

Figure 3. Blood results pre- and post-trial

*Figures highlighted in red indicate readings that are outside of optimal range

				P1			P2			P3			P4		
	Units	Optimal Range Male	Optimal Range Female	Pre	Post	Difference	Pre	Post	Difference	Pre	Post	Difference	Pre	Post	Difference
Sample date				23.10.18	25.11.18		31.10.18	09.12.18		23.10.18	27.11.18		23.10.18	21.11.18	
Gender				Male			Male			Male			Female		
DOB				10.04.83			25.02.61			02.07.81			23.01.79		
Age at time of testing				35			57			37			39		
Huel useage				200 - 400g/day for 1 year			On & off for 2 years			0			0		
HAEMATOLOGY															
RED BLOOD CELLS															
Haemoglobin	g/l	130 - 170	120 - 160	153	158	+5.00	140	134	-6.00	159	157	-2.00	147	146	-1.00
HCT	l/l	0.38 - 0.50	0.35 - 0.47	0.447	0.461	+0.01	0.415	0.391	-0.02	0.455	0.451	-0.00	0.425	0.429	+0.00
Red blood cell count (RCC)	x10 ¹² /L	4.40 - 5.80	3.8 - 5.8	4.81	4.95	+0.14	4.6	4.2	-0.40	4.99	4.93	-0.06	4.52	4.52	+0.00
Mean corpuscular volume (MCV)	fl	81 - 98	81 - 98	93	93	+0.00	90	93	+3.00	91	92	+1.00	94	95	+1.00
Mean corpuscular haemoglobin (MCH)	pg	27 - 33	27 - 33	31.8	31.8	+0.00	30.3	31.8	+1.50	31.8	32	+0.20	32.5	32.3	-0.20
Mean corpuscular haemoglobin concentration (MCHC)	g/l	300 - 350	300 - 350	342	342	+0.00	337	341	+4.00	349	349	+0.00	346	340	-6.00
Red blood cell distribution width (RDW)	%	11.50 - 14.40	11.50 - 14.40	12.2	11.5	-0.70	11.5	13.2	+1.70	12.8	11.9	-0.90	11.2	11	-0.20
WHITE BLOOD CELLS															
White cell count (WCC)	x10 ⁹ /L	3 - 10	3 - 10	6.4	6.4	+0.00	6.9	4.2	-2.70	7.1	4.9	-2.20	5.7	4.6	-1.10
Neutrophils	x10 ⁹ /L	2.0 - 7.5	2.0 - 7.5	3.74	3.83	+0.09	3.22	1.31	-1.91	3.7	2.59	-1.11	3.58	2.25	-1.33
Lymphocytes	x10 ⁹ /L	1.20 - 3.65	1.20 - 3.65	2.11	1.98	-0.13	3	2.48	-0.52	2.74	1.9	-0.84	1.85	2	+0.15
Monocytes	x10 ⁹ /L	0.2 - 1.0	0.2 - 1.0	0.43	0.44	+0.01	0.46	0.29	-0.17	0.52	0.33	-0.19	0.18	0.26	+0.08
Eosinophils	x10 ⁹ /L	0.0 - 4.0	0.0 - 0.4	0.12	0.16	+0.04	0.21	0.05	-0.16	0.09	0.06	-0.03	0.08	0.07	-0.01
Basophils	x10 ⁹ /L	0.0 - 0.1	0.0 - 0.1	0.03	0.03	+0.00	0.05	0.02	-0.03	0.04	0.02	-0.02	0.04	0.02	-0.02
CLOTTING STATUS															

Platelet count	x10 ⁹ /L	150 - 400	150 - 400	224	231	+7.00	302	188	-114.00	255	227	-28.00	296	236	-60.00
Mean platelet volume (MPV)	fl	7 - 13	7 - 13	9.2	10.1	+0.90	9.2	11.5	+2.30	9	10.1	+1.10	11	11	+0.00
BIOCHEMISTRY															
KIDNEY FUNCTION															
Urea	mmo/l	2.76 - 8.07	2.76 - 8.07	5.7	8.1	+2.40	4.9	9.7	+4.80	9.1	4.7	-4.40	3.7	3.9	+0.20
Creatinine	umol/l	62 - 106	44 - 80	84	93	+9.00	78	72	-6.00	133	115	-18.00	68	71	+3.00
Estimated glomerular filtration rate (GFR)	mmo/l	60 - 250	60 - 250	95.88	85.25	-10.63	94.59	103.75	+9.16	55.78	65.98	+10.20	88.81	84.5	-4.31
LIVER FUNCTION															
Alkaline phosphatase	iu/l	0 - 129	0 - 104	44	48	+4.00	65	54	-11.00	92	95	+3.00	55	42	-13.00
Alanine aminotransferase (ALT)	iu/l	0 - 50	0 - 35	83.3	17.7	-65.60	21.3	24.5	+3.20	28.4	40	+11.60	25.7	25.1	-0.60
Creatine Kinase (CK)	iu/l	39 - 308	26 - 192	9566	192	-9,374	135	344	+209	126	104	-22.00	78	70	-8.00
Gamma-glutamyl transferase (GGT)	iu/l	10 - 71	6 - 42	17	15	-2.00	16	11	-5.00	23	22	-1.00	26	23	-3.00
Bilirubin	iu/l	0 - 24	0 - 15	15	21.2	+6.20	7.1	10.4	+3.30	9	19.9	+10.90	12.4	18	+5.60
PROTEINS															
Total proteins	g/l	66 - 87	66 - 87	72.5	69.4	-3.10	68.7	68.8	+0.10	72.5	70.7	-1.80	75.2	73.9	-1.30
Albumin	g/l	35 - 52	35 - 52	48.7	47.8	-0.90	40	42	+2.00	44.5	44.7	+0.20	46.7	47.7	+1.00
Globulin	g/l	19 - 35	19 - 35	23.8	21.6	-2.20	28.7	26.8	-1.90	28	26	-2.00	28.5	26.2	-2.30
GOUT															
Uric acid	umol/l	202 - 416	143 - 339	373	551	+178.00	298	361	+63.00	390	471	+81.00	167	237	+70.00
DIABETES															
Haemoglobin A1c (HbA1c)	mmol/mol	20 - 42	20 - 42	30.13	31.68	+1.55	33.98	34.12	+0.14	34.33	31.36	-2.97	30.98	30.38	-0.60
IRON STATUS															
Iron	umol/l	5.8 - 34.5	5.8 - 34.5	13.92	18.61	+4.69	15.55	9.04	-6.51	20.32	21.66	+1.34	24.03	24.76	+0.73
Total iron binding capacity (TIBC)	umol/l	45 - 72	45 - 72	51.52	57.81	+6.29	56.65	56.84	+0.19	60.22	57.06	-3.16	62.73	59.86	-2.87
Transferrin saturation	%	20 - 50	20 - 50	27.02	32.19	+5.17	27.45	15.9	-11.55	33.74	37.96	+4.22	38.31	41.36	+3.05
Ferritin	ug/l	30 - 400	13 - 150	90.2	69.6	-20.60	151	165	+14.00	313	376	+63.00	140	141	+1.00

CHOLESTEROL STATUS															
Triglycerides	mmol/l	0.0 - 2.3	0.0 - 2.3	0.93	1.06	+0.13	1.1	0.52	-0.58	0.85	1.18	+0.33	1.19	0.88	-0.31
Total Cholesterol (TC)	mmol/l	0.00 - 4.99	0.00 - 4.99	4.5	3.31	-1.19	4.61	3.11	-1.50	4.57	2.9	-1.67	5.18	3.45	-1.73
High-density lipoprotein (HDL)	mmol/l	1.0 - 1.5	1.20 - 1.68	1.38	1.01	-0.37	1.49	1.45	-0.04	1.33	0.82	-0.51	1.12	0.97	-0.15
Low-density lipoprotein (LDL)	mmol/l	0 - 3	0 - 3	2.7	1.82	-0.88	2.62	1.42	-1.20	2.85	1.54	-1.31	3.52	2.08	-1.44
LDL:HDL				1.96	1.80	-0.15	1.76	0.98	-0.78	2.14	1.88	-0.26	3.14	2.14	-1.00
Non-HDL cholesterol	mmol/l	0 - 4	0 - 4	3.12	2.3	-0.82	3.12	1.66	-1.46	3.24	2.08	-1.16	4.06	2.48	-1.58
Very low-density lipoprotein (VLDL)	mmol/l	0.1 - 1.7	0.1 - 1.7	0.42	0.48	+0.06	0.5	0.24	-0.26	0.39	0.54	+0.15	0.54	0.4	-0.14
HEART DISEASE RISK															
HDL % of total	%	20 - 100	20 - 100	30.67	30.51	-0.16	32.32	46.62	+14.30	29.1	28.28	-0.82	21.62	28.12	+6.50
INFLAMMATORY MARKER															
High-sensitivity c-reactive protein (hs-CRP)	mg/l	0 - 5	0 - 5	0.71	0.29	-0.42	1.25	1.65	+0.40	3.49	2.3	-1.19	1.44	0.64	-0.80
ENDOCRINOLOGY															
THYROID FUNCTION															
Thyroid-stimulating hormone	mIU/L	0.27 - 4.20	0.27 - 4.20	1.61	1.29	-0.32	1.42	0.779	-0.64	4.09	2.28	-1.81	1.66	1.62	-0.04
Free thyroxine	pmol/L	12 - 22	12 - 22	19	21.7	+2.70	15.4	15	-0.40	19.1	22.1	+3.00	16.4	18.6	+2.20
Free triiodothyronine (T3)	pmol/L	3.1 - 6.8	3.1 - 6.8	5.25	5.81	+0.56	4.79	4.32	-0.47	6.14	5.42	-0.72	6.07	5.89	-0.18
VITAMINS															
Active B12	pmol/l	37.5 - 188.0	37.5 - 188.0	153	139	-14.00	125	124	-1.00	37.5	40.3	+2.80	79	71.4	-7.60
Folate (serum)	ug/l	3.89 - 26.80	3.89 - 26.80	5.06	4.26	-0.80	9.68	8.45	-1.23	1.77	2.93	+1.16	7.83	8.18	+0.35
Vitamin C	umol/l	34 - 114	34 - 114	24	16	-8.00	27.4	27.6	+0.20	No result available	25.2	No result available	20	35.5	+15.50
25 OH vitamin D	umol/l	50 - 200	50 - 200	87.2	84.2	-3.00	67.8	66.6	-1.20	50.8	53.5	+2.70	44.8	51.5	+6.70
MINERALS															
Iodine - serum	ug/l	40 - 80	40 - 80	62	61	-1.00	56	52	-4.00	70	64	-6.00	65	64	-1.00