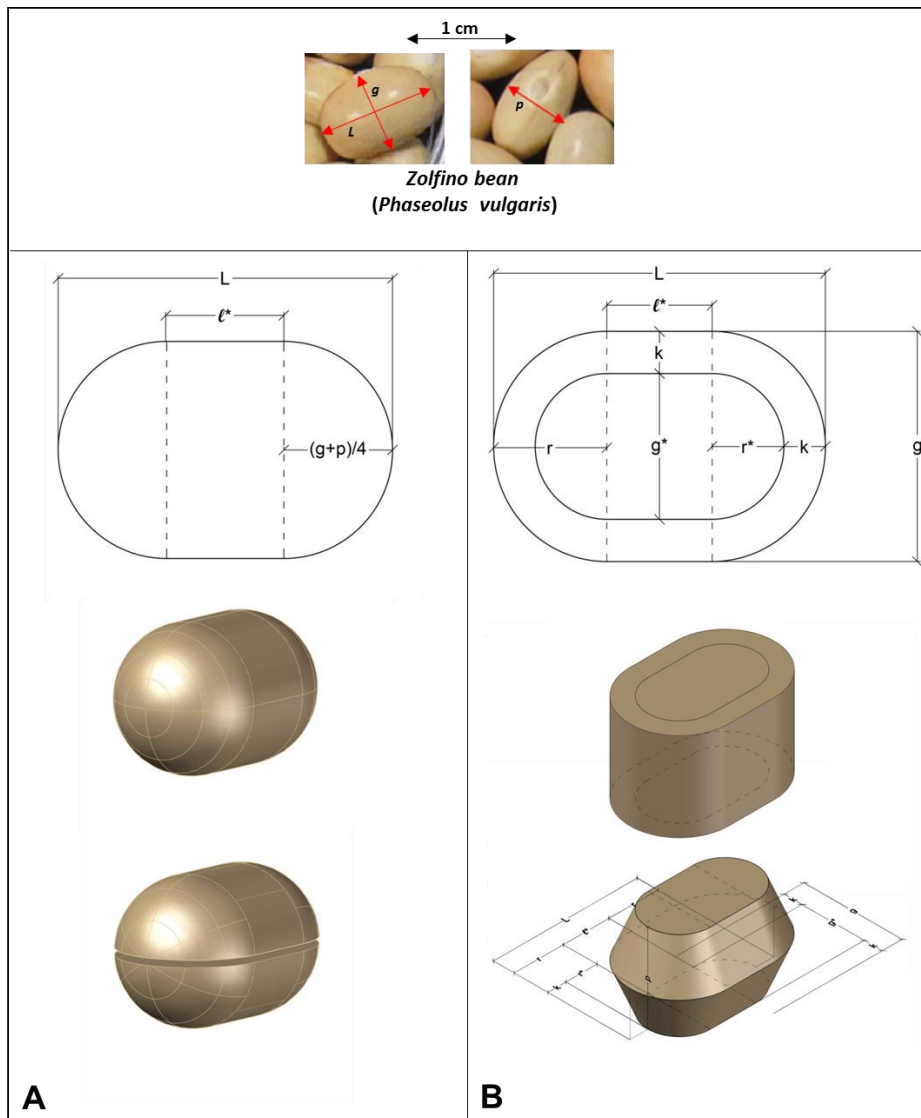


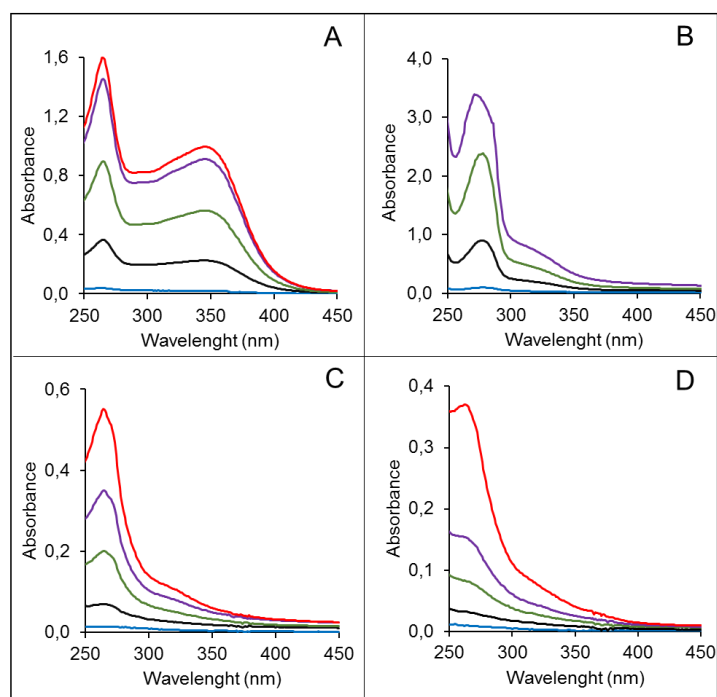
## Zolfino landrace (*Phaseolus vulgaris* L.) from Pratomagno: general and specific features of a functional food.

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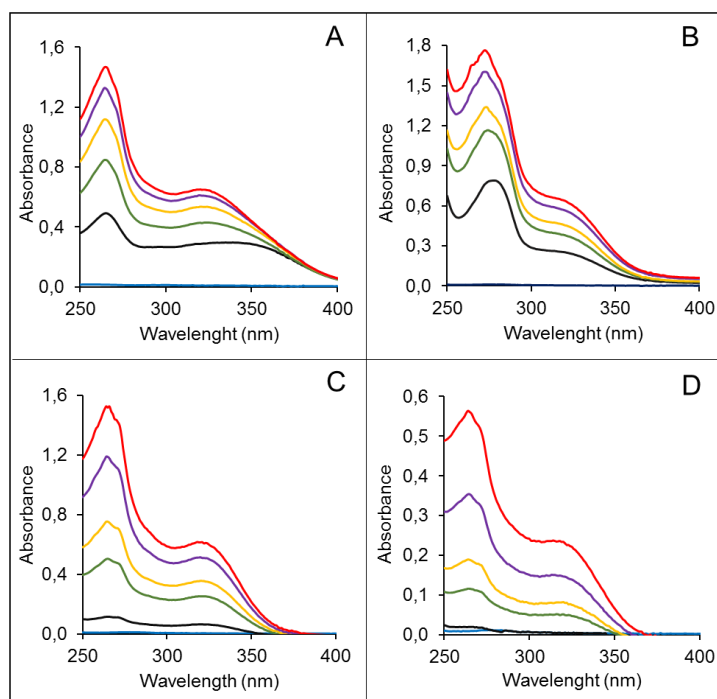
### Supporting Information



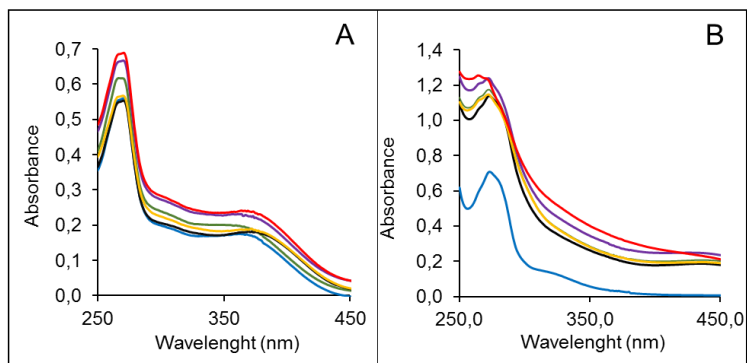
**Figure 1S.** Graphical representation of the proposed empirical method to evaluate the beans surface areas. Panels A and B refer to Method A and Method B, respectively. The images derived from size parameters measured for Zolfino (See Table 1 and the text for details).



**Figure 2S.** Extrusion of molecular species from different beans. Zolfino (*Panel A*), Borlotto (*Panel B*), Cannellino (*Panel C*) and Corona (*Panel D*) beans were suspended (0.4 g/mL) in water and the absorption spectra in the UV-visible region of the imbibition media after 0 (blue), 15 (black), 45 (green), 60 (violet) and 120 (red) min of incubation at room temperature were acquired. For all the beans a tenfold dilution in water of the media was performed.



**Figure 3S.** Extrusion of molecular species from different beans undergoing thermal treatment. Zolfino (*Panel A*), Borlotto (*Panel B*), Cannellino (*Panel C*) and Corona (*Panel D*) beans were suspended (0.4 g/mL) in water and the absorption spectra in the UV-visible region of the imbibition media after 0 (blue), 15 (black), 45 (green), 60 (orange), 90 (violet) and 120 (red) min of incubation at 100 °C were acquired. For all the beans a tenfold dilution in water of the media was performed.



**Figure 4S.** Thermal treatment of beans imbibition media. The imbibitions media of Zolfino (*Panel A*) and Borlotto (*Panel B*) obtained after an overnight incubation at room temperature were further incubated at 100°C for 0 (blue), 15 (black), 30 (orange), 45 (green), 60 (violet), 90 (red) min and the absorption spectra in the UV-visible region were acquired. For all the beans a tenfold dilution in water of the media was performed.