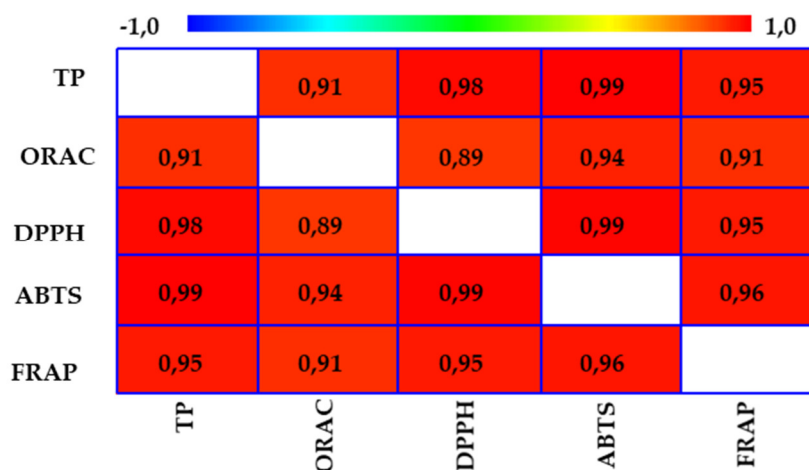


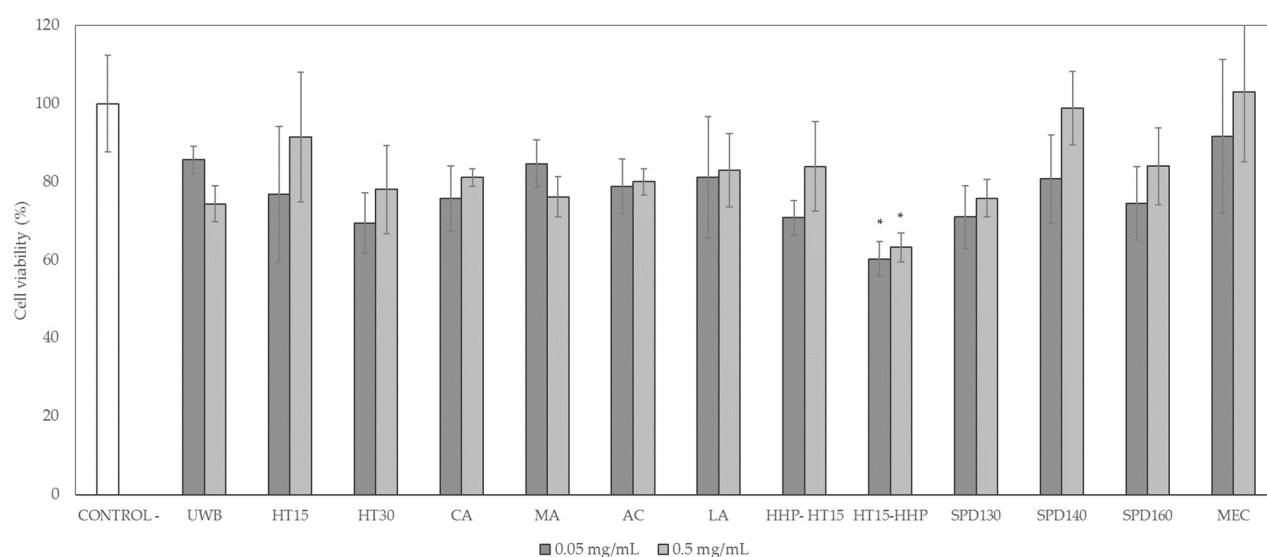
**Table S1.** Relative antioxidant capacity (RACI) for hydrolysed WB.

Hydrolysed WB	RACI
CONTROL	-1,15
HT15	-0,471
HT30	-0,470
CA	-0,332
MA	-0,432
AA	-0,395
LA	-0,480
HHP-HT15	-0,558
HT15-HHP	-0,427
SPD130	1,449
SPD140	1,701
SPD160	1,860
MEC	-0,291

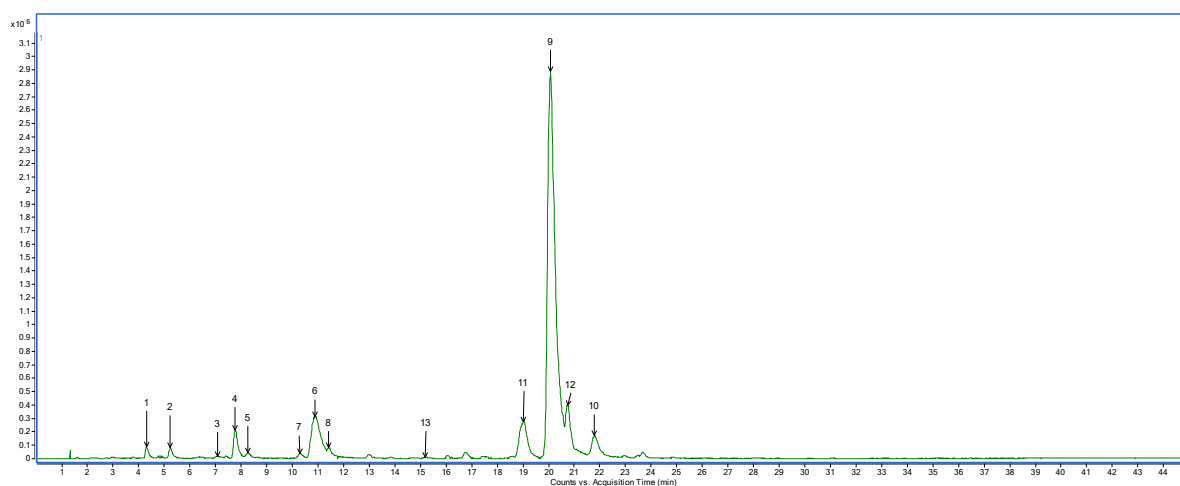
Sample identification: without hydrothermal treatment (CONTROL), with hydrothermal treatment for 15 min (HT15), with hydrothermal treatment for 30 min (HT30), with hydrothermal treatment for 15 min and HHP (HT15-HHP), with HHP and hydrothermal treatment for 15 min (HHP-HT15), treated with citric acid (CA), malic acid (MA), acetic acid (AC), lactic acid (LA), spray dried at 130 °C (SPD130), 140 °C (SPD140), 160 °C (SPD140), and microencapsulated with Pisane C<sub>9</sub> at 130 °C (MEC).



**Figure S1.** Pearson's correlation analysis for hydrolysed WB. Abbreviations: 2,2'-azino-bis (3-ethylbenzothiazoline-6-sulfonic acid) (ABTS); 2,2-diphenyl-1-picryl-hydrazyl-hydrate (DPPH); ferric reducing antioxidant power (FRAP); oxygen radical absorbance capacity (ORAC); total phenolic content (TP).



**Figure S2.** Effect of different hydrolysed WB on cell viability. Data are mean values (expressed as percentage relative to untreated cells)  $\pm$  standard deviation of five replicates. \* indicates significant differences for mean values relative to control cells (0 mg mL<sup>-1</sup>) (one-way ANOVA, post hoc Duncan's test,  $p \leq 0.05$ ). Abbreviations: acetic acid (AC); citric acid (CA); control (CT); high hydrostatic pressure (HP); hydrothermal treatment for 15 minutes (HT15); hydrothermal treatment for 30 minutes (HT30); lactic acid (LA); malic acid (MA); microencapsulation with Pisane C<sub>9</sub> at 130°C (MEC); spray drying at 130°C (SPD130); spray drying at 140°C (SPD140); spray drying at 160°C (SPD160); untreated wheat bran (UT-WB).



**Figure S3.** Based peak chromatogram of the phenolic compounds identified in spray dried (SPD) WB hydrolysates by HPLC-ESI-QTOF-MS (numbers are the same assigned to the identified compounds collected in Table 2).