Supplementary Material

Tomato-Oleoresin Anti-Inflammatory Effect Recovers Obesity-Induced Cardiac Dysfunction by Modulating Myocardial Calcium Handling

Artur Junio Togneri Ferron[a] Fabiane Valentini Francisqueti-Ferron[a]
Carol Cristina Vágula de Almeida Silva[a] Silmeia Garcia Zanati Bazan[a]
Dijon Henrique Salomé de Campos[a] Jéssica Leite Garcia[a] Luciana Ghiraldeli[a]
Igor Otávio Minatel[b] Camila Renata Correa[a] Fernando Moreto[a]
Ana Lucia Anjos Ferreira[a]

[a]Medical School, Sao Paulo State University (UNESP), Botucatu, Brazil, [b]Institute of Biosciences, Sao Paulo State University (UNESP), Botucatu, Brazil

Supplementary Table 1. Diet composition

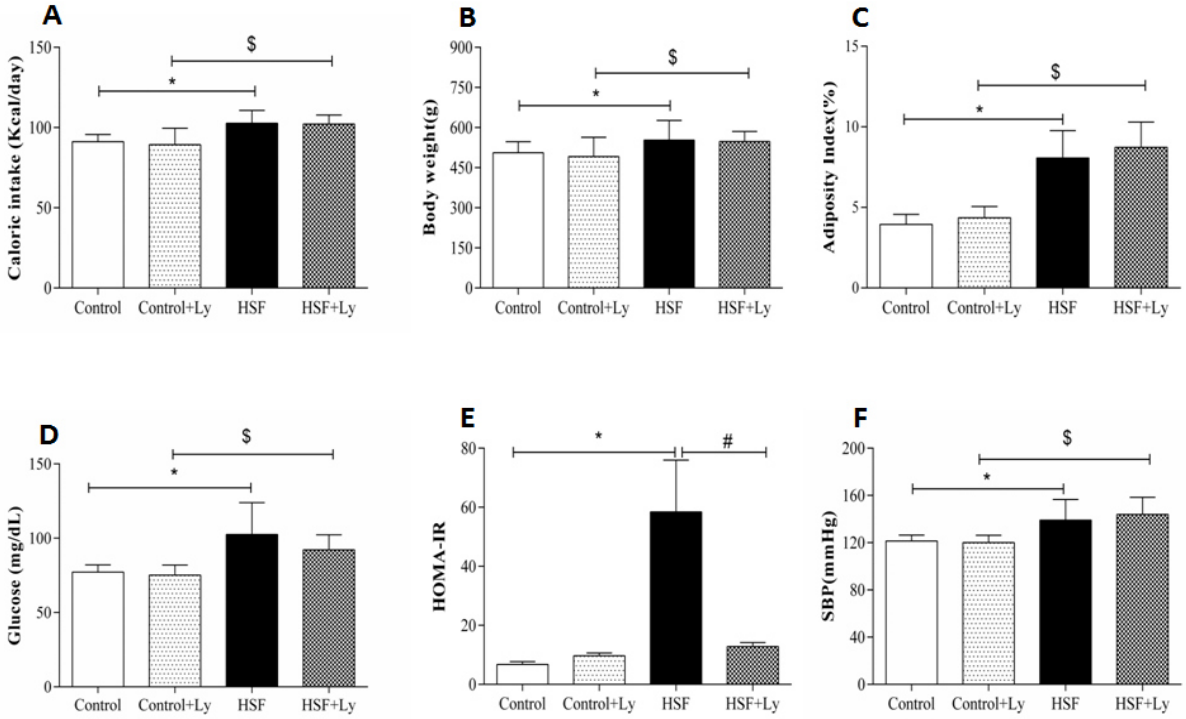
	Diet	
Ingredients	**Control**	**HSF**
Soybean meal (g/kg)	335	340
Shorgo (g/kg)	278	80
Soy hulls (g/kg)	188.5	116.7
Dextrin (g/kg)	146.5	20
Sucrose (g/kg)	-	80
Fructose (g/kg)	-	180
Soy oil (g/kg)	14	-
Lard (g/kg)	-	154.3
Minerals (g/kg)	25	25
Salt (g/kg)	4	8
Components		
Protein (%)	20	16
Carbohydrate (%)	60	70
Fat (%)	4	14.6
% Energy from protein	22.85	13.45
% Energy from carbohydrate	66.78	58.69
% Energy from fat	10.37	27.8
Energy (kcal/g)	3,59	4,35

Supplementary Table 2. Echocardiogram at 20 weeks

Variables	Groups		
	Control (*n* = 20)	**HSF (*n* = 20)**	***P value***
LVDD, mm	7.50 ± 0.40	6.53 ± 0.49	0,015
LVSD, mm	2.68 ± 0.34	3.31 ± 0.44	0,040
LVPWD, mm	1.54 ± 0.11	1.97 ± 0.11	0,010
Aorta diameter, mm	3.79 ± 0.24	4.01 ± 0.19	0,001
Left Atrium	4.73 ± 0.20	6.17 ± 0.41	0,001
Estimated LV mass, g	1.56 ± 0.32	2.03 ± 0.23	0,001
Relative wall thickness	0.45 ± 0.03	0.58 ± 0.06	0,001
Shortening Δ% endo	58.2 ± 3.3	52.5 ± 55.3	0,001
Ejection fraction, %	0.92 ± 0.01	0.89 ± 0.03	0,001
Deceleration time, MS	44.1 ± 7.8	53.4 ± 9.4	0,015
IRT	22.9 ± 3.1	28.1 ± 4.8	0,018

Data presented as means ± SD. Control and high-sugar high-fat (HSF) groups; n: animals numbers; LV:Left ventricular; LVDD:Left ventricular diastolic diameter; LVSD:Left ventricular systolic diameter; LVPWD:diastolic posterior wall thickness; Aw: A-wave mitral inflow velocity; Ew: E-wave mitral inflow deceleration time; IRT: Isovolumetric relaxion time; Student's *t*-test for independent samples.

Supplementary Figure 1. Data previously published[25]



Nutritional and cardio- metabolic parameters. **A**—caloric intake (kcal/day); **B**—adiposity index (%); **C**—final body weight (g); **D**—glucose (mg/dL); **E**—HOMA-IR; **F**—systolic blood pressure (mmHg). Data are expressed in mean ± standard deviation (n = 6 animals/group). Comparison by Two-way ANOVA with Tukey post-hoc ($p < 0.05$): *HSF *vs* Control; $^{\#}$HSF *vs* HSF + Ly; $^{\$}$HSF + Ly *vs* Control + Ly.