

Table S1. Pearson correlations between oral physiological, anatomical characteristics and chewing behavior and bolus properties. Only the correlations that are significant at $p < 0.05$ are presented here.

	Eye width (mm)	Face length (mm)	Bottom width (mm)	Jaw angle (°)	Bottom face length (mm)	Left eye to mouth (mm)	Max Bite Force (N)	Oral cavity volume (mL)	Unstimulate d saliva flow rate (g/min)	Stimulated saliva flow rate (g/min)	sAA (U/mL)
Natural mouthful size (a mouthful of rice) (g/mouthful)		0.46 *			0.42 *						0.46 *
<i>Chewing parameters</i>											
Total chewing time (s/mouthful)										− 0.44 *	
Chew time per gram rice (s/g)	− 0.42 *				− 0.37 *						
Number of chews										− 0.45 *	
Cycle opening angle (°)											0.40 *
Cycle closing time (s)				0.49 **					0.44 *		
Cycle opening time (s)						0.38 *					
Distance of closing mouth (mm)					0.39 *		0.43 *	0.37 *	0.48 **		
Vertical closing speed (mm/s)							0.44 *	0.40 *			
Distance of opening mouth (mm)					0.38 *		0.41 *		0.48 **		
Chew cycle angle (°)					0.52 **						
Area of chew cycle (mm ²)				0.38 *	0.37 *		0.47 *	0.44 *	0.57 ***		
Width of chew cycle (mm)									0.46 *		
Height of chew cycle (mm)							0.41 *	0.37 *	0.47 **		
Perimeter of chew cycle (mm)					0.38 *		0.42 *	0.40 *	0.50 **		
<i>Bolus properties</i>											
Saliva added to the bolus (g/g dry rice)										0.59 ***	
Proportion of particles bigger than 2mm (%)			− 0.37 *		0.38 *						
Proportion of particles smaller than 2 mm (%)			0.37 *		− 0.38 *						
d (0.1) (μm)				− 0.45 *				− 0.38 *		0.38 *	
d (0.5) (μm)										0.40 *	
d (0.9) (μm)			0.51 **	− 0.47 **							
D [3, 2] - Surface weighted mean (μm)				− 0.38 *						0.41 *	
D [4, 3] - Volume weighted mean (μm)			0.45 *	− 0.42 *							

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

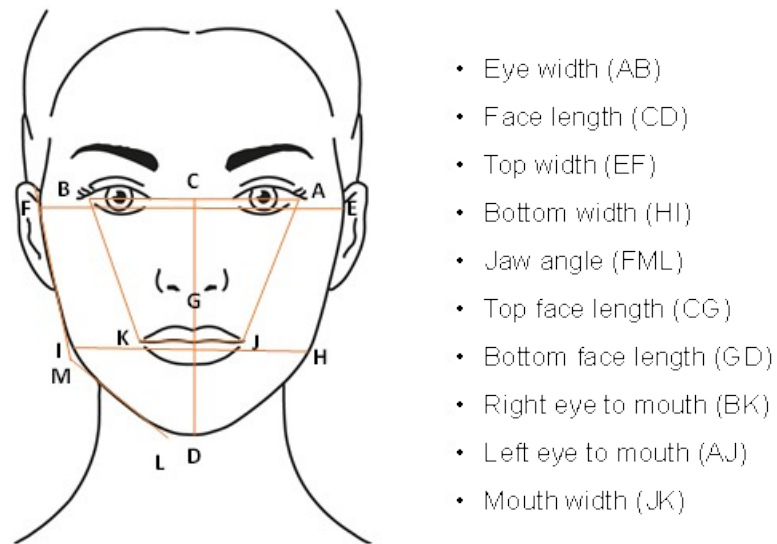


Figure S1. The definitions of 10 facial dimension parameters measured.


Short chewers			
Long chewers			

Figure S2. Visual inspection of expectorated ready-to-swallow boluses collected from three short chewers and three long chewers.