

Supplementary Materials: Rutin and *Physalis peruviana* Extract: Population Pharmacokinetics in New Zealand Rabbits

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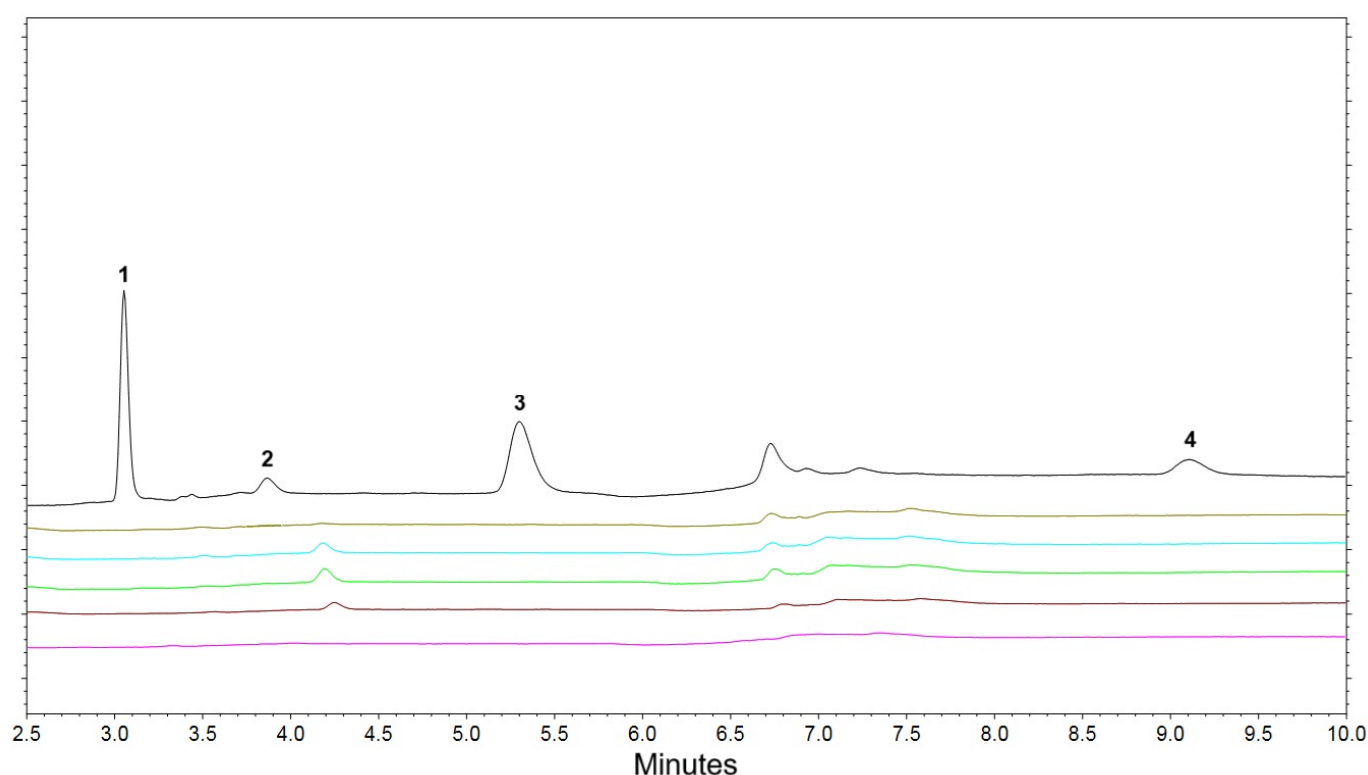


Figure S1. Selectivity of the bioanalytical method. Colored lines are blank samples from different rabbits. Black line is blank plasma spiked with rutin (250 ng/mL, peak 1), quercetin-3-O-glucuronide (50 ng/mL, peak 2), quercetin (250 ng/mL, peak 3), and the internal standard chrysin (1000 ng/mL, peak 4). It is noticed that there was not interfering signals for the analytes and IS. Column Kinetex® EVO C18, 2,6 μ m, 100 \times 2.1 mm at 30°C, mobile phase with formic acid 0.1% (A) and acetonitrile acidified with formic acid at 0.5%, in gradient from 85 to 65% A, at 0.5 mL/min. Detection at 260 nm and injections of 6 μ L of the samples. Samples were prepared by protein precipitation with methanol (1:2).

Table S1. Accuracy and precision of the method used for quantify rutin and quercetin in rabbit plasma

	Rutin				Quercetin			
Quality control	LLOC	LQC	MQC	HQC	LLOC	LQC	MQC	HQC
Nominal concentration (ng/mL)	100	250	5000	10000	100	250	5000	10000
Between -run								
Calculated concentration (ng/mL) ¹	90.1	252.8	5363.2	9608.1	99.7	247.8	5190.3	9806.6
Recovery (%) ²	90.1	101.1	107.3	96.1	99.7	99.1	103.8	98.1
CV (%) ³	9.7	3.0	8.6	2.7	14.8	2.0	5.4	4.7
Within-run								
Calculated concentration (ng/mL) ¹	119.2	268.7	5674.2	10233.4	102.2	251.7	5290.3	10307.9
Recovery (%) ²	119.2	107.5	113.5	102.3	102.2	100.7	105.8	103.1
CV (%) ³	3.6	7.4	3.9	4.0	8.8	9.8	10.3	6.2

LLOC: low limit of quantification. LQC: low quality control. MQC: medium quality control. HQC: high quality control. ¹ Concentration calculated using the calibration curves $y = 0.00042x + 0.00910$ (r^2 0.9996) for rutin and $y = 0.00056x - 0.00767$ (r^2 0.99980) for quercetin. ² Accuracy measured as percentage of calculated concentration relative to nominal concentration. ³ Precision measured as coefficient of variation. n = 5.