Table S1. Composition of experimental diets fed to rats.

Ingredient (g/kg)	Control diet	Diet with added ground RBS
Casein [a]	200	200
DL-methionine	3.0	3.0
Celullose [b]	50	6.1
Sucrose	100	100
Rapeseed oil [c]	20	10.1
Lard	60	60
Ground raspberry seeds	-	70
Mineral mixture [d]	35	35
Vitamin mixture [e]	10	10
Choline chloride	2.0	2.0
Corn starch	520	503.8
Calculated content of polyphenols	0	1.2

[a] Casein preparation (LACPOL Co., Murowana Goslina, Poland), containing (%): Crude protein (89.7), Crude fat (0.3), Ash (2.0), and water (8.0).

[b] α-cellulose (Sigma-Aldrich, St. Louis, MO, USA), main source of dietary fiber.

[c] rapeseed oil – Majewski et al. [11]

[d] AIN-93G-MX, containing (%): Calcium Carbonate anhydrous (35.7), Potassium Phosphate monobasic (19.6), Potassium Citrate (7.078), Sodium Chloride (7.4), Potassium Sulfate (4.66), Magnesium Oxide (2.4), Ferric Citrate (0.606), Zinc Carbonate (0.165), Sodium meta-silicate 9H2O (0.145), Manganous Carbonate (0.063), Cupric Carbonate (0.03), Chromium Potassium Sulfate·12H2O (0.0275), Boric Acid (17.5% B) (0.00815), Sodium Fluoride (45.24% F) (0.00635), Nickel Carbonate (0.00318), Lithium Chloride (0.00174), Sodium Selenate anhydrous (0.001025), Potassium Iodate (0.0010), Ammonium Paramolybdate·4H2O (0.000795), Ammonium Vanadate (0.00066), powdered Sucrose (22.1026).

[e] AIN-93G Vitamin Mix, containing (%):Nicotinic Acid (0.3), Calcium Pantothenate (0.16), Pyridoxine HCl (0.07), Thiamin HCl (0.06), Riboflavin (0.06), Folic Acid (0.02), Biotin (0.002), Vitamin B12 (Cyanocobalamin, 0.1% in mannitol) (0.25), Vitamin E (all-rac-α-tocopheryl Acetate, 500 IU/g) (1.50), Vitamin A (all-trans-retinyl Palmitate, 500,000 IU/g) (0.08), Vitamin D3 (Cholecalciferol, 400,000 IU/g) (0.025), Vitamin K1 (Phylloquinone) (0.0075), powdered Sucrose (97.4655).

Table S2. Daily dietary intake, body weight change and organ weights of experimental rats.

Experimental group	Food intake/day (g) [a]	RBS intake/day (g) [b]	Initial body weight (g)	Final body weight (g)	Body weight gain (g) [c]	Organs weight (g/100 g BW) [d]		
						Heart	Liver	Kidneys
WKY, Control (C)	20.33 ± 0.608 19.91 (19.26–21.60)	1.423 ± 0.043 1.394 (1.348–1.512)	288.8 ± 7.403 290.3 (269.4–307.5)	364.1 ± 7.16 366.5 (349.5–376.3)	75.35 ± 4.35 76.70 (65.13–84.15)	0.306 ± 0.004 0.306 (0.299–0.314)	3.11 ± 0.07 3.09 (2.96–3.23)	0.532 ± 0.013 0.517 (0.508–0.563)
WKY, Raspberry Seeds (RBS)	20.76 ± 0.572 21.33 (19.14–21.78)	1.453 ± 0.040 1.493 (1.340–1.525)	286.3 ± 5.811 287.1 (273.1–298.7)	369.9 ± 9.89 362.8 (349.7–397.8)	83.52 ± 5.07 76.70 (75.53–95.30)	0.306 ± 0.004 0.308 (0.297–0.312)	3.27 ± 0.06 3.31 (3.15–3.40)	0.551 ± 0.010 0.556 (0.536–0.563)
SHR, Control (C)	21.27 ± 0.388 20.98 (20.55–22.06)	1.489 ± 0.027 1.469 (1.438–1.544)	263.3 ± 5.749 262.0 (250.6–276.1)	354.4 ± 4.187 353.4 (344.4–365.3)	91.05 ± 2.22 92.75 (84.85–94.55)	0.373 ± 0.014 0.356 (0.348–0.414)	3.64 ± 0.04 3.62 (3.58–3.71)	0.603 ± 0.005 0.607 (0.596–0.612)
SHR, Raspberry Seeds (RBS)	21.50 ± 0.432 21.54 (20.97–22.42)	1.505 ± 0.030 1.508 (1.468–1.570)	263.4 ± 4.012 264.8 (252.1–273.0)	354.7 ± 6.535 352.4 (340.3–369.5)	91.30 ± 3.89 92.50 (83.43–97.58)	0.360 ± 0.010 0.357 (0.341–0.377)	3.58 ± 0.04 3.59 (3.51–3.66)	0.598 ± 0.011 0.592 (0.578–0.622)
p–value								
WKY, C vs. WKY, RBS	0.8872		0.7999	0.9398	0.3302	0.3904	0.1669	0.6446
SHR, C vs. SHR, RBS	0.9802		0.8506	>0.9999	>0.9999	0.4728	0.8643	0.9839
WKY, C vs. SHR, C	0.4171		**0.0216**	0.7663	**0.0192**	**0.0058**	**<0.0001**	**0.0020**
WKY, RBS vs. SHR, RBS	0.6099		**0.0088**	0.4585	0.3696	**0.0022**	**0.0032**	**0.0402**

[a] Daily total food intake per animal during 6 weeks of supplementation.
[b] Daily RBS intake per animal during 6 weeks of supplementation.
[c] Calculated as: final body weight (g) – initial body weight (g).
[d] The weight of the internal organs calculated as: organ weight (g)/final body weight (g)*100 (g).
Data are expressed either as means ± SEM or the median (with Q1 and Q3), of n = 6 rats: two-way ANOVA/Tukey's. Bold values indicate statistically significant differences ($p \leq 0.05$).
Abbreviations: BW, body weight; RBS, dried raspberry seeds.

Table S3. Traditional and nontraditional lipid profile of experimental rats.

	Traditional lipid profile			Nontraditional lipid profile [a]			
Experimental group	TC (mmol/L)	HDL (mmol/L)	TG (mmol/L)	non-HDL = TC – HDL (mmol/L)	TC/HDL	*non*HDL/HDL	AIP = logTG/HDL
WKY, Control (C)	3.45 ± 0.11 3.42 (3.25–3.61)	0.837 ± 0.021 0.830 (0.7875–0.8875)	2.273 ± 0.168 2.480 (1.825–2.535)	2.613 ± 0.101 2.54 (2.45–2.765)	4.13 ± 0.13 4.11 (3.84–4.35)	3.130 ± 0.129 3.109 (2.836–3.350)	0.428 ± 0.038 0.453 (0.355–0.494)
WKY, Raspberry Seeds (RBS)	3.25 ± 0.07 3.21 (3.10–3.41)	0.923 ± 0.033 0.940 (0.8425–0.9675)	1.968 ± 0.130 2.135 (1.583–2.203)	2.327 ± 0.054 2.325 (2.238–2.445)	3.53 ± 0.09 3.51 (3.34–3.78)	2.533 ± 0.091 2.505 (2.340–2.775)	0.325 ± 0.028 0.345 (0.249–0.379)
SHR, Control (C)	2.17 ± 0.04 2.17 (2.06–2.27)	0.602 ± 0.021 0.585 (0.5650–0.6450)	1.595 ± 0.104 1.470 (1.403–1.910)	1.567 ± 0.037 1.555 (1.488–1.625)	3.62 ± 0.10 3.61 (3.40–3.84)	2.618 ± 0.105 2.609 (2.402–2.838)	0.420 ± 0.038 0.396 (0.345–0.528)
SHR, Raspberry Seeds (RBS)	2.04 ± 0.03 2.03 (1.99–2.10)	0.632 ± 0.028 0.610 (0.5900–0.6775)	1.670 ± 0.092 1.665 (1.448–1.905)	1.440 ± 0.035 1.43 (1.37–1.515)	3.44 ± 0.09 3.51 (3.17–3.62)	2.438 ± 0.094 2.510 (2.168–2.615)	0.421 ± 0.027 0.394 (0.372–0.487)
p–value							
WKY, C vs. WKY, RBS	0.1838	0.0733	0.3447	**0.0173**	**0.0036**		**0.05**
SHR, C vs. SHR, RBS	0.5424	0.7914	0.9734	0.0625	0.2311		>0.9999
WKY, C vs. SHR, C	**<0.0001**	**<0.0001**	**0.0078**	**0.0022**	**0.0117**		0.9969
WKY, RBS vs. SHR, RBS	**<0.0001**	**<0.0001**	0.3628	**<0.0001**	0.4891		**0.0342**

[a] Nontraditional lipid profile was calculated as: non-HDL-C = TC minus HDL-C; TC/HDL; atherogenic index = non-HDL-C/HDL-C; AIP, log10(TG/HDL-C). Data are expressed either as means ± SEM or the median (with Q1 and Q3), of n = 6 rats: two-way ANOVA/Tukey's. Bold values indicate statistically significant differences ($p \leq 0.05$).
Abbreviations: AI, atherogenic index; AIP, atherogenic index of plasma; HDL-C, high density cholesterol; TC, total cholesterol; TG, triglycerides.

Table S4. Blood plasma biochemical indices.

Experimental group	AST (U/L)	ALT (U/L)	Uric acid (mmol/L)	Urea (mmol/L)	CAT (U/mL)	SOD (U/mL)
WKY, Control (C)	89.32 ± 1.658 89.80 (85.55–92.93)	28.25 ± 1.186 27.35 (25.90–31.05)	21.67 ± 2.011 21.00 (17.00–26.50)	5.225 ± 0.215 5.250 (4.735–5.608)	1090 ± 53.70 1117 (944.5–1193)	28.01 ± 0.05 28.01 (27.88–28.14)
WKY, Raspberry Seeds (RBS)	78.30 ± 2.709 77.85 (73.00–85.53)	29.25 ± 1.136 29.35 (26.58–31.63)	18.5 ± 1.586 19.00 (14.75–22.00)	5.16 ± 0.158 5.235 (4.755–5.478)	948.4 ± 32.03 942.4 (891.0–1024)	28.35 ± 0.327 28.13 (27.88–28.96)
SHR, Control (C)	100.50 ± 1.791 100.40 (97.00–103.40)	32.60 ± 1.418 33.05 (30.00–34.88)	14.5 ± 1.384 14.00 (12.25–17.00)	5.738 ± 0.137 5.740 (5.413–6.010)	1065 ± 19.98 1091 (1016–1096)	27.99 ± 0.105 28.09 (27.78–28.19)
SHR, Raspberry Seeds (RBS)	88.33 ± 1.924 87.80 (83.90–93.70)	30.52 ± 1.326 29.65 (27.58–34.08)	11.83 ± 1.222 12.00 (8.75–15.00)	5.852 ± 0.324 5.985 (5.460–6.325)	994.5 ± 23.03 995.2 (948.6–1039)	28.42 ± 0.298 28.36 (27.87–28.80)
p–value						
WKY, C vs. WKY, RBS	**0.0095**	0.9259	0.2776	0.9975	**0.0468**	0.3095
SHR, C vs. SHR, RBS	**0.0045**	0.5888	0.4171	0.9873	**0.0390**	0.1797
WKY, C vs. SHR, C	**0.0087**	0.0738	**0.0035**	0.4692	0.6736	0.8182
WKY, RBS vs. SHR, RBS	**0.0183**	0.8632	**0.0062**	0.2304	0.2697	0.8701

Bold values indicate statistically significant differences ($p \leq 0.05$). Data are expressed either as means ± SEM or the median (with Q1 and Q3), of n = 6 rats: two-way ANOVA/Tukey's. Abbreviations: ALT, alanine aminotransferases; AST, aspartate aminotransferase; CAT, Catalase; SOD, Superoxide dismutase.