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**Data base of Thirst response to post-exercise fluid replacement needs and controlled drinking**

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Es

## THIRST RESPONSE TO POST-EX

Catalina C

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Treatments	0%					
Subject	Age	Body mass	Height	USG	BP	Thirst
1	24	71,31	177,5	1,015	120/90	3
2	23	78,6	171,5	1,023	110/80	7
3	21	71,97	164	1,023	120/80	3
4	33	75,49	172	1,016	110/70	3
5	23	60,71	167	1,009	110/80	4
6	24	60,05	165,5	1,01	120/80	3
7	25	99,91	176	1,02	130/90	4
8	23	66,69	160	1,009	110/70	3

ta base de datos corresponde a la obra

## EXERCISE FLUID REPLACEMENT NEEDS AND CONTROLLED DRINKING

Capitán-Jiménez y Luis Fernando Aragón Vargas

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Initial condition						
1%						
Body mass	Height	USG	BP	Thirst	Body mass	Height
70,27	177,5	1,02	120/80	2	69,88	177,5
79,48	171,5	1,025	110/80	3	77,61	171,5
73,23	164	1,024	110/80	2	73,02	164
75,05	172	1,015	120/90	2	75,47	172
61,11	167	1,022	110/80	3	60,8	167
60,66	165,5	1,01	110/80	3	60,89	165,5
100,64	176	1,024	120/80	4	100,86	176
66,19	160	1,012	120/80	2	66,18	160



2%			3%			
USG	PA	Thirst	Body mass	Height	USG	BP
1,027	125/80	3	71,33	177,5	1,015	120/70
1,023	120/80	6	80,01	171,5	1,02	110/80
1,025	100/80	1	73,35	164	1,03	120/70
1,015	110/60	2	74,98	172	1,013	110/80
1,013	110/80	2	61,87	167	1,014	110/80
1,005	100/80	3	60,99	165,5	1,005	120/80
1,015	120/80	3	100,48	176	1,023	120/80
1,025	120/70	2	67,36	160	1,012	110/80

	BEFORE					
Thirst	Hct	Hb	BV	CV	PV	Hct
4	0,49	16,3	100	49	51	0,46
7	0,49	16,8	100	49	51	0,47
3	0,41	13,4	100	41	59	0,4
1	0,45	15,9	100	45	55	0,45
2	0,41	13,7	100	41	59	0,39
7	0,41	13,6	100	41	59	0,4
3	0,45	15,6	100	45	55	0,46
2	0,45	14,7	100	45	55	0,43



AFTER EXERCISE						
Hb	BV	CV	PV	% PV	Hct	Hb
15,7	103,821656	47,7579618	56,0636943	9,92881229	0,47	15,8
16,7	100,598802	47,2814371	53,3173653	4,54385347	0,45	15,8
13,2	101,515152	40,6060606	60,9090909	3,2357473	0,38	12,5
16,1	98,757764	44,4409938	54,3167702	-1,24223602	0,43	15,3
13,3	103,007519	40,1729323	62,8345865	6,4992991	0,36	11,7
13,3	102,255639	40,9022556	61,3533835	3,98878552	0,38	12,3
16	97,5	44,85	52,65	-4,27272727	0,41	14,5
14,2	103,521127	44,5140845	59,0070423	7,28553137	0,4	13,1

				0%		
AFTER REHYDRATION/0 MIN				60 MIN		
BV	CV	PV	% PV	Hct	Hb	BV
103,164557	48,4873418	54,6772152	7,21022586	0,47	15,7	103,821656
106,329114	47,8481013	58,4810127	14,6686523	0,44	15,5	108,387097
107,2	40,736	66,464	12,6508475	0,39	12,7	105,511811
103,921569	44,6862745	59,2352941	7,70053476	0,42	14,8	107,432432
117,094017	42,1538462	74,9401709	27,0172389	0,39	13,3	103,007519
110,569106	42,0162602	68,5528455	16,1912636	0,31	10	136
107,586207	44,1103448	63,4758621	15,4106583	0,43	15,2	102,631579
112,21374	44,8854962	67,3282443	22,4149896	0,41	13,6	108,088235



VIIN			120 MIN			
CV	PV	% PV	Hct	Hb	BV	CV
48,7961783	55,0254777	7,89309354	0,47	16	101,875	47,88125
47,6903226	60,6967742	19,0132827	0,45	16	105	47,25
41,1496063	64,3622047	9,08848258	0,38	12,8	104,6875	39,78125
45,1216216	62,3108108	13,2923833	0,38	13	122,307692	46,4769231
40,1729323	62,8345865	6,4992991	0,4	13,5	101,481481	40,5925926
42,16	93,84	59,0508475	0,33	11,6	117,241379	38,6896552
44,1315789	58,5	6,36363636	0,41	14,5	107,586207	44,1103448
44,3161765	63,7720588	15,9491979	0,41	13,5	108,888889	44,6444444





		180 MIN				
PV	% PV	Hct	Hb	BV	CV	PV
53,99375	5,87009804	0,45	15	108,666667	48,9	59,7666667
57,75	13,2352941	0,46	16,2	103,703704	47,7037037	56
64,90625	10,0105932	0,39	12,8	104,6875	40,828125	63,859375
75,8307692	37,8741259	0,43	15,4	103,246753	44,3961039	58,8506494
60,8888889	3,20150659	0,38	12,9	106,20155	40,3565891	65,8449612
78,5517241	33,1385155	0,41	13,5	100,740741	41,3037037	59,437037
63,4758621	15,4106583	0,4	14	111,428571	44,5714286	66,8571429
64,2444444	16,8080808	0,41	13,6	108,088235	44,3161765	63,7720588

	BEFORE					
% PV	Hct	Hb	BV	CV	PV	Hct
17,1895425	0,49	16,5	100	49	51	0,47
9,80392157	0,5	17,2	100	50	50	0,5
8,23622881	0,42	13,9	100	42	58	0,41
7,00118064	0,48	16,7	100	48	52	0,47
11,6016292	0,41	14	100	41	59	0,42
0,74074074	0,43	13,9	100	43	57	0,39
21,5584416	0,44	15,4	100	44	56	0,43
15,9491979	0,45	15,1	100	45	55	0,42



AFTER EXERCISE						
Hb	BV	CV	PV	% PV	Hct	Hb
16,1	102,484472	48,1677019	54,3167702	6,50347095	0,47	15,9
17,3	99,4219653	49,7109827	49,7109827	-0,57803468	0,48	16,3
14,2	97,8873239	40,1338028	57,7535211	-0,42496357	0,42	14,2
17,1	97,6608187	45,9005848	51,7602339	-0,46108862	0,42	14,8
13,9	100,719424	42,3021583	58,4172662	-0,98768443	0,4	14
13,1	106,10687	41,3816794	64,7251908	13,5529664	0,4	13,4
15,4	100	43	57	1,78571429	0,42	14,9
14,2	106,338028	44,6619718	61,6760563	12,1382843	0,39	12,8

1%						
AFTER REHYDRATION/0 MIN				60 MIN		
BV	CV	PV	% PV	Hct	Hb	BV
103,773585	48,7735849	55	7,84313725	0,47	15,7	105,095541
105,521472	50,6503067	54,8711656	9,74233129	0,46	16	107,5
97,8873239	41,1126761	56,7746479	-2,11267606	0,38	12,8	108,59375
112,837838	47,3918919	65,4459459	25,8575884	0,46	16,3	102,453988
100	40	60	1,69491525	0,39	13,3	105,263158
103,731343	41,4925373	62,238806	9,19088767	0,38	12,5	111,2
103,355705	43,409396	59,9463087	7,04697987	0,42	15,2	101,315789
117,96875	46,0078125	71,9609375	30,8380682	0,4	13,4	112,686567

VIIN			120 MIN			
CV	PV	% PV	Hct	Hb	BV	CV
49,3949045	55,7006369	9,21693518	0,48	16,2	101,851852	48,8888889
49,45	58,05	16,1	0,46	15,6	110,25641	50,7179487
41,265625	67,328125	16,0829741	0,4	13,4	103,731343	41,4925373
47,1288344	55,3251534	6,39452572	0,46	16	104,375	48,0125
41,0526316	64,2105263	8,83140054	0,4	13,8	101,449275	40,5797101
42,256	68,944	20,954386	0,4	13,2	105,30303	42,1212121
42,5526316	58,7631579	4,93421053	0,37	13,1	117,557252	43,4961832
45,0746269	67,6119403	22,9308005	0,41	13,9	108,633094	44,5395683



		180 MIN				
PV	% PV	Hct	Hb	BV	CV	PV
52,962963	3,84894699	0,48	16,3	101,226994	48,5889571	52,6380368
59,5384615	19,0769231	0,47	16,2	106,17284	49,9012346	56,2716049
62,238806	7,30828616	0,41	13,8	100,724638	41,2971014	59,4275362
56,3625	8,38942308	0,45	16,3	102,453988	46,1042945	56,3496933
60,8695652	3,16875461	0,4	13,3	105,263158	42,1052632	63,1578947
63,1818182	10,8452951	0,39	13,1	106,10687	41,3816794	64,7251908
74,0610687	32,2519084	0,37	12,9	119,379845	44,1705426	75,2093023
64,0935252	16,5336821	0,41	13,6	111,029412	45,5220588	65,5073529

Plasma volume						
	BEFORE					
% PV	Hct	Hb	BV	CV	PV%	Hct
3,21183688	0,49	16,6	100	49	51	0,48
12,5432099	0,51	17,7	100	51	49	0,49
2,46126937	0,43	14,3	100	43	57	0,41
8,36479471	0,44	15,6	100	44	56	0,46
7,04727921	0,4	13,5	100	40	60	0,39
13,5529664	0,42	13,8	100	42	58	0,4
34,3023256	0,44	15,4	100	44	56	0,43
19,1042781	0,43	14,4	100	43	57	0,45

AFTER EXERCISE						
Hb	BV	CV	PV	% PV	Hct	Hb
16,5	100,606061	48,2909091	52,3151515	2,57872846	0,48	16,5
17,4	101,724138	49,8448276	51,8793103	5,87614356	0,47	16,7
14	102,142857	41,8785714	60,2642857	5,72681704	0,37	12,5
16,4	95,1219512	43,7560976	51,3658537	-8,27526132	0,43	15,5
13,3	101,503759	39,5864662	61,9172932	3,19548872	0,36	12,3
13,3	103,759398	41,5037594	62,2556391	7,33730879	0,39	12,7
15,5	99,3548387	42,7225806	56,6322581	1,12903226	0,44	15,4
15,1	95,3642384	42,9139073	52,4503311	-7,98187522	0,43	14,5



2%						
AFTER REHYDRATION/0 MIN				60 MIN		
BV	CV	PV	% PV	Hct	Hb	BV
100,606061	48,2909091	52,3151515	2,57872846	0,45	15,5	107,096774
105,988024	49,8143713	56,1736527	14,6401075	0,47	16,4	107,926829
114,4	42,328	72,072	26,4421053	0,4	13,3	107,518797
100,645161	43,2774194	57,3677419	2,44239631	0,44	15,6	100
109,756098	39,5121951	70,2439024	17,0731707	0,32	10,8	125
108,661417	42,3779528	66,2834646	14,2818355	0,39	12,9	106,976744
100	44	56	0	0,43	15,3	100,653595
99,3103448	42,7034483	56,6068966	-0,68965517	0,44	14,8	97,2972973

VIIN			120 MIN			
CV	PV	% PV	Hct	Hb	BV	CV
48,1935484	58,9032258	15,4965212	0,48	16,3	101,840491	48,8834356
50,7256098	57,2012195	16,7371827	0,47	16,5	107,272727	50,4181818
43,0075188	64,5112782	13,177681	0,41	13,8	103,623188	42,4855072
44	56	0	0,43	15,3	101,960784	43,8431373
40	85	41,6666667	0,36	12,4	108,870968	39,1935484
41,7209302	65,255814	12,5100241	0,4	13,1	105,343511	42,1374046
43,2810458	57,372549	2,45098039	0,44	15,2	101,315789	44,5789474
42,8108108	54,4864865	-4,40967283	0,4	13,9	103,597122	41,4388489

		180 MIN				
PV	% PV	Hct	Hb	BV	CV	PV
52,9570552	3,83736317	0,5	17	97,6470588	48,8235294	48,8235294
56,8545455	16,0296846	0,5	17,2	102,906977	51,4534884	51,4534884
61,1376812	7,25908975	0,41	14,1	101,41844	41,5815603	59,8368794
58,1176471	3,78151261	0,43	15,3	101,960784	43,8431373	58,1176471
69,6774194	16,1290323	0,36	12,6	107,142857	38,5714286	68,5714286
63,2061069	8,97604633	0,4	13,2	104,545455	41,8181818	62,7272727
56,7368421	1,31578947	0,44	15,2	101,315789	44,5789474	56,7368421
62,1582734	9,04960242	0,41	14,4	100	41	59

	BEFORE					
% PV	Hct	Hb	BV	CV	PV	Hct
-4,26758939	0,5	16,5	100	50	50	0,5
5,00711913	0,48	17	100	48	52	0,47
4,97698146	0,42	14,3	100	42	58	0,44
3,78151261	0,46	16,7	100	46	54	0,47
14,2857143	0,39	13,2	100	39	61	0,39
8,15047022	0,41	13,4	100	41	59	0,4
1,31578947	0,43	15,2	100	43	57	0,46
3,50877193	0,46	15	100	46	54	0,44

AFTER EXERCISE						
Hb	BV	CV	PV	% PV	Hct	Hb
16,7	98,8023952	49,4011976	49,4011976	-1,19760479	0,48	16,1
16,6	102,409639	48,1325301	54,2771084	4,37905468	0,48	16,5
15,1	94,7019868	41,6688742	53,0331126	-8,563599	0,42	14,6
17	98,2352941	46,1705882	52,0647059	-3,583878	0,45	16,1
13,6	97,0588235	37,8529412	59,2058824	-2,94117647	0,41	14
13,3	100,75188	40,3007519	60,4511278	2,45953868	0,39	12,9
16,6	91,5662651	42,1204819	49,4457831	-13,253012	0,45	16,2
14,9	100,671141	44,295302	56,3758389	4,39970172	0,38	12,4

3%						
AFTER REHYDRATION/0 MIN				60 MIN		
BV	CV	PV	% PV	Hct	Hb	BV
102,484472	49,1925466	53,2919255	6,58385093	0,43	14,2	116,197183
103,030303	49,4545455	53,5757576	3,03030303	0,47	16,3	104,294479
97,9452055	41,1369863	56,8082192	-2,05479452	0,43	14,5	98,6206897
103,726708	46,6770186	57,0496894	5,64757304	0,44	16,2	103,08642
94,2857143	38,6571429	55,6285714	-8,80562061	0,4	13,5	97,7777778
103,875969	40,5116279	63,3643411	7,39718828	0,38	12,4	108,064516
93,8271605	42,2222222	51,6049383	-9,46502058	0,43	15,5	98,0645161
120,967742	45,9677419	75	38,8888889	0,43	14,3	104,895105

VIIN			120 MIN			
CV	PV	% PV	Hct	Hb	BV	CV
49,9647887	66,2323944	32,4647887	0,5	16,7	98,8023952	49,4011976
49,0184049	55,2760736	6,30014158	0,47	16,4	103,658537	48,7195122
42,4068966	56,2137931	-3,07966706	0,41	14,1	101,41844	41,5815603
45,3580247	57,7283951	6,9044353	0,46	16,3	102,453988	47,1288344
39,1111111	58,6666667	-3,82513661	0,39	13,5	97,7777778	38,1333333
41,0645161	67	13,559322	0,36	11,8	113,559322	40,8813559
42,1677419	55,8967742	-1,93548387	0,43	15,5	98,0645161	42,1677419
45,1048951	59,7902098	10,7226107	0,4	13,4	111,940299	44,7761194



		180 MIN				
PV	% PV	Hct	Hb	BV	CV	PV
49,4011976	-1,19760479	0,51	17	97,0588235	49,5	47,5588235
54,9390244	5,65196998	0,45	15,8	107,594937	48,4177215	59,1772152
59,8368794	3,1670335	0,42	14,1	101,41844	42,5957447	58,822695
55,3251534	2,45398773	0,46	16,7	100	46	54
59,6444444	-2,22222222	0,39	13,3	99,2481203	38,7067669	60,5413534
72,6779661	23,1829934	0,39	12,9	103,875969	40,5116279	63,3643411
55,8967742	-1,93548387	0,42	14,9	102,013423	42,8456376	59,1677852
67,1641791	24,3781095	0,4	13,4	111,940299	44,7761194	67,1641791



	0%					
% PV	Initial	Before exercise	After exercise	After rehydration	0 min	30 min
-4,88235294	120/90	120/70	120/70	110/80	110/80	110/80
13,8023369	110/80	120/80	120/90	120/70	120/70	120/90
1,41843972	120/80	120/70	120/80	100/70	100/70	110/70
0	110/70	110/80	120/90	120/80	120/80	110/70
-0,7518797	110/80	110/80	110/70	110/70	110/70	110/70
7,39718828	120/80	110/80	120/80	110/70	110/70	110/70
3,80313199	130/90	110/70	130/90	110/70	110/70	110/80
24,3781095	110/70	110/60	90/60	110/70	110/70	100/60



60 min	90 min	120 min	150 min	180 min	Initial	Before exercise
110/80	110/70	110/70	110/80	120/80	120/80	120/70
110/90	120/80	120/90	120/80	110/80	110/80	110/70
110/70	110/70	100/60	110/70	110/70	110/80	110/70
100/70	110/80	120/90	110/70	110/80	120/90	120/80
110/70	100/60	110/70	100/70	100/70	110/80	110/80
110/70	110/70	110/70	110/70	110/70	110/80	110/80
110/80	110/80	110/80	110/80	100/70	120/80	120/80
100/70	90/50	110/60	110/70	110/70	120/80	110/70



1%

After exercise	After rehydration	0 min	30 min	60 min	90 min	120 min
130/80	120/90	120/90	110/80	120/80	110/70	110/80
110/80	110/80	110/80	110/80	120/70	110/90	120/80
120/80	120/80	120/80	100/80	100/70	100/70	100/70
120/90	120/80	120/80	110/70	110/70	110/70	110/90
110/80	110/70	110/70	110/80	100/70	100/80	100/80
110/80	100/80	100/80	90/70	100/80	110/80	110/80
110/80	110/90	110/90	120/90	120/90	120/90	120/80
100/60	100/70	100/70	100/70	100/80	110/70	110/80

# Blood pressure

150 min	180 min	Initial	Before exercise	After exercise	After rehydration	0 min
120/70	110/80	125/80	120/69	120/80	110/80	110/80
110/80	110/90	120/80	120/70	130/80	120/90	120/90
100/80	110/80	100/80	110/80	100/70	100/80	100/80
120/80	110/70	110/60	120/80	100/80	100/80	100/80
100/70	100/70	110/80	100/80	100/60	100/70	100/70
110/80	110/80	100/80	110/70	110/80	110/70	110/70
120/90	120/90	120/80	130/80	120/90	110/80	110/80
100/70	110/70	120/70	100/70	100/70	100/70	100/70



2%

30 min	60 min	90 min	120 min	150 min	180 min	Initial
110/80	120/90	120/80	120/90	120/90	120/80	120/70
110/90	120/80	110/70	110/80	110/70	120/100	110/80
100/90	110/70	110/70	90/70	90/70	100/80	120/70
120/80	110/70	120/80	110/70	100/80	110/80	110/80
110/70	100/80	100/60	100/60	90/70	100/70	110/80
100/80	100/70	100/90	100/80	100/80	110/80	120/80
110/80	110/80	120/90	110/80	110/80	110/80	120/80
110/90	100/70	110/70	110/70	100/70	110/80	110/80



3%

Before exercise	After exercise	After rehydration	0 min	30 min	60 min	90 min
120/60	120/90	120/90	120/90	110/90	110/80	100/80
120/80	100/80	110/70	110/70	100/70	120/80	120/90
110/60	90/70	110/80	100/70	100/70	110/70	100/70
120/70	100/80	100/80	110/80	110/70	110/80	100/80
110/80	110/80	100/80	100/80	100/70	90/70	110/80
110/70	110/70	110/70	110/70	110/70	110/70	110/70
110/60	110/70	110/70	110/80	100/80	110/80	110/80
110/70	100/70	100/70	110/80	100/70	100/80	100/70



120 min	150 min	180 min	Initial	Before exercise	After exercise	After rehydration
110/80	100/80	120/90	3	2	3	1
120/70	110/80	110/80	7	5	4	1
100/80	100/70	100/70	3	1	1	1
110/80	110/70	110/80	3	1	1	1
110/90	110/90	100/80	4	1	2	1
110/80	100/80	100/80	3	2	2	1
120/80	120/80	120/80	4	4	3	1
100/80	110/80	110/80	3	1	5	1



0%						
0 min	30 min	60 min	90 min	120 min	150 min	180 min
1	1	2	1	2	3	4
1	1	2	2	2	3	3
1	1	1	1	2	2	2
1	1	1	1	1	1	1
1	1	1	2	2	3	2
1	1	1	1	2	2	2
1	1	1	1	1	2	2
1	2	2	2	3	2	2





1%						
Initial	Before exercise	After exercise	After rehydration	0 min	30 min	60 min
2	1	5	1	1	1	1
3	2	6	2	2	2	1
2	1	4	1	1	1	1
2	1	1	1	1	1	1
3	2	3	2	1	1	1
3	2	8	2	1	1	2
4	2	2	1	1	1	1
2	2	5	1	1	1	2

### Thirst perception

90 min	120 min	150 min	180 min	Initial	Before exercise	After exercise
2	2	3	2	3	2	7
2	2	3	6	6	3	8
1	2	3	4	1	1	7
1	1	1	1	2	1	6
1	1	1	1	2	2	2
2	2	3	5	3	3	9
1	2	1	2	3	3	4
2	2	2	2	2	2	8

2%

After rehydration	0 min	30 min	60 min	90 min	120 min	150 min
3	3	2	1	1	2	2
3	3	4	4	3	4	4
1	1	1	1	1	2	2
3	3	2	2	1	1	1
2	2	3	4	4	5	4
6	6	5	5	4	3	4
1	1	1	1	2	2	2
2	2	3	3	3	4	4



	3%					
180 min	Initial	Before exercise	After exercise	After rehydration	0 min	30 min
2	4	2	8	2	1	2
4	7	3	9	5	5	4
3	3	1	9	8	2	1
1	1	2	8	3	3	1
5	2	1	9	7	6	4
3	7	6	9	7	6	5
3	3	2	9	8	8	8
5	2	2	8	1	1	2

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60 min	90 min	120 min	150 min	180 min	0 min	30 min
2	1	2	3	3	192	298
4	5	5	4	5	63	212
1	1	2	3	3	72	84
1	1	1	1	1	120	142
4	2	2	2	1	122	257
5	4	3	3	3	136	66
7	7	7	8	7	73	276
3	3	3	4	4	149	419

# Urine output

0%

60 min	90 min	120 min	150 min
385	314	183	106
256	150	102	75
176	64	39	34
221	157	130	102
341	75	73	0
0	113	111	35
438	237	135	92
395	73	88	51