

Table S1. The body weight, food intake, systolic blood pressure, organ-to-body weight ratios and pH of caecum in experimental Wistar rats.

	Body weight – begin of feeding (g)	Body weight – end of feeding (g)	Body weight gain ¹ (g)	Daily food intake ² (g)	Daily dandelion intake ³ (mg)	Heart rate (bpm)	Systolic BP (mmHg)	Diastolic BP (mmHg)
Control (C)	190 ± 2	324 ± 10	134 ± 8	18.0 ± 0.3	-	414 ± 10	172 ± 32	87 ± 3
Leaf fraction (LF)	191 (186–193)	326 (306–340)	135 (120–146)	18.1 (17.4– 18.6)	-	414 (403–423)	186 (121–229)	90 (81–91)
Petal fraction (PF)	190 ± 3	308 ± 6	118 ± 3	16.9 ± 0.2	11.7 ± 0.1	383 ± 16	142 ± 29	97 ± 7
Control (C)	189 (185–197)	310 (298–317)	120 (113–121)	16.9 (16.6–17.2)	11.7 (11.5–12.1)	387 (351–410)	119 (104–201)	91 (90–111)
Leaf fraction (LF)	190 ± 2	315 ± 14	124 ± 12	17.3 ± 0.8	12.0 ± 0.6	409 ± 26	156 ± 36	112 ± 15
Petal fraction (PF)	192 (187–193)	322 (287–335)	130 (100–143)	17.8 (15.7– 18.4)	12.4 (10.9–12.8)	407 (356–465)	120 (118–228)	104 (91–142)
	<i>p</i> -Value*							
C vs. LF	0.9695	0.2409	0.2516	0.3722	-	0.9916	0.1634	0.9519
C vs. PF	0.9456	0.6199	0.5364	0.6476	-	0.9916	0.2555	0.9418
LF vs. PF	0.9936	0.7073	0.7495	0.8343	0.8113	0.9916	0.9963	0.9519
	Organ to body weight ratio (in %)⁴				Intestinal digesta (g)			pH
	Heart	Liver	Spleen	Brain	Filled cecum	Empty cecum	Part of the small intestine	Cecum
Control (C)	0.233 ± 0.007	3.93 ± 0.19	0.21 ± 0.03	0.56 ± 0.02	2.72 ± 0.10	0.71 ± 0.11	4.5 ± 1.5	7.23 ± 0.09
Leaf fraction (LF)	0.239 (0.219–0.241)	3.77 (3.70–4.31)	0.27 (0.21–0.33)	0.57 (0.53–0.59)	2.68 (2.57–2.90)	0.62 (0.57–0.93)	5.58 (1.63–6.34)	7.20 (7.08–7.40)
Petal fraction (PF)	0.246 ± 0.009	3.60 ± 0.04	0.28 ± 0.04	0.59 ± 0.01	2.49 ± 0.14	0.64 ± 0.07	4.5 ± 1.4	7.07 ± 0.05
Control (C)	0.249 (0.229–0.260)	3.58 (3.56–3.68)	0.29 (0.21–0.34)	0.58 (0.58–0.62)	2.61 (2.21–2.64)	0.61 (0.54–0.77)	5.88 (1.60–5.97)	7.04 (7.01–7.17)
Leaf fraction (LF)	0.233 ± 0.003	3.94 ± 0.43	0.29 ± 0.02	0.59 ± 0.03	2.78 ± 0.08	0.55 ± 0.04	4.2 ± 1.2	7.23 ± 0.18
Petal fraction (PF)	0.233 (0.227–0.238)	3.56 (3.46–4.79)	0.29 (0.26–0.32)	0.56 (0.55–0.66)	2.74 (2.67–2.94)	0.57 (0.48–0.60)	5.10 (1.89–5.68)	7.29 (6.91–7.51)
	<i>p</i> -Value*							
C vs. LF	0.3198	0.1760	0.8164	0.2502	0.2486	0.6388	0.9876	0.2260
C vs. PF	0.9709	0.9802	0.5722	0.5236	0.6436	0.2582	0.8834	0.9712
LF vs. PF	0.2404	0.4783	0.7968	0.9860	0.1442	0.3194	0.8961	0.4288

Values are expressed as the mean ± SEM and median (with Q1 and Q3) from $n = 6$ rats per each group, $*p \leq 0.05$ (two-way ANOVA with Tukey's multiple comparisons test). N varies among bioassays due to limitations on samples volume collected from animal subjects and/or data outlier detection by the Grubbs' test. Q1 and Q3 are 25th and 75th percentiles. ¹ Calculated as: final body weight minus initial body weight. ² Daily food intake per animal during 28 days of dietary supplementation. ³ Daily dandelion intake (DDI, mg) was calculated as: daily food intake (g) * 694 mg/1000 g. daily HCAs intake (mg) was calculated as: DDI * 420 mg/1000 mg for leaves and DDI * 214 mg/1000 mg for petals; daily L-chicoric acid intake (mg) was calculated as DDI * 350 mg/1000 mg for leaves and DDI * 117 mg/1000 mg for petals. ⁴ The weight of the internal organs is calculated as: organ weight/final body weight (%). Bold values indicate statistically significant differences. *Abbreviations:* BP, blood pressure; LF, leaf fraction; PF, petal fraction.

Table S2. Blood plasma glucose and lipid profile of experimental Wistar rats.

	Glucose (mmol/L)	Traditional lipid profile (mmol/L)				
		TG	TC	HDL-C	LDL-C	
Control (C)	17.6 ± 0.9	3.6 ± 0.5	3.2 ± 0.2	0.48 ± 0.03	0.44 ± 0.02	
	17.1 (16.1–19.4)	3.1 (3.0–4.6)	3.4 (2.9–3.5)	0.50 (0.42–0.51)	0.42 (0.42–0.47)	
Leaf fraction (LF)	18.4 ± 0.2	1.6 ± 0.2	2.4 ± 0.4	0.44 ± 0.01	0.39 ± 0.03	
	18.5 (18.1–18.7)	1.5 (1.2–2.0)	2.1 (1.9–3.1)	0.45 (0.41–0.46)	0.36 (0.35–0.46)	
Petal fraction (PF)	18.5 ± 1.3	2.7 ± 0.4	2.9 ± 0.3	0.45 ± 0.05	0.49 ± 0.03	
	19.1 (16.0–20.5)	2.7 (2.1–3.4)	2.7 (2.6–3.5)	0.42 (0.38–0.56)	0.48 (0.45–0.54)	
<i>p</i> -Value*						
C vs. LF	0.8665	0.0262*	0.05*	0.7240	0.5270	
C vs. PF	0.8262	0.2634	0.4481	0.8717	0.4487	
LF vs. PF	0.9961	0.05*	0.2910	0.9552	0.1345	
Nontraditional lipid profile ¹						
	Non-HDL (mmol/L)	TC/HDL-C	LDL-C/HDL-C	AI	LCI	AIP
Control (C)	2.8 ± 0.2	6.9 ± 0.7	0.93 ± 0.09	5.9 ± 0.7	11 ± 3.1	0.87 ± 0.09
	2.9 (2.4–3.0)	6.9 (5.7–8.0)	0.84 (0.82–1.12)	5.9 (4.7–7.0)	9.0 (7.1–17.4)	0.79 (0.77–1.04)
Leaf fraction (LF)	1.9 ± 0.4	5.4 ± 0.8	0.89 ± 0.07	4.4 ± 0.8	4 ± 1.4	0.54 ± 0.07
	1.7 (1.4–2.7)	5.0 (4.1–7.0)	0.85 (0.78–1.02)	4.0 (3.1–6.0)	2.7 (1.7–6.4)	0.57 (0.40–0.65)
Petal fraction (PF)	2.5 ± 0.3	6.7 ± 1.1	1.11 ± 0.13	5.7 ± 1.1	10 ± 3.1	0.78 ± 0.10
	2.3 (2.1–3.1)	7.0 (4.8–8.4)	1.18 (0.86–1.29)	6.0 (3.8–7.4)	8.6 (4.7–15.3)	0.86 (0.57–0.90)
<i>p</i> -Value*						
C vs. LF	0.2316	0.5279	0.9574	0.5279	0.05*	0.0449*
C vs. PF	0.8194	0.9931	0.4942	0.9931	0.8840	0.7597
LF vs. PF	0.4371	0.5846	0.3735	0.5846	0.2863	0.2446

Values are expressed as the mean ± SEM and median (with Q1 and Q3) from $n = 6$ rats per each group, $*p \leq 0.05$ (two-way ANOVA with *Tukey's* multiple comparisons test). N varies among bioassays due to limitations on samples volume collected from animal subjects and/or data outlier detection by the Grubbs' test. Q1 and Q3 are 25th and 75th percentiles. ¹ A nontraditional lipid profile was calculated as non-HDL-C: TC minus HDL-C; LDL-C/HDL-C; AI, non-HDL-C/HDL-C; LCI, TC*TG*LDL-C/HDL-C; AIP, $\log_{10}(\text{TG}/\text{HDL-C})$. Bold values indicate statistically significant differences. *Abbreviations:* AI, atherogenic index; AIP, atherogenic index of plasma; HDL-C, high-density lipoprotein cholesterol; LCI, lipoprotein combine index; LDL-C, low-density lipoprotein cholesterol; LF, leaf fraction; PF, petal fraction; TC, total cholesterol; TG, triglyceride.

Table S3. The antioxidant capacity of experimental Wistar rats.

	Thiol groups (nmol/mL/mg of protein)		Carbonyl groups (nmol/mL/mg of protein or nmol/mg homogenate)				F2 α -isoprostane
	Plasma	Plasma	Heart	Liver	Spleen	Brain	Urine
Control (C)	60 \pm 6	29.2 \pm 0.2	1.5 \pm 0.3	12.3 \pm 2.5	36 \pm 3	18.6 \pm 2.4	20 \pm 8
	55 (53–73)	29.1 (29–29.6)	1.66 (0.99–1.9)	11.0 (8.8–17.0)	37.8 (29.6–39.4)	21.0 (13.7–21.2)	14 (9.4–34.9)
Leaf fraction (LF)	81 \pm 12	17.2 \pm 1.8	1.9 \pm 0.3	19.2 \pm 1.9	49 \pm 13	23.1 \pm 3.3	18 \pm 9
	79 (62–103)	15.73 (15.1–20.9)	1.85 (1.28–2.46)	18.6 (17.9–24.0)	54.3 (24.6–68.7)	20.9 (18.9–29.5)	11 (7.8–36.1)
Petal fraction (PF)	96 \pm 3	29.0 \pm 5.3	1.5 \pm 0.1	10.9 \pm 3.6	31 \pm 7	25.2 \pm 3.6	14 \pm 3
	97 (90–100)	29.3 (19.6–38.2)	1.53 (1.31–1.76)	9.6 (4.9–15.1)	26.0 (21.3–45.3)	23.3 (20.1–32.1)	12 (10.4–19.0)
<i>p</i> -Value*							
C vs. LF	0.2033	0.0214*	0.3636	0.0646	0.4055	0.3867	0.9074
C vs. PF	0.0076*	0.9902	0.9986	0.4772	0.8761	0.1907	0.5025
LF vs. PF	0.3093	0.0486*	0.3825	0.0486*	0.2424	0.7860	0.6509
	ORAC (μ mol TE/L)		TBARS (nmol/mL or nmol/mg homogenate)				
	Plasma	Plasma	Thoracic artery	Heart	Liver	Spleen	Brain
Control (C)	578 \pm 2	1.32 \pm 0.02	0.18 \pm 0.04	0.23 \pm 0.06	0.120 \pm 0.018	0.408 \pm 0.023	0.058 \pm 0.006
	579 (574–581)	1.33 (1.28–1.36)	0.18 (0.11–0.25)	0.20 (0.14–0.34)	0.122 (0.088–0.150)	0.412 (0.365–0.446)	0.064 (0.045–0.066)
Leaf fraction (LF)	573 \pm 13	1.70 \pm 0.23	0.13 \pm 0.03	0.14 \pm 0.05	0.127 \pm 0.007	0.317 \pm 0.006	0.031 \pm 0.003
	571 (551–596)	1.76 (1.29–2.06)	0.13 (0.07–0.18)	0.10 (0.09–0.24)	0.130 (0.113–0.137)	0.314 (0.308–0.330)	0.028 (0.028–0.038)
Petal fraction (PF)	627 \pm 24	1.36 \pm 0.03	0.10 \pm 0.04	0.15 \pm 0.02	0.121 \pm 0.012	0.327 \pm 0.012	0.036 \pm 0.012
	649 (578–653)	1.35 (1.33–1.42)	0.08 (0.05–0.18)	0.15 (0.11–0.19)	0.111 (0.107–0.145)	0.327 (0.306–0.348)	0.043 (0.013–0.051)
<i>p</i> -Value*							
C vs. LF	0.9612	0.1706	0.05*	0.5827	0.7719	0.0208*	0.0225*
C vs. PF	0.1183	0.9651	0.05*	0.6161	0.9938	0.0379*	0.1651
LF vs. PF	0.0910	0.2222	0.7057	0.9978	0.8266	0.5219	0.7370

Values are expressed as the mean \pm SEM and median (with Q1 and Q3) from $n = 6$ rats per each group, $*p \leq 0.05$ (two-way ANOVA with *Tukey's* multiple comparisons test). N varies among bioassays due to limitations on samples volume collected from animal subjects and/or data outlier detection by the Grubbs' test. Q1 and Q3 are 25th and 75th percentiles. Bold values indicate statistically significant differences. *Abbreviations:* LF, leaf fraction; PF, petal fraction.