

## Supporting Information

### Screening of by-products from the food industry as growth promoting agents in serum-free media for skeletal muscle cell culture

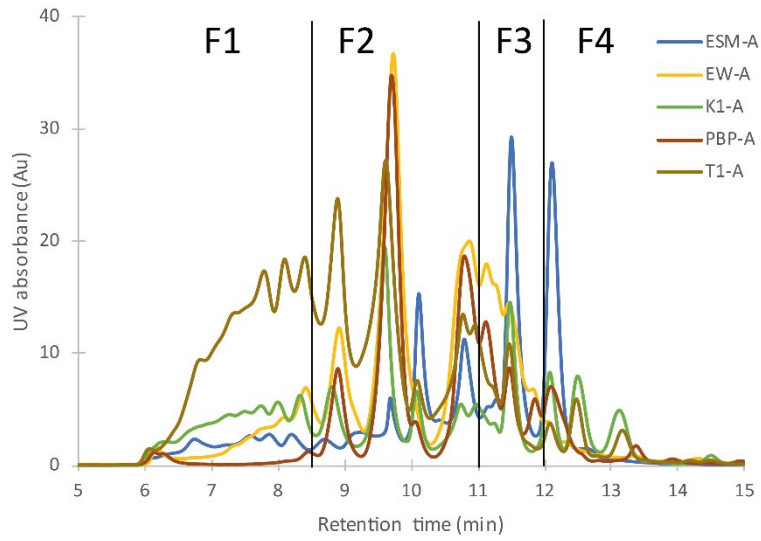
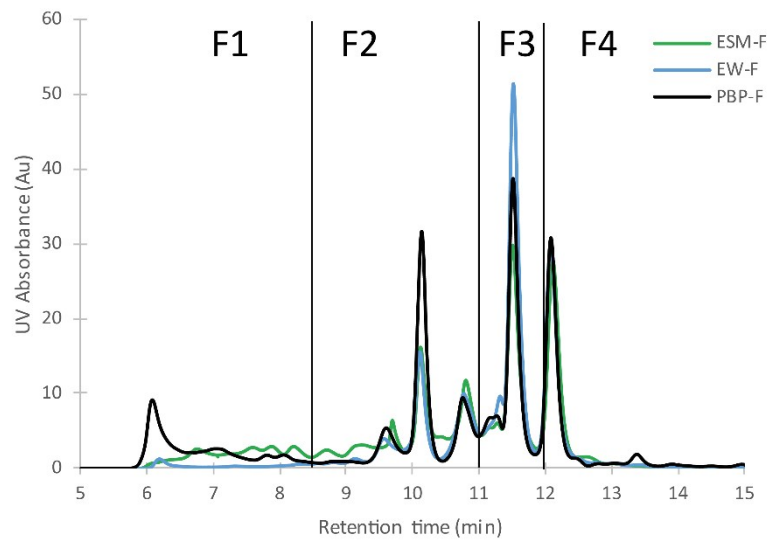
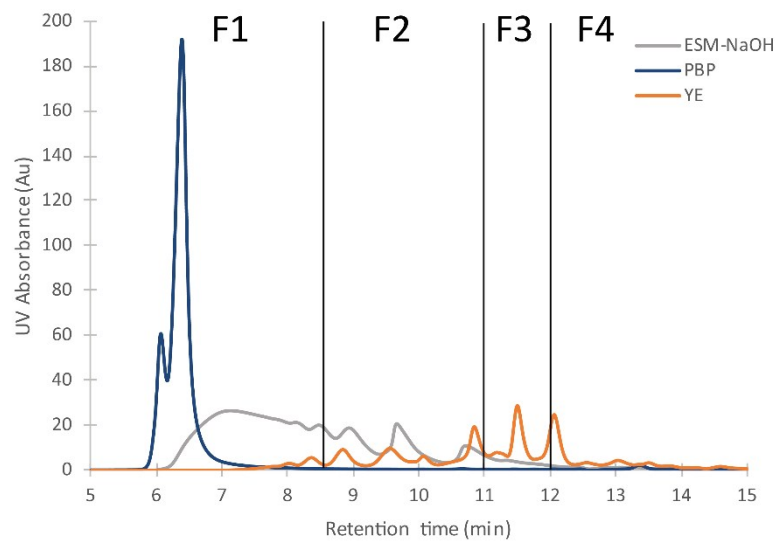
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This document contains:

One figure containing all size exclusion chromatograms (SEC). 13 tables; the first contains  $M_w$  and molecular weight distribution (MWD) values, the second table contains retention times for all standards used to calculate  $M_w$ , The remaining tables contains statistical data from one-way ANOVA using Dunnett's multiple comparison test for all treatments.

**A****B****C**

**Fig S-1:** All SEC chromatograms from 5-15 min of the 11 different materials studied. A: Eggshell membrane (ESM), egg whites (EW), cod (T1), Chicken (K1), and pork blood plasma (PBP) hydrolyzed with Alcalase (A). B: ESM, EW, and PBP hydrolyzed with Flavourzyme (F). C: ESM chemically hydrolyzed with NaOH, and lyophilized PBP and yeast extract (YE) powder.

**Table S-1:**  $M_w$  (g/mol) and molecular weight distribution (MWD) values for all samples.

Sample	$M_w$	Area	F1 (%)	F2 (%)	F3 (%)	F4 (%)
ESM-A	1137,6	46,37	7,1	14,3	68,1	10,5
ESM-F	1054,6	31,31	7,9	9,8	62,0	20,3
ESM-NaOH	4128,0	82,82	50,9	21,7	22,6	4,9
EW-A	1222,2	46,43	8,0	14,7	71,0	6,3
EW-F	707,8	28,91	2,4	2,8	69,7	25,1
K1-A	2467,6	31,59	25,7	13,6	41,5	19,2
PBP	16831,0	61,45	95,0	0,9	1,3	2,9
PBP-A	1005,3	30,54	2,1	8,9	75,7	13,3
PBP-F	2923,8	34,79	17,3	2,7	56,6	23,5
T1-A	2791,6	66,07	33,5	24,9	36,0	5,6
YE	723,7	38,35	4,4	12,7	51,2	31,7

All samples were measured once

**Table S-2:** The molecular weights (Mw) and the retention times (RT) for the analytical standards used for the BioSep-SEC-s2000 column calibration.

<b>Compound name</b>	<b>Mw (g/mol)</b>	<b>RT (min)</b>
Albumin from chicken egg white	44287	6.071
Carbonic anhydrase	29000	6.003
Lysozyme	14300	6.626
Aprotinin from bovine lung	6511	6.865
Insulin chain B oxidized from bovine pancreas	3496	8.763
Renin substrate tetradecapeptide porcine	1759	8.133
Angiotensin II human	1046	8.724
Bradykinin Fragment 1-7	757	9.208
[D-Ala <sup>2</sup> ]-leucine enkephalin	570	11.377
Val-Tyr-Val	379	10.925
Tryptophan	204	11.950

The column was calibrated using the mean of three replicates of each standers.

**Table S-3 to S-13:** Statistics of all treatments, significant variance by treatments in comparison to the control sample (cells grown in normal serum conditions), analysed by one-way ANOVA using Dunnett's multiple comparison test of all samples. Asterix indicate significant differences, \* $<0.05$ , \*\* $<0.001$ , \*\*\*  $<0.001$ , \*\*\*\* $p<0.0001$ . Abbreviations: ESM (eggshell membrane), ns (no significant difference).

**TABLE S-3: COD ALCALASE**

		DUNNETT'S MULTIPLE COMPARISONS TEST	MEAN DIFF	95,00% CI OF DIFF	SIGNIFICANT?	SUMMARY	ADJUSTED P VALUE
<b>ATP</b>	Normal serum conditions	Control vs. 0.1	-2,645	-20,13 to 14,84	No	ns	0,9976
		Control vs. 1	-18,97	-36,45 to -1,487	Yes	*	0,0277
		Control vs. 10	-7,463	-24,94 to 10,02	No	ns	0,7490
		Control vs. 100	-8,533	-26,01 to 8,949	No	ns	0,6345
		Control vs. 1000	-2,939	-20,42 to 14,54	No	ns	0,9954
		Control vs. 10000	42,08	24,6 to 59,56	Yes	****	<0,0001
	Reduced-serum conditions	Control vs. 0.1	17,86	2,416 to 33,3	Yes	*	0,0163
		Control vs. 1	20,94	5,499 to 36,39	Yes	**	0,0032
		Control vs. 10	4,649	-10,79 to 20,09	No	ns	0,9302
		Control vs. 100	20,59	5,145 to 36,03	Yes	**	0,0039
		Control vs. 1000	6,31	-9,135 to 21,75	No	ns	0,7813
		Control vs. 10000	44,59	29,14 to 60,03	Yes	****	<0,0001
	Serum-free conditions	Control vs. 0.1	56,81	45,02 to 68,6	Yes	****	<0,0001
		Control vs. 1	50,2	38,41 to 61,99	Yes	****	<0,0001
		Control vs. 10	54,36	42,57 to 66,15	Yes	****	<0,0001
		Control vs. 100	53,49	41,7 to 65,28	Yes	****	<0,0001
		Control vs. 1000	37,05	25,26 to 48,84	Yes	****	<0,0001
		Control vs. 10000	71,03	59,24 to 82,82	Yes	****	<0,0001
<b>DNA</b>	Normal serum conditions	Control vs. 0.1	0,3265	-15,92 to 16,58	No	ns	>0,9999
		Control vs. 1	-11,9	-28,15 to 4,345	No	ns	0,2360
		Control vs. 10	-16,02	-32,27 to 0,2337	No	ns	0,0549
		Control vs. 100	-11,73	-27,98 to 4,52	No	ns	0,2488
		Control vs. 1000	-1,146	-17,4 to 15,1	No	ns	0,9997
		Control vs. 10000	10,11	-9,394 to 29,62	No	ns	0,5747
	Reduced-serum conditions	Control vs. 0.1	3,038	-17,92 to 24	No	ns	0,9978
		Control vs. 1	3,069	-17,89 to 24,03	No	ns	0,9977
		Control vs. 10	2,575	-18,39 to 23,53	No	ns	0,9995
		Control vs. 100	2,381	-18,58 to 23,34	No	ns	0,9996
		Control vs. 1000	-2,402	-23,36 to 18,56	No	ns	0,9996
		Control vs. 10000	12,9	-8,062 to 33,86	No	ns	0,4013
	Serum-free conditions	Control vs. 0.1	44,61	23,15 to 66,08	Yes	****	<0,0001
		Control vs. 1	45,5	24,03 to 66,96	Yes	****	<0,0001
		Control vs. 10	45,32	23,86 to 66,78	Yes	****	<0,0001
		Control vs. 100	41,53	20,07 to 63	Yes	****	<0,0001
		Control vs. 1000	23,49	2,026 to 44,95	Yes	*	0,0260
		Control vs. 10000	-4,988	-26,45 to 16,48	No	ns	0,9782
<b>LDH</b>	Normal serum conditions	Control vs. 0.1	6,264	-3,668 to 16,2	No	ns	0,3784
		Control vs. 1	6,511	-3,421 to 16,44	No	ns	0,3400
		Control vs. 10	7,828	-2,104 to 17,76	No	ns	0,1785
		Control vs. 100	7,105	-2,827 to 17,04	No	ns	0,2581
		Control vs. 1000	8,281	-1,651 to 18,21	No	ns	0,1391
		Control vs. 10000	-28,29	-38,22 to -18,36	Yes	****	<0,0001
	Reduced-serum conditions	Control vs. 0.1	20,09	11,93 to 28,26	Yes	****	<0,0001
		Control vs. 1	24,58	16,41 to 32,75	Yes	****	<0,0001
		Control vs. 10	25,41	17,24 to 33,57	Yes	****	<0,0001
		Control vs. 100	23,02	14,86 to 31,19	Yes	****	<0,0001
		Control vs. 1000	20,5	12,34 to 28,67	Yes	****	<0,0001
		Control vs. 10000	-18,21	-26,37 to -10,04	Yes	****	<0,0001
	Serum-free conditions	Control vs. 0.1	32,74	25,23 to 40,24	Yes	****	<0,0001
		Control vs. 1	33,8	26,3 to 41,31	Yes	****	<0,0001
		Control vs. 10	36,67	29,16 to 44,17	Yes	****	<0,0001
		Control vs. 100	32,19	24,68 to 39,7	Yes	****	<0,0001
		Control vs. 1000	27,71	20,2 to 35,21	Yes	****	<0,0001
		Control vs. 10000	-23,65	-31,16 to -16,15	Yes	****	<0,0001

**TABLE S-4: CHICKEN ALCALASE**

		<b>DUNNETT'S MULTIPLE COMPARISONS TEST</b>	<b>MEAN DIFF</b>	<b>95,00% CI OF DIFF</b>	<b>SIGNIFICANT?</b>	<b>SUMMARY</b>	<b>ADJUSTED P VALUE</b>
<b>ATP</b>	Normal serum conditions	Control vs. 0.1	1,667	-17,61 to 20,95	No	ns	0,9997
		Control vs. 1	-16,55	-35,83 to 2,726	No	ns	0,1207
		Control vs. 10	-17,46	-36,74 to 1,817	No	ns	0,0912
		Control vs. 100	-18,88	-38,15 to 0,4023	No	ns	0,0574
		Control vs. 1000	-14,24	-33,52 to 5,035	No	ns	0,2298
		Control vs. 10000	87,81	68,54 to 107,1	Yes	****	<0,0001
	Reduced-serum conditions	Control vs. 0.1	9,842	-4,122 to 23,81	No	ns	0,2712
		Control vs. 1	7,941	-6,023 to 21,9	No	ns	0,4834
		Control vs. 10	2,574	-11,39 to 16,54	No	ns	0,9933
		Control vs. 100	-4,269	-18,23 to 9,695	No	ns	0,9256
		Control vs. 1000	6,632	-7,332 to 20,6	No	ns	0,6596
		Control vs. 10000	84,43	70,47 to 98,39	Yes	****	<0,0001
	Serum-free conditions	Control vs. 0.1	54,19	40,40 to 67,99	Yes	****	<0,0001
		Control vs. 1	48,62	34,83 to 62,42	Yes	****	<0,0001
		Control vs. 10	45,93	32,13 to 59,73	Yes	****	<0,0001
		Control vs. 100	42,98	29,19 to 56,78	Yes	****	<0,0001
		Control vs. 1000	38,44	24,64 to 52,23	Yes	****	<0,0001
		Control vs. 10000	62,05	48,25 to 75,85	Yes	****	<0,0001
<b>DNA</b>	Normal serum conditions	Control vs. 0.1	9,18	-8,264 to 26,62	No	ns	0,5599
		Control vs. 1	2,856	-14,59 to 20,3	No	ns	0,9957
		Control vs. 10	-3,168	-20,61 to 14,28	No	ns	0,9937
		Control vs. 100	-13,86	-31,3 to 3,584	No	ns	0,1717
		Control vs. 1000	-9,402	-26,85 to 8,042	No	ns	0,5360
		Control vs. 10000	39,83	20,31 to 59,34	Yes	****	<0,0001
	Reduced-serum conditions	Control vs. 0.1	28,78	12,27 to 45,3	Yes	****	<0,0001
		Control vs. 1	19,79	3,277 to 36,31	Yes	*	0,0119
		Control vs. 10	11,37	-5,142 to 27,89	No	ns	0,2913
		Control vs. 100	4,035	-12,48 to 20,55	No	ns	0,9723
		Control vs. 1000	11,08	-5,439 to 27,59	No	ns	0,3164
		Control vs. 10000	35,72	19,2 to 52,23	Yes	****	<0,0001
	Serum-free conditions	Control vs. 0.1	55,51	40,69 to 70,34	Yes	****	<0,0001
		Control vs. 1	56,96	42,13 to 71,78	Yes	****	<0,0001
		Control vs. 10	51,82	36,99 to 66,64	Yes	****	<0,0001
		Control vs. 100	48,34	33,52 to 63,17	Yes	****	<0,0001
		Control vs. 1000	40,39	25,57 to 55,22	Yes	****	<0,0001
		Control vs. 10000	43,36	28,54 to 58,19	Yes	****	<0,0001
<b>LDH</b>	Normal serum conditions	Control vs. 0.1	2,515	-7,035 to 12,06	No	ns	0,9614
		Control vs. 1	6,583	-2,967 to 16,13	No	ns	0,2920
		Control vs. 10	4,849	-4,701 to 14,4	No	ns	0,5976
		Control vs. 100	7,671	-1,879 to 17,22	No	ns	0,1646
		Control vs. 1000	1,98	-7,57 to 11,53	No	ns	0,9882
		Control vs. 10000	-63,09	-72,64 to -53,54	Yes	****	<0,0001
	Reduced-serum conditions	Control vs. 0.1	16,45	7,239 to 25,66	Yes	****	<0,0001
		Control vs. 1	16,68	7,471 to 25,89	Yes	****	<0,0001
		Control vs. 10	18,66	9,444 to 27,87	Yes	****	<0,0001
		Control vs. 100	20,91	11,7 to 30,12	Yes	****	<0,0001
		Control vs. 1000	13,47	4,261 to 22,68	Yes	**	0,0012
		Control vs. 10000	-44,79	-54 to -35,57	Yes	****	<0,0001
	Serum-free conditions	Control vs. 0.1	31,43	20,27 to 42,6	Yes	****	<0,0001
		Control vs. 1	30,27	19,1 to 41,43	Yes	****	<0,0001
		Control vs. 10	30,14	18,97 to 41,3	Yes	****	<0,0001
		Control vs. 100	29,75	18,58 to 40,91	Yes	****	<0,0001
		Control vs. 1000	23,99	12,83 to 35,16	Yes	****	<0,0001
		Control vs. 10000	-42,3	-53,46 to -31,13	Yes	****	<0,0001

TABLE S-5: EGGHELL MEMBRANE ALCALASE

		DUNNETT'S MULTIPLE COMPARISONS TEST	MEAN DIFF	95,00% CI OF DIFF	SIGNIFICANT?	SUMMARY	ADJUSTED P VALUE
<b>ATP</b>	Normal serum conditions	Control vs. 0.1	-2,811	-13,73 to 8,109	No	ns	0,9648
		Control vs. 1	-13,04	-23,96 to -2,116	Yes	*	0,0123
		Control vs. 10	-10,8	-21,72 to 0,1177	No	ns	0,0536
		Control vs. 100	-12,54	-23,46 to -1,616	Yes	*	0,0175
		Control vs. 1000	-4,719	-15,64 to 6,2	No	ns	0,7380
		Control vs. 10000	45,32	34,4 to 56,24	Yes	****	<0,0001
	Reduced-serum conditions	Control vs. 0.1	11,97	1,332 to 22,61	Yes	*	0,0208
		Control vs. 1	14,8	4,161 to 25,44	Yes	**	0,0024
		Control vs. 10	9,328	-1,31 to 19,97	No	ns	0,1082
		Control vs. 100	12,69	2,055 to 23,33	Yes	*	0,0124
		Control vs. 1000	19,53	8,89 to 30,17	Yes	****	<0,0001
		Control vs. 10000	50,31	39,67 to 60,94	Yes	****	<0,0001
	Serum-free conditions	Control vs. 0.1	54,48	43,64 to 65,32	Yes	****	<0,0001
		Control vs. 1	54,3	43,46 to 65,14	Yes	****	<0,0001
		Control vs. 10	53,15	42,31 to 63,99	Yes	****	<0,0001
		Control vs. 100	54,14	43,3 to 64,98	Yes	****	<0,0001
		Control vs. 1000	55,06	44,22 to 65,9	Yes	****	<0,0001
		Control vs. 10000	78,22	67,38 to 89,06	Yes	****	<0,0001
<b>DNA</b>	Normal serum conditions	Control vs. 0.1	-10,16	-28,77 to 8,451	No	ns	0,5234
		Control vs. 1	-11,44	-30,05 to 7,172	No	ns	0,4026
		Control vs. 10	-15,2	-33,81 to 3,412	No	ns	0,1523
		Control vs. 100	-25,04	-43,65 to -6,431	Yes	**	0,0036
		Control vs. 1000	-14,14	-32,75 to 4,465	No	ns	0,2057
		Control vs. 10000	14,37	-4,237 to 32,98	No	ns	0,1931
	Reduced-serum conditions	Control vs. 0.1	-27,99	-63,86 to 7,885	No	ns	0,1860
		Control vs. 1	-30,12	-65,99 to 5,755	No	ns	0,1345
		Control vs. 10	-37,01	-72,88 to -1,139	Yes	*	0,0403
		Control vs. 100	-37,57	-73,44 to -1,696	Yes	*	0,0362
		Control vs. 1000	-25,43	-61,3 to 10,44	No	ns	0,2659
		Control vs. 10000	-4,314	-40,19 to 31,56	No	ns	0,9995
	Serum-free conditions	Control vs. 0.1	25,38	10,08 to 40,67	Yes	***	0,0002
		Control vs. 1	27,68	10,99 to 44,37	Yes	***	0,0002
		Control vs. 10	22,88	8,138 to 37,61	Yes	***	0,0006
		Control vs. 100	26,9	10,96 to 42,84	Yes	***	0,0001
		Control vs. 1000	25,87	9,928 to 41,81	Yes	***	0,0003
		Control vs. 10000	27,7	11,01 to 44,39	Yes	***	0,0002
<b>LDH</b>	Normal serum conditions	Control vs. 0.1	6,508	-14,91 to 27,92	No	ns	0,9270
		Control vs. 1	1,606	-19,81 to 23,02	No	ns	0,9997
		Control vs. 10	15,05	-6,369 to 36,46	No	ns	0,2735
		Control vs. 100	6,32	-15,09 to 27,73	No	ns	0,9355
		Control vs. 1000	18,88	-2,533 to 40,3	No	ns	0,1053
		Control vs. 10000	-4,228	-26,64 to 17,19	No	ns	0,9955
	Reduced-serum conditions	Control vs. 0.1	12,73	-13,71 to 39,17	No	ns	0,6462
		Control vs. 1	15,85	-10,59 to 42,3	No	ns	0,4285
		Control vs. 10	5,663	-20,78 to 32,11	No	ns	0,9856
		Control vs. 100	-0,9636	-27,41 to 25,48	No	ns	0,9999
		Control vs. 1000	4,37	-22,07 to 30,81	No	ns	0,9956
		Control vs. 10000	-12,12	-38,56 to 14,32	No	ns	0,6900
	Serum-free conditions	Control vs. 0.1	35,3	20,06 to 50,53	Yes	****	<0,0001
		Control vs. 1	32,36	17,13 to 47,59	Yes	****	<0,0001
		Control vs. 10	32,71	17,48 to 47,94	Yes	****	<0,0001
		Control vs. 100	26,18	10,95 to 41,41	Yes	***	0,0001
		Control vs. 1000	32,21	16,98 to 47,44	Yes	****	<0,0001
		Control vs. 10000	10,71	-4,525 to 25,94	No	ns	0,2731

TABLE S-6: EGGHELL MEMBRANE FLAVOURZYME

		DUNNETT'S MULTIPLE COMPARISONS TEST	MEAN DIFF	95,00% CI OF DIFF	SIGNIFICANT?	SUMMARY	ADJUSTED P VALUE
<b>ATP</b>	Normal serum conditions	Control vs. 0.1	-14,38	-27,09 to -1,673	Yes	*	0,0198
		Control vs. 1	-27,55	-40,26 to -14,84	Yes	****	<0,0001
		Control vs. 10	-29,36	-42,07 to -16,65	Yes	****	<0,0001
		Control vs. 100	-14,77	-27,48 to -2,057	Yes	*	0,0158
		Control vs. 1000	-11,73	-24,44 to 0,9848	No	ns	0,0822
		Control vs. 10000	56,3	43,59 to 69,01	Yes	****	<0,0001
	Reduced-serum conditions	Control vs. 0.1	4,429	-6,472 to 15,33	No	ns	0,7838
		Control vs. 1	5,317	-5,585 to 16,22	No	ns	0,6336
		Control vs. 10	-2,331	-13,23 to 8,57	No	ns	0,9856
		Control vs. 100	-1,189	-12,09 to 9,712	No	ns	0,9996
		Control vs. 1000	5,307	-5,594 to 16,21	No	ns	0,6352
		Control vs. 10000	64,85	53,95 to 75,75	Yes	****	<0,0001
	Serum-free conditions	Control vs. 0.1	51,54	40,54 to 62,53	Yes	****	<0,0001
		Control vs. 1	52,27	41,27 to 63,26	Yes	****	<0,0001
		Control vs. 10	49,2	38,2 to 60,19	Yes	****	<0,0001
		Control vs. 100	47,84	36,84 to 58,83	Yes	****	<0,0001
		Control vs. 1000	48,4	37,41 to 59,4	Yes	****	<0,0001
		Control vs. 10000	79	68 to 89,99	Yes	****	<0,0001
<b>DNA</b>	Normal serum conditions	Control vs. 0.1	0,4341	-16,82 to 17,69	No	ns	>0,9999
		Control vs. 1	-5,571	-22,82 to 11,68	No	ns	0,943
		Control vs. 10	-12,87	-30,13 to 4,378	No	ns	0,251
		Control vs. 100	-16,49	-33,74 to 0,7638	No	ns	0,0686
		Control vs. 1000	-1,273	-18,53 to 15,98	No	ns	0,9998
		Control vs. 10000	15,3	-1,949 to 32,56	No	ns	0,1088
	Reduced-serum conditions	Control vs. 0.1	14,35	-0,795 to 29,49	No	ns	0,0704
		Control vs. 1	9,56	-5,583 to 24,7	No	ns	0,3770
		Control vs. 10	6,579	-8,564 to 21,72	No	ns	0,7353
		Control vs. 100	7,036	-8,107 to 22,18	No	ns	0,6792
		Control vs. 1000	12,64	-2,506 to 27,78	No	ns	0,1384
		Control vs. 10000	14,52	-0,6225 to 29,66	No	ns	0,0655
	Serum-free conditions	Control vs. 0.1	45,91	30,18 to 61,65	Yes	****	<0,0001
		Control vs. 1	47,03	31,3 to 62,76	Yes	****	<0,0001
		Control vs. 10	42,09	26,36 to 57,82	Yes	****	<0,0001
		Control vs. 100	38,76	23,03 to 54,49	Yes	****	<0,0001
		Control vs. 1000	41,22	25,49 to 56,95	Yes	****	<0,0001
		Control vs. 10000	47,66	30,65 to 64,68	Yes	****	<0,0001
<b>LDH</b>	Normal serum conditions	Control vs. 0.1	-1,458	-10,07 to 7,157	No	ns	0,9952
		Control vs. 1	-2,553	-11,17 to 6,062	No	ns	0,9343
		Control vs. 10	-2,638	-11,25 to 5,977	No	ns	0,9247
		Control vs. 100	-3,468	-12,08 to 5,147	No	ns	0,7908
		Control vs. 1000	-6,843	-15,46 to 1,772	No	ns	0,1723
		Control vs. 10000	-28,95	-37,56 to -20,33	Yes	****	<0,0001
	Reduced-serum conditions	Control vs. 0.1	15,73	9,326 to 22,14	Yes	****	<0,0001
		Control vs. 1	17,31	10,9 to 23,71	Yes	****	<0,0001
		Control vs. 10	16,89	10,49 to 23,3	Yes	****	<0,0001
		Control vs. 100	15,68	9,277 to 22,09	Yes	****	<0,0001
		Control vs. 1000	13,07	6,664 to 19,48	Yes	****	<0,0001
		Control vs. 10000	-15,18	-21,58 to -8,774	Yes	****	<0,0001
	Serum-free conditions	Control vs. 0.1	30,09	23,48 to 36,7	Yes	****	<0,0001
		Control vs. 1	32,38	25,77 to 38,98	Yes	****	<0,0001
		Control vs. 10	30,2	23,59 to 36,81	Yes	****	<0,0001
		Control vs. 100	28,47	21,87 to 35,08	Yes	****	<0,0001
		Control vs. 1000	25,86	19,25 to 32,47	Yes	****	<0,0001
		Control vs. 10000	-5,418	-12,03 to 1,19	No	ns	0,1500



TABLE S-7: EGGHELL MEMBRANE NAOH

		DUNNETT'S MULTIPLE COMPARISONS TEST	MEAN DIFF	95,00% CI OF DIFF	SIGNIFICANT?	SUMMARY	ADJUSTED P VALUE
<b>ATP</b>	Normal serum conditions	Control vs. 0.1	-3,654	-14,38 to 7,068	No	ns	0,8841
		Control vs. 1	-4,377	-16,52 to 7,77	No	ns	0,8572
		Control vs. 10	-4,83	-16,98 to 7,317	No	ns	0,7988
		Control vs. 100	-4,947	-17,09 to 7,2	No	ns	0,7823
		Control vs. 1000	7,81	-4,336 to 19,96	No	ns	0,3577
		Control vs. 10000	22,26	10,11 to 34,4	Yes	****	<0,0001
	Reduced-serum conditions	Control vs. 0.1	12,84	2,448 to 23,23	Yes	**	0,0089
		Control vs. 1	12,31	0,5389 to 24,08	Yes	*	0,0367
		Control vs. 10	9,734	-2,037 to 21,5	No	ns	0,1440
		Control vs. 100	3,095	-8,676 to 14,87	No	ns	0,9612
		Control vs. 1000	19,68	7,911 to 31,45	Yes	***	0,0002
		Control vs. 10000	27,9	16,13 to 39,67	Yes	****	<0,0001
	Serum-free conditions	Control vs. 0.1	49,18	36 to 62,35	Yes	****	<0,0001
		Control vs. 1	50,45	35,52 to 65,37	Yes	****	<0,0001
		Control vs. 10	45,06	30,13 to 59,98	Yes	****	<0,0001
		Control vs. 100	48,84	33,91 to 63,77	Yes	****	<0,0001
		Control vs. 1000	47,74	32,81 to 62,67	Yes	****	<0,0001
		Control vs. 10000	57,61	42,68 to 72,54	Yes	****	<0,0001
<b>DNA</b>	Normal serum conditions	Control vs. 0.1	5,104	-20,4 to 30,61	No	ns	0,9955
		Control vs. 1	-6,702	-32,21 to 18,8	No	ns	0,9811
		Control vs. 10	-4,492	-30 to 21,01	No	ns	0,9978
		Control vs. 100	-14,51	-40,02 to 10,99	No	ns	0,5691
		Control vs. 1000	-19,13	-44,64 to 6,371	No	ns	0,2515
		Control vs. 10000	-8,235	-33,74 to 17,27	No	ns	0,9485
	Reduced-serum conditions	Control vs. 0.1	4,228	-15,55 to 24,01	No	ns	0,9859
		Control vs. 1	-4,213	-25,92 to 17,5	No	ns	0,9916
		Control vs. 10	-10,72	-32,43 to 10,99	No	ns	0,6238
		Control vs. 100	-14,69	-36,4 to 7,016	No	ns	0,3089
		Control vs. 1000	-22,3	-44,01 to -0,5931	Yes	*	0,0416
		Control vs. 10000	-6,798	-28,51 to 14,91	No	ns	0,9179
	Serum-free conditions	Control vs. 0.1	34,5	17,52 to 51,49	Yes	****	<0,0001
		Control vs. 1	31,47	13,68 to 49,26	Yes	****	<0,0001
		Control vs. 10	28,46	10,67 to 46,24	Yes	***	0,0004
		Control vs. 100	10,7	-7,088 to 28,49	No	ns	0,4234
		Control vs. 1000	1,736	-24,05 to 27,53	No	ns	0,9997
		Control vs. 10000	40,48	10,91 to 70,05	Yes	**	0,0029
<b>LDH</b>	Normal serum conditions	Control vs. 0.1	3,27	-6,446 to 12,99	No	ns	0,8898
		Control vs. 1	4,775	-6,251 to 15,8	No	ns	0,7370
		Control vs. 10	1,884	-9,142 to 12,91	No	ns	0,9950
		Control vs. 100	0,9095	-10,12 to 11,94	No	ns	0,9997
		Control vs. 1000	0,8482	-10,18 to 11,87	No	ns	0,9997
		Control vs. 10000	-5,734	-19 to 7,53	No	ns	0,7385
	Reduced-serum conditions	Control vs. 0.1	12,84	1,714 to 23,97	Yes	*	0,0167
		Control vs. 1	9,875	-2,751 to 22,5	No	ns	0,1839
		Control vs. 10	1,873	-10,75 to 14,5	No	ns	0,9977
		Control vs. 100	3,63	-8,995 to 16,26	No	ns	0,9424
		Control vs. 1000	5,01	-7,616 to 17,64	No	ns	0,8007
		Control vs. 10000	10,71	-1,92 to 23,33	No	ns	0,1281
	Serum-free conditions	Control vs. 0.1	26,42	12,6 to 40,23	Yes	****	<0,0001
		Control vs. 1	26,98	11,3 to 42,66	Yes	***	0,0001
		Control vs. 10	29,7	14,02 to 45,38	Yes	****	<0,0001
		Control vs. 100	24,56	8,883 to 40,24	Yes	***	0,0005
		Control vs. 1000	-11,21	-26,89 to 4,468	No	ns	0,2577
		Control vs. 10000	-44,61	-63,47 to -25,74	Yes	****	<0,0001

TABLE S-8: EGG WHITE ALCALASE

		DUNNETT'S MULTIPLE COMPARISONS TEST	MEAN DIFF	95,00% CI OF DIFF	SIGNIFICANT?	SUMMARY	ADJUSTED P VALUE
<b>ATP</b>	Normal serum conditions	Control vs. 0.1	-32,51	-56,77 to -8,244	Yes	**	0,0037
		Control vs. 1	-33,39	-57,65 to -9,128	Yes	**	0,0027
		Control vs. 10	-34,66	-58,92 to -10,4	Yes	**	0,0017
		Control vs. 100	-33,33	-57,59 to -9,072	Yes	**	0,0027
		Control vs. 1000	-28,38	-52,65 to -4,124	Yes	*	0,0147
		Control vs. 10000	29,19	4,929 to 53,45	Yes	*	0,0114
	Reduced-serum conditions	Control vs. 0.1	-13,92	-36,74 to 8,895	No	ns	0,4114
		Control vs. 1	-17,61	-40,43 to 5,203	No	ns	0,1942
		Control vs. 10	-13,78	-36,6 to 9,032	No	ns	0,4214
		Control vs. 100	-10,94	-33,76 to 11,87	No	ns	0,6508
		Control vs. 1000	-10,84	-33,65 to 11,98	No	ns	0,6595
		Control vs. 10000	32,84	10,03 to 55,66	Yes	**	0,0015
	Serum-free conditions	Control vs. 0.1	21,49	6,615 to 36,37	Yes	**	0,0015
		Control vs. 1	13,86	-1,017 to 28,74	No	ns	0,0777
		Control vs. 10	16,2	1,32 to 31,08	Yes	*	0,0271
		Control vs. 100	18,27	3,392 to 33,15	Yes	**	0,0094
		Control vs. 1000	20,33	5,451 to 35,21	Yes	**	0,0030
		Control vs. 10000	56,88	43,75 to 70,02	Yes	****	<0,0001
<b>DNA</b>	Normal serum conditions	Control vs. 0.1	-18,87	-36,01 to -1,731	Yes	*	0,0247
		Control vs. 1	-20,62	-37,76 to -3,477	Yes	*	0,0114
		Control vs. 10	-18,47	-35,61 to -1,324	Yes	*	0,0293
		Control vs. 100	-16,27	-33,41 to 0,8697	No	ns	0,0696
		Control vs. 1000	-27,98	-45,12 to -10,84	Yes	***	0,0002
		Control vs. 10000	-23,68	-43,1 to -4,267	Yes	**	0,0100
	Reduced-serum conditions	Control vs. 0.1	-9,027	-24,92 to 6,864	No	ns	0,4844
		Control vs. 1	-6,701	-22,59 to 9,19	No	ns	0,7582
		Control vs. 10	-0,7502	-16,64 to 15,14	No	ns	0,9998
		Control vs. 100	3,451	-12,44 to 19,34	No	ns	0,9846
		Control vs. 1000	-12,17	-28,06 to 3,724	No	ns	0,2006
		Control vs. 10000	-25,9	-41,8 to -10,01	Yes	***	0,0003
	Serum-free conditions	Control vs. 0.1	17,28	3,076 to 31,48	Yes	*	0,0102
		Control vs. 1	15,22	1,019 to 29,42	Yes	*	0,0305
		Control vs. 10	20,27	6,073 to 34,47	Yes	**	0,0017
		Control vs. 100	18,32	4,119 to 32,52	Yes	**	0,0056
		Control vs. 1000	8,19	-6,009 to 22,39	No	ns	0,4688
		Control vs. 10000	-7,071	-21,27 to 7,129	No	ns	0,6156
<b>LDH</b>	Normal serum conditions	Control vs. 0.1	8,317	-0,6519 to 17,29	No	ns	0,0799
		Control vs. 1	10,58	1,614 to 19,55	Yes	*	0,0137
		Control vs. 10	11,15	2,183 to 20,12	Yes	**	0,0083
		Control vs. 100	12,08	3,11 to 21,05	Yes	**	0,0035
		Control vs. 1000	8,193	-0,7759 to 17,16	No	ns	0,0869
		Control vs. 10000	-9,373	-18,34 to -0,4039	Yes	*	0,0368
	Reduced-serum conditions	Control vs. 0.1	26,2	20 to 32,4	Yes	****	<0,0001
		Control vs. 1	28,05	21,84 to 34,25	Yes	****	<0,0001
		Control vs. 10	26,73	20,52 to 32,93	Yes	****	<0,0001
		Control vs. 100	25,66	19,45 to 31,86	Yes	****	<0,0001
		Control vs. 1000	19,29	13,09 to 25,5	Yes	****	<0,0001
		Control vs. 10000	2,495	-3,708 to 8,698	No	ns	0,7914
	Serum-free conditions	Control vs. 0.1	24,14	14,57 to 33,72	Yes	****	<0,0001
		Control vs. 1	28,84	19,27 to 38,41	Yes	****	<0,0001
		Control vs. 10	28,19	18,62 to 37,77	Yes	****	<0,0001
		Control vs. 100	30,63	21,06 to 40,2	Yes	****	<0,0001
		Control vs. 1000	21,08	11,51 to 30,66	Yes	****	<0,0001
		Control vs. 10000	11,67	2,1 to 21,24	Yes	*	0,0100

TABLE S-9: EGG WHITE FLAVOURZYME

		DUNNETT'S MULTIPLE COMPARISONS TEST	MEAN DIFF	95,00% CI OF DIFF	SIGNIFICANT?	SUMMARY	ADJUSTED P VALUE
<b>ATP</b>	Normal serum conditions	Control vs. 0.1	-2,847	-14,39 to 8,694	No	ns	0,9713
		Control vs. 1	-7,497	-19,04 to 4,043	No	ns	0,3483
		Control vs. 10	-8,009	-19,55 to 3,532	No	ns	0,2852
		Control vs. 100	-17,02	-28,56 to -5,482	Yes	**	0,0011
		Control vs. 1000	-23,65	-35,19 to -12,1	Yes	****	<0,0001
		Control vs. 10000	10,05	-3,021 to 23,13	No	ns	0,1971
	Reduced-serum conditions	Control vs. 0.1	11,09	-0,7085 to 22,9	No	ns	0,0738
		Control vs. 1	8,357	-3,445 to 20,16	No	ns	0,2669
		Control vs. 10	5,973	-5,828 to 17,78	No	ns	0,6001
		Control vs. 100	4,728	-7,074 to 16,53	No	ns	0,7949
		Control vs. 1000	-0,339	-12,14 to 11,46	No	ns	>0,9999
		Control vs. 10000	7,718	-4,084 to 19,52	No	ns	0,3421
	Serum-free conditions	Control vs. 0.1	43,62	32,11 to 55,13	Yes	****	<0,0001
		Control vs. 1	38,57	27,05 to 50,08	Yes	****	<0,0001
		Control vs. 10	45,98	34,47 to 57,49	Yes	****	<0,0001
		Control vs. 100	39,91	27,03 to 52,79	Yes	****	<0,0001
		Control vs. 1000	45,13	33,62 to 56,65	Yes	****	<0,0001
		Control vs. 10000	36,61	25,62 to 47,6	Yes	****	<0,0001
<b>DNA</b>	Normal serum conditions	Control vs. 0.1	-0,9177	-17,17 to 15,33	No	ns	0,9998
		Control vs. 1	-10,7	-26,95 to 5,551	No	ns	0,3340
		Control vs. 10	-17,99	-34,24 to -1,747	Yes	*	0,0237
		Control vs. 100	-18,06	-34,31 to -1,816	Yes	*	0,0229
		Control vs. 1000	-21,17	-37,42 to -4,919	Yes	**	0,0051
		Control vs. 10000	-10,46	-28,64 to 7,721	No	ns	0,4697
	Reduced-serum conditions	Control vs. 0.1	4,752	-10,04 to 19,54	No	ns	0,9079
		Control vs. 1	5,031	-9,762 to 19,82	No	ns	0,8847
		Control vs. 10	3,434	-11,36 to 18,23	No	ns	0,9783
		Control vs. 100	-1,254	-16,05 to 13,54	No	ns	0,9997
		Control vs. 1000	-5,382	-20,17 to 9,411	No	ns	0,8519
		Control vs. 10000	-10,48	-25,28 to 4,31	No	ns	0,2653
	Serum-free conditions	Control vs. 0.1	23,96	0,3077 to 47,61	Yes	*	0,0459
		Control vs. 1	20,66	-2,986 to 44,31	No	ns	0,1101
		Control vs. 10	16,57	-7,078 to 40,22	No	ns	0,2752
		Control vs. 100	18,07	-5,576 to 41,72	No	ns	0,2012
		Control vs. 1000	-9,614	-33,26 to 14,04	No	ns	0,7830
		Control vs. 10000	-74,87	-103,3 to -46,48	Yes	****	<0,0001
<b>LDH</b>	Normal serum conditions	Control vs. 0.1	16,94	9,279 to 24,59	Yes	****	<0,0001
		Control vs. 1	15,26	7,601 to 22,91	Yes	****	<0,0001
		Control vs. 10	14,99	7,333 to 22,65	Yes	****	<0,0001
		Control vs. 100	15,81	8,152 to 23,46	Yes	****	<0,0001
		Control vs. 1000	14,95	7,291 to 22,6	Yes	****	<0,0001
		Control vs. 10000	16,57	8,915 to 24,23	Yes	****	<0,0001
	Reduced-serum conditions	Control vs. 0.1	23,72	13,29 to 34,15	Yes	****	<0,0001
		Control vs. 1	24,52	14,09 to 34,95	Yes	****	<0,0001
		Control vs. 10	25,33	14,9 to 35,76	Yes	****	<0,0001
		Control vs. 100	24,63	14,2 to 35,06	Yes	****	<0,0001
		Control vs. 1000	20,7	10,27 to 31,13	Yes	****	<0,0001
		Control vs. 10000	22,1	11,67 to 32,53	Yes	****	<0,0001
	Serum-free conditions	Control vs. 0.1	31,52	16,45 to 46,59	Yes	****	<0,0001
		Control vs. 1	33,42	18,34 to 48,49	Yes	****	<0,0001
		Control vs. 10	33,84	18,77 to 48,91	Yes	****	<0,0001
		Control vs. 100	33,23	18,16 to 48,3	Yes	****	<0,0001
		Control vs. 1000	23,14	8,07 to 38,21	Yes	***	0,0006
		Control vs. 10000	-41,04	-56,11 to -25,97	Yes	****	<0,0001

TABLE S-10: YEAST EXTRACT

		DUNNETT'S MULTIPLE COMPARISONS TEST	MEAN DIFF	95,00% CI OF DIFF	SIGNIFICANT?	SUMMARY	ADJUSTED P VALUE
<b>ATP</b>	Normal serum conditions	Control vs. 0.1	-71,56	-104,6 to -38,47	Yes	****	<0,0001
		Control vs. 1	-77,38	-110,5 to -44,29	Yes	****	<0,0001
		Control vs. 10	-100,4	-136,7 to -64,06	Yes	****	<0,0001
		Control vs. 100	-108,8	-145,2 to -72,52	Yes	****	<0,0001
		Control vs. 1000	-101,6	-137,9 to -65,3	Yes	****	<0,0001
		Control vs. 10000	77,88	44,79 to 111	Yes	****	<0,0001
	Reduced-serum conditions	Control vs. 0.1	-42,36	-70,48 to -14,24	Yes	***	0,0008
		Control vs. 1	-40,34	-68,46 to -12,22	Yes	**	0,0016
		Control vs. 10	-46,11	-74,23 to -17,98	Yes	***	0,0002
		Control vs. 100	-45,82	-73,94 to -17,7	Yes	***	0,0002
		Control vs. 1000	-50,97	-79,09 to -22,85	Yes	****	<0,0001
		Control vs. 10000	68,16	40,03 to 96,28	Yes	****	<0,0001
	Serum-free conditions	Control vs. 0.1	-58,48	-102,5 to -14,46	Yes	**	0,0040
		Control vs. 1	-40,56	-75,97 to -5,161	Yes	*	0,0177
		Control vs. 10	-27,21	-66,07 to 11,65	No	ns	0,2774
		Control vs. 100	-37,64	-76,5 to 1,219	No	ns	0,0615
		Control vs. 1000	-45,2	-80,6 to -9,797	Yes	**	0,0062
		Control vs. 10000	18,08	-17,32 to 53,48	No	ns	0,5918
<b>DNA</b>	Normal serum conditions	Control vs. 0.1	-6,546	-23,75 to 10,66	No	ns	0,8285
		Control vs. 1	-8,479	-25,69 to 8,729	No	ns	0,6264
		Control vs. 10	-14,36	-31,56 to 2,853	No	ns	0,1389
		Control vs. 100	-39,71	-56,91 to -22,5	Yes	****	<0,0001
		Control vs. 1000	-19,2	-38,08 to -0,3133	Yes	*	0,0447
		Control vs. 10000	27,83	8,945 to 46,71	Yes	**	0,0011
	Reduced-serum conditions	Control vs. 0.1	8,657	-14,81 to 32,12	No	ns	0,8964
		Control vs. 1	5,551	-17,91 to 29,02	No	ns	0,9874
		Control vs. 10	5,716	-17,75 to 29,18	No	ns	0,9852
		Control vs. 100	-5,412	-28,88 to 18,05	No	ns	0,9891
		Control vs. 1000	-23,53	-46,99 to -0,05937	Yes	*	0,0491
		Control vs. 10000	-10,66	-34,12 to 12,81	No	ns	0,7713
	Serum-free conditions	Control vs. 0.1	14,21	-2,147 to 30,57	No	ns	0,1137
		Control vs. 1	9,832	-6,529 to 26,19	No	ns	0,4268
		Control vs. 10	11,15	-5,21 to 27,51	No	ns	0,3022
		Control vs. 100	6,507	-9,854 to 22,87	No	ns	0,7996
		Control vs. 1000	9,908	-6,453 to 26,27	No	ns	0,4190
		Control vs. 10000	-13,19	-29,55 to 3,17	No	ns	0,1617
<b>LDH</b>	Normal serum conditions	Control vs. 0.1	4,461	-8,524 to 17,45	No	ns	0,8814
		Control vs. 1	6,021	-6,964 to 19,01	No	ns	0,6811
		Control vs. 10	5,9	-7,085 to 18,89	No	ns	0,6987
		Control vs. 100	5,998	-6,988 to 18,98	No	ns	0,6845
		Control vs. 1000	8,365	-4,62 to 21,35	No	ns	0,3570
		Control vs. 10000	-45,48	-58,47 to -32,49	Yes	****	<0,0001
	Reduced-serum conditions	Control vs. 0.1	11,15	-5,898 to 28,2	No	ns	0,3450
		Control vs. 1	11,91	-5,138 to 28,96	No	ns	0,2818
		Control vs. 10	-3,237	-20,28 to 13,81	No	ns	0,9927
		Control vs. 100	15,26	-1,789 to 32,31	No	ns	0,0979
		Control vs. 1000	9,705	-7,342 to 26,75	No	ns	0,4861
		Control vs. 10000	-51,09	-68,13 to -34,04	Yes	****	<0,0001
	Serum-free conditions	Control vs. 0.1	32,42	17,94 to 46,89	Yes	****	<0,0001
		Control vs. 1	36,03	21,56 to 50,51	Yes	****	<0,0001
		Control vs. 10	33,86	19,39 to 48,33	Yes	****	<0,0001
		Control vs. 100	35,94	21,47 to 50,41	Yes	****	<0,0001
		Control vs. 1000	31,09	16,61 to 45,56	Yes	****	<0,0001
		Control vs. 10000	19,03	4,56 to 33,51	Yes	**	0,0045

TABLE S-11: PORSK PLASMA

		DUNNETT'S MULTIPLE COMPARISONS TEST	MEAN DIFF	95,00% CI OF DIFF	SIGNIFICANT?	SUMMARY	ADJUSTED P VALUE
<b>ATP</b>	Normal serum conditions	Control vs. 0.1	-13,04	-25,52 to -0,5571	Yes	*	0,0370
		Control vs. 1	-14,65	-27,81 to -1,501	Yes	*	0,0226
		Control vs. 10	-11,8	-24,95 to 1,359	No	ns	0,0962
		Control vs. 100	1,939	-11,21 to 15,09	No	ns	0,9977
		Control vs. 1000	48,41	35,93 to 60,89	Yes	****	<0,0001
		Control vs. 10000	87,62	75,13 to 100,1	Yes	****	<0,0001
	Reduced-serum conditions	Control vs. 0.1	-17,08	-28,28 to -5,883	Yes	***	0,0007
		Control vs. 1	-16,29	-27,49 to -5,092	Yes	**	0,0014
		Control vs. 10	-13,37	-24,57 to -2,173	Yes	*	0,0123
		Control vs. 100	-2,501	-13,7 to 8,698	No	ns	0,9821
		Control vs. 1000	42,58	31,38 to 53,77	Yes	****	<0,0001
		Control vs. 10000	88,22	77,02 to 99,42	Yes	****	<0,0001
	Serum-free conditions	Control vs. 0.1	1,506	-9,473 to 12,49	No	ns	0,9980
		Control vs. 1	0,3312	-10,65 to 11,31	No	ns	0,9999
		Control vs. 10	-0,5427	-11,52 to 10,44	No	ns	0,9998
		Control vs. 100	8,952	-2,028 to 19,93	No	ns	0,1535
		Control vs. 1000	47,67	36,69 to 58,65	Yes	****	<0,0001
		Control vs. 10000	89,47	78,49 to 100,5	Yes	****	<0,0001
<b>DNA</b>	Normal serum conditions	Control vs. 0.1	16,45	-3,081 to 35,98	No	ns	0,1320
		Control vs. 1	-3,735	-24,31 to 16,84	No	ns	0,9937
		Control vs. 10	-0,4781	-20,01 to 19,05	No	ns	>0,9999
		Control vs. 100	-27,42	-47,99 to -6,84	Yes	**	0,0040
		Control vs. 1000	-19,58	-40,15 to 1,002	No	ns	0,0686
		Control vs. 10000	17,81	-1,72 to 37,34	No	ns	0,0876
	Reduced-serum conditions	Control vs. 0.1	-15,17	-39,92 to 9,582	No	ns	0,4053
		Control vs. 1	-14,76	-39,52 to 9,989	No	ns	0,4329
		Control vs. 10	-34,64	-59,39 to -9,887	Yes	**	0,0023
		Control vs. 100	-39,12	-63,88 to -14,37	Yes	***	0,0004
		Control vs. 1000	-20,09	-46,17 to 5,988	No	ns	0,1950
		Control vs. 10000	-3,459	-28,21 to 21,29	No	ns	0,9979
	Serum-free conditions	Control vs. 0.1	-17,05	-41,12 to 7,008	No	ns	0,2651
		Control vs. 1	-40,92	-64,99 to -16,86	Yes	***	0,0001
		Control vs. 10	-57,63	-81,69 to -33,57	Yes	****	<0,0001
		Control vs. 100	-40,69	-64,76 to -16,63	Yes	***	0,0001
		Control vs. 1000	-28,58	-53,93 to -3,224	Yes	*	0,0205
		Control vs. 10000	-5,168	-29,23 to 18,89	No	ns	0,9852
<b>LDH</b>	Normal serum conditions	Control vs. 0.1	-15,83	-34,63 to 2,975	No	ns	0,1471
		Control vs. 1	-15,81	-34,61 to 2,992	No	ns	0,1479
		Control vs. 10	-17,93	-36,74 to 0,8699	No	ns	0,0698
		Control vs. 100	-25,15	-43,96 to -6,349	Yes	**	0,0030
		Control vs. 1000	-53,79	-72,59 to -34,99	Yes	****	<0,0001
		Control vs. 10000	-134	-152,8 to -115,2	Yes	****	<0,0001
	Reduced-serum conditions	Control vs. 0.1	27,58	8,528 to 46,63	Yes	**	0,0014
		Control vs. 1	23,8	4,744 to 42,85	Yes	**	0,0079
		Control vs. 10	19,47	0,4188 to 38,53	Yes	*	0,0431
		Control vs. 100	13,26	-5,798 to 32,31	No	ns	0,2825
		Control vs. 1000	-30,09	-49,14 to -11,03	Yes	***	0,0004
		Control vs. 10000	-115,6	-134,7 to -96,57	Yes	****	<0,0001
	Serum-free conditions	Control vs. 0.1	55,12	37,72 to 72,51	Yes	****	<0,0001
		Control vs. 1	51,22	33,83 to 68,62	Yes	****	<0,0001
		Control vs. 10	47,83	30,44 to 65,23	Yes	****	<0,0001
		Control vs. 100	41,11	23,72 to 58,51	Yes	****	<0,0001
		Control vs. 1000	12,44	-4,954 to 29,84	No	ns	0,2576
		Control vs. 10000	-75,91	-93,31 to -58,52	Yes	****	<0,0001

TABLE S-12: PORK PLASMA ALCALASE

		DUNNETT'S MULTIPLE COMPARISONS TEST	MEAN DIFF	95,00% CI OF DIFF	SIGNIFICANT?	SUMMARY	ADJUSTED P VALUE
<b>ATP</b>	Normal serum conditions	Control vs. 0.1	-169,2	-233 to -105,5	Yes	****	<0,0001
		Control vs. 1	-170,4	-234,2 to -106,7	Yes	****	<0,0001
		Control vs. 10	-154,7	-218,4 to -90,91	Yes	****	<0,0001
		Control vs. 100	-95,74	-159,5 to -31,98	Yes	***	0,0009
		Control vs. 1000	39,68	-27,51 to 106,9	No	ns	0,4434
		Control vs. 10000	98,53	34,77 to 162,3	Yes	***	0,0006
	Reduced-serum conditions	Control vs. 0.1	-155,8	-206,3 to -105,3	Yes	****	<0,0001
		Control vs. 1	-141,6	-192,1 to -91,14	Yes	****	<0,0001
		Control vs. 10	-126,7	-177,2 to -76,25	Yes	****	<0,0001
		Control vs. 100	-54,06	-104,5 to -3,571	Yes	*	0,0308
		Control vs. 1000	95,37	44,88 to 145,8	Yes	****	<0,0001
		Control vs. 10000	99,58	49,09 to 150,1	Yes	****	<0,0001
	Serum-free conditions	Control vs. 0.1	-110,9	-151,1 to -70,72	Yes	****	<0,0001
		Control vs. 1	-104,6	-144,8 to -64,35	Yes	****	<0,0001
		Control vs. 10	-77,86	-118,1 to -37,65	Yes	****	<0,0001
		Control vs. 100	48,15	7,939 to 88,35	Yes	*	0,0120
		Control vs. 1000	98,74	58,54 to 139	Yes	****	<0,0001
		Control vs. 10000	99,79	59,58 to 140	Yes	****	<0,0001
<b>DNA</b>	Normal serum conditions	Control vs. 0.1	-46,5	-66,68 to -26,32	Yes	****	<0,0001
		Control vs. 1	-57,79	-76,95 to -38,64	Yes	****	<0,0001
		Control vs. 10	-62,04	-82,22 to -41,86	Yes	****	<0,0001
		Control vs. 100	-41,55	-60,7 to -22,4	Yes	****	<0,0001
		Control vs. 1000	-2,408	-22,59 to 17,77	No	ns	0,9995
		Control vs. 10000	94,58	75,42 to 113,7	Yes	****	<0,0001
	Reduced-serum conditions	Control vs. 0.1	-27	-69,68 to 15,67	No	ns	0,3733
		Control vs. 1	-38,57	-81,24 to 4,106	No	ns	0,0921
		Control vs. 10	-47,28	-89,95 to -4,606	Yes	*	0,0236
		Control vs. 100	-36,14	-78,81 to 6,534	No	ns	0,1286
		Control vs. 1000	25,84	-16,84 to 68,51	No	ns	0,4177
		Control vs. 10000	95,02	52,35 to 137,7	Yes	****	<0,0001
	Serum-free conditions	Control vs. 0.1	-33,21	-49,07 to -17,35	Yes	****	<0,0001
		Control vs. 1	-23,1	-38,96 to -7,241	Yes	**	0,0014
		Control vs. 10	-31,73	-47,59 to -15,87	Yes	****	<0,0001
		Control vs. 100	39,97	24,11 to 55,83	Yes	****	<0,0001
		Control vs. 1000	84,32	68,47 to 100,2	Yes	****	<0,0001
		Control vs. 10000	93,05	77,19 to 108,9	Yes	****	<0,0001
<b>LDH</b>	Normal serum conditions	Control vs. 0.1	-10,5	-17,89 to -3,103	Yes	**	0,0019
		Control vs. 1	-6,412	-13,8 to 0,9807	No	ns	0,1146
		Control vs. 10	-8,39	-15,78 to -0,9979	Yes	*	0,0193
		Control vs. 100	-5,865	-13,26 to 1,528	No	ns	0,1732
		Control vs. 1000	-4,907	-12,3 to 2,486	No	ns	0,3269
		Control vs. 10000	64,95	57,56 to 72,34	Yes	****	<0,0001
	Reduced-serum conditions	Control vs. 0.1	30,37	23,68 to 37,07	Yes	****	<0,0001
		Control vs. 1	31,38	24,68 to 38,08	Yes	****	<0,0001
		Control vs. 10	29,09	22,4 to 35,79	Yes	****	<0,0001
		Control vs. 100	25,17	18,48 to 31,87	Yes	****	<0,0001
		Control vs. 1000	64,57	57,88 to 71,27	Yes	****	<0,0001
		Control vs. 10000	66,65	59,96 to 73,35	Yes	****	<0,0001
	Serum-free conditions	Control vs. 0.1	71,46	65,75 to 77,16	Yes	****	<0,0001
		Control vs. 1	72,25	66,54 to 77,95	Yes	****	<0,0001
		Control vs. 10	71,01	65,31 to 76,72	Yes	****	<0,0001
		Control vs. 100	68,35	62,65 to 74,06	Yes	****	<0,0001
		Control vs. 1000	79,92	74,22 to 85,62	Yes	****	<0,0001
		Control vs. 10000	59,85	54,14 to 65,55	Yes	****	<0,0001

TABLE S-13: PORK PLASMA FLAVOURZYME

		DUNNETT'S MULTIPLE COMPARISONS TEST	MEAN DIFF	95,00% CI OF DIFF	SIGNIFICANT?	SUMMARY	ADJUSTED P VALUE
<b>ATP</b>	Normal serum conditions	Control vs. 0.1	-47,57	-60,29 to -34,86	Yes	****	<0,0001
		Control vs. 1	-46,94	-59,65 to -34,22	Yes	****	<0,0001
		Control vs. 10	-43,53	-56,25 to -30,81	Yes	****	<0,0001
		Control vs. 100	-21,27	-33,98 to -8,551	Yes	***	0,0002
		Control vs. 1000	43,72	31,01 to 56,44	Yes	****	<0,0001
		Control vs. 10000	96,33	83,61 to 109	Yes	****	<0,0001
	Reduced-serum conditions	Control vs. 0.1	-26,52	-40,96 to -12,08	Yes	****	<0,0001
		Control vs. 1	-15,75	-30,19 to -1,315	Yes	*	0,0266
		Control vs. 10	-5,232	-19,67 to 9,205	No	ns	0,8541
		Control vs. 100	11,41	-3,028 to 25,85	No	ns	0,1757
		Control vs. 1000	66,02	51,58 to 80,46	Yes	****	<0,0001
		Control vs. 10000	97,35	82,91 to 111,8	Yes	****	<0,0001
	Serum-free conditions	Control vs. 0.1	-17,84	-32,78 to -2,907	Yes	*	0,0123
		Control vs. 1	-24,16	-39,1 to -9,227	Yes	***	0,0003
		Control vs. 10	-22,28	-37,21 to -7,339	Yes	***	0,0010
		Control vs. 100	-3,321	-18,26 to 11,62	No	ns	0,9824
		Control vs. 1000	41,39	26,45 to 56,33	Yes	****	<0,0001
		Control vs. 10000	97,44	82,51 to 112,4	Yes	****	<0,0001
<b>DNA</b>	Normal serum conditions	Control vs. 0.1	-21,05	-40,37 to -1,733	Yes	*	0,0269
		Control vs. 1	-25,72	-45,04 to -6,404	Yes	**	0,0041
		Control vs. 10	-33,49	-52,8 to -14,17	Yes	****	<0,0001
		Control vs. 100	-40,29	-60,65 to -19,94	Yes	****	<0,0001
		Control vs. 1000	-60,32	-88,32 to -32,31	Yes	****	<0,0001
		Control vs. 10000	45,9	26,58 to 65,22	Yes	****	<0,0001
	Reduced-serum conditions	Control vs. 0.1	-15,21	-46,23 to 15,81	No	ns	0,6280
		Control vs. 1	-21,15	-52,17 to 9,869	No	ns	0,3006
		Control vs. 10	-20,47	-53,16 to 12,21	No	ns	0,3833
		Control vs. 100	-64,23	-95,25 to -33,21	Yes	****	<0,0001
		Control vs. 1000	-136,6	-169,3 to -103,9	Yes	****	<0,0001
		Control vs. 10000	1,35	-29,67 to 32,37	No	ns	0,9999
	Serum-free conditions	Control vs. 0.1	-20,59	-43,45 to 2,281	No	ns	0,0940
		Control vs. 1	-49,74	-75,33 to -24,16	Yes	****	<0,0001
		Control vs. 10	-39,59	-67,04 to -12,14	Yes	**	0,0016
		Control vs. 100	-20,42	-43,28 to 2,449	No	ns	0,0982
		Control vs. 1000	-25,82	-55,68 to 4,039	No	ns	0,1159
		Control vs. 10000	70,15	47,28 to 93,02	Yes	****	<0,0001
<b>LDH</b>	Normal serum conditions	Control vs. 0.1	8,957	-1,532 to 19,45	No	ns	0,1237
		Control vs. 1	8,737	-1,752 to 19,23	No	ns	0,1394
		Control vs. 10	7,318	-3,171 to 17,81	No	ns	0,2798
		Control vs. 100	8,223	-2,266 to 18,71	No	ns	0,1819
		Control vs. 1000	0,1011	-10,39 to 10,59	No	ns	>0,9999
		Control vs. 10000	-38,14	-48,63 to -27,65	Yes	****	<0,0001
	Reduced-serum conditions	Control vs. 0.1	44,97	37,21 to 52,72	Yes	****	<0,0001
		Control vs. 1	43,43	35,68 to 51,19	Yes	****	<0,0001
		Control vs. 10	43,14	35,38 to 50,89	Yes	****	<0,0001
		Control vs. 100	40,9	33,15 to 48,66	Yes	****	<0,0001
		Control vs. 1000	26,66	18,91 to 34,41	Yes	****	<0,0001
		Control vs. 10000	-27,04	-34,79 to -19,28	Yes	****	<0,0001
	Serum-free conditions	Control vs. 0.1	75,63	69,09 to 82,17	Yes	****	<0,0001
		Control vs. 1	75,42	68,88 to 81,96	Yes	****	<0,0001
		Control vs. 10	76,88	70,34 to 83,42	Yes	****	<0,0001
		Control vs. 100	76,6	70,05 to 83,14	Yes	****	<0,0001
		Control vs. 1000	67,26	60,72 to 73,8	Yes	****	<0,0001
		Control vs. 10000	-10,25	-16,79 to -3,711	Yes	***	0,0005