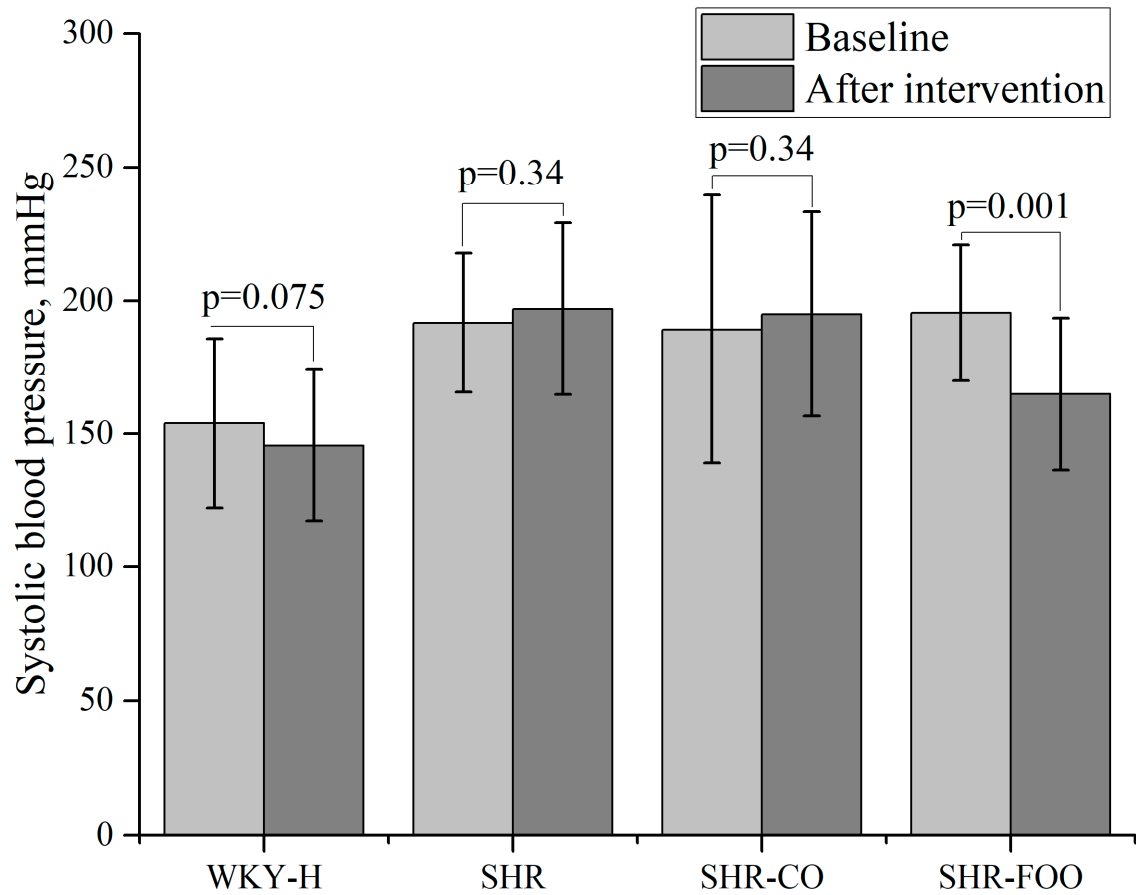


Supplemental Table S1. Characteristics of the olive oils used in the study.

	CO	FOO
Acidity (%)	0.14	0.14
Peroxide value (meq/Kg)	5.3	9.5
K270	0.14	0.15
K232	1.79	1.85
DeltaK	<0.01	<0.01
Fatty acids		
Miristic acid (C14) (%)	0.01	0.01
Palmitic acid (C16) (%)	10.12	10.09
Palmitoleic acid (C16:1) (%)	0.93	0.92
Margaric acid (C17) (%)	<0.10	<0.10
Margaroleic acid (C17:1) (%)	0.16	0.15
Stearic acid (C18) (%)	3.81	3.79
Oleic acid (C18:1) (%)	79.71	79.87
Linoleic acid (C18:2n6) (%)	3.95	3.91
Linolenic acid (C18:3n3) (%)	0.67	0.65
Araquidic acid (C20) (%)	0.33	0.32
Gadoleic acid (C20:1) (%)	0.19	0.18
Behenic acid (C22) (%)	0.11	0.11
Lignoceric acid (C24) (%)	<0.10	<0.10
Total ethyl esters (mg/Kg)	6	13
Ethyl palmitate (mg/Kg)	3	6
Ethyl oleate (mg/Kg)	4	7
Total sterols (mg/Kg)	1316	1328
Cholesterol (% of total sterols)	0.1	0.1
Brassterol (% of total sterols)	<0.1	<0.1
Campesterol (% of total sterols)	3.2	3.3
Stigmasterol (% of total sterols)	0.5	0.5
B-Sitosterol (% of total sterols)	94.9	94.8
D7-Stigmastenol (% of total sterols)	0.4	0.4
Total phenolic compounds (mg/Kg)	17.6	749.9
<i>Organic and phenolic acids and aldehydes (mg/kg)</i>	<i>n.d.</i>	235.2
Quinic acid* (mg/kg)	n.d.	92.3
3,4-dihydroxyphenylglycol* (mg/kg)	n.d.	116.6
Chlorogenic acid (mg/kg)	n.d.	22.2
p-coumaric acid* (mg/kg)	n.d.	3.0
Vanillin* (mg/kg)	n.d.	0.32
Ferulic acid* (mg/kg)	n.d.	0.80
<i>Simple phenols (mg/kg)</i>	0.15	179.0
Hydroxytyrosol* (mg/kg)	n.d.	110.0
Tyrosol* (mg/kg)	0.15	69.0
<i>Glycosylated secoiridoids and derivatives (mg/kg)</i>	<i>n.d.</i>	204.8
Acycloclihydroelenolic acid hexoside (mg/kg)	n.d.	21.0
Oleoside/secologanoside (mg/kg)	n.d.	103.2
Elenolic acid glucoside (mg/kg)	n.d.	31.9
Hydroxy oleuropein (mg/kg)	n.d.	32.3
Oleuropein* (mg/kg)	n.d.	16.4
<i>Secoiridoids and derivatives in aglycone form (mg/kg)</i>	17.0	82.9
Elenolic acid (mg/kg)	0.01	2.6

Hydroxydecarboxymethyl oleuropein aglycone (mg/kg)	n.d.	4.7
Decarboxymethyl oleuropein aglycone (mg/kg)	1.3	8.2
10-Hydroxy-oleuropein aglycone (mg/kg)	0.11	0.3
Decarboxymethyl ligstroside aglycone (mg/kg)	2.4	6.3
Ligstroside algycone (mg/kg)	6.1	2.2
Oleuropein algycone (mg/kg)	7.1	58.5
<i>Flavonoids</i> (mg/kg)	0.1	40.9
Luteolin-7-O-glucoside* (mg/kg)	n.d.	4.6
Luteolin-O-glucoside isomers (mg/kg)	n.d.	12.3
Apigenin-7-O-glucoside* (mg/kg)	n.d.	1.7
Apigenin-O-glucoside isomers (mg/kg)	n.d.	3.6
Luteolin* (mg/kg)	0.03	14.5
Apigenin* (mg/kg)	0.04	1.6
Diosmetin (mg/kg)	0.03	2.5
<i>Lignans</i> (mg/kg)	0.31	7.1
Syringaresinol (mg/kg)	0.10	1.8
Pinoresinol* (mg/kg)	0.11	2.5
Acetoxypinoresinol (mg/kg)	0.10	2.8

Individual phenolic compounds quantitative data obtained for the oils evaluated in this study by the LC-MS method described in Appendix A. Every result (expressed in mg/kg of olive oil) is the mean value of three independent replicates. Individual sterols are expressed as the percentage of total sterols. RSD values were lower than 8.4 % in every case. *Phenolic compounds quantified in terms of their pure standard. CO, control oil FOO, functional oil; n.d.: non detected.



Supplemental Figure S1: Systolic blood pressure at the beginning and end of the intervention. The data are means \pm SEM. ANOVA test were used to compare results between groups for normal distribution variable, for multiple comparisons among groups Bonferroni *post hoc* test was used. $P < 0.05$ was considered significant. SHR, spontaneously hypertensive rats. SHR-CO, spontaneously hypertensive rats supplemented with the control olive oil. SHR-FOO, spontaneously hypertensive rats supplemented with the functional olive oil. WKY-H, Wistar Kyoto healthy rats.