

**Table S1.** Plasma concentrations of amino acids by dairy intake groups throughout the intervention period.

	<i>Reduced dairy intake</i>		<i>Maintained dairy intake</i>		<i>Increased dairy intake</i>		<i>p-value<sup>a</sup></i>
	(n=36)		(n=33)		(n=33)		
	<b>Baseline</b>	<b>Post intervention</b>	<b>Baseline</b>	<b>Post intervention</b>	<b>Baseline</b>	<b>Post intervention</b>	
<i>Branched-chain amino acids</i>							
<b>Valine</b>	163.45 ± 5.39	166.14 ± 5.99	168.9 ± 5.63	171.61 ± 6.26	172.84 ± 5.63	172.32 ± 6.25	0.82
<b>Leucine</b>	83.97 ± 3.49	86.74 ± 3.72	90.62 ± 3.64	93.42 ± 3.89	94.63 ± 3.64	92.61 ± 3.89	0.32
<b>Isoleucine</b>	40.16 ± 1.91	40.05 ± 1.99	42.69 ± 2.00	43.38 ± 2.08	42.32 ± 2.00	41.99 ± 2.08	0.84
<i>Other essential amino acids</i>							
<b>Phenylalanine</b>	36.41 ± 1.05	37.48 ± 1.04	38.49 ± 1.10	39.33 ± 1.08	38.81 ± 1.10	38.23 ± 1.08	0.52
<b>Methionine</b>	19.01 ± 1.13	19.79 ± 1.29	19.97 ± 1.18	20.53 ± 1.34	20.1 ± 1.18	19.99 ± 1.35	0.64
<b>Lysine</b>	97.86 ± 3.85	101.18 ± 4.29	101.84 ± 4.10	98.1 ± 4.56	103.75 ± 3.96	104.81 ± 4.42	0.44
<b>Histidine</b>	23.75 ± 0.85	25.37 ± 1.24	25.26 ± 0.89	25.35 ± 1.30	26.29 ± 0.89	26.05 ± 1.30	0.44
<b>Threonine</b>	21.15 ± 0.92	21.2 ± 0.92	21.45 ± 0.96	20.91 ± 1.00	23.21 ± 0.96	23.11 ± 0.97	0.80
<i>Non-essential amino acids</i>							
<b>Glycine</b>	186.79 ± 12.57	195.69 ± 12.41	192.48 ± 13.13	188.43 ± 12.96	203.89 ± 13.13	187.10 ± 12.96	0.36
<b>Asparagine</b>	35.84 ± 2.44	37.65 ± 2.66	39.11 ± 2.55	40.22 ± 2.77	38.0 ± 2.55	38.51 ± 2.77	0.90
<b>Alanine</b>	244.53 ± 9.71	252.41 ± 10.95	258.54 ± 10.15	256.37 ± 11.44	257.46 ± 10.15	253.69 ± 11.44	0.69
<b>Arginine</b>	16.96 ± 1.72	17.5 ± 1.91	18.73 ± 1.85	19.33 ± 2.06	20.3 ± 1.82	18.22 ± 2.03	0.33
<b>Serine</b>	78.51 ± 4.10	82.49 ± 4.09	72.58 ± 4.29	70.57 ± 4.27	75.14 ± 4.29	73.77 ± 4.27	0.16
<b>Proline</b>	143.03 ± 7.46	142.54 ± 7.87	152.89 ± 7.79	154.73 ± 8.22	165.51 ± 7.79	168.43 ± 8.22	0.92
<b>Tyrosine</b>	43.44 ± 1.97	42.52 ± 2.01	47.46 ± 2.06	48.29 ± 2.10	45.63 ± 2.06	46.41 ± 2.10	0.68
<b>Aspartic acid</b>	1.93 ± 0.19	1.86 ± 0.15	1.96 ± 0.20	1.79 ± 0.15	1.89 ± 0.20	1.98 ± 0.15	0.61
<b>Glutamic acid</b>	21.41 ± 1.81	22.63 ± 1.97	22.47 ± 1.89	23.39 ± 2.06	22.2 ± 1.89	24.78 ± 2.06	0.72
<b>Glutamine</b>	393.7 ± 9.93	399.3 ± 10.39	394.86 ± 10.34	393.9 ± 10.85	411.7 ± 10.37	406.54 ± 10.85	0.61
<i>Non-proteogenic amino acids</i>							
<b>Taurine</b>	54.01 ± 2.60	48.84 ± 2.39	46.74 ± 2.71	43.37 ± 2.44	46.49 ± 2.71	46.04 ± 2.44	0.41
<b>Hydroxyproline</b>	6.83 ± 0.71	7.39 ± 0.67	6.78 ± 0.74	6.37 ± 0.70	6.91 ± 0.74	6.57 ± 0.70	0.66
<b>Ornithine</b>	32.56 ± 1.87	34.11 ± 1.78	34.80 ± 1.96	31.19 ± 1.86	32.94 ± 1.96	34.38 ± 1.86	0.06
<b>Citrulline</b>	80.22 ± 4.08	81.44 ± 4.09	86.98 ± 4.26	84.76 ± 4.28	81.73 ± 4.26	80.76 ± 4.28	0.82

Values represent mean ± SEM. <sup>a</sup> Comparisons between dairy intake groups and interactions (time × dietary intervention group) analyzed by two-factor repeated-measures ANOVA. None of the changes were significant ( $p > 0.05$  each, respectively).