

Table S1 Pearson's correlation of bolus properties at the swallowing stage

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1 MC _{bolus}	1																		
2 MC _{bolus-DM}	0.992**	1																	
3 residue	0.662**	0.664**	1																
4 h _s	0.945**	0.969**	0.622**	1															
5 h _w	0.885**	0.920**	0.571**	0.987**	1														
6 M _{saliva_in_spit}	0.852**	0.886**	0.432*	0.964**	0.985*	1													
7 SAAbread	0.352*	0.348*	0.298	0.374*	0.378*	0.345*	1												
8 SAAbolus	0.358*	0.349*	0.297	0.359*	0.353*	0.319	0.995**	1											
9 large particles fraction	-0.516**	-0.513**	-0.229	-0.403*	-0.319	-0.305	-0.068	-0.101	1										
10 small particles fraction	0.516**	0.513**	0.229	0.403*	0.319	0.305	0.068	0.101	-1**	1									
11 D ₇₅	-0.1636	-0.169	-0.096	-0.102	-0.054	-0.037	-0.165	-0.192	0.554*	-0.554*	1								
12 D ₅₀	-0.112	-0.115	-0.075	-0.052	-0.007	0.008	-0.133	-0.158	0.475*	-0.475*	0.974*	1							
13 D ₇₅ /D ₂₅	-0.145	-0.148	-0.028	-0.088	-0.043	-0.039	-0.114	-0.147	0.6003*	-0.600*	0.887*	0.799*	1						
14 Median Area	-0.216	-0.219	-0.127	-0.160	-0.115	-0.094	-0.255	-0.281	0.5359*	-0.535*	0.952*	0.929*	0.867*	1					
15 Particle number per DM bolus	0.364*	0.345*	0.116	0.280	0.223	0.221	0.352*	0.357*	-0.732*	0.732*	-0.582*	-0.533*	-0.645*	-0.693*	1				
16 hardness	-0.670**	-0.632**	-0.426**	-0.512**	-0.569*	-0.4913**	-0.399*	-0.404*	0.380*	-0.380*	0.014	-0.009	0.031	0.289	-0.324	1			
17 adhesiveness	0.405*	0.414*	0.385*	0.426*	0.434*	0.397*	0.178	0.166	-0.234	0.235	-0.071	-0.047	0.077	-0.127	0.153	-0.213	1		
18 cohesiveness	0.588**	0.600**	0.314	0.612*	0.621*	0.605**	0.425**	0.420**	-0.460**	0.460**	0.045	0.002	-0.094	-0.208	0.425*	-0.625*	0.046	1	
19 chewiness	-0.674**	-0.637**	-0.473*	-0.493*	-0.557*	-0.462*	-0.339*	-0.343*	0.267	-0.267	0.069	0.041	0.039	0.293	-0.297	0.968*	-0.258	-0.470*	1

Notes: * Correlation is significant at the level of 0.05 (2-tailed); ** Correlation is significant at the level of 0.01 (2-tailed).

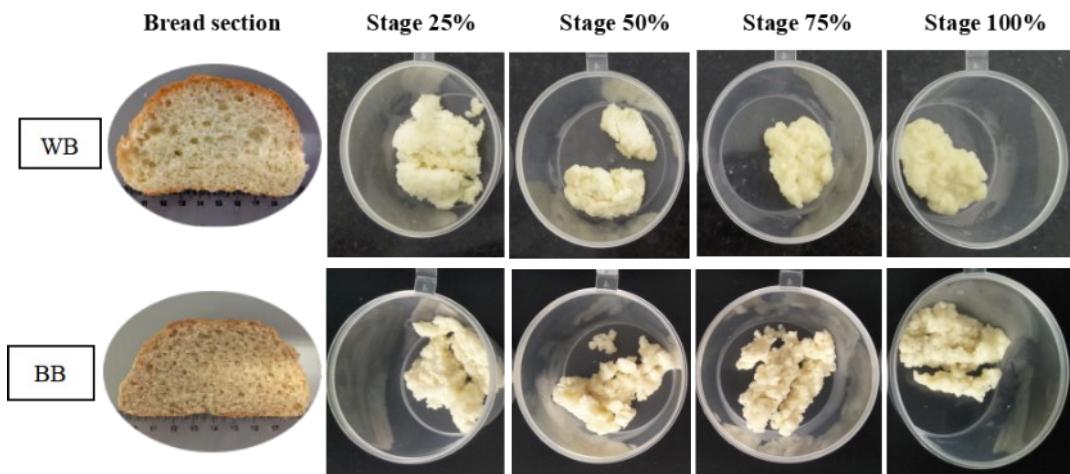


Fig. S1 Representative images of bread section and bread boluses (panellist #18) for WB and BB at different mastication stages (25%, 50%, 75% and 100%). WB: white wheat bread; BB: bran-fortified wheat bread. Boluses were spat into containers of 50-mm diameter and 4-mm height.

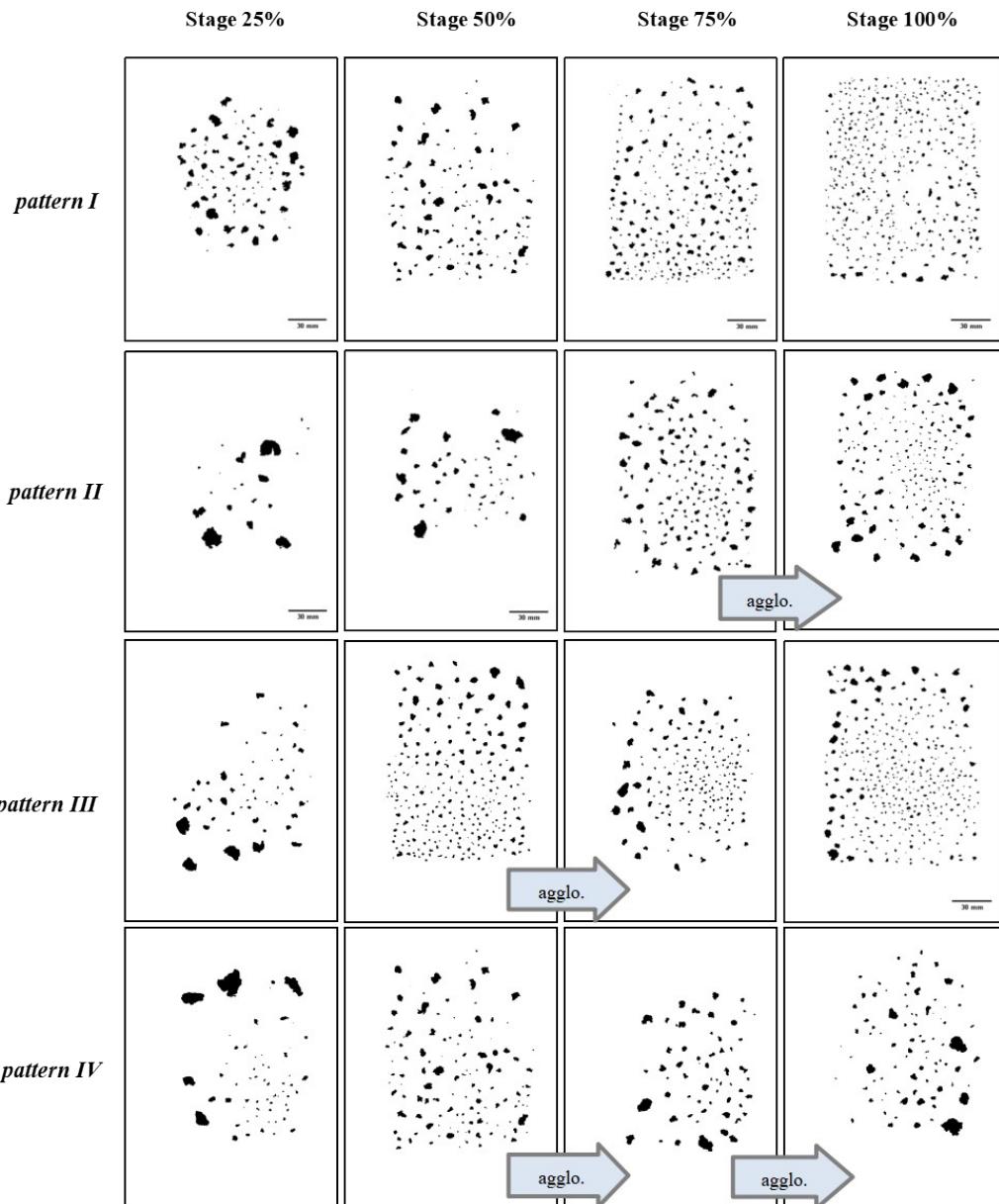


Fig. S2 Representative images of bolus-particle disintegration pattern I, II, III and IV. The scale bar in the images is 30 mm. The arrow indicates the occurrence of agglomeration (agglo.).

