

**Supplementary material 1.** SEPs and RPDs for all routes of analysis.

Spectrometer	Data analysis software	Content	State of cheese	SEP / %	RPD	
NIRFlex N-500	The Unscrambler X	Fat	Whole pieces	1.887	5.109	
			Grated cheese	0.679	14.022	
		Moisture	Whole pieces	1.108	5.597	
			Grated cheese	0.926	6.697	
SCiO	The Unscrambler X	Fat	Whole pieces	1.159	7.754	
			Grated cheese	0.809	10.398	
		Moisture	Whole pieces	1.319	4.341	
			Grated cheese	1.729	3.208	
	SCiO Lab web-application	Fat	Whole pieces	0.785	11.448	
			Grated cheese	0.779	10.799	
		Moisture	Whole pieces	1.050	5.453	
			Grated cheese	1.102	5.034	
		SCiO App	Fat	Whole pieces	1.064	7.832
				Grated cheese	1.218	6.844
Moisture	Whole pieces		1.349	4.021		
	Grated cheese		1.159	4.681		

SEP – Standard Error of Prediction; RPD – Ratio of Performance to Deviation.