
Supplementary Materials

Table S1: Measurement parameters and ingredients of the placebo and red fruit juice drink.

parameter	amount in Placebo	amount in juice (lot 1)	amount in juice (lot 2)
specific gravity [kg/L]	1,04867	1,0614	1,06129
Brix [°Bx]	12,0	15,22	15,45
conductance	2060	2380	2260
extract [g/L]	126,3	159,6	159
sugar-free extract [g/L]	18,2	40,7	41,9
sugar [g/L]	108,1	118,9	117,1
glucose [g/L]	52,4	58,4	56,3
fructose [g/L]	55,7	60,6	58,6
sucrose [g/L]	< 0,5	< 0,5	2,3
glucose/fructose-ratio	0,94	0,96	0,96
pH-value	3,29	3,42	3,34
total acid pH 8,1 cal. Cs [g/L]	6,47	7,24	7,03
ascorbic acid [mg/L]	n.n.	5	7
volatile acid [g/L]	0,02	0,04	0,04
L-malic acid [g/L]	< 0,05	2,91	2,86
citric acid [g/L]	6,76	4,45	4,85
total phenols [mg/L]	91	4052	4159
zinc [mg/L]	< 0,1	0,6	0,6
ferrum [mg/L]	< 0,1	1,5	1,4
potassium [mg/L]	1498	1429	1467
calcium	< 1	158	164
magnesium [mg/L]	< 1	97	94
copper [mg/L]	< 0,1	0,1	0,1

Table S2: Overview of the six-day endurance training protocol documentation.

ID	Training time juice [min]	Training km juice [km]	ER km juice [km]	Interval km juice [km]	Pace/ overall juice [min/km]	Training time placebo [min]	Training km placebo [km]	ER km placebo [km]	Interval km placebo [km]	Pace / overall placebo [min/km]
P01	210.00	38.02	17.98	20.04	5.52	210.00	36.32	17.34	18.98	5.78
P02	210.00	42.42	18.87	23.55	4.95	210.00	39.70	17.78	21.92	5.29
P03	210.00	56.65	21.41	35.24	3.71	210.00	51.66	21.33	30.33	4.07
P04	210.00	51.75	23.92	27.83	4.06	210.00	52.55	24.33	28.22	4.00
P05	210.00	61.88	22.51	39.37	3.39	210.00	59.38	22.64	36.74	3.54
P06	210.00	52.70	20.28	32.42	3.98	210.00	46.44	20.03	26.41	4.52
P07	210.00	41.15	17.55	23.60	5.10	210.00	40.13	17.57	22.56	5.23
P08	210.00	42.75	17.77	24.98	4.91	210.00	44.87	18.98	25.89	4.68
P09	210.00	39.86	18.90	20.96	5.91	210.00	38.10	18.98	19.12	5.51
P10	210.00	64.02	22.05	41.97	3.28	210.00	67.81	23.53	44.28	3.10
P11	210.00	48.72	21.21	27.51	4.31	210.00	50.37	23.25	27.12	4.17
P12	210.00	44.24	18.99	25.25	4.75	210.00	49.04	23.10	25.94	4.28
P13	210.00	41.65	19.31	22.34	5.04	210.00	42.28	20.74	21.54	4.97
P14	210.00	40.23	18.25	21.98	5.22	210.00	44.11	21.13	22.98	4.76
P15	210.00	39.46	18.12	21.34	5.32	210.00	40.30	19.32	20.98	5.21
P16	210.00	65.90	26.38	39.52	3.19	210.00	64.22	24.12	40.10	3.27
P17	210.00	40.56	18.10	22.46	5.18	210.00	38.58	18.49	20.09	5.44
P18	210.00	42.31	18.03	24.28	4.96	210.00	42.63	18.04	24.59	4.93
mean	210.00	47.76	20.09	27.67	4.58	210.00	47.40	20.74	26.66	4.58
SD	0.00	9.34	2.49	7.24	0.84	0.00	9.33	2.40	7.42	0.81

Table S3: Strength test and blood parameters before and after a 6-day intensive endurance training time interval for the placebo and juice interventions.

Parameter	Unit	N	JUICE			PLACEBO			<i>p</i> -value			
			T0	T1	Δ	T0	T1	Δ	time	group	time x group	time
CK	[U/L] Log10	17	199.24 ± 149.60 2.20 ± 0.07	316.35 ± 159.29* 2.44 ± 0.06	117.12 ± 191.75 0.24 ± 0.07	215.18 ± 118.25 2.26 ± 0.07	379.53 ± 221.60* 2.51 ± 0.07	164.35 ± 267.00 0.25 ± 0.07	0.001	0.371	0.976	0.170
oxLDL	[U/L] Log10	18	64 ± 51.40 1.66 ± 0.09	68.78 ± 58.70 1.67 ± 0.10	4.78 ± 37.52 0.01 ± 0.07	60.39 ± 61.37 1.59 ± 0.11	83.22 ± 92.08 1.71 ± 0.11	22.83 ± 71.56 0.12 ± 0.07	0.120	0.632	0.354	0.040
est. 1 RM	[kg]	18	104.22 ± 24.21	105.56 ± 24.54	1.34 ± 9.26	104.28 ± 22.00	100.95 ± 17.74	-3.33 ± 11.49	0.168	0.988	0.172	0.030
rel. est. 1 RM	[kg/kg KG]	18	1.40 ± 0.26	1.44 ± 0.26	0.04 ± 0.14	1.41 ± 0.20	1.38 ± 0.20	-0.03 ± 0.17	0.438	0.941	0.269	0.010
IL-6	[pg/ml] Log10	18 ^a	0.77 ± 0.58 -0.26 ± 0.12	0.74 ± 0.64 -0.30 ± 0.14	-0.1 ± 0.55 -0.01 ± 0.12	1.20 ± 1.27 -0.50 ± 0.35	1.09 ± 1.54 -0.25 ± 0.14	0.17 ± 1.24 0.14 ± 0.19	0.256	0.383	0.278	0.040
IL-10	[pg/ml] Log10	18 ^a	10.18 ± 12.26 0.81 ± 0.11	6.65 ± 5.06 0.62 ± 0.13	-2.80 ± 9.67 -0.13 ± 0.11	7.35 ± 6.07 0.67 ± 0.13	6.86 ± 5.31 0.61 ± 0.14	-0.004 ± 3.76 -0.01 ± 0.09	0.737	0.434	0.189	0.000

^aIn the evaluation of cytokines, there are 30 missing values for IL-6 and 17 missing values for IL-10. CK = Creatin kinase, oxLDL = oxidized low-density lipoprotein, est. 1 RM = estimated 1 repetition maximum, rel. est. 1 RM = relative estimated 1 repetition maximum, IL-6 = Interleukin 6, IL-10 = Interleukin.