

Effects of different pilot-scale milling methods on bioactive components and end-use properties of whole wheat flour

Supplementary documents

Table S1. Different milling methods used for preparing WWF.

Sample	Flour type	Mill type
WWF-1	Total bran reconstitution	HM
WWF-2		JM-45 Hz
WWF-3		JM-65 Hz
WWF-4	Entire grain grinding	JM-45 Hz
WWF-5		JM-65 Hz

WWF: whole-wheat flour; HM: bran ground by hammer mill; JM-45 Hz: bran or grains pulverized by jet mill with the rotor speed of 45 Hz; JM-65 Hz: bran or grains pulverized by jet mill with the rotor speed of 65 Hz. WWF-1: Total reconstitution of brans grinded by hammer mill; WWF-2: Total reconstitution of brans grinded by jet mill at 45Hz. WWF-3: Total reconstitution of brans grinded by jet mill at 65Hz; WWF-4: Entire grains grinded by jet mill at 45Hz; WWF-5: Entire grains grinded by jet mill at 65Hz.

Figure S1. Particle size distributions of WWFs.

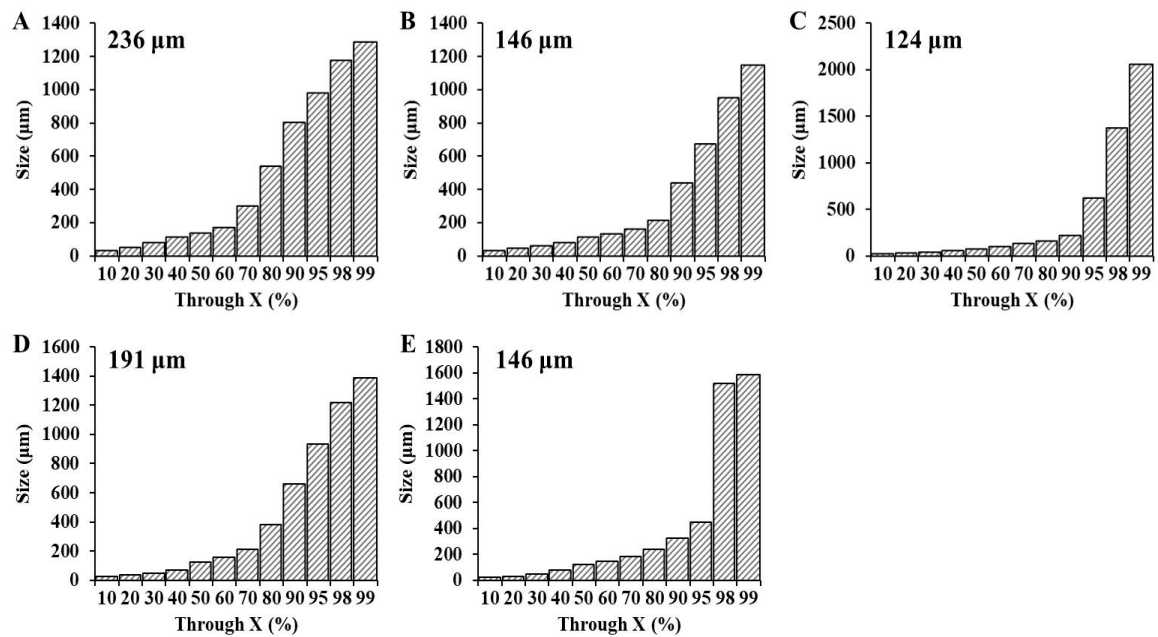
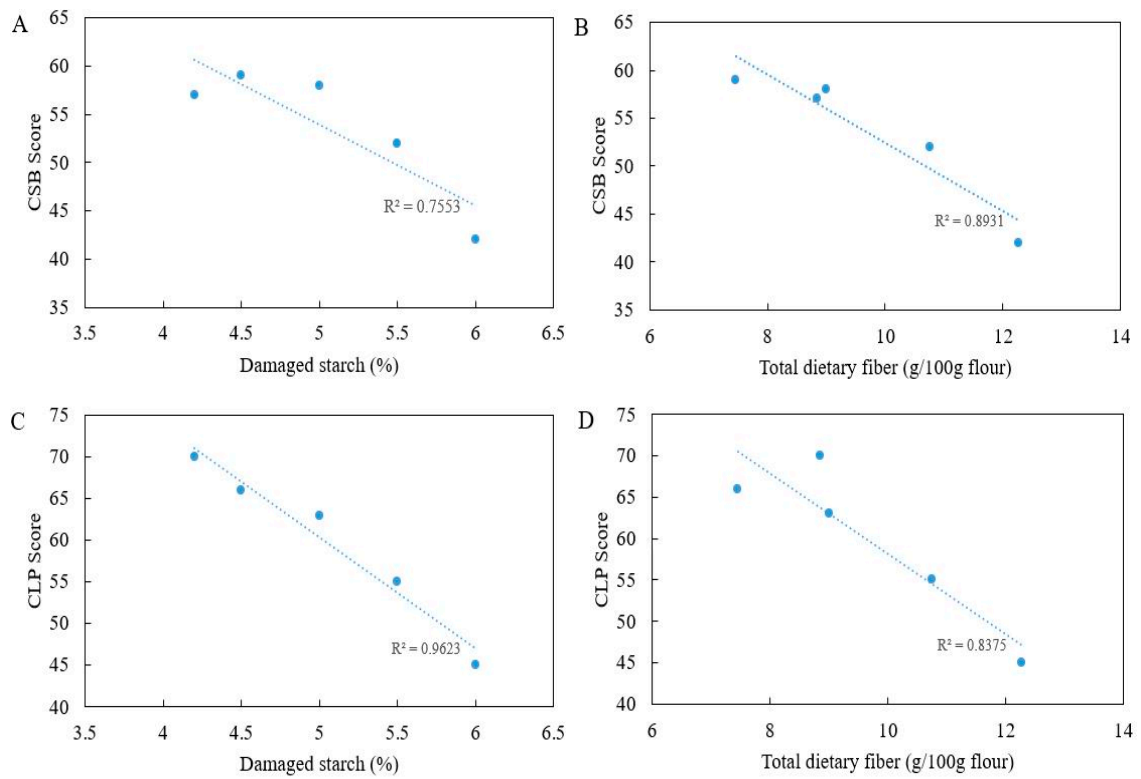


Figure A, B, C, D, E, particle size distributions for WWF-1, WWF-2, WWF-3, WWF-4, and WWF-5, respectively. The average particle size is noted in each figure.

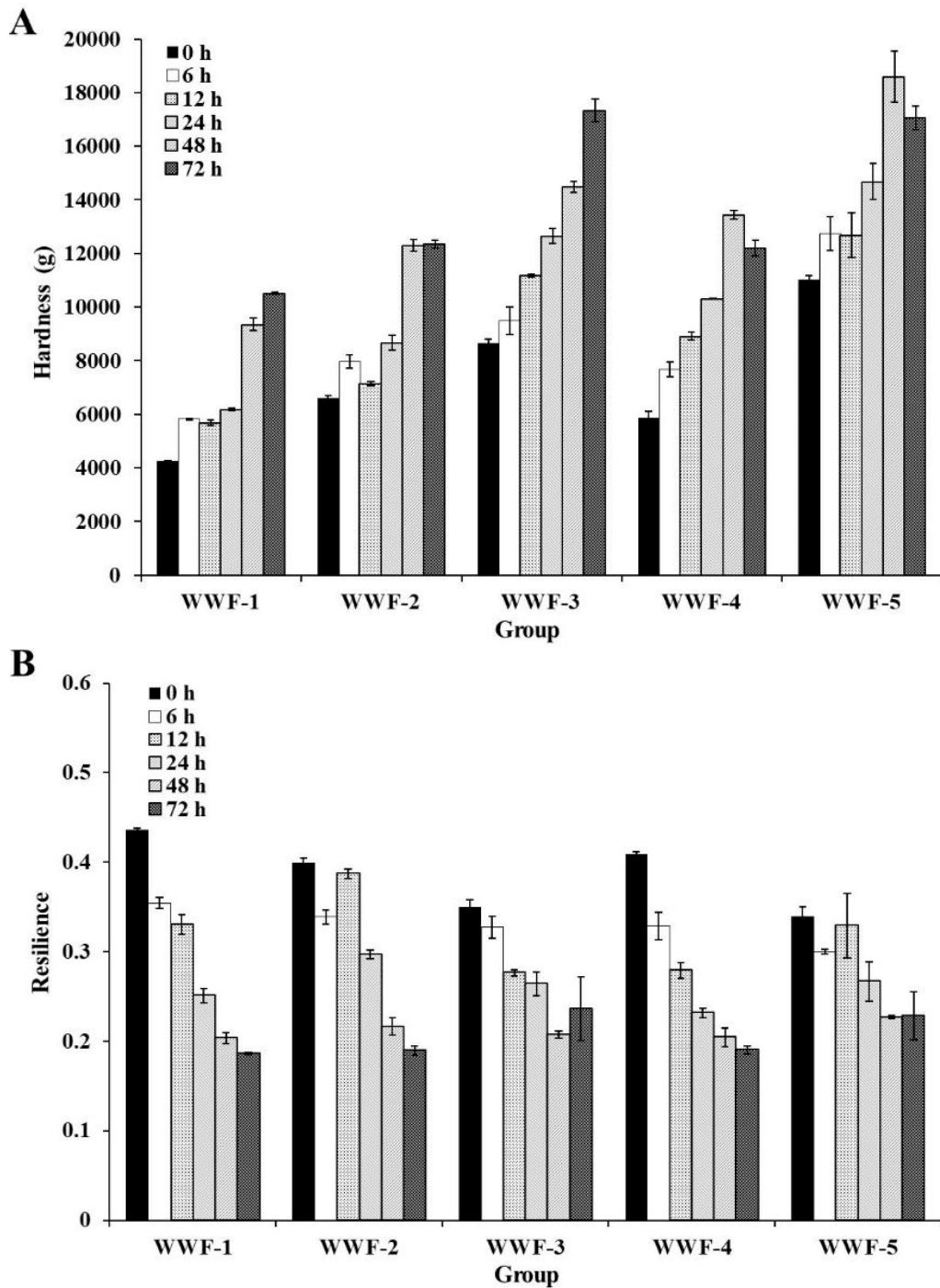
Figure S2. Correlation analyses of sensory quality and chemical composition.



Correlations between (A) CSB score and damaged starch ($R^2 = 0.7553$), (B) CSB score and total dietary fiber ($R^2 = 0.8931$), (C) CLP score and damaged starch ($R^2 = 0.9623$), and (D) CLP score and total dietary fiber ($R^2 = 0.8375$).

CSB, Chinese steamed bread; CLP, Chinese leavened pancake

Figure S3. Storage quality of CSB



CSB, Chinese steamed bread. A, changes in hardness from 0 to 72 hours; B: changes of resilience from 0 to 72 hours.