

Table A.1. Main physiological characteristics of the 20 subjects included in the study conducted on non-fortified cereal products^{16,19}

	Poor Dental Status (PFU ≤ 4) n=10	Satisfactory Dental Status (PFU ≥ 7) n=10	Whole group n=20
Age (years)	75 ± 4	69 ± 5	72 ± 5
Sex			
Number of Male	5	4	9
Number of Female	5	6	11
Unstimulated Salivary Flow Rate (mL/min)	0.41 ± 0.19 Min 0.18 Max 0.75	0.33 ± 0.18 Min 0.03 Max 0.67	0.37 ± 0.18 Min 0.03 Max 0.75
Stimulated Salivary Flow Rate (mL/ min)	1.76 ± 0.89 Min 0.84 Max 3.70	2.05 ± 0.98 Min 0.30 Max 3.84	1.91 ± 0.92 Min 0.30 Max 3.84

Table A.2. Composition (wet basis) and properties of the non fortified cereal products ^{16,19}

	Sponge-cake	Brioche
Proteins (g/100 g)*	11	7
Fat (g/100 g)*	6	17
Carbohydrates (g/100 g)*	55	46
Sucrose (g/100 g)	27	14
Starch (g/100 g)	18	30
Others (g/100 g)	10	2
Density (g/cm³)	0.21 ± 0.02	0.33 ± 0.02
Water content (g/100 g)	28 ± 2	30 ± 2
Young's modulus E (kPa)	20 (±3)	5 (±1)

**Theoretical values based on individual ingredients composition (USDA database).*

Table A.3 In-mouth comfort assessment sub-sections and questions

Section	Questions	Scale (structured)
General comfort	Is this food...	
	Comfortable? (Overall)	1 to 5
	Easy to eat?	
Bolus formation	Is this food...	
	Easy to bite with incisors?	
	Easy to chew?	
	Easy to bite with premolars?	1 to 6
	Easy to moisten?	
	Easy to swallow?	
	Rapid to swallow?	
Pain	Does this food cause you...	
	Burning sensation?	
	Muscular pain?	
	Joint pain?	
	Gums pain?	
Texture	Is this food...	1 to 4
	Sticky?	
	Pasty?	
	Stringy?	
	Fatty?	
	Melting?	
	Firm?	
	Hard?	

	Is this food...
Flavor	Intense?
	Salty?
	Sweet?
	Acid?
	Bitter?

Table A.4 ANCOVA model coefficients (Type III sum of squares) for particle size parameters for fortified sponge-cake (FSC) and fortified brioche (FB). F= Fisher ratio; p= p-value; β =normalized regression coefficients, for dental status only the Satisfactory coefficient is given (S). Bold figures indicate significant influence of DS or SSF on chewing parameters and bolus properties

		D₇₅/D₂₅		b Gompertz		c Gompertz	
<i>Product</i>		<i>FSC</i>	<i>FB</i>	<i>FSC</i>	<i>FB</i>	<i>FSC</i>	<i>FB</i>
Dental Status (DS)	F	3.64	1.53	0.02	0.24	5.11	3.59
	p	0.06	0.22	0.88	0.63	0.02	0.04
	β S	-0.74	-0.49	-0.06	-0.19	-0.18	-0.24
Stimulated Salivary Flow (SSF)	F	0.51	0.89	1.07	0.05	1.51	2.05
	p	0.48	0.35	0.31	0.82	0.22	0.57
	β	0.73	0.31	-0.04	0.16	-0.17	-0.18