

## **Supplementary Material**

# **Low Fat Yoghurts Produced with Different Protein Levels and Alternative Natural Sweeteners**

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**Table S1.** pH and titratable acidity (TA, % lactic acid) (mean  $\pm$  standard deviation) of the low-fat, low-protein yoghurts produced with different sweeteners. Different capital letters within the same column represent statistical differences between storage time for each parameter in the same sweetener. Different small letters within the same row represent statistical differences between sweeteners for each parameter in the same storage time ( $p < 0.05$ ).

Parameter	Storage time (days)	Sucrose 6%	Stevia 0.03%	Agave 4.5%	<i>P-value</i>		
pH	1	4.47 $\pm$ 0.01 <sup>Aa</sup>	4.46 $\pm$ 0.01 <sup>Aa</sup>	4.45 $\pm$ 0.03 <sup>Aa</sup>	Sweetener (A) Time (B) A x B	<0.0001 <0.0001 <0.0001	
	7	4.34 $\pm$ 0.01 <sup>Bb</sup>	4.39 $\pm$ 0.01 <sup>Ba</sup>	4.32 $\pm$ 0.01 <sup>Bb</sup>			
	14	4.29 $\pm$ 0.02 <sup>Cb</sup>	4.34 $\pm$ 0.01 <sup>Ca</sup>	4.25 $\pm$ 0.02 <sup>Cc</sup>			
	21	4.23 $\pm$ 0.02 <sup>Dab</sup>	4.20 $\pm$ 0.01 <sup>Db</sup>	4.25 $\pm$ 0.01 <sup>Ca</sup>			
TA (% lactic acid)	1	0.67 $\pm$ 0.02 <sup>Ca</sup>	0.66 $\pm$ 0.04 <sup>Da</sup>	0.66 $\pm$ 0.02 <sup>Da</sup>	Sweetener (A) Time (B) A x B	0.1564 <0.0001 0.0423	
	7	0.82 $\pm$ 0.02 <sup>Ba</sup>	0.77 $\pm$ 0.02 <sup>Cb</sup>	0.75 $\pm$ 0.03 <sup>Cb</sup>			
	14	0.85 $\pm$ 0.00 <sup>Ba</sup>	0.84 $\pm$ 0.02 <sup>Ba</sup>	0.86 $\pm$ 0.01 <sup>Ba</sup>			
	21	0.93 $\pm$ 0.02 <sup>Aa</sup>	0.93 $\pm$ 0.01 <sup>Aa</sup>	0.94 $\pm$ 0.02 <sup>Aa</sup>			

**Table S2.** pH and titratable acidity (TA, % lactic acid) (mean  $\pm$  standard deviation) of the low-fat, high-protein yoghurts produced with different sweeteners. Different capital letters within the same column represent statistical differences between storage time for each parameter in the same sweetener. Different small letters within the same row represent statistical differences between sweeteners for each parameter in the same storage time ( $p < 0.05$ ).

Parameter	Storage time (days)	Sucrose 6%	Stevia 0.04%	Xylitol 6%	Honey 6%	<i>P-value</i>		
pH	1	4.61 $\pm$ 0.01 <sup>Ab</sup>	4.65 $\pm$ 0.01 <sup>Aa</sup>	4.66 $\pm$ 0.01 <sup>Aa</sup>	4.60 $\pm$ 0.01 <sup>Ab</sup>	Sweetener (A) Time (B) A x B	<0.0001 <0.0001 <0.0001	
	7	4.54 $\pm$ 0.01 <sup>Bb</sup>	4.60 $\pm$ 0.01 <sup>Ba</sup>	4.61 $\pm$ 0.01 <sup>Ba</sup>	4.55 $\pm$ 0.01 <sup>Bb</sup>			
	14	4.48 $\pm$ 0.01 <sup>Cb</sup>	4.52 $\pm$ 0.01 <sup>Ca</sup>	4.53 $\pm$ 0.01 <sup>Ca</sup>	4.46 $\pm$ 0.01 <sup>Cb</sup>			
	21	4.42 $\pm$ 0.01 <sup>Da</sup>	4.43 $\pm$ 0.01 <sup>Da</sup>	4.41 $\pm$ 0.01 <sup>Ca</sup>	4.37 $\pm$ 0.01 <sup>Db</sup>			
TA (% lactic acid)	1	0.86 $\pm$ 0.01 <sup>Cba</sup>	0.96 $\pm$ 0.03 <sup>Ba</sup>	0.70 $\pm$ 0.07 <sup>Dc</sup>	0.93 $\pm$ 0.03 <sup>Ca</sup>	Sweetener (A) Time (B) A x B	<0.0001 <0.0001 <0.0001	
	7	0.89 $\pm$ 0.01 <sup>Cc</sup>	0.98 $\pm$ 0.01 <sup>Bab</sup>	0.92 $\pm$ 0.02 <sup>Cbc</sup>	1.03 $\pm$ 0.03 <sup>Ba</sup>			
	14	1.05 $\pm$ 0.02 <sup>Bb</sup>	1.01 $\pm$ 0.02 <sup>Bbc</sup>	0.99 $\pm$ 0.00 <sup>Bc</sup>	1.13 $\pm$ 0.03 <sup>Aa</sup>			
	21	1.12 $\pm$ 0.03 <sup>Aa</sup>	1.15 $\pm$ 0.00 <sup>Aa</sup>	1.05 $\pm$ 0.03 <sup>Ab</sup>	1.15 $\pm$ 0.02 <sup>Aa</sup>			

**Table S3.** Color parameters ( $L^*$ ,  $a^*$ ,  $b^*$ ) (mean  $\pm$  standard deviation) of the low-fat, low-protein yoghurts produced with different sweeteners. Different capital letters within the same column represent statistical differences between storage time for each parameter in the same sweetener. Different small letters within the same row represent statistical differences between sweeteners for each parameter in the same storage time ( $p < 0.05$ ).

Parameter	Storage time (days)	Sucrose 6%	Stevia 0.03%	Agave 4.5%	<i>P-value</i>		
$L^*$	1	92.0 $\pm$ 1.2 <sup>Cb</sup>	93.4 $\pm$ 0.4 <sup>Ca</sup>	92.9 $\pm$ 0.4 <sup>Ba</sup>	Sweetener (A) Time (B) A x B	<0.0001 <0.0001 0.0007	
	7	92.4 $\pm$ 0.6 <sup>BCc</sup>	94.3 $\pm$ 0.2 <sup>Ba</sup>	93.4 $\pm$ 0.2 <sup>Bb</sup>			
	14	93.7 $\pm$ 0.4 <sup>Ab</sup>	95.9 $\pm$ 0.4 <sup>Aa</sup>	95.5 $\pm$ 0.3 <sup>Aa</sup>			
	21	93.1 $\pm$ 0.6 <sup>ABb</sup>	93.9 $\pm$ 0.4 <sup>BCa</sup>	92.8 $\pm$ 0.3 <sup>Bb</sup>			
$a^*$	1	-3.6 $\pm$ 0.1 <sup>Cb</sup>	-3.3 $\pm$ 0.1 <sup>Ca</sup>	-3.3 $\pm$ 0.2 <sup>Ba</sup>	Sweetener (A) Time (B) A x B	<0.0001 <0.0001 0.8756	
	7	-3.3 $\pm$ 0.2 <sup>Bb</sup>	-3.0 $\pm$ 0.1 <sup>Ba</sup>	-3.1 $\pm$ 0.1 <sup>Bab</sup>			
	14	-2.9 $\pm$ 0.2 <sup>Aa</sup>	-2.7 $\pm$ 0.2 <sup>Aa</sup>	-2.7 $\pm$ 0.2 <sup>Aa</sup>			
	21	-3.4 $\pm$ 0.1 <sup>BCb</sup>	-3.1 $\pm$ 0.1 <sup>BCa</sup>	-3.2 $\pm$ 0.2 <sup>Bab</sup>			
$b^*$	1	5.2 $\pm$ 0.3 <sup>Ab</sup>	5.4 $\pm$ 0.2 <sup>Ab</sup>	5.8 $\pm$ 0.2 <sup>Aa</sup>	Sweetener (A) Time (B) A x B	<0.0001 <0.0001 0.3681	
	7	5.1 $\pm$ 0.2 <sup>Ab</sup>	5.2 $\pm$ 0.2 <sup>Ab</sup>	5.7 $\pm$ 0.1 <sup>Aa</sup>			
	14	4.2 $\pm$ 0.1 <sup>Bb</sup>	4.2 $\pm$ 0.2 <sup>Cb</sup>	4.8 $\pm$ 0.2 <sup>Ca</sup>			
	21	4.4 $\pm$ 0.1 <sup>Bb</sup>	4.6 $\pm$ 0.1 <sup>Bb</sup>	5.2 $\pm$ 0.2 <sup>Ba</sup>			

**Table S4.** Color parameters ( $L^*$ ,  $a^*$ ,  $b^*$ ) (mean  $\pm$  standard deviation) of the low-fat, high-protein yoghurts produced with different sweeteners. Different capital letters within the same column represent statistical differences between storage time for each parameter in the same sweetener. Different small letters within the same row represent statistical differences between sweeteners for each parameter in the same storage time ( $p < 0.05$ ).

Parameter	Storage time (days)	Sucrose 6%	Stevia 0.04%	Xylitol 6%	Honey 6%	<i>P-value</i>		
$L^*$	1	91.6 $\pm$ 0.7 <sup>Ba</sup>	91.1 $\pm$ 1.0 <sup>Ca</sup>	92.0 $\pm$ 0.7 <sup>Aa</sup>	91.5 $\pm$ 0.3 <sup>Ba</sup>	Sweetener (A) Time (B) A x B	<0.0001 <0.0001 <0.0001	
	7	92.4 $\pm$ 0.4 <sup>Ba</sup>	93.3 $\pm$ 0.3 <sup>ABA</sup>	92.7 $\pm$ 0.6 <sup>Ab</sup>	91.2 $\pm$ 0.6 <sup>Bb</sup>			
	14	94.0 $\pm$ 0.3 <sup>Aa</sup>	94.2 $\pm$ 0.5 <sup>Aa</sup>	92.0 $\pm$ 1.3 <sup>Ab</sup>	93.7 $\pm$ 0.4 <sup>Aa</sup>			
	21	92.1 $\pm$ 0.6 <sup>Bab</sup>	93.0 $\pm$ 0.4 <sup>Ba</sup>	92.2 $\pm$ 0.4 <sup>Aab</sup>	91.9 $\pm$ 0.5 <sup>Bb</sup>			
$a^*$	1	-3.7 $\pm$ 0.2 <sup>Aa</sup>	-3.7 $\pm$ 0.3 <sup>Aa</sup>	-3.6 $\pm$ 0.2 <sup>Aa</sup>	-3.5 $\pm$ 0.1 <sup>Aa</sup>	Sweetener (A) Time (B) A x B	<0.0001 <0.0001 <0.0001	
	7	-4.1 $\pm$ 0.3 <sup>Ba</sup>	-4.1 $\pm$ 0.2 <sup>Ba</sup>	-4.0 $\pm$ 0.2 <sup>Ba</sup>	-4.1 $\pm$ 0.2 <sup>Ca</sup>			
	14	-4.1 $\pm$ 0.1 <sup>BCa</sup>	-4.1 $\pm$ 0.1 <sup>Ba</sup>	-4.8 $\pm$ 0.2 <sup>Cb</sup>	-3.9 $\pm$ 0.2 <sup>BCa</sup>			
	21	-4.4 $\pm$ 0.2 <sup>Cc</sup>	-3.9 $\pm$ 0.2 <sup>ABab</sup>	-4.1 $\pm$ 0.2 <sup>Bbc</sup>	-3.8 $\pm$ 0.1 <sup>Ba</sup>			
$b^*$	1	5.7 $\pm$ 0.2 <sup>Cb</sup>	5.9 $\pm$ 0.2 <sup>Cb</sup>	5.7 $\pm$ 0.2 <sup>Cb</sup>	7.1 $\pm$ 0.1 <sup>Da</sup>	Sweetener (A) Time (B) A x B	<0.0001 <0.0001 0.0037	
	7	6.1 $\pm$ 0.2 <sup>Bc</sup>	6.5 $\pm$ 0.3 <sup>Bb</sup>	6.2 $\pm$ 0.3 <sup>Bbc</sup>	7.9 $\pm$ 0.1 <sup>Ca</sup>			
	14	8.1 $\pm$ 0.2 <sup>Ab</sup>	8.1 $\pm$ 0.2 <sup>Ab</sup>	8.0 $\pm$ 0.1 <sup>Ab</sup>	9.4 $\pm$ 0.2 <sup>Ba</sup>			
	21	8.0 $\pm$ 0.1 <sup>Ab</sup>	7.9 $\pm$ 0.2 <sup>Ab</sup>	8.0 $\pm$ 0.3 <sup>Ab</sup>	9.8 $\pm$ 0.3 <sup>Aa</sup>			

**Table S5.** Syneresis index and water holding capacity (mean  $\pm$  standard deviation) of the low-fat, low-protein yoghurts produced with different sweeteners. Different capital letters within the same column represent statistical differences between storage time for each parameter in the same sweetener. Different small letters within the same row represent statistical differences between sweeteners for each parameter in the same storage time ( $p < 0.05$ ).

Parameter	Storage time (days)	Sucrose 6%	Stevia 0.03%	Agave 4.5%	<i>P-value</i>	
Syneresis index (%)	1	4.6 $\pm$ 0.2 <sup>Ba</sup>	4.6 $\pm$ 0.5 <sup>Ca</sup>	4.8 $\pm$ 0.2 <sup>Ca</sup>	Sweetener (A) Time (B) A x B	<0.0001 <0.0001 <0.0001
	7	9.4 $\pm$ 0.5 <sup>Aab</sup>	12.9 $\pm$ 0.3 <sup>Ba</sup>	7.8 $\pm$ 1.7 <sup>BCb</sup>		
	14	7.1 $\pm$ 0.5 <sup>Ab</sup>	12.9 $\pm$ 0.9 <sup>Ba</sup>	11.6 $\pm$ 1.1 <sup>Bab</sup>		
	21	10.2 $\pm$ 0.8 <sup>Ac</sup>	41.5 $\pm$ 2.6 <sup>Aa</sup>	31.9 $\pm$ 7.1 <sup>Ab</sup>		
Water Holding Capacity (%)	1	95.4 $\pm$ 0.2 <sup>Ba</sup>	95.4 $\pm$ 0.5 <sup>Ca</sup>	95.2 $\pm$ 0.2 <sup>Ca</sup>	Sweetener (A) Time (B) A x B	<0.0001 <0.0001 <0.0001
	7	90.6 $\pm$ 0.5 <sup>Ab</sup>	87.1 $\pm$ 0.3 <sup>Ba</sup>	92.2 $\pm$ 1.7 <sup>BCb</sup>		
	14	92.9 $\pm$ 0.5 <sup>Ab</sup>	87.1 $\pm$ 0.9 <sup>Ba</sup>	88.4 $\pm$ 1.1 <sup>Bab</sup>		
	21	89.8 $\pm$ 0.8 <sup>Ac</sup>	58.5 $\pm$ 2.6 <sup>Aa</sup>	68.1 $\pm$ 7.1 <sup>Ab</sup>		

**Table S6.** Syneresis index and water holding capacity (mean  $\pm$  standard deviation) of the low-fat, high-protein yoghurts produced with different sweeteners. Different capital letters within the same column represent statistical differences between storage time for each parameter in the same sweetener. Different small letters within the same row represent statistical differences between sweeteners for each parameter in the same storage time ( $p < 0.05$ ).

Parameter	Storage time (days)	Sucrose 6%	Stevia 0.04%	Xylitol 6%	Honey 6%	<i>P-value</i>	
Syneresis index (%)	1	3.6 $\pm$ 0.4 <sup>Cb</sup>	5.7 $\pm$ 0.9 <sup>Da</sup>	2.1 $\pm$ 0.3 <sup>Bb</sup>	2.8 $\pm$ 0.4 <sup>Bb</sup>	Sweetener (A) Time (B) A x B	<0.0001 <0.0001 <0.0001
	7	5.0 $\pm$ 0.3 <sup>BCb</sup>	8.9 $\pm$ 1.8 <sup>Ca</sup>	4.1 $\pm$ 0.7 <sup>Ab</sup>	5.5 $\pm$ 0.3 <sup>Ab</sup>		
	14	9.6 $\pm$ 0.7 <sup>Ab</sup>	14.0 $\pm$ 1.0 <sup>Ba</sup>	4.9 $\pm$ 1.5 <sup>Ac</sup>	3.1 $\pm$ 0.8 <sup>Bc</sup>		
	21	5.7 $\pm$ 0.5 <sup>Bb</sup>	16.2 $\pm$ 0.7 <sup>Aa</sup>	4.3 $\pm$ 0.5 <sup>Ab</sup>	4.4 $\pm$ 0.2 <sup>ABb</sup>		
Water Holding Capacity (%)	1	96.4 $\pm$ 0.4 <sup>Cb</sup>	94.3 $\pm$ 0.9 <sup>Da</sup>	97.9 $\pm$ 0.3 <sup>Bb</sup>	97.2 $\pm$ 0.4 <sup>Bb</sup>	Sweetener (A) Time (B) A x B	<0.0001 <0.0001 <0.0001
	7	95.0 $\pm$ 0.3 <sup>Cb</sup>	91.1 $\pm$ 1.8 <sup>Ca</sup>	95.9 $\pm$ 0.7 <sup>Ab</sup>	94.5 $\pm$ 0.3 <sup>Ab</sup>		
	14	90.5 $\pm$ 0.7 <sup>Ab</sup>	86.0 $\pm$ 1.0 <sup>Ba</sup>	95.1 $\pm$ 1.5 <sup>Ac</sup>	96.9 $\pm$ 0.8 <sup>Bc</sup>		
	21	94.3 $\pm$ 0.5 <sup>Bb</sup>	83.8 $\pm$ 0.7 <sup>Aa</sup>	95.7 $\pm$ 0.5 <sup>Ab</sup>	95.6 $\pm$ 0.2 <sup>Bb</sup>		

**Table S7.** Rheological parameters (mean  $\pm$  standard deviation) of the low-fat, low-protein yoghurts produced with different sweeteners. Different capital letters within the same column represent statistical differences between storage time for each parameter in the same sweetener. Different small letters within the same row represent statistical differences between sweeteners for each parameter in the same storage time ( $p < 0.05$ ).

Parameter	Storage time (days)	Sucrose 6%	Stevia 0.03%	Agave 4.5%	P-value
<b>G' (Pa)</b>	7	231.9 $\pm$ 37.4 <sup>Bb</sup>	366.9 $\pm$ 32.5 <sup>Ba</sup>	293.9 $\pm$ 8.5 <sup>Bb</sup>	Sweetener (A) $<0.0001$
	14	265.7 $\pm$ 44.0 <sup>Ac</sup>	460.3 $\pm$ 54.2 <sup>ABa</sup>	368.4 $\pm$ 39.6 <sup>Ab</sup>	Time (B) $<0.0001$
	21	370.7 $\pm$ 6.8 <sup>Ab</sup>	504.2 $\pm$ 29.4 <sup>Aa</sup>	411.2 $\pm$ 23.0 <sup>Ab</sup>	A x B 0.4287
<b>G'' (Pa)</b>	7	71.2 $\pm$ 10.6 <sup>Bb</sup>	106.1 $\pm$ 8.2 <sup>Ba</sup>	87.5 $\pm$ 1.8 <sup>Bab</sup>	Sweetener (A) $<0.0001$
	14	78.3 $\pm$ 12.9 <sup>Bc</sup>	128.0 $\pm$ 13.8 <sup>Aa</sup>	105.3 $\pm$ 12.5 <sup>ABb</sup>	Time (B) $<0.0001$
	21	106.1 $\pm$ 1.7 <sup>Ab</sup>	134.8 $\pm$ 9.4 <sup>Aa</sup>	115.2 $\pm$ 6.2 <sup>Aab</sup>	A x B 0.3866
<b><math>\eta^*</math> (Pas)</b>	7	38.6 $\pm$ 6.2 <sup>Bb</sup>	60.8 $\pm$ 5.3 <sup>Ba</sup>	48.8 $\pm$ 1.4 <sup>Bb</sup>	Sweetener (A) $<0.0001$
	14	44.1 $\pm$ 7.3 <sup>Bc</sup>	76.0 $\pm$ 8.9 <sup>Aa</sup>	61.0 $\pm$ 6.6 <sup>Ab</sup>	Time (B) $<0.0001$
	21	61.4 $\pm$ 1.1 <sup>Ab</sup>	83.1 $\pm$ 4.9 <sup>Aa</sup>	68.0 $\pm$ 3.8 <sup>Ab</sup>	A x B 0.4246
<b><math>\tan \delta</math></b>	7	0.307 $\pm$ 0.006 <sup>Aa</sup>	0.289 $\pm$ 0.004 <sup>Ac</sup>	0.298 $\pm$ 0.002 <sup>Ab</sup>	Sweetener (A) $<0.0001$
	14	0.295 $\pm$ 0.003 <sup>Ba</sup>	0.278 $\pm$ 0.003 <sup>Bb</sup>	0.286 $\pm$ 0.003 <sup>Bb</sup>	Time (B) $<0.0001$
	21	0.286 $\pm$ 0.004 <sup>Ca</sup>	0.267 $\pm$ 0.003 <sup>Cb</sup>	0.280 $\pm$ 0.003 <sup>Ba</sup>	A x B 0.6849

**Table S8.** Rheological parameters (mean  $\pm$  standard deviation) of the low-fat, high-protein yoghurts produced with different sweeteners. Different capital letters within the same column represent statistical differences between storage time for each parameter in the same sweetener. Different small letters within the same row represent statistical differences between sweeteners for each parameter in the same storage time ( $p < 0.05$ ).

Parameter	Storage time (days)	Sucrose 6%	Stevia 0.04%	Xylitol 6%	Honey 6%	P-value
<b>G' (Pa)</b>	7	410.2 $\pm$ 195.4 <sup>Aa</sup>	808.2 $\pm$ 178.3 <sup>Aa</sup>	619.3 $\pm$ 123.8 <sup>Aa</sup>	665.9 $\pm$ 81.3 <sup>Aa</sup>	Sweetener (A) 0.1957
	14	825.0 $\pm$ 294.6 <sup>ABa</sup>	1014.4 $\pm$ 343.3 <sup>Aa</sup>	871.4 $\pm$ 125.2 <sup>Aa</sup>	726.7 $\pm$ 172.4 <sup>Aa</sup>	Time (B) 0.0009
	21	976.8 $\pm$ 177.7 <sup>Aa</sup>	1033.3 $\pm$ 121.8 <sup>Aa</sup>	981.6 $\pm$ 153.4 <sup>Aa</sup>	973.4 $\pm$ 324.7 <sup>Aa</sup>	A x B 0.7829
<b>G'' (Pa)</b>	7	120.8 $\pm$ 55.3 <sup>Aa</sup>	224.0 $\pm$ 46.7 <sup>Aa</sup>	181.8 $\pm$ 37.5 <sup>Aa</sup>	195.2 $\pm$ 23.1 <sup>Aa</sup>	Sweetener (A) 0.3056
	14	235.5 $\pm$ 80.6 <sup>ABa</sup>	276.2 $\pm$ 92.4 <sup>Aa</sup>	244.8 $\pm$ 30.6 <sup>Aa</sup>	201.7 $\pm$ 45.8 <sup>Aa</sup>	Time (B) 0.0022
	21	267.6 $\pm$ 46.9 <sup>Aa</sup>	276.7 $\pm$ 35.5 <sup>Aa</sup>	269.9 $\pm$ 42.3 <sup>Aa</sup>	266.9 $\pm$ 86.7 <sup>Aa</sup>	A x B 0.7333
<b><math>\eta^*</math> (Pas)</b>	7	68.0 $\pm$ 32.3 <sup>Ba</sup>	133.5 $\pm$ 29.3 <sup>Aa</sup>	102.7 $\pm$ 20.6 <sup>Aa</sup>	110.5 $\pm$ 13.4 <sup>Aa</sup>	Sweetener (A) 0.202
	14	136.5 $\pm$ 48.6 <sup>ABa</sup>	167.3 $\pm$ 56.6 <sup>Aa</sup>	144.1 $\pm$ 20.5 <sup>Aa</sup>	155.0 $\pm$ 36.7 <sup>Aa</sup>	Time (B) 0.0009
	21	161.2 $\pm$ 29.2 <sup>Aa</sup>	170.3 $\pm$ 20.2 <sup>Aa</sup>	162.0 $\pm$ 25.3 <sup>Aa</sup>	160.6 $\pm$ 53.5 <sup>Aa</sup>	A x B 0.7796
<b><math>\tan \delta</math></b>	7	0.297 $\pm$ 0.008 <sup>Aa</sup>	0.278 $\pm$ 0.004 <sup>Ab</sup>	0.293 $\pm$ 0.003 <sup>Aa</sup>	0.293 $\pm$ 0.004 <sup>Aa</sup>	Sweetener (A) $<0.0001$
	14	0.287 $\pm$ 0.006 <sup>Ba</sup>	0.273 $\pm$ 0.001 <sup>ABb</sup>	0.281 $\pm$ 0.005 <sup>Bab</sup>	0.278 $\pm$ 0.003 <sup>Bab</sup>	Time (B) $<0.0001$
	21	0.274 $\pm$ 0.003 <sup>Ca</sup>	0.268 $\pm$ 0.003 <sup>Ba</sup>	0.275 $\pm$ 0.002 <sup>Ba</sup>	0.275 $\pm$ 0.004 <sup>Ba</sup>	A x B 0.2737

**Table S9.** Texture parameters (mean  $\pm$  standard deviation) of the low-fat, low-protein yoghurts produced with different sweeteners. Different capital letters within the same column represent statistical differences between storage time for each parameter in the same sweetener. Different small letters within the same row represent statistical differences between sweeteners for each parameter in the same storage time ( $p < 0.05$ ).

Parameter	Storage time (days)	Sucrose 6%	Stevia 0.03%	Agave 4.5%	<i>P</i> -value	
Hardness (g)	1	13.9 $\pm$ 1.1 <sup>Ca</sup>	14.4 $\pm$ 0.2 <sup>Ca</sup>	13.1 $\pm$ 0.3 <sup>Ba</sup>	Sweetener (A) Time (B) A x B	<0.0001 <0.0001 0.1572
	7	15.7 $\pm$ 0.9 <sup>Bb</sup>	17.1 $\pm$ 0.4 <sup>Ba</sup>	15.8 $\pm$ 0.3 <sup>Aab</sup>		
	14	16.9 $\pm$ 0.8 <sup>Bab</sup>	17.9 $\pm$ 0.9 <sup>ABa</sup>	16.1 $\pm$ 0.5 <sup>Ab</sup>		
	21	19.2 $\pm$ 2.2 <sup>Aa</sup>	18.9 $\pm$ 0.8 <sup>Aa</sup>	17.2 $\pm$ 0.7 <sup>Ab</sup>		
Adhesiveness (g.s)	1	-19.1 $\pm$ 1.3 <sup>Db</sup>	-20.9 $\pm$ 0.7 <sup>Dc</sup>	-16.9 $\pm$ 0.9 <sup>Da</sup>	Sweetener (A) Time (B) A x B	<0.0001 <0.0001 0.0009
	7	-7.8 $\pm$ 0.9 <sup>Ba</sup>	-9.1 $\pm$ 1.4 <sup>Ba</sup>	-8.1 $\pm$ 1.1 <sup>Ba</sup>		
	14	-11.6 $\pm$ 0.5 <sup>Ca</sup>	-11.8 $\pm$ 1.4 <sup>Ca</sup>	-11.1 $\pm$ 0.4 <sup>Ca</sup>		
	21	-4.4 $\pm$ 0.6 <sup>Aa</sup>	-4.3 $\pm$ 0.4 <sup>Aa</sup>	-4.1 $\pm$ 0.5 <sup>Aa</sup>		
Springiness	1	0.95 $\pm$ 0.01 <sup>Bb</sup>	0.94 $\pm$ 0.04 <sup>Bb</sup>	0.98 $\pm$ 0.01 <sup>Aa</sup>	Sweetener (A) Time (B) A x B	0.0015 <0.0001 0.0072
	7	0.94 $\pm$ 0.01 <sup>Bb</sup>	0.96 $\pm$ 0.03 <sup>ABb</sup>	0.99 $\pm$ 0.00 <sup>Aa</sup>		
	14	0.99 $\pm$ 0.02 <sup>Aa</sup>	0.99 $\pm$ 0.00 <sup>Aa</sup>	0.99 $\pm$ 0.00 <sup>Aa</sup>		
	21	0.25 $\pm$ 0.02 <sup>Ca</sup>	0.24 $\pm$ 0.01 <sup>Ca</sup>	0.24 $\pm$ 0.01 <sup>Ba</sup>		
Gumminess (g)	1	7.3 $\pm$ 0.5 <sup>Ca</sup>	7.4 $\pm$ 0.2 <sup>Ca</sup>	6.6 $\pm$ 0.2 <sup>Ba</sup>	Sweetener (A) Time (B) A x B	<0.0001 <0.0001 0.0969
	7	8.2 $\pm$ 0.6 <sup>Bb</sup>	9.1 $\pm$ 0.3 <sup>Ba</sup>	8.5 $\pm$ 0.3 <sup>Aab</sup>		
	14	9.5 $\pm$ 0.3 <sup>Aa</sup>	9.6 $\pm$ 0.7 <sup>ABa</sup>	8.7 $\pm$ 0.2 <sup>Ab</sup>		
	21	10.1 $\pm$ 1.3 <sup>Aa</sup>	9.9 $\pm$ 0.5 <sup>Aa</sup>	9.0 $\pm$ 0.4 <sup>Ab</sup>		
Cohesiveness	1	0.53 $\pm$ 0.03 <sup>ABa</sup>	0.51 $\pm$ 0.01 <sup>Aa</sup>	0.51 $\pm$ 0.02 <sup>Ba</sup>	Sweetener (A) Time (B) A x B	0.5552 0.0001 0.1531
	7	0.52 $\pm$ 0.01 <sup>Ba</sup>	0.53 $\pm$ 0.01 <sup>Aa</sup>	0.54 $\pm$ 0.01 <sup>Aa</sup>		
	14	0.55 $\pm$ 0.01 <sup>Aa</sup>	0.54 $\pm$ 0.01 <sup>Aa</sup>	0.54 $\pm$ 0.01 <sup>Aa</sup>		
	21	0.52 $\pm$ 0.02 <sup>Ba</sup>	0.53 $\pm$ 0.03 <sup>Aa</sup>	0.53 $\pm$ 0.01 <sup>ABa</sup>		
Resilience	1	0.10 $\pm$ 0.01 <sup>BCa</sup>	0.11 $\pm$ 0.01 <sup>Aa</sup>	0.11 $\pm$ 0.02 <sup>Ba</sup>	Sweetener (A) Time (B) A x B	0.1981 <0.0001 0.0080
	7	0.12 $\pm$ 0.01 <sup>Ba</sup>	0.10 $\pm$ 0.01 <sup>Aa</sup>	0.11 $\pm$ 0.01 <sup>Ba</sup>		
	14	0.10 $\pm$ 0.00 <sup>Ca</sup>	0.11 $\pm$ 0.01 <sup>Aa</sup>	0.10 $\pm$ 0.00 <sup>Ba</sup>		
	21	0.14 $\pm$ 0.02 <sup>Aa</sup>	0.12 $\pm$ 0.01 <sup>Ab</sup>	0.13 $\pm$ 0.01 <sup>Aa</sup>		

**Table S10.** Texture parameters (mean  $\pm$  standard deviation) of the low-fat, high-protein yoghurts produced with different sweeteners. Different capital letters within the same column represent statistical differences between storage time for each parameter in the same sweetener. Different small letters within the same row represent statistical differences between sweeteners for each parameter in the same storage time ( $p < 0.05$ ).

Parameter	Storage time (days)	Sucrose 6%	Stevia 0.04%	Xylitol 6%	Honey 6%	<i>P-value</i>	
Hardness (g)	1	33.8 $\pm$ 2.0 <sup>Cb</sup>	42.0 $\pm$ 1.6 <sup>Ba</sup>	41.8 $\pm$ 1.8 <sup>Ca</sup>	35.2 $\pm$ 1.1 <sup>Cb</sup>	Sweetener (A) Time (B) A x B	<0.0001 <0.0001 0.0124
	7	40.5 $\pm$ 1.2 <sup>Ab</sup>	43.6 $\pm$ 1.7 <sup>Ba</sup>	44.7 $\pm$ 0.6 <sup>Ba</sup>	38.3 $\pm$ 1.3 <sup>Bb</sup>		
	14	40.5 $\pm$ 2.0 <sup>Ab</sup>	47.2 $\pm$ 0.9 <sup>Aa</sup>	48.3 $\pm$ 3.4 <sup>Aa</sup>	40.7 $\pm$ 1.3 <sup>ABb</sup>		
	21	43.0 $\pm$ 1.2 <sup>Bb</sup>	47.1 $\pm$ 1.0 <sup>Aa</sup>	49.2 $\pm$ 1.0 <sup>Aa</sup>	42.5 $\pm$ 1.8 <sup>Ab</sup>		
Adhesiveness (g.s)	1	-3.6 $\pm$ 0.7 <sup>Aa</sup>	-22.2 $\pm$ 2.0 <sup>Ab</sup>	-28.9 $\pm$ 0.9 <sup>Bc</sup>	-22.8 $\pm$ 1.7 <sup>Bb</sup>	Sweetener (A) Time (B) A x B	<0.0001 <0.0001 <0.0001
	7	-25.8 $\pm$ 0.8 <sup>BCbc</sup>	-27.3 $\pm$ 1.7 <sup>Bc</sup>	-20.1 $\pm$ 1.2 <sup>Da</sup>	-25.3 $\pm$ 1.7 <sup>Cb</sup>		
	14	-24.9 $\pm$ 1.3 <sup>Ba</sup>	-29.4 $\pm$ 1.1 <sup>Cb</sup>	-33.2 $\pm$ 1.1 <sup>Cc</sup>	-24.0 $\pm$ 1.6 <sup>BCa</sup>		
	21	-27.6 $\pm$ 1.6 <sup>Cc</sup>	-22.0 $\pm$ 1.0 <sup>Ab</sup>	-22.2 $\pm$ 0.9 <sup>Ab</sup>	-18.6 $\pm$ 0.3 <sup>Aa</sup>		
Springiness	1	0.95 $\pm$ 0.00 <sup>Ac</sup>	0.99 $\pm$ 0.00 <sup>Aa</sup>	0.98 $\pm$ 0.02 <sup>Ab</sup>	0.96 $\pm$ 0.02 <sup>Abc</sup>	Sweetener (A) Time (B) A x B	<0.0001 0.1194 0.0005
	7	0.96 $\pm$ 0.01 <sup>Aa</sup>	0.96 $\pm$ 0.02 <sup>Ba</sup>	0.97 $\pm$ 0.03 <sup>Aa</sup>	0.96 $\pm$ 0.01 <sup>Aa</sup>		
	14	0.96 $\pm$ 0.01 <sup>Aab</sup>	0.95 $\pm$ 0.01 <sup>Bb</sup>	0.97 $\pm$ 0.02 <sup>Ab</sup>	0.98 $\pm$ 0.02 <sup>Aa</sup>		
	21	0.96 $\pm$ 0.01 <sup>Ab</sup>	0.99 $\pm$ 0.01 <sup>Aa</sup>	0.98 $\pm$ 0.02 <sup>Ab</sup>	0.96 $\pm$ 0.02 <sup>Ab</sup>		
Gumminess (g)	1	20.1 $\pm$ 1.5 <sup>Bb</sup>	24.4 $\pm$ 2.2 <sup>Aa</sup>	23.3 $\pm$ 1.8 <sup>Ba</sup>	18.9 $\pm$ 1.3 <sup>Bb</sup>	Sweetener (A) Time (B) A x B	<0.0001 <0.0001 0.0584
	7	21.7 $\pm$ 1.0 <sup>ABab</sup>	23.8 $\pm$ 2.3 <sup>Aa</sup>	22.8 $\pm$ 2.1 <sup>Ba</sup>	20.6 $\pm$ 1.0 <sup>ABb</sup>		
	14	22.9 $\pm$ 1.4 <sup>Abc</sup>	24.2 $\pm$ 1.0 <sup>Ab</sup>	26.2 $\pm$ 1.1 <sup>Aa</sup>	21.6 $\pm$ 0.7 <sup>Ac</sup>		
	21	23.1 $\pm$ 0.7 <sup>Ab</sup>	25.2 $\pm$ 0.6 <sup>Aa</sup>	25.8 $\pm$ 0.6 <sup>Aa</sup>	21.8 $\pm$ 1.1 <sup>Ab</sup>		
Cohesiveness	1	0.60 $\pm$ 0.05 <sup>Aa</sup>	0.54 $\pm$ 0.01 <sup>Ab</sup>	0.56 $\pm$ 0.02 <sup>Ab</sup>	0.55 $\pm$ 0.01 <sup>Ab</sup>	Sweetener (A) Time (B) A x B	0.0110 0.0035 0.0660
	7	0.54 $\pm$ 0.01 <sup>Ba</sup>	0.55 $\pm$ 0.05 <sup>Aa</sup>	0.51 $\pm$ 0.04 <sup>Ba</sup>	0.54 $\pm$ 0.01 <sup>Aa</sup>		
	14	0.57 $\pm$ 0.05 <sup>ABA</sup>	0.51 $\pm$ 0.02 <sup>Ab</sup>	0.53 $\pm$ 0.02 <sup>ABab</sup>	0.53 $\pm$ 0.02 <sup>Ab</sup>		
	21	0.54 $\pm$ 0.01 <sup>Ba</sup>	0.54 $\pm$ 0.01 <sup>Aa</sup>	0.52 $\pm$ 0.02 <sup>ABa</sup>	0.55 $\pm$ 0.02 <sup>Aa</sup>		
Resilience	1	0.10 $\pm$ 0.01 <sup>Aa</sup>	0.10 $\pm$ 0.00 <sup>Aa</sup>	0.10 $\pm$ 0.01 <sup>Aa</sup>	0.09 $\pm$ 0.01 <sup>Aa</sup>	Sweetener (A) Time (B) A x B	0.0041 0.0002 0.2033
	7	0.09 $\pm$ 0.00 <sup>Aa</sup>	0.09 $\pm$ 0.00 <sup>Ba</sup>	0.09 $\pm$ 0.01 <sup>Ba</sup>	0.09 $\pm$ 0.01 <sup>Aa</sup>		
	14	0.09 $\pm$ 0.01 <sup>Aa</sup>	0.09 $\pm$ 0.00 <sup>ABA</sup>	0.09 $\pm$ 0.01 <sup>ABA</sup>	0.09 $\pm$ 0.01 <sup>Aa</sup>		
	21	0.09 $\pm$ 0.01 <sup>Ab</sup>	0.09 $\pm$ 0.01 <sup>ABA</sup>	0.09 $\pm$ 0.01 <sup>ABA</sup>	0.08 $\pm$ 0.01 <sup>Ab</sup>		

**Table S11.** Sensorial analysis results (mean  $\pm$  standard deviation) regarding flavor, taste, consistency, and appearance of the yoghurts produced with low-protein (LP) and high-protein (HP) and different sweeteners. Different small letters within the same row represent statistical differences between sweetened yoghurts for each parameter ( $p < 0.05$ ).

Parameter	Sucrose 6% (LP)	Stevia 0.03% (LP)	Agave 4.5% (LP)	Sucrose 6% (HP)	Stevia 0.04% (HP)	Xylitol 6% (HP)	Honey 6% (HP)	P-value
<b>Flavor</b>	6.6 $\pm$ 1.2 <sup>ab</sup>	7.0 $\pm$ 1.5 <sup>a</sup>	5.8 $\pm$ 1.4 <sup>b</sup>	6.9 $\pm$ 1.4 <sup>a</sup>	6.7 $\pm$ 1.7 <sup>ab</sup>	6.6 $\pm$ 1.2 <sup>ab</sup>	7.0 $\pm$ 1.3 <sup>a</sup>	0.0200
<b>Taste</b>	5.8 $\pm$ 1.4 <sup>de</sup>	8.0 $\pm$ 0.9 <sup>a</sup>	5.1 $\pm$ 1.7 <sup>e</sup>	7.5 $\pm$ 0.9 <sup>ab</sup>	6.4 $\pm$ 1.5 <sup>cd</sup>	6.9 $\pm$ 1.2 <sup>bc</sup>	6.8 $\pm$ 1.4 <sup>bcd</sup>	<0.0001
<b>Consistency</b>	6.1 $\pm$ 1.5 <sup>c</sup>	6.7 $\pm$ 1.8 <sup>bc</sup>	6.5 $\pm$ 1.5 <sup>c</sup>	8.0 $\pm$ 1.0 <sup>a</sup>	7.6 $\pm$ 1.5 <sup>ab</sup>	7.8 $\pm$ 1.1 <sup>a</sup>	7.7 $\pm$ 1.4 <sup>ab</sup>	<0.0001
<b>Appearance</b>	6.8 $\pm$ 1.6 <sup>b</sup>	7.0 $\pm$ 1.5 <sup>b</sup>	6.9 $\pm$ 1.4 <sup>b</sup>	8.0 $\pm$ 0.8 <sup>a</sup>	7.8 $\pm$ 1.3 <sup>ab</sup>	8.1 $\pm$ 0.8 <sup>a</sup>	7.8 $\pm$ 1.6 <sup>ab</sup>	<0.0001