

Supplementary Materials: The following are available online at www.mdpi.com/xxx/s1,

Supplementary Table S1.- Phenolic composition of the beers used in the study

Phenolic compounds	Traditional Beer		Alcohol-free Beer	
	Men	Women	Men	Women
4hydroxybenzoic acid	47.4 ± 1.0	23.7 ± 1.0	26.4 ± 1.0	13.2 ± 1.0
Caffeic acid	43.2 ± 1.0	21.6 ± 1.0	37.2 ± 1.0	18.6 ± 1.0
Catechin	94.2 ± 2.0	47.1 ± 1.0	99 ± 3.0	49.5 ± 3.0
Chlorogenic acid	6.6 ± 0.2	3.3 ± 0.1	1.4 ± 0.0	0.7 ± 0.0
Epicatechin	12.7 ± 0.2	6.4 ± 0.2	12.9 ± 0.2	6.5 ± 0.2
Ferulic acid	333 ± 6.0	166.5 ± 4.0	241.8 ± 5.0	120.9 ± 5.0
Kaempferol- <i>O</i> -glucoside	6.2 ± 0.2	3.1 ± 0.2	4.9 ± 0.1	2.5 ± 0.1
p-Coumaric acid	141.0 ± 4.0	70.5 ± 3.0	92.4 ± 2.0	46.2 ± 2.0
Protocatechuic acid	22.4 ± 0.7	11.2 ± 0.4	13.6 ± 0.3	6.8 ± 0.3
Quercetin	9.9 ± 0.2	4.9 ± 0.2	8.5 ± 0.3	4.3 ± 0.3
Quercetin-3- <i>O</i> -glucoside	37.4 ± 1.1	18.7 ± 0.7	21.8 ± 0.4	10.9 ± 0.4
Rutin	10.1 ± 0.2	5.0 ± 0.1	7.1 ± 0.3	3.6 ± 0.3
Sinapic acid	77.1 ± 1.0	38.7 ± 1.0	54.6 ± 1.0	27.3 ± 1.0
Vanillic acid	17.0 ± 0.5	8.5 ± 0.3	7.2 ± 0.3	3.6 ± 0.3
Isoxanthohumol	331.2 ± 49.0	165.6 ± 32.0	111.6 ± 8.0	55.8 ± 8.0
D 8-Prenylnaringenin	19.6 ± 1.4	9.8 ± 0.9	11.4 ± 1.2	5.7 ± 1.2
^a Total (sum)	1209.6 ± 131.0	604.8 ± 190.0	751.8 ± 158.0	375.9 ± 157.0

ⁱ Daily intake (µg). Values are given as mean ± SD

Supplementary Table S2. Anthropometric and hemodynamic variables, biochemical parameter and hemogram profile before and after 4-weeks dietary intervention with alcohol-free and traditional and beer in men (N=21)

	Alcohol-free Beer			Traditional Beer		
	Baseline	Δ	<i>P-value</i>	Baseline	Δ	<i>P-value</i>
<i>Anthropometric parameters</i>						
Weight (Kg)	94.4±2.4	0.5±0.3	0.06	94.5±2.5	0.4±0.3	0.24
BMI (Kg/m ²)	30.2±0.5	0.1±0.1	0.14	30.3±0.5	0.1±0.1	0.32
Waist (cm)	102.9±2.2	0.9±1.1	0.39	102.9±1.6	0.9±0.9	0.32
<i>Hemodynamic control</i>						
Systolic blood pressure (mmHg)	127.4±1.8	-0.2±1.5	0.90	126.2±2.0	0.4±2.7	0.89
Diastolic blood pressure (mmHg)	79.0±1.5	-0.7±1.0	0.47	78.1±1.4	-1.9±1.4	0.19
Cardiac Frequency (beats/min)	64.1±2.3	-3.7±1.1	<0.01	62.9±2.2	1.6±0.7	0.02
<i>Biochemical parameters</i>						
Glucose (mg/dL)	89.1±2.3	1.0±1.2	0.40	90.7±2.5	0.4±1.1	0.69
Creatinine (mg/dL)	0.83±0.02	0.03±0.01	0.03	0.87±0.03	0.001±0.01	0.90
Urea (mg/dL)	15.0±0.8	0.2±0.6	0.78	15.7±0.9	0.4±0.9	0.61
AST (U/L)	17.5±0.8	-1.0±0.5	0.08	17.0±0.8	0.9±0.5	0.12
GGT (U/L)	24.7±2.4	1.3±0.5	0.02	24.8±2.8	4.5±0.9	<0.01
<i>Hemogram</i>						
RBC (10 ⁶ mm)	4.5±0.1	-0.04±0.04	0.32	4.5±0.1	-0.03±0.04	0.46
HCT(%)	38.4±0.6	-0.3±0.4	0.43	38.1±0.5	-0.03±0.04	0.93
PLT (10 ³ mm ³)	187.9±5.9	-1.2±4.0	0.77	191.8±6.8	-1.6±4.0	0.70
MPV (Um ³)	8.4±0.1	-0.04±0.04	0.61	8.4±0.1	-0.01±0.09	0.91
WBC (10 ³ mm ³)	5.9±0.2	0.2±0.2	0.12	6.0±0.2	0.1±0.2	0.65

Baseline values after the 4-week run-in and the 4-week wash-out periods are expressed as mean ± SEM. Statistical analysis was performed with a T-student for paired samples. Statistical significance: p<0.05. BMI=body mass index; AST=aspartate transaminase; GGT= gamma-glutamyltransferase; RBC= red blood cells; HCT= hematocrit; PLT= platelet; MPV= mean platelet volume; WBC= white blood cells.

Supplementary Table S3. Anthropometric and hemodynamic variables, biochemical parameter and hemogram profile before and after 4-weeks dietary intervention with alcohol-free and traditional and beer in women (N=15)

	Alcohol-free Beer			Traditional Beer		
	Baseline	Δ	<i>P-value</i>	Baseline	Δ	<i>P-value</i>
<i>Anthropometric parameters</i>						
Weight (Kg)	78.4±3.0	0.2±0.2	0.20	78.1±2.8	0.5±0.4	0.21
BMI (Kg/m ²)	30.6±1.0	0.1±0.1	0.14	30.6±0.9	0.2±0.1	0.26
Waist (cm)	95.1±3.2	2.0±1.3	0.15	97.3±2.3	2.4±1.4	0.11
<i>Hemodynamic control</i>						
Systolic blood pressure (mmHg)	122.5±3.9	1.3±2.6	0.63	124.0±3.9	0.4±1.9	0.84
Diastolic blood pressure (mmHg)	69.7±2.9	1.2±2.0	0.56	72.8±2.7	0.4±1.5	0.79
Cardiac Frequency (beats/min)	67.2±2.3	1.7±2.4	0.50	67.5±1.9	0.5±2.3	0.82
<i>Biochemical parameters</i>						
Glucose (mg/dL)	86.6±2.1	0.2±1.3	0.86	84.7±1.8	4.1±1.5	0.02
Creatinine (mg/dL)	0.67±0.05	0.01±0.01	0.59	0.67±0.01	0.01±0.01	0.63
Urea (mg/dL)	14.6±0.9	0.1±0.7	0.88	13.7±0.9	1.2±0.7	0.13
AST (U/L)	15.3±1.1	0.7±0.5	0.18	16.0±0.91	0.2±0.6	0.75
GGT (U/L)	17.1±3.1	-1.5±1.6	0.36	14.7±1.2	1.5±0.6	0.02
<i>Hemogram</i>						
RBC (10 ⁶ mm)	4.0±0.1	-0.1±0.1	0.18	4.2±0.2	-0.2±0.1	0.21
HCT(%)	34.3±0.7	-0.7±0.5	0.22	36.0±1.6	-1.7±1.2	0.19
PLT (10 ³ mm ³)	214.4±9.1	14.1±6.4	0.05	213.7±11.7	12.9±7.0	0.09
MPV (Um ³)	8.3±0.2	0.1±0.1	0.40	8.4±0.3	-0.1±0.2	0.35
WBC (10 ³ mm ³)	5.6±0.3	0.0±0.2	>0.99	5.8±0.3	0.2±0.3	0.43

Baseline values after the 4-week run-in and the 4-week wash-out periods are expressed as mean ± SEM. Statistical analysis was performed with a T-student for paired samples. Statistical significance: p<0.05. BMI=body mass index; AST=aspartate transaminase; GGT= gamma-glutamyltransferase; RBC= red blood cells; HCT= hematocrit; PLT= platelet; MPV= mean platelet volume; WBC= white blood cells.