Table 1 Baseline characteristics in whole sample and categorized by gender

Variable	Total (n=16)	Men (n=6)	Women (n=10)	*p*
Age (years)	25.94±3.02	25.50±2.35	26.20±3.46	0.669
Weight (kg)	68.25±12.92	81.97±6.15	60.02±7.52	<0.001
BMI (kg/m^2)	23.99±3.05	26.42±1.95	22.54±2.68	0.008
Waist/hip ratio	0.86± 0.07	0.93±0.04	0.81±0.05	<0.001
Body fat mass (kg)	16.94±5.10	17.37±3.82	16.68±5.92	0.804
Body fat free mass (kg)	51.31±11.07	64.60±4.38	43.34±2.29	<0.001
Systolic pressure (mmHg)	102.31±9.27	103.33±12.11	101.43±6.90	0.729
Diastolic pressure (mmHg)	67.69±8.57	68.33±11.69	67.14±5.67	0.815

Data are shown as mean ± standard deviation. *p* value: Comparison between men and women baseline characteristics. $p<0.05$ was considered significant.

BMI, Body Mass Index

Table 2 Nutritional composition of the three assessed types of jams per 100g

Nutritional features	HS Mean ± SD	LS Mean ± SD	LSA Mean ± SD	*P* HS-LS	*P* HS-LSA	*P* LS-LSA
Energy (kcal/100g)	185.9±8.6	21.2±3.7	26.2±4.7	<0.05	<0.05	ns
Carbohydrates (g/100g)	46.0±2.1	4.2±0.8	5.1±0.9	<0.05	<0.05	ns
Sugars (g/100g)	41.8±1.6	2.6±0.1	2.7±0.1	<0.05	<0.05	ns
- Fructose (g/100g)	12.8±2.2	<1.3	1.3±0.1	nc	<0.05	nc
- Glucose (g/100g)	12.7±2.1	<1.3	1.4±0.1	nc	<0.05	nc
- Sucrose (g/100g)	16.4±5.7	<0.5	<0.5	nc	nc	nc
Sucralose (mg/100g)	nd	252.9±8.6	281.8±9.9	nc	nc	ns
Total fibre (g/100g)	0.5±0.1	1.12±0.2	1.64±0.2	ns	<0.05	ns
Soluble Fibre (g/100g)	<0.5	0.71±0.01	0.65±0.01	nc	nc	<0.05
Free polyphenols (µmol catechin/100g)	480.4±32.2	369.0±64.8	839.8±43.3	ns	<0.05	<0.05

Data expressed as mean ± SD, (three samples for three different batches). p <0.05 between jams was considered significant.

HS high-sugar jam, *LS* low-sugar jam, *LSA* low-sugar with antioxidant extract jam, *nc* non-calculable, *nd* non-detectable, *ns* non-significant.

Table 3 Variation of postprandial lipid profile after 2 h of eating each type of jam

		Time (minutes)					*p*		
	Jam	**0**	**30**	**60**	**90**	**120**	Jam	Time	Jam × Time
Total-c (mg/dL)	LSA	191.13±23.62[a]	181.75±23.61[b]	181.88±22.54[b]	182.06±21.52[ab]	182.00±24.97[ab]			
	LS	194.31±35.16[a]	181.94±33.70[b]	185.94±37.15[b]	186.75±36.41[b]	188.19±34.46[ab]			
	HS	197.00±56.95[a]	184.13±49.91[b]	186.06±45.96[b]	184.19±36.11[ab]	184.88±35.13[ab]	0.849	<0.001	0.913
HDL-c (mg/dL)	LSA	63.84±15.72[a]	60.54±14.75[b]	60.52±15.58[b]	60.14±14.22[b]	61.24±13.86[ab]			
	LS	64.91±17.73[a]	61.51±16.80[b]	62.71±17.13[ab]	64.05±18.62[ab]	64.24±17.77[ab]			
	HS	66.29±26.98[a]	61.41±22.37[b]	62.41±23.26[ab]	60.66±17.99[ab]	61.41±17.50[ab]	0.606	<0.001	0.455
LDL-c (mg/dL)	LSA	108.33±21.06[a]	105.72±21.14[a]	105.89±20.66[a]	106.83±21.22[a]	105.46±22.55[a]			
	LS	109.44±28.43[a]	104.46±28.29[b]	107.26±29.42[ab]	106.84±28.94[ab]	108.05±28.82[ab]			
	HS	109.56±34.23[a]	105.66±33.15[a]	106.82±28.28[a]	107.46±27.61[a]	107.29±27.83[a]	0.987	0.005	0.799
TG (mg/dL)	LSA	94.81±28.26[a]	77.44±26.74[b]	77.31±27.92[b]	75.44±28.54[b]	76.50±28.89[b]			
	LS	99.81±35.58[a]	79.88±31.25[b]	79.88±31.51[b]	79.31±30.11[b]	79.50±29.21[b]			
	HS	105.75±44.61[a]	85.25±34.14[b]	84.19±36.60[b]	80.31±31.51[b]	80.88±34.28[b]	0.284	<0.001	0.748

Data are reported as mean ± SD (n = 16). Effect of jam, time and Jam × time was analyzed with repeated measures ANOVA.

Values in a row with different superscript letters (a, b) are significantly different, $p < 0.05$, by Bonferroni post hoc test.

No were differences between jams at different time points

Total-c total cholesterol, *HDL-c* high-density cholesterol, *LDL-c* low-density cholesterol, *TG* triglycerides, *LSA* low-sugar including antioxidant jam, *LS* low-sugar jam, *HS* high-sugar jam

Table 4 Variation of postprandial antioxidant status after 2 hours of eating each type of jam

		Time (minutes)					*p*		
	Jam	**0**	**30**	**60**	**90**	**120**	Jam	Time	Jam × Time
MDA (µM)	LSA	1.10±0.51[a]	1.03±0.47[a]	1.04±0.51[a]	0.98±0.50[a]	0.99±0.51[a]			
	LS	1.05±0.41[a]	1.00±0.45[a]	1.03±0.45[a]	0.98±0.40[a]	1.02±0.47[a]			
	HS	1.12±0.47[a]	1.11±0.40[a]	1.01±0.41[a]	1.05±0.45[a]	0.97±0.44[a]	0.850	0.003	0.703
GPx (nmol/min/mL)	LSA	52.44±22.82[a]	52.60±24.38[a]	53.84±18.43[a]	60.93±24.66[a]	62.39±22.61[a]			
	LS	54.16±28.49[a]	58.42±29.45[a]	59.51±27.56[a]	57.13±26.73[a]	58.62±26.91[a]			
	HS	57.10±29.05[a]	53.56±29.27[a]	61.70±28.41[a]	58.34±33.10[a]	62.10±32.58[a]	0.912	0.067	0.450
Uric acid (mg/dL)	LSA	5.15±1.21[a]	5.18±1.19[a]	5.11±1.21[a]	5.06±1.22[a]	5.02±1.25[a]			
	LS	5.12±1.02[a]	5.13±1.03[a]	5.14±0.94[a]	5.14±0.99[a]	5.08±0.99[a]			
	HS	5.36±0.85[a]	5.35±0.81[a]	5.37±0.82[a]	5.27±0.82[a]	5.21±0.82[a]	0.450	0.032	0.740
TAC (mmol/L)	LSA	1.07±0.48[a]	1.11±0.49[a]	1.04±0.49[a]	1.16±0.53[a]	1.04±0.63[a]			
	LS	1.06±0.50[a]	1.16±0.68[a]	1.39±0.60[b]	1.20±0.55[a]	1.14±0.48[a]			
	HS	1.12±0.45[a]	0.99±0.54[a]	1.06±0.50[a]	1.14±0.56[a]	1.27±0.54[a]	0.591	0.832	0.404

Data are reported as mean ± SD (n = 16). Effect of jam, time and Jam × time was analyzed with repeated measures ANOVA.

Values in a row with different superscript letters (a, b) are significantly different, $p < 0.05$, by Bonferroni post hoc test.

MDA malondialdehyde, *GPx* glutathione peroxidise, *TAC* total antioxidant capacity, *LSA* low-sugar including antioxidant jam, *LS* low-sugar jam, *HS* high-sugar jam