

Table S1. Blood chemistry values for Study 2

	CaHMB					Free Acid Gel Swallow					Free Acid Gel Sublingual					<i>P</i> Value [‡]
	Before [*]	SEM [†]	After	SEM	% Change	Before	SEM	After	SEM	% Change	Before	SEM	After	SEM	% Change	
Glucose, mmol/l	3.93	0.05	4.45	0.13	13.4%	4.11	0.11	4.43	0.11	7.8%	4.05	0.10	4.48	0.11	10.6%	0.62
Uric Acid, mmol/l	0.28	0.02	0.25	0.03	-12.0%	0.28	0.01	0.28	0.02	1.9%	0.28	0.02	0.28	0.02	0.8%	0.50
Blood Urea Nitrogen, mmol/l	5.27	0.49	4.77	0.34	-9.3%	5.18	0.50	4.95	0.49	-4.3%	5.44	0.61	5.49	0.38	0.8%	0.55
Creatinine, μmol/l	90.4	6.9	89.1	5.0	-1.5%	85.2	6.5	84.6	6.9	-0.6%	84.9	6.8	91.6	4.9	7.9%	0.12
Sodium, mmol/l	139.5	0.8	141.4	0.5	1.3%	139.9	0.7	141.5	0.9	1.2%	138.5	0.6	142.1	1.1	2.6%	0.07
Potassium, mmol/l	4.1	0.1	4.7	0.2	14.8%	4.1	0.1	4.7	0.2	14.0%	4.0	0.1	4.9	0.1	21.7%	0.51
Chloride, mmol/l	102.4	0.5	103.0	0.5	0.6%	103.1	0.8	102.8	0.7	-0.4%	102.1	0.5	104.3	0.9	2.1%	0.06
CO ₂ , mmol/l	24.9	0.6	27.3	0.6	9.5%	24.8	1.0	27.8	0.9	12.1%	25.3	0.8	27.9	0.4	10.4%	0.85
Phosphorus, mmol/l	1.30	0.02	1.43	0.03	10.6%	1.36	0.05	1.44	0.05	6.2%	1.34	0.05	1.49	0.05	11.5%	0.44
Protein, g/l	63.6	2.0	65.4	1.9	2.8%	64.1	1.4	67.4	1.7	5.1%	64.5	1.9	66.4	2.4	2.9%	0.62
Albumin, g/l	41.3	1.5	41.5	1.4	0.6%	41.4	1.3	43.3	1.3	4.5%	41.3	1.3	42.4	1.5	2.7%	0.08
Globulin, g/l	22.4	1.2	23.9	1.4	6.7%	22.8	1.5	24.1	1.5	6.0%	23.3	1.4	24.0	1.4	3.2%	0.93
A:G Ratio	1.9	0.1	1.8	0.1	-3.4%	1.9	0.2	1.8	0.1	-2.6%	1.8	0.1	1.8	0.1	-1.4%	0.83
Total Bilirubin, μmol/l	9.62	2.1	7.91	2.7	-17.8%	8.12	1.8	8.34	2.3	2.6%	9.62	2.1	8.34	2.3	-13.3%	0.10
Direct Bilirubin, μmol/l	3.48	1.1	2.18	0.6	-37.4%	2.14	0.5	2.27	0.6	6.0%	2.50	0.5	2.18	0.6	-12.8%	0.21
Alkaline Phosphatase, IU/l	65.5	7.3	66.8	6.9	1.9%	64.8	7.3	74.1	7.6	14.5%	66.5	7.3	62.8	6.7	-5.6%	0.18
Lactate Dehydrogenase, IU/l	161.8	12.6	142.4	10.5	-12.0%	155.9	13.9	136.6	11.6	-12.3%	163.8	11.9	151.8	5.2	-7.3%	0.86
Aspartate Aminotransferase, IU/l	22.6	1.4	20.0	1.1	-11.6%	23.3	0.9	21.3	0.7	-8.6%	23.9	3.2	24.8	2.3	3.7%	0.23
Alanine Aminotransferase, IU/l	15.4	1.8	14.9	2.2	-3.3%	16.4	1.6	16.4	1.7	0.0%	15.3	1.5	16.6	1.8	9.0%	0.18
Gamma-glutamyl Transpeptidase, IU/l	14.0	1.9	14.3	1.4	1.8%	13.3	1.2	14.0	1.0	5.7%	13.9	1.2	13.9	1.0	0.0%	0.50
Iron Binding Capacity, μmol/l	66.5	5.1	67.6	5.4	1.5%	67.8	5.8	70.7	6.2	4.4%	66.6	5.6	68.9	5.3	3.5%	0.68
UIBC, μmol/l	48.8	7.1	56.9	6.9	16.5%	55.6	7.6	60.0	7.5	7.9%	47.3	6.0	55.9	6.4	18.1%	0.44
Iron, μmol/l	17.7	3.6	10.7	2.2	-39.5%	12.2	2.4	9.6	1.9	-21.0%	19.3	2.5	11.6	2.2	-39.6%	0.37
Iron Saturation, %	28.4	5.8	17.5	4.2	-38.3%	20.3	5.0	16.9	4.6	-16.7%	30.1	5.1	20.1	4.2	-33.2%	0.38
Total Cholesterol, mmol/l	4.15	0.21	4.22	0.18	1.6%	4.26	0.27	4.58	0.31	7.4%	4.19	0.24	4.23	0.24	1.0%	0.25
Triglycerides, mmol/l	1.10	0.14	1.21	0.2	9.8%	1.27	0.21	1.37	0.26	7.8%	1.05	0.12	1.22	0.19	15.6%	0.52
HDL, mmol/l	1.35	0.07	1.40	0.09	3.3%	1.33	0.07	1.46	0.08	9.7%	1.35	0.08	1.33	0.07	-1.9%	0.24
LDL, mmol/l	2.30	0.19	2.30	0.15	0.0%	2.35	0.18	2.49	0.21	5.9%	2.36	0.15	2.34	0.17	-1.0%	0.18
Cholesterol Ratio	3.1	0.2	3.1	0.2	-0.8%	3.2	0.2	3.2	0.2	-2.3%	3.1	0.2	3.2	0.2	3.6%	0.53

*Values Before and 24 h after administration of the treatment.

†Standard error of the mean.

‡*P* value for treatment effect of the difference in starting and ending values indicated by % change for each treatment.

Table S2. Hematology values Study 2

	CaHMB					Free Acid Gel Swallow					Free Acid Gel Sublingual					<i>P</i> Value [‡]
	Before [*]	SEM [†]	After	SEM	% Change	Before	SEM	After	SEM	% Change	Before	SEM	After	SEM	% Change	
WBC, x10 ⁹ /l	7.3	0.3	6.5	0.3	-10.5%	6.4	0.3	7.1	0.3	9.7%	7.1	0.4	6.8	0.3	-3.5%	0.10
RBC, x10 ¹² /l	4.3	0.2	4.3	0.2	0.7%	4.2	0.1	4.4	0.1	3.5%	4.3	0.1	4.3	0.1	0.1%	0.27
Hemoglobin, g/l	132	6.5	133	5.9	0.7%	130	4.2	134	4.3	3.2%	132	4.6	132	4.8	0.4%	0.31
Hematocrit, l/l	0.38	0.02	0.38	0.02	0.7%	0.37	0.01	0.39	0.01	4.2%	0.38	0.01	0.39	0.01	2.9%	0.42
MCV, μm ³	88.4	1.5	88.5	1.4	0.1%	88.1	1.5	88.6	1.5	0.6%	88.4	1.5	89.3	1.4	1.0%	0.21
MCH, pg	30.6	0.5	30.7	0.6	0.2%	30.6	0.6	30.5	0.6	-0.3%	30.4	0.5	30.5	0.5	0.3%	0.52
MCHC, g/l	347	1.6	347	1.6	0.0%	348	1.9	345	1.9	-0.8%	345	2.0	345	2.5	0.1%	0.14
RDW, %	13.4	0.2	13.4	0.1	-0.1%	13.3	0.2	13.2	0.2	-0.5%	13.3	0.2	13.4	0.2	0.7%	0.66
Platelets, x10 ⁹ /l	228	17.6	236	10.9	3.5%	229	12.9	242	12.2	5.8%	234	14.2	244	17.5	4.5%	0.92
Neutrophils, %	44.9	3.8	45.6	3.3	1.7%	45.6	2.7	46.0	4.4	0.8%	45.3	5.2	42.4	3.5	-6.4%	0.90
Lymphocytes, %	44.8	3.2	42.5	3.5	-5.0%	43.6	2.4	43.3	3.9	-0.9%	43.1	4.2	45.6	3.4	5.8%	0.68
Monocytes, %	6.9	0.9	8.5	1.5	23.6%	7.5	1.1	6.9	0.8	-8.3%	8.3	1.0	8.4	0.9	1.5%	0.24
Eosinophils, %	2.9	0.5	2.6	0.4	-8.7%	2.8	0.5	3.0	0.5	9.1%	2.5	0.5	3.3	0.5	30.0%	0.57
Basophils, %	0.6	0.2	0.8	0.2	20.0%	0.5	0.2	0.9	0.3	75.0%	0.6	0.2	0.4	0.2	-40.0%	0.36
Neutrophils, x10 ⁹ /l	3.3	0.3	3.0	0.2	-9.9%	2.9	0.2	3.3	0.4	10.6%	3.3	0.5	2.9	0.3	-12.1%	0.49
Lymphocytes, x10 ⁹ /l	3.3	0.3	2.8	0.3	-13.5%	2.8	0.2	3.1	0.3	9.4%	3.0	0.3	3.1	0.3	5.0%	0.06
Monocytes, x10 ⁹ /l	0.5	0.06	0.5	0.08	5.0%	0.5	0.07	0.5	0.04	2.6%	0.6	0.05	0.6	0.05	0.0%	0.71
Eosinophils, x10 ⁹ /l	0.2	0.04	0.2	0.03	-12.5%	0.2	0.03	0.2	0.04	13.3%	0.2	0.04	0.2	0.03	35.7%	0.42
Basophils, x10 ⁹ /l	0.06	0.02	0.06	0.02	0.0%	0.05	0.02	0.09	0.03	75.0%	0.06	0.02	0.04	0.02	-40.0%	0.29

^{*}Values Before and 24 h after administration of the treatment.

[†]Standard error of the mean.

[‡]*P* value for treatment effect of the difference in starting and ending values indicated by % change for each treatment.