



Supplementary Material:

Article

Modelling of Catechin Extraction from Red Grape Solids under Conditions that Simulate Red Wine Fermentation

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Table S1. Extracted Catechin amounts for Juice (266 g/L glucose; 0 % *v/v* ethanol) and Wine (0 g/L glucose; 14 % *v/v* ethanol) at low temperature (4.4 °C)

Low Temperature (4.4 °C)		
	Juice (266 g/L glucose; 0 % <i>v/v</i> ethanol)	Wine (0 g/L glucose; 14 % <i>v/v</i> ethanol)
Time (h)	Catechin in mg/L	Catechin in mg/L
1	1.462	2.132
3	2.297	3.912
6	3.187	5.475
10	3.758	6.474
16	4.051	7.281
22	4.564	8.227
28	4.703	8.973
34	4.801	9.010
41	4.769	9.540
48	5.033	9.427
69.5	5.286	10.126

Table S2. Extracted Catechin amounts for the mid-ferment (133 g/L glucose; 7 % *v/v* ethanol) at medium temperature (12.2 °C)

Medium Temperature (12.2 °C)	
	Mid-Ferment (133 g/L glucose; 7 % <i>v/v</i> ethanol)
Time (h)	Catechin in mg/L
1	2.374
3	3.743
6	4.913
10	5.924
16	7.031
22	7.661
28	8.303
34	8.495
41	8.714

48	8.613
69.5	8.849

Table S3. Extracted Catechin amounts for Juice (266 g/L glucose; 0 % *v/v* ethanol) and Wine (0 g/L glucose; 14 % *v/v* ethanol) at high temperature (23.1 °C)

High Temperature (23.1 °C)		
	Juice (266 g/L glucose; 0 % <i>v/v</i> ethanol)	Wine (0 g/L glucose; 14 % <i>v/v</i> ethanol)
Time (hours)	Catechin in mg/L	Catechin in mg/L
1	3.480	5.231
3	4.820	9.029
6	6.115	11.052
10	7.025	11.734
16	7.778	11.764
22	8.597	11.643
28	9.430	11.386
34	9.820	11.091
41	10.318	10.948
48	10.419	10.618
69.5	-	10.302

Table S4. Extracted Catechin amounts for Juice (266 g/L glucose; 0 % *v/v* ethanol) and Wine (0 g/L glucose; 14 % *v/v* ethanol) at high temperature (23.1 °C).

	R ² at k	R ² at k +10%	R ² at k +30%	R ² at k +50%
Sim-Wine 0°C	0.98	0.98	0.97	0.96
Sim-Juice 0°C	0.97	0.97	0.96	0.96
Sim-Mid-Ferment 10°C	0.98	0.98	0.97	0.96
Sim-Wine 20°C	0.98	0.98	0.97	0.96
Sim-Juice 20°C	0.94	0.94	0.94	0.93