

Supplementary Materials

The Different Phytochemical Profiles of *Salvia officinalis* Dietary Supplements Labelled for Menopause Symptoms

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Table S1. Ratio (%) of the four eluent solutions used for HPLC runs in the isoflavones determination. During the elution, components of the mobile phase are varied with linear gradients.

Minutes	Ratio of eluent solutions (%)			
	A	B	C	D
0	80	20	0	0
5	80	20	0	0
29	72	28	0	0
32	70	28	2	0
56	54	20	26	0
78	40	6	54	0
87	34	0	62	4
96	28	0	62	10
141	0	0	48	52
147	0	0	20	80
150	0	0	0	100

Table S2. Analytical standards used in this work (SigmaAldrich)

Compound	CAS number
Thujone standard mixture	76231-76-0
Internal standard thujone: Ethyl deconoate	110-38-3
daidzin	552-66-9
genistin	529-59-9
daidzein	552-66-9

Compound	CAS number
genistein	446-72-0

Table S3. Polyphenols and flavonoids (mg/100 g \pm SD) in *S. officinalis* extracts. Data are means from four separate experiments, each performed in triplicate. Differences were considered significant when $p < 0.05$. Products from SALVITILAB (T), ACEF (A), Fontana (F), Menosan (M).

Mean value \pm SD mg / 100 g	T	A	F	M	F test statistic (p value from one way ANOVA)
Total Polyphenols	6986 \pm 318	3980 \pm 119	2203 \pm 98	3326 \pm 96	640.24 (<0.0000)
Flavonoids AlCl ₃	1274 \pm 124	780 \pm 5	316 \pm 8	929 \pm 8	160.48 (<0.0000)
Flavonoids DNPH	1257 \pm 185	725 \pm 13	598 \pm 23	555 \pm 28	54.47 (<0.0000)
Total Flavonoids	2532 \pm 66	1505 \pm 12	914 \pm 28	1483 \pm 31	1531.35 (<0.0000)

Table S4. Tukey-Kramer pairwise comparisons for polyphenols and flavonoids of *S. officinalis* extracts (post-hoc analyses for one-way ANOVA). Superscripts * indicates statistically significant (p value < 0.05) estimates. SALVITILAB (T), ACEF (A), Fontana (F), Menosan (M)

	T vs A	T vs F	T vs M	A vs F	A vs M	F vs M
<i>Total Polyphenols</i>						
Mean difference	3006	4783	3660	1777	654	1123
TK-test	34.8134*	55.3954*	42.3876*	17.8245	6.5594	11.261
<i>Flavonoid AlCl₃</i>						
Mean difference	495	959	346	464	149	612
TK-test	15.7177*	30.4583*	10.9963*	12.7657*	4.089	16.8546
<i>Flavonoid DNPH</i>						
Mean difference	532	659	702	127	170	43
TK-test	11.1717*	13.8517*	14.7513*	2.3210	3.1000	0.7791
<i>Total Flavonoid</i>						
Mean difference	1026	1618	1048	591	22	570
TK-test	56.2039*	88.5915*	57.3974*	28.0485*	1.0336	27.0149*

Table S5. Tukey-Kramer pairwise comparisons for α -thujone and isoflavones of *Salvia officinalis* extracts (post-hoc analyses for one-way ANOVA). Superscripts * indicates statistically significant (p value < 0.05) estimates. SALVITILAB (I), ACEF (A), Fontana (F), Menosan (M). LOQ, limit of quantification.

	T vs A	T vs F	T vs M	A vs F	A vs M	F vs M
	<i>α-thujone</i>					
Mean difference	0.0007	C < LOQ	0.0007	C < LOQ	0.0000	C < LOQ
TK-test	7.5548*		7.9804*		0.3686	
	<i>Genestin</i>					
Mean difference	0.1727	0.0069	D < LOQ	0.1658	D < LOQ	D < LOQ
TK-test	20.6517*	0.8205		17.1743*		
	<i>Genestein</i>					
Mean difference	0.1148	0.0094	0.0052	0.1054	0.1200	0.0146
TK-test	25.8646*	2.1075	1.1743	20.5743*	23.4164*	2.8421
	<i>Daidzin</i>					
Mean difference	1.1243	0.0984	0.0694	1.0259	1.1937	0.1678
TK-test	48.5865*	4.2503*	2.9996	38.3963*	44.649*	6.2786*
	<i>Total isoflavones</i>					
Mean difference	1.4117	0.1146	0.0852	1.2971	1.4968	0.1997
TK-test	52.3545*	4.2487*	3.1583	41.6609*	48.0755*	6.4146*