

Table S1. Changes in pH during cold storage of smoothies.

Type of smoothie	Addition of yogurt	pH				
		Storage time [week]				
		0	1	2	3	4
Strawberry smoothie	0%	3.46 <sup>Ad</sup> ±0.02	3.46 <sup>Ad</sup> ±0.00	3.45 <sup>Ac</sup> ±0.01	3.46 <sup>Ac</sup> ±0.02	3.44 <sup>Ac</sup> ±0.01
	10%	3.50 <sup>Ac</sup> ±0.02	3.51 <sup>Ac</sup> ±0.04	3.51 <sup>Ab</sup> ±0.03	3.51 <sup>Ab</sup> ±0.02	3.50 <sup>Ab</sup> ±0.03
	20%	3.61 <sup>Ab</sup> ±0.02	3.58 <sup>ABb</sup> ±0.01	3.59 <sup>ABa</sup> ±0.01	3.57 <sup>Ba</sup> ±0.01	3.57 <sup>Ba</sup> ±0.00
	30%	3.67 <sup>Aa</sup> ±0.02	3.65 <sup>Aa</sup> ±0.03	3.63 <sup>ABa</sup> ±0.02	3.60 <sup>Ba</sup> ±0.02	3.60 <sup>Ba</sup> ±0.01
Raspberry smoothie	0%	3.35 <sup>Ac</sup> ±0.03	3.35 <sup>Ac</sup> ±0.01	3.34 <sup>Ab</sup> ±0.03	3.35 <sup>Ab</sup> ±0.03	3.34 <sup>Ab</sup> ±0.02
	10%	3.37 <sup>Abc</sup> ±0.02	3.37 <sup>Abc</sup> ±0.02	3.34 <sup>Bb</sup> ±0.01	3.33 <sup>Bb</sup> ±0.00	3.34 <sup>Bb</sup> ±0.01
	20%	3.41 <sup>Ab</sup> ±0.02	3.39 <sup>ABb</sup> ±0.03	3.36 <sup>Bb</sup> ±0.01	3.35 <sup>Bb</sup> ±0.01	3.35 <sup>Bb</sup> ±0.00
	30%	3.49 <sup>Aa</sup> ±0.01	3.45 <sup>BCa</sup> ±0.02	3.42 <sup>Ca</sup> ±0.04	3.41 <sup>Ca</sup> ±0.03	3.40 <sup>Ca</sup> ±0.03
Blueberry smoothie	0%	3.53 <sup>Ad</sup> ±0.02	3.54 <sup>Ac</sup> ±0.01	3.54 <sup>Ac</sup> ±0.01	3.53 <sup>Ac</sup> ±0.01	3.54 <sup>Ac</sup> ±0.01
	10%	3.61 <sup>Ac</sup> ±0.03	3.57 <sup>ABc</sup> ±0.03	3.54 <sup>BCc</sup> ±0.04	3.48 <sup>CDd</sup> ±0.03	3.42 <sup>Dd</sup> ±0.03
	20%	3.78 <sup>Ab</sup> ±0.04	3.72 <sup>Bb</sup> ±0.01	3.70 <sup>BCb</sup> ±0.03	3.62 <sup>CDb</sup> ±0.04	3.60 <sup>Db</sup> ±0.01
	30%	3.92 <sup>Aa</sup> ±0.03	3.88 <sup>ABa</sup> ±0.02	3.82 <sup>BCa</sup> ±0.04	3.78 <sup>CDa</sup> ±0.01	3.73 <sup>Da</sup> ±0.04

<sup>A-E</sup> – Same line followed by different uppercase represents a significant difference (p≤0.05).

<sup>a-c</sup> – Same column followed by different lowercase represents a significant difference (p≤0.05).

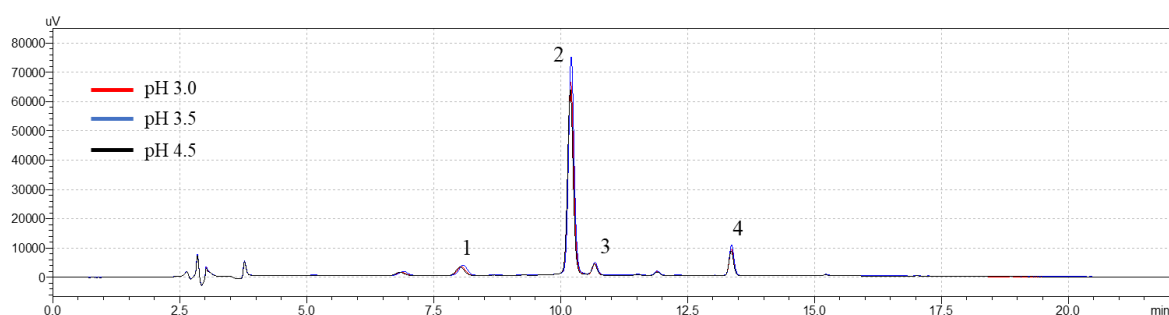
± standard deviation

Table S2. Protein and fat content and the population of lactic acid bacteria in yogurt is used in the production of smoothies.

Parameters	Yogurt
Protein content [%]	3.26±0.21
Fat content [%]	3.2±0.17
<i>L. delbrueckii</i> subsp. <i>bulgaricus</i> population [log CFU/g]	6.1±0.1
<i>S. thermophilus</i> population [log CFU/g]	8.3±0.1

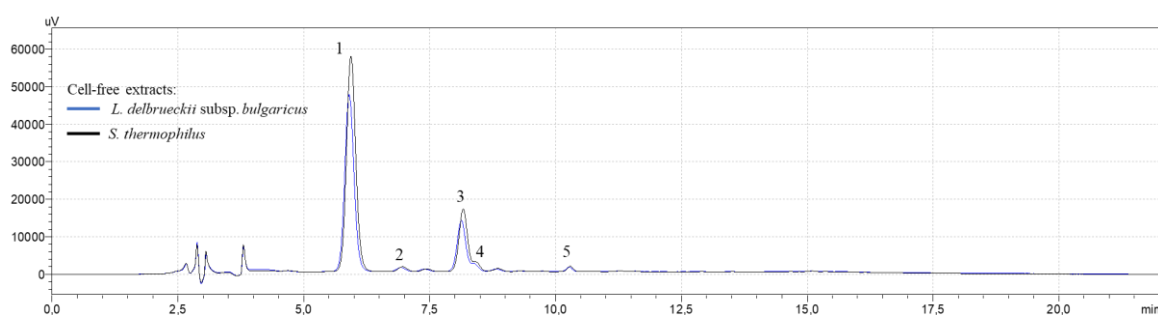
± standard deviation

Figure S1 HPLC chromatogram of anthocyanins in strawberry purified extracts in different pH (3.0, 3.5, and 4.5) after 4 weeks of cold storage.



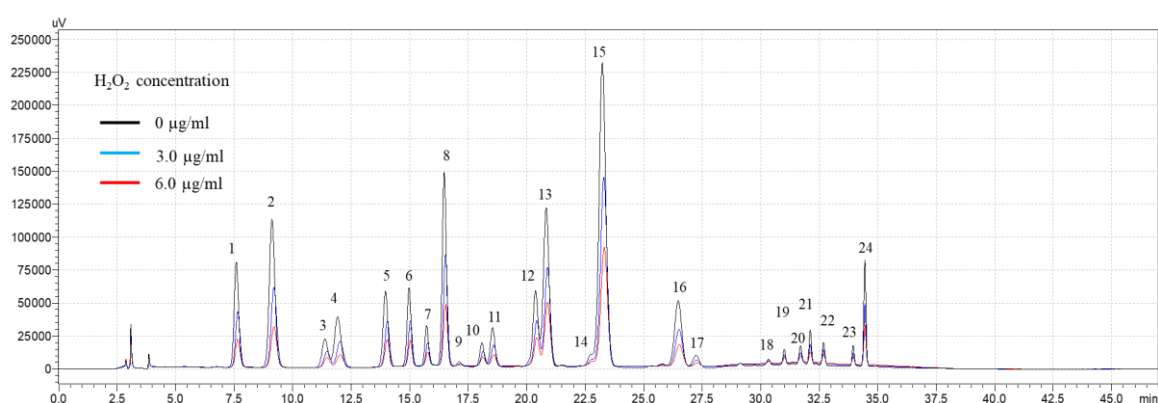
1. Cyanidin-3-O-glucoside, 2. Pelargonidin-3-O-glucoside, 3. Pelargonidin-3-O-rutinoside, 4. Pelargonidin 3-malonyl-glucoside.

Figure S2 HPLC chromatogram of anthocyanins in raspberry purified extracts in different cell-free extracts presence after 4 weeks of cold storage.



1. Cyanidin-3-O-sophoroside, 2. Cyanidin-3-O-glucosylrutinoside, 3. Cyanidin-3-O-glucoside, 4. Cyanidin-3-O-rutinoside, 5. Pelargonidin-3-O-glucosylrutinoside.

Figure S3 HPLC chromatogram of anthocyanins in blueberry purified extracts with the addition of various doses of hydrogen peroxidase (0; 3.0 and 6.0 µg/mL) after 4 weeks of cold storage.



1. Delphinidin-3-O-galactoside, 2. Delphinidin-3-O-glucoside, 3. Cyanidin-3-O-galactoside, 4. Delphinidin-3-O-arabinoside, 5. Cyanidin-3-O-glucoside, 6. Petunidin-3-O-galactoside, 7. Cyanidin-3-O-arabinose, 8. Petunidin-3-O-glucoside, 9. Peonidin-3-O-galactoside, 10. Peonidin-3-O-glucoside, 11. Petunidin-3-O-arabinoside, 13. Malvidin-3-O-galactoside, 15. Malvidin-3-O-glucoside, 16. Malvidin-3-O-arabinoside, 12, 14, 16-24 – acylated anthocyanins.