

## Supplementary material

**Table S1:** Bioactive components and antioxidant activity of mangaba powder

Bioactive components and antioxidant activity	Mangaba powder
TPC (mg GAE/100g)	1524.90 ± 32.44
Total carotenoids (mg/100g)	0.10 ± 0.03
Vitamin C (mg/100g)	140.20 ± 3.09
<b>Phenolic profile (mg/100 g)</b>	
Hesperidin	0.35 ± 0.02
Procyanidin B1	2.84 ± 0.00
Procyanidin B2	2.30 ± 0.03
Catechin	0.44 ± 0.09
Epigallocatechin gallate	0.10 ± 0.01
Quercetin 3-glucoside	2.24 ± 0.08
Kaempferol 3-glucoside	0.03 ± 0.03
Rutin	0.03 ± 0.01
Chlorogenic acid	2.87 ± 0.05
Trans-resveratrol	0.32 ± 0.04
<b>Antioxidant activity (μmol Trolox /100g)</b>	
DPPH	3548.67 ± 8.50
ABTS	1653.82 ± 45.91
<b>Oligossacharides (mg/100g)</b>	
Kestose	0.15 ± 0.02
Raffinose	17.48 ± 0.46
<b>Dietary fibre (g/100 g)</b>	
TDF	4.10 ± 0.14
SDF	1.55 ± 0.06
IDF	2.55 ± 0.12

Means and standard deviation (±) three repetitions (n=3). Results expressed on dry basis. TDF, Total dietary fibre; SDF, Soluble dietary fibre; IDF, Insoluble dietary fibre; TPC total phenolic compounds.

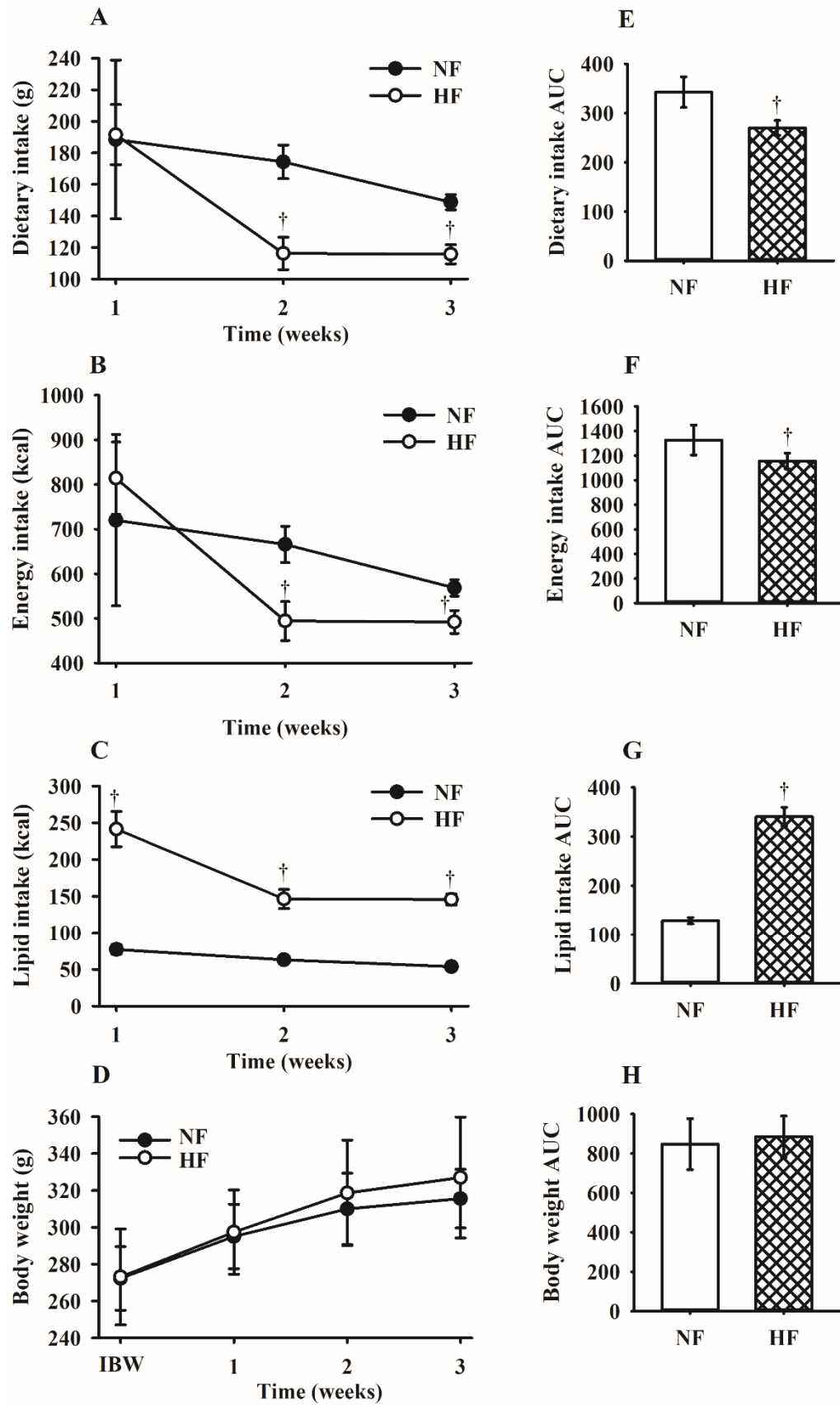
**Table S2:** Composition of the normal- and high-fat diets consumed by Wistar rats treated or not with mangaba powder.

Ingredients (g/100g)	Diets	
	AIN-93M*	Dyslipidaemic**
Milk casein	14.00	16.50
Maize starch	47.00	36.45
Dextrinized starch	15.50	15.50
Sucrose	10.00	6.00
Fibre	5.00	5.00
Soy oil	4.00	3.00
Animal fat (lard)	-	6.00
Non-hydrolyzed vegetable fat	-	5.00
Sigma cholic acid	-	0.50
Sigma cholesterol	-	1.00
Mineral mix AIN -93M	3.50	3.50
Vitamin mix	1.00	1.00
L-cysteine	0.18	0.30
Hill bitartrate	0.25	0.25
t-BHQ***	0.008	0.014
Calories (kcal/g)	3.82	4.25
Carbohydrates (kcal %)	75.77	54.54
Proteins (kcal %)	14.82	15.81
Lipids (kcal %)	9.40	29.64

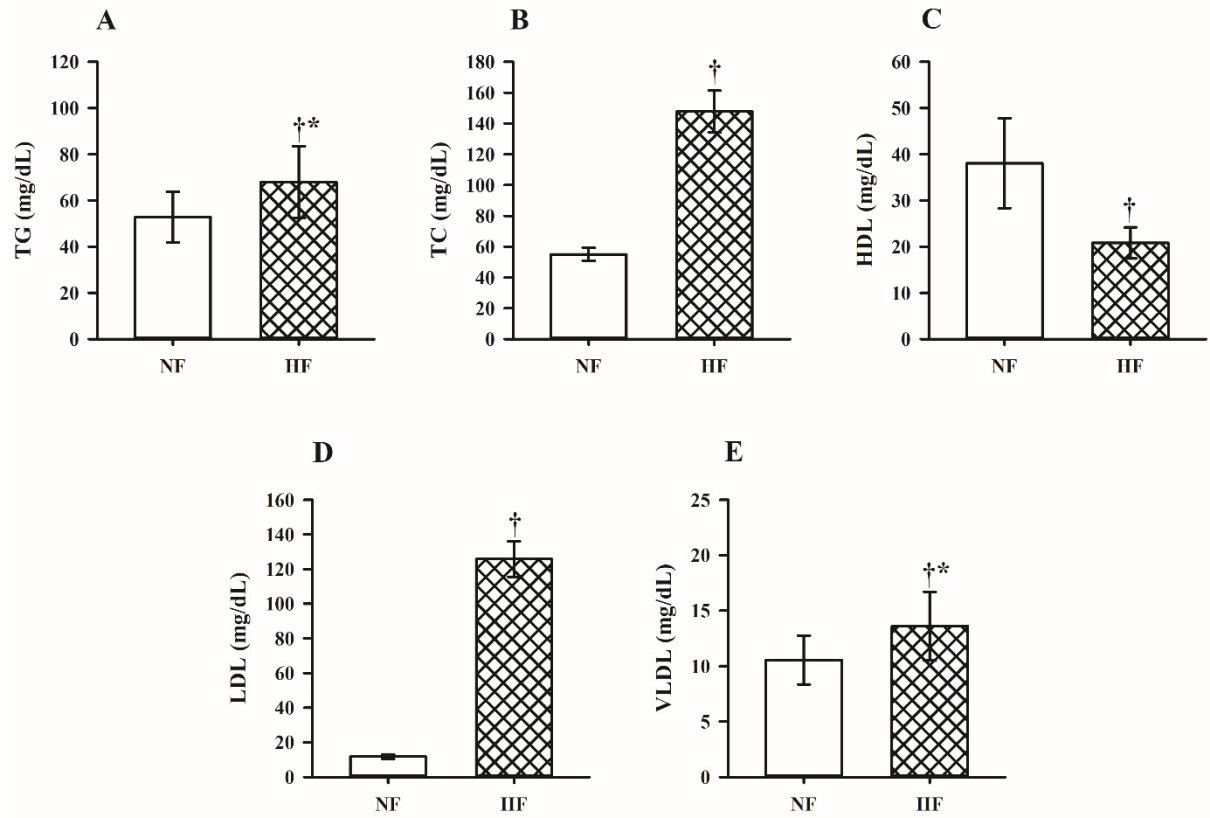
\*Adapted from Reeves et al., (1993). \*\*Rhoister Industria and Comércio Ltda. \*\*\*: t-BHQ, tert-butylhydroquinone.

**Table S3:** Fatty acid composition of the normal- and high-fat diets consumed by Wistar rats treated or not with mangaba powder

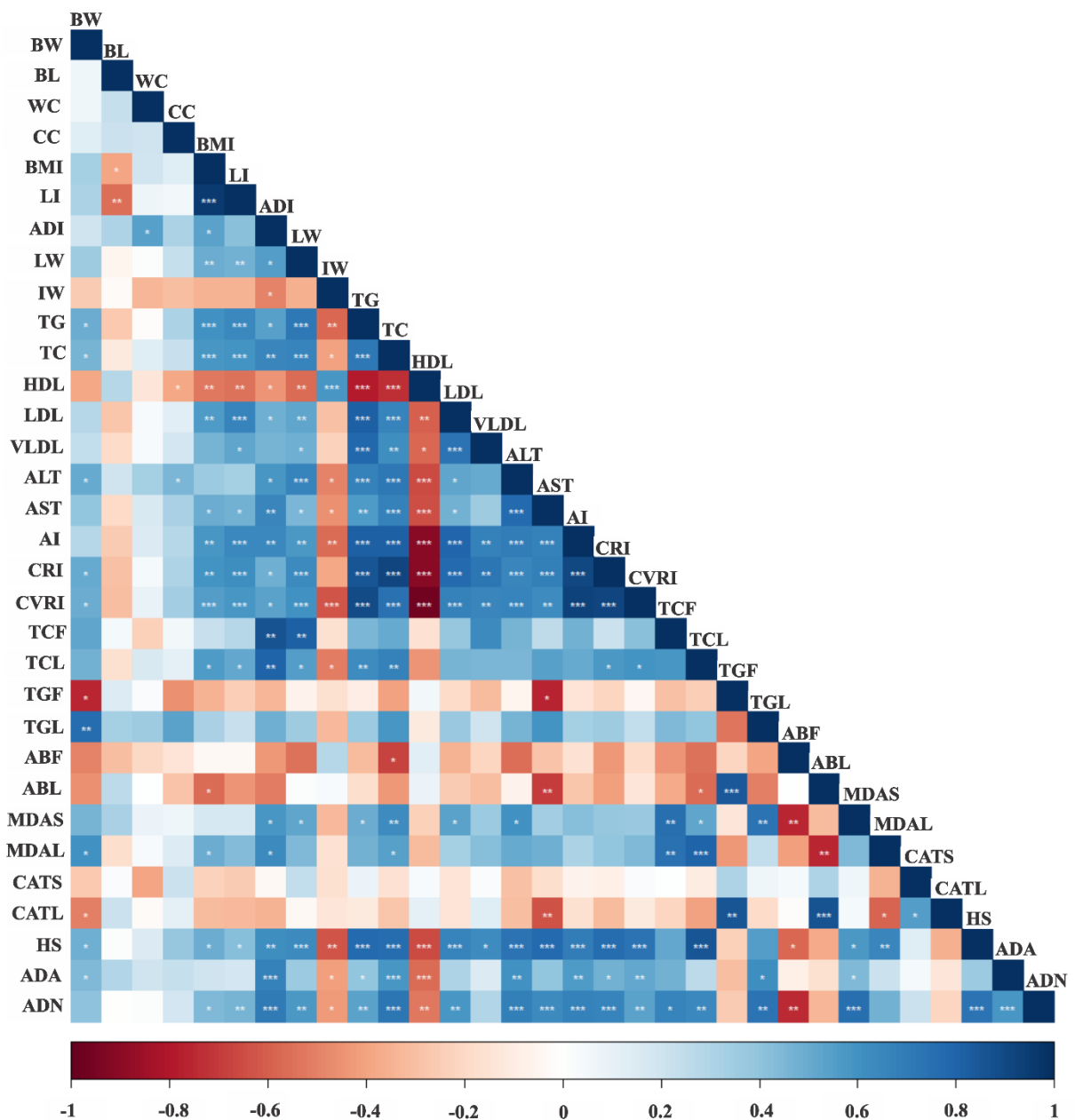
Fatty Acids (g /100g)	Diets	
	AIN-93M	Dyslipidaemic
Myristic acid C 14:0	0.50 ± 0.06	-
Palmitic acid C16:0	16.41 ± 0.10	33.23 ± 0.22
Stearic acid C18:0	11.22 ± 0.45	5.98 ± 0.05
Arachidic acid C20:0	0.21 ± 0.13	-
<b>Saturated Fatty Acids (SFA g /100g)</b>	<b>28.34</b>	<b>39.21</b>
Palmitoleic acid C16:1 n7	0.79 ± 0.07	-
Heptadecenoic acid C17:1 n7	0.21 ± 0.03	-
Oleic acid C18:1 n9	29.65 ± 0.12	35.14 ± 0.11
<b>Monounsaturated Fatty Acids (MUFA g /100g)</b>	<b>30.95</b>	<b>35.14</b>
Elaidic acid C18:1 n9t	3.55 ± 0.02	1.77 ± 0.12
Linoleic acid C18:2 n6	35.89 ± 0.35	20.16 ± 0.37
Alpha-linolenic acid C18:3n3	0.76 ± 0.05	3.72 ± 0.20
Cis-11-Eicosenoic acid C20:1n9	0.51 ± 0.09	-
Eicosapentaenoic acid C20:5 n3 (EPA)	-	-
Docosahexaenoic acid C22:6n3 (DHA)	-	-
<b>Polyunsaturated Fatty Acids (PUFA g /100g)</b>	<b>40.71</b>	<b>25.65</b>



**Figure S1:** Dietary intake (A), energy intake (B), lipid intake (C), body weight (D) and areas under the curve (E-H) in the dyslipidemia induction. AUC, areas under the curve; HG, healthy group; DG, dyslipidaemic group; IBW, initial body weight; † significant difference compared with HG. Values are median to the 25th - 75th percentiles (Mann-Whitney U test,  $P < 0.05$ ),  $n = 16$ .



**Figure S2:** Lipid profile to diagnostic dyslipidemia induction in Wistar rats (A-E). HG, healthy group; DG, dyslipidaemic group; TC, total cholesterol; TG, triglycerides; LDL, low density lipoprotein; VLDL, very low-density lipoprotein; HDL, high density lipoprotein. † significant difference compared with HG. Values are median to the 25th - 75th percentiles (Mann-Whitney U test,  $P < 0.05$ ),  $n = 16$ .



**Figure S3:** Spearman correlation matrix considering parameters of rats fed normal- or high-fat diets and treated or not with mangaba powder. \*  $P < 0.05$ ; \*\*  $P < 0.01$ ; \*\*\*  $P < 0.001$ . FBW, final body weight; BL, body length; WC, waist circumference; CC, chest circumference; BMI, body mass index; LI, lee index; BMI, body mass index; LI, Lee index; ADI, adiposity index; LW, liver weight; IW, intestine weight; TG, triglycerides; TC, total cholesterol; TCF, total cholesterol faecal; TGL, triglycerides liver; LDL, low density lipoprotein; VLDL, very low density lipoprotein; HDL, high density lipoprotein; AI, atherogenic index; CRI, coronary risk index; CVRI, cardiovascular risk index; TCF, total cholesterol faecal; TCL, total cholesterol liver; ABF, bile acids faecal; ABL, bile acids liver; MDAS, serum malondialdehyde; MDAL, liver malondialdehyde; CATS, total serum antioxidant capacity; CATL, total liver antioxidant capacity; HS, hepatic steatosis; ADA, adiposity area; ADN adiposity number; AST, aspartate aminotransferase; ALT, alanine aminotransferase.