

Table format: Grouped		Group A							Group B						
		Veículo salina estéril							MCH						
		A:1	A:2	A:3	A:4	A:5	A:6	A:7	B:1	B:2	B:3	B:4	B:5	B:6	B:7
1	basal	5.251686	7.547112	7.456747	7.986187	7.246444	6.644011		6.466236						
2	10 min	6.890555	10.454090	10.384160	9.220604	7.838910	8.048388		7.643616						
3	20 min	10.035070	13.774680	11.694830	14.002010	11.647210	15.852870		11.179320						
4	30 min	12.493750	14.020520	12.611240	15.178030	12.189300	15.514930		12.201960						
5	40 min	11.638660	13.805610	12.082710	16.103410	10.995160	15.696240		11.644020						

Table format: Grouped		Group A							Group B				
		Veículo							MCH				
		A:1	A:2	A:3	A:4	A:5	A:6	A:7	B:1	B:2	B:3	B:4	B:5
1	basal	133.093200	99.911460	116.635000	96.082620	118.900700	98.196900		95.706340	97.191390	111.545300	100.759500	111.570700
2	10 min	141.500500	167.714300	145.442000	121.964500	116.944400	121.995000		126.951000	113.298000	134.920000	132.180000	127.614000
3	20 min	196.187000	186.615300	197.497300	192.230000	217.499300	198.987000		149.872000	145.813000	184.933000	176.251000	177.500500
4	30 min	173.377300	178.613400	198.272000	181.621000	210.827400	201.755800		144.375000	163.802000	182.864500	162.528500	172.923200
5	40 min	171.567000	163.780000	186.184500	182.373000	204.185000	197.147700		144.834000	160.651500	195.987000	152.428000	177.216300

	B:6	B:7
1	02.160300	96.191060
2	40.988600	129.378600
3	200.852000	193.521500
4	89.155800	172.057500
5	79.773000	167.615500

Table format: Grouped		Group A							Group B			
		Veículo							MCH			
		A:1	A:2	A:3	A:4	A:5	A:6	A:7	B:1	B:2	B:3	B:4
1	basal	695.614700	751.120800	872.835300	775.027000	857.887300	644.656200		612.955400	663.459900	640.802200	644.471000
2	10 min	975.017000	1753.301000	1306.807000	1124.586000	1273.935000	981.863000		984.053400	655.692600	972.754500	944.734900
3	20 min	2309.629000	2731.704000	2451.172000	2691.607000	2533.068000	3152.271000		1676.413000	1210.042000	1969.223000	2032.261000
4	30 min	2165.960000	2503.701000	2540.126000	2756.649000	2570.295000	3130.420000		1761.809000	1621.772000	2059.470000	2170.588000
5	40 min	2016.898000	2263.638000	2249.614000	2936.827000	2244.391000	3093.194000		1686.450000	1595.921000	2269.206000	1977.888000

				Group C						
				Data Set-C						
	B:5	B:6	B:7	C:1	C:2	C:3	C:4	C:5	C:6	C:7
1	811.973900	692.765500	690.640400							
2	939.691500	1429.316000	834.768300							
3	951.812000	2318.092000	2303.354000							
4	2117.323000	2336.262000	2159.161000							
5	2251.511000	2214.583000	2096.861000							

Table format: Grouped		Group A							Group B						
		Veículo							MCH						
		A:1	A:2	A:3	A:4	A:5	A:6	A:7	B:1	B:2	B:3	B:4	B:5	B:6	B:7
1	basal	7.548015	6.786684	9.023643	8.094401				6.443955						
2	7%CO <sub>2</sub>	12.855160	11.084810	15.001080	11.406070				11.633330						

Table format: Grouped		Group A						Group B					
		Vehicle						MCH					
		A:1	A:2	A:3	A:4	A:5	A:6	B:1	B:2	B:3	B:4	B:5	B:6
1	basal	88.809750	109.288600	82.690230	97.232950			85.433600					
2	7%CO <sub>2</sub>	176.357500	176.246800	169.908500	203.423300			145.344300					

Table format: <b>Grouped</b>		Group A						Group B				
		Vehicle						MCH				
		A:1	A:2	A:3	A:4	A:5	A:6	B:1	B:2	B:3	B:4	B:5
1	basal	668.502100	742.195800	742.020000	784.687500			551.926600	626.524600	597.667300	575.112800	636.382600
2	7%CO <sub>2</sub>	2266.963000	1957.752000	2547.133000	2318.899000			1689.954000	1563.625000	2104.869000	2050.882000	1999.712000

	<b>B:6</b>
<b>1</b>	631.4664
<b>2</b>	2077.0190

2way ANOVA ANOVA results						
1	Table Analyzed	VE awake				
2						
3	<b>Two-way ANOVA</b>	Ordinary				
4	Alpha	0.05				
5						
6	<b>Source of Variation</b>	<b>% of total variation</b>	<b>P value</b>	<b>P value summary</b>	<b>Significant?</b>	
7	Interaction	2.154	0.0511	ns	No	
8	Tempo	79.86	<0.0001	****	Yes	
9	Tratamento	7.650	<0.0001	****	Yes	
10						
11	<b>ANOVA table</b>	<b>SS (Type III)</b>	<b>DF</b>	<b>MS</b>	<b>F (DFn, DFd)</b>	<b>P value</b>
12	Interaction	811380	4	202845	F (4, 55) = 2.525	P=0.0511
13	Tempo	30078093	4	7519523	F (4, 55) = 93.60	P<0.0001
14	Tratamento	2881172	1	2881172	F (1, 55) = 35.86	P<0.0001
15	Residual	4418497	55	80336		
16						
17	<b>Difference between column means</b>					
18	Predicted (LS) mean of Veículo	1945				
19	Predicted (LS) mean of MCH	1523				
20	Difference between predicted means	422.3				
21	SE of difference	70.52				
22	95% CI of difference	281.0 to 563.7				

2way ANOVA Multiple comparisons				
1	Compare each cell mean with the other cell mean in that row			
2				
3	Number of families	1		
4	Number of comparisons per family	5		
5	Alpha	0.05		
6				
7	<b>Bonferroni's multiple comparisons test</b>	<b>Predicted (LS) mean diff.</b>	<b>95.00% CI of diff.</b>	<b>Significant?</b>
8				
9	MCH - Veículo			
10	basal	-86.61	-507.4 to 334.1	No
11	10 min	-270.1	-690.8 to 150.7	No
12	20 min	-721.9	-1143 to -301.1	Yes
13	30 min	-578.9	-999.6 to -158.1	Yes
14	40 min	-454.2	-875.0 to -33.47	Yes
15				
16				
17	<b>Test details</b>	<b>Predicted (LS) mean 1</b>	<b>Predicted (LS) mean 2</b>	<b>Predicted (LS) mean diff.</b>
18				
19	MCH - Veículo			
20	basal	679.6	766.2	-86.61
21	10 min	965.9	1236	-270.1
22	20 min	1923	2645	-721.9
23	30 min	2032	2611	-578.9
24	40 min	2013	2467	-454.2

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7	<b>Summary</b>				
8					
9					
10	ns				
11	ns				
12	***				
13	**				
14	*				
15					
16					
17	<b>SE of diff.</b>	<b>N1</b>	<b>N2</b>	<b>t</b>	<b>DF</b>
18					
19					
20	157.7	7	6	0.5492	55.00
21	157.7	7	6	1.713	55.00
22	157.7	7	6	4.578	55.00
23	157.7	7	6	3.671	55.00
24	157.7	7	6	2.880	55.00

Data analyzed: VE awake

Source of Variation	Degrees of Freedom	Sum of Squares	Mean square
Tratamento	1	2881172	2881172
Tempo	4	30078093	7519523
Interaction	4	811380	202845
Residual (error)	55	4418497	80336
Total	64	37664262	

Does Tratamento have the same effect at all values of Tempo?

Interaction accounts for 2.154 of the total variance.

$F = 2.52$ .  $DF_n = 4$ ,  $DF_d = 55$

The P value = 0.0511

If there is no interaction overall, there is a 5.1% chance of randomly observing so much interaction in an experiment of this size. The interaction is considered not quite significant.

Does Tratamento affect the result?

Tratamento accounts for 7.65 of the total variance.

$F = 35.86$ .  $DF_n = 1$ ,  $DF_d = 55$

The P value is  $< 0.0001$

If Tratamento has no effect overall, there is a less than 0.01% chance of randomly observing an effect this big (or bigger) in an experiment of this size. The effect is considered extremely significant.

Does Tempo affect the result?

Tempo accounts for 79.86 of the total variance.

$F = 93.60$ .  $DF_n = 4$ ,  $DF_d = 55$

The P value is  $< 0.0001$

If Tempo has no effect overall, there is a less than 0.01% chance of randomly observing an effect this big (or bigger) in an experiment of this size. The effect is considered extremely significant.

2way ANOVA ANOVA results						
1	Table Analyzed	Vt awake				
2						
3	<b>Two-way ANOVA</b>	Ordinary				
4	Alpha	0.05				
5						
6	<b>Source of Variation</b>	<b>% of total variation</b>	<b>P value</b>	<b>P value summary</b>	<b>Significant?</b>	
7	Interaction	0.8932	0.6477	ns	No	
8	Time	74.54	<0.0001	****	Yes	
9	Treatment	5.340	0.0003	***	Yes	
10						
11	<b>ANOVA table</b>	<b>SS (Type III)</b>	<b>DF</b>	<b>MS</b>	<b>F (DFn, DFd)</b>	<b>P value</b>
12	Interaction	4.852	4	1.213	F (4, 55) = 0.6236	P=0.6477
13	Time	404.9	4	101.2	F (4, 55) = 52.04	P<0.0001
14	Treatment	29.01	1	29.01	F (1, 55) = 14.91	P=0.0003
15	Residual	107.0	55	1.945		
16						
17	<b>Difference between column means</b>					
18	Predicted (LS) mean of Veículo salina estéril	11.14				
19	Predicted (LS) mean of MCH	9.803				
20	Difference between predicted means	1.340				
21	SE of difference	0.3470				
22	95% CI of difference	0.6446 to 2.035				

2way ANOVA Multiple comparisons				
1	Compare each cell mean with the other cell mean in that row			
2				
3	Number of families	1		
4	Number of comparisons per family	5		
5	Alpha	0.05		
6				
7	<b>Bonferroni's multiple comparisons test</b>	<b>Predicted (LS) mean diff.</b>	<b>95.00% CI of diff.</b>	<b>Significant?</b>
8				
9	MCH - Veículo salina estéril			
10	basal	-0.3390	-2.409 to 1.731	No
11	10 min	-1.420	-3.491 to 0.6500	No
12	20 min	-1.954	-4.024 to 0.1165	No
13	30 min	-1.680	-3.750 to 0.3908	No
14	40 min	-1.307	-3.378 to 0.7630	No
15				
16				
17	<b>Test details</b>	<b>Predicted (LS) mean 1</b>	<b>Predicted (LS) mean 2</b>	<b>Predicted (LS) mean diff.</b>
18				
19	MCH - Veículo salina estéril			
20	basal	6.683	7.022	-0.3390
21	10 min	7.386	8.806	-1.420
22	20 min	10.88	12.83	-1.954
23	30 min	11.99	13.67	-1.680
24	40 min	12.08	13.39	-1.307

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7	<b>Summary</b>				
8					
9					
10	ns				
11	ns				
12	ns				
13	ns				
14	ns				
15					
16					
17	<b>SE of diff.</b>	<b>N1</b>	<b>N2</b>	<b>t</b>	<b>DF</b>
18					
19					
20	0.7759	7	6	0.4368	55.00
21	0.7759	7	6	1.830	55.00
22	0.7759	7	6	2.518	55.00
23	0.7759	7	6	2.165	55.00
24	0.7759	7	6	1.685	55.00

Data analyzed: Vt awake

Source of Variation	Degrees of Freedom	Sum of Squares	Mean square
Treatment	1	29.01	29.01
Time	4	404.9	101.2
Interaction	4	4.852	1.213
Residual (error)	55	107.0	1.945
Total	64	543.2	

Does Treatment have the same effect at all values of Time?

Interaction accounts for 0.8932 of the total variance.

$F = 0.62$ .  $DF_n = 4$ ,  $DF_d = 55$

The P value = 0.6477

If there is no interaction overall, there is a 65% chance of randomly observing so much interaction in an experiment of this size. The interaction is considered not significant.

Does Treatment affect the result?

Treatment accounts for 5.34 of the total variance.

$F = 14.91$ .  $DF_n = 1$ ,  $DF_d = 55$

The P value = 0.0003

If Treatment has no effect overall, there is a 0.03% chance of randomly observing an effect this big (or bigger) in an experiment of this size. The effect is considered extremely significant.

Does Time affect the result?

Time accounts for 74.54 of the total variance.

$F = 52.04$ .  $DF_n = 4$ ,  $DF_d = 55$

The P value is  $< 0.0001$

If Time has no effect overall, there is a less than 0.01% chance of randomly observing an effect this big (or bigger) in an experiment of this size. The effect is considered extremely significant.

2way ANOVA ANOVA results						
1	Table Analyzed	FR awake				
2						
3	<b>Two-way ANOVA</b>	Ordinary				
4	Alpha	0.05				
5						
6	<b>Source of Variation</b>	<b>% of total variation</b>	<b>P value</b>	<b>P value summary</b>	<b>Significant?</b>	
7	Interaction	0.8521	0.5514	ns	No	
8	time	80.07	<0.0001	****	Yes	
9	treatment	4.472	0.0002	***	Yes	
10						
11	<b>ANOVA table</b>	<b>SS (Type III)</b>	<b>DF</b>	<b>MS</b>	<b>F (DFn, DFd)</b>	<b>P value</b>
12	Interaction	682.5	4	170.6	F (4, 55) = 0.7668	P=0.5514
13	time	64136	4	16034	F (4, 55) = 72.06	P<0.0001
14	treatment	3582	1	3582	F (1, 55) = 16.10	P=0.0002
15	Residual	12238	55	222.5		
16						
17	<b>Difference between column means</b>					
18	Predicted (LS) mean of Veículo	163.9				
19	Predicted (LS) mean of MCH	149.0				
20	Difference between predicted means	14.89				
21	SE of difference	3.711				
22	95% CI of difference	7.454 to 22.33				

2way ANOVA Multiple comparisons				
1	Compare each cell mean with the other cell mean in that row			
2				
3	Number of families	1		
4	Number of comparisons per family	5		
5	Alpha	0.05		
6				
7	<b>Bonferroni's multiple comparisons test</b>	<b>Predicted (LS) mean diff.</b>	<b>95.00% CI of diff.</b>	<b>Significant?</b>
8				
9	Veículo - MCH			
10	basal	8.309	-13.83 to 30.45	No
11	10 min	6.594	-15.55 to 28.74	No
12	20 min	22.63	0.4911 to 44.78	Yes
13	30 min	21.07	-1.071 to 43.22	No
14	40 min	15.85	-6.295 to 37.99	No
15				
16				
17	<b>Test details</b>	<b>Predicted (LS) mean 1</b>	<b>Predicted (LS) mean 2</b>	<b>Predicted (LS) mean diff.</b>
18				
19	Veículo - MCH			
20	basal	110.5	102.2	8.309
21	10 min	135.9	129.3	6.594
22	20 min	198.2	175.5	22.63
23	30 min	190.7	169.7	21.07
24	40 min	184.2	168.4	15.85

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7	<b>Summary</b>	<b>Adjusted P Value</b>			
8					
9					
10	ns	>0.9999			
11	ns	>0.9999			
12	*	0.0428			
13	ns	0.0699			
14	ns	0.3070			
15					
16					
17	<b>SE of diff.</b>	<b>N1</b>	<b>N2</b>	<b>t</b>	<b>DF</b>
18					
19					
20	8.299	6	7	1.001	55.00
21	8.299	6	7	0.7945	55.00
22	8.299	6	7	2.727	55.00
23	8.299	6	7	2.539	55.00
24	8.299	6	7	1.910	55.00

Data analyzed: FR awake

Source of Variation	Degrees of Freedom	Sum of Squares	Mean square
treatment	1	3582	3582
time	4	64136	16034
Interaction	4	682.5	170.6
Residual (error)	55	12238	222.5
Total	64	80096	

Does treatment have the same effect at all values of time?

Interaction accounts for 0.8521 of the total variance.

$F = 0.77$ .  $DF_n = 4$ ,  $DF_d = 55$

The P value = 0.5514

If there is no interaction overall, there is a 55% chance of randomly observing so much interaction in an experiment of this size. The interaction is considered not significant.

Does treatment affect the result?

treatment accounts for 4.472 of the total variance.

$F = 16.10$ .  $DF_n = 1$ ,  $DF_d = 55$

The P value = 0.0002

If treatment has no effect overall, there is a 0.018% chance of randomly observing an effect this big (or bigger) in an experiment of this size. The effect is considered extremely significant.

Does time affect the result?

time accounts for 80.07 of the total variance.

$F = 72.06$ .  $DF_n = 4$ ,  $DF_d = 55$

The P value is  $< 0.0001$

If time has no effect overall, there is a less than 0.01% chance of randomly observing an effect this big (or bigger) in an experiment of this size. The effect is considered extremely significant.

2way ANOVA ANOVA results						
1	Table Analyzed	VE sleep				
2						
3	<b>Two-way ANOVA</b>	Ordinary				
4	Alpha	0.05				
5						
6	<b>Source of Variation</b>	<b>% of total variation</b>	<b>P value</b>	<b>P value summary</b>	<b>Significant?</b>	
7	Interaction	0.5826	0.1580	ns	No	
8	Row Factor	91.66	<0.0001	****	Yes	
9	Column Factor	2.705	0.0057	**	Yes	
10						
11	<b>ANOVA table</b>	<b>SS (Type III)</b>	<b>DF</b>	<b>MS</b>	<b>F (DFn, DFd)</b>	<b>P value</b>
12	Interaction	61929	1	61929	F (1, 16) = 2.194	P=0.1580
13	Row Factor	9743572	1	9743572	F (1, 16) = 345.2	P<0.0001
14	Column Factor	287549	1	287549	F (1, 16) = 10.19	P=0.0057
15	Residual	451604	16	28225		
16						
17	<b>Difference between column means</b>					
18	Predicted (LS) mean of Vehicle	1504				
19	Predicted (LS) mean of MCH	1259				
20	Difference between predicted means	244.8				
21	SE of difference	76.68				
22	95% CI of difference	82.20 to 407.3				
23						
24	<b>Difference between row means</b>					
25	Predicted (LS) mean of basal	668.8				
26	Predicted (LS) mean of 7%CO <sub>2</sub>	2094				
27	Difference between predicted means	-1425				
28	SE of difference	76.68				
29	95% CI of difference	-1587 to -1262				
30						
31	<b>Interaction CI</b>					

2way ANOVA ANOVA results						
32	Mean diff, A1 - B1	131.2				
33	Mean diff, A2 - B2	358.3				
34	(A1 - B1) - (A2 - B2)	-227.2				
35	95% CI of difference	-552.3 to 97.95				
36	(B1 - A1) - (B2 - A2)	227.2				
37	95% CI of difference	-97.95 to 552.3				

2way ANOVA Multiple comparisons				
1	Compare each cell mean with the other cell mean in that row			
2				
3	Number of families	1		
4	Number of comparisons per family	2		
5	Alpha	0.05		
6				
7	<b>Bonferroni's multiple comparisons test</b>	<b>Predicted (LS) mean diff.</b>	<b>95.00% CI of diff.</b>	<b>Significant?</b>
8				
9	Vehicle - MCH			
10	basal	131.2	-137.0 to 399.3	No
11	7%CO <sub>2</sub>	358.3	90.17 to 626.5	Yes
12				
13				
14	<b>Test details</b>	<b>Predicted (LS) mean 1</b>	<b>Predicted (LS) mean 2</b>	<b>Predicted (LS) mean diff.</b>
15				
16	Vehicle - MCH			
17	basal	734.4	603.2	131.2
18	7%CO <sub>2</sub>	2273	1914	358.3

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7	<b>Summary</b>	<b>Adjusted P Value</b>			
8					
9					
10	ns	0.4880			
11	**	0.0090			
12					
13					
14	<b>SE of diff.</b>	<b>N1</b>	<b>N2</b>	<b>t</b>	<b>DF</b>
15					
16					
17	108.4	4	6	1.210	16.00
18	108.4	4	6	3.304	16.00

2way ANOVA ANOVA results						
1	Table Analyzed	Vt sleep				
2						
3	<b>Two-way RM ANOVA</b>	Matching: Stacked				
4	Assume sphericity?	Yes				
5	Alpha	0.05				
6						
7	<b>Source of Variation</b>	<b>% of total variation</b>	<b>P value</b>	<b>P value summary</b>	<b>Significant?</b>	
8	Interaction	0.2768	0.4979	ns	No	
9	Time	77.22	<0.0001	****	Yes	
10	Treatment	3.953	0.0978	ns	No	
11	Subject	9.004	0.1650	ns	No	
12						
13	<b>ANOVA table</b>	<b>SS</b>	<b>DF</b>	<b>MS</b>	<b>F (DFn, DFd)</b>	<b>P value</b>
14	Interaction	0.4343	1	0.4343	F (1, 8) = 0.5042	P=0.4979
15	Time	121.2	1	121.2	F (1, 8) = 140.7	P<0.0001
16	Treatment	6.203	1	6.203	F (1, 8) = 3.512	P=0.0978
17	Subject	14.13	8	1.766	F (8, 8) = 2.050	P=0.1650
18	Residual	6.891	8	0.8614		
19						
20	<b>Difference between row means</b>					
21	Mean of basal	7.144				
22	Mean of 7%CO <sub>2</sub>	12.17				
23	Difference between means	-5.024				
24	SE of difference	0.4236				
25	95% CI of difference	-6.001 to -4.047				
26						
27	<b>Difference between column means</b>					
28	Mean of Veículo	10.22				
29	Mean of MCH	9.088				
30	Difference between means	1.137				
31	SE of difference	0.6066				

2way ANOVA ANOVA results						
32	95% CI of difference	-0.2620 to 2.536				
33						
34	<b>Interaction CI</b>					
35	Mean diff, A1 - B1	1.438				
36	Mean diff, A2 - B2	0.8360				
37	(A1 - B1) - (A2 - B2)	0.6016				
38	95% CI of difference	-1.352 to 2.555				
39	(B1 - A1) - (B2 - A2)	-0.6016				
40	95% CI of difference	-2.555 to 1.352				
41						
42	<b>Data summary</b>					
43	Number of columns (Treatment)	2				
44	Number of rows (Time)	2				
45	Number of subjects (Subject)	10				

2way ANOVA Multiple comparisons				
1	Compare each cell mean with the other cell mean in that row			
2				
3	Number of families	1		
4	Number of comparisons per family	2		
5	Alpha	0.05		
6				
7	<b>Bonferroni's multiple comparisons test</b>	<b>Predicted (LS) mean diff.</b>	<b>95.00% CI of diff.</b>	<b>Significant?</b>
8				
9	Veículo - MCH			
10	basal	1.438	-0.3920 to 3.267	No
11	7%CO <sub>2</sub>	0.8360	-0.9936 to 2.666	No
12				
13				
14	<b>Test details</b>	<b>Predicted (LS) mean 1</b>	<b>Predicted (LS) mean 2</b>	<b>Predicted (LS) mean diff.</b>
15				
16	Veículo - MCH			
17	basal	7.863	6.426	1.438
18	7%CO <sub>2</sub>	12.59	11.75	0.8360

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7	<b>Summary</b>	<b>Adjusted P Value</b>			
8					
9					
10	ns	0.1396			
11	ns	0.5503			
12					
13					
14	<b>SE of diff.</b>	<b>N1</b>	<b>N2</b>	<b>t</b>	<b>DF</b>
15					
16					
17	0.7399	4	6	1.943	16.00
18	0.7399	4	6	1.130	16.00

2way ANOVA ANOVA results						
1	Table Analyzed	fR sleep				
2						
3	<b>Two-way RM ANOVA</b>	Matching: Stacked				
4	Assume sphericity?	Yes				
5	Alpha	0.05				
6						
7	<b>Source of Variation</b>	<b>% of total variation</b>	<b>P value</b>	<b>P value summary</b>	<b>Significant?</b>	
8	Interaction	1.241	0.0548	ns	No	
9	Time	91.11	<0.0001	****	Yes	
10	Treatment	1.293	0.1874	ns	No	
11	Subject	4.975	0.1053	ns	No	
12						
13	<b>ANOVA table</b>	<b>SS</b>	<b>DF</b>	<b>MS</b>	<b>F (DFn, DFd)</b>	<b>P value</b>
14	Interaction	396.7	1	396.7	F (1, 8) = 5.051	P=0.0548
15	Time	29119	1	29119	F (1, 8) = 370.8	P<0.0001
16	Treatment	413.1	1	413.1	F (1, 8) = 2.079	P=0.1874
17	Subject	1590	8	198.7	F (8, 8) = 2.531	P=0.1053
18	Residual	628.2	8	78.53		
19						
20	<b>Difference between row means</b>					
21	Mean of basal	94.41				
22	Mean of 7%CO <sub>2</sub>	172.3				
23	Difference between means	-77.89				
24	SE of difference	4.045				
25	95% CI of difference	-87.22 to -68.56				
26						
27	<b>Difference between column means</b>					
28	Mean of Vehicle	138.0				
29	Mean of MCH	128.7				
30	Difference between means	9.277				
31	SE of difference	6.435				

2way ANOVA ANOVA results						
32	95% CI of difference	-5.561 to 24.12				
33						
34	<b>Interaction CI</b>					
35	Mean diff, A1 - B1	0.1865				
36	Mean diff, A2 - B2	18.37				
37	(A1 - B1) - (A2 - B2)	-18.18				
38	95% CI of difference	-36.84 to 0.4736				
39	(B1 - A1) - (B2 - A2)	18.18				
40	95% CI of difference	-0.4736 to 36.84				
41						
42	<b>Data summary</b>					
43	Number of columns (Treatment)	2				
44	Number of rows (Time)	2				
45	Number of subjects (Subject)	10				

2way ANOVA Multiple comparisons				
1	Compare each cell mean with the other cell mean in that row			
2				
3	Number of families	1		
4	Number of comparisons per family	2		
5	Alpha	0.05		
6				
7	<b>Bonferroni's multiple comparisons test</b>	<b>Predicted (LS) mean diff.</b>	<b>95.00% CI of diff.</b>	<b>Significant?</b>
8				
9	Vehicle - MCH			
10	basal	0.1865	-18.61 to 18.98	No
11	7%CO <sub>2</sub>	18.37	-0.4271 to 37.16	No
12				
13				
14	<b>Test details</b>	<b>Predicted (LS) mean 1</b>	<b>Predicted (LS) mean 2</b>	<b>Predicted (LS) mean diff.</b>
15				
16	Vehicle - MCH			
17	basal	94.51	94.32	0.1865
18	7%CO <sub>2</sub>	181.5	163.1	18.37

1					
2					
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6					
7	<b>Summary</b>	<b>Adjusted P Value</b>			
8					
9					
10	ns	>0.9999			
11	ns	0.0559			
12					
13					
14	<b>SE of diff.</b>	<b>N1</b>	<b>N2</b>	<b>t</b>	<b>DF</b>
15					
16					
17	7.600	4	6	0.02454	16.00
18	7.600	4	6	2.417	16.00

2way ANOVA ANOVA results						
1	Table Analyzed	VE awake				
2						
3	<b>Two-way ANOVA</b>	Ordinary				
4	Alpha	0.05				
5						
6	<b>Source of Variation</b>	<b>% of total variation</b>	<b>P value</b>	<b>P value summary</b>	<b>Significant?</b>	
7	Interaction	2.154	0.0511	ns	No	
8	Row Factor	79.86	<0.0001	****	Yes	
9	Column Factor	7.650	<0.0001	****	Yes	
10						
11	<b>ANOVA table</b>	<b>SS (Type III)</b>	<b>DF</b>	<b>MS</b>	<b>F (DFn, DFd)</b>	<b>P value</b>
12	Interaction	811380	4	202845	F (4, 55) = 2.525	P=0.0511
13	Row Factor	30078093	4	7519523	F (4, 55) = 93.60	P<0.0001
14	Column Factor	2881172	1	2881172	F (1, 55) = 35.86	P<0.0001
15	Residual	4418497	55	80336		
16						
17	<b>Difference between column means</b>					
18	Predicted (LS) mean of Veículo	1945				
19	Predicted (LS) mean of MCH	1523				
20	Difference between predicted means	422.3				
21	SE of difference	70.52				
22	95% CI of difference	281.0 to 563.7				

2way ANOVA Multiple comparisons				
1	Compare each cell mean with the other cell mean in that row			
2				
3	Number of families	1		
4	Number of comparisons per family	5		
5	Alpha	0.05		
6				
7	<b>Bonferroni's multiple comparisons test</b>	<b>Predicted (LS) mean diff.</b>	<b>95.00% CI of diff.</b>	<b>Significant?</b>
8				
9	Veículo - MCH			
10	basal	86.61	-334.1 to 507.4	No
11	10 min	270.1	-150.7 to 690.8	No
12	20 min	721.9	301.1 to 1143	Yes
13	30 min	578.9	158.1 to 999.6	Yes
14	40 min	454.2	33.47 to 875.0	Yes
15				
16				
17	<b>Test details</b>	<b>Predicted (LS) mean 1</b>	<b>Predicted (LS) mean 2</b>	<b>Predicted (LS) mean diff.</b>
18				
19	Veículo - MCH			
20	basal	766.2	679.6	86.61
21	10 min	1236	965.9	270.1
22	20 min	2645	1923	721.9
23	30 min	2611	2032	578.9
24	40 min	2467	2013	454.2

1					
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6					
7	<b>Summary</b>	<b>Adjusted P Value</b>			
8					
9					
10	ns	>0.9999			
11	ns	0.4621			
12	***	0.0001			
13	**	0.0027			
14	*	0.0282			
15					
16					
17	<b>SE of diff.</b>	<b>N1</b>	<b>N2</b>	<b>t</b>	<b>DF</b>
18					
19					
20	157.7	6	7	0.5492	55.00
21	157.7	6	7	1.713	55.00
22	157.7	6	7	4.578	55.00
23	157.7	6	7	3.671	55.00
24	157.7	6	7	2.880	55.00

Row stats		A			B		
		Veículo			MCH		
		Mean	SD	N	Mean	SD	N
1	basal	766.190	89.262	6	679.581	64.884	7
2	10 min	1235.918	289.539	6	965.859	234.411	7
3	20 min	2644.909	293.116	6	1923.028	384.011	7
4	30 min	2611.192	318.517	6	2032.341	250.757	7
5	40 min	2467.427	436.718	6	2013.203	274.475	7

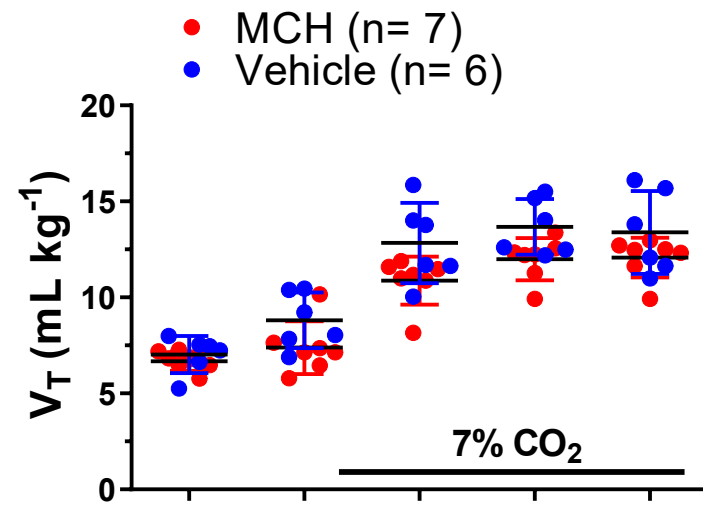
Row stats		A			B		
		Veículo salina estéril			MCH		
		Mean	SD	N	Mean	SD	N
1	basal	7.022	0.972	6	6.683	0.510	7
2	10 min	8.806	1.453	6	7.386	1.374	7
3	20 min	12.834	2.093	6	10.881	1.249	7
4	30 min	13.668	1.449	6	11.988	1.100	7
5	40 min	13.387	2.162	6	12.080	1.034	7

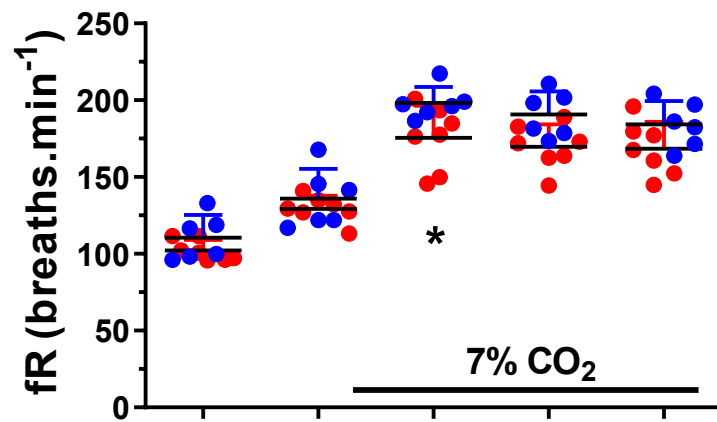
Row stats		A			B		
		Veículo			MCH		
		Mean	SD	N	Mean	SD	N
1	basal	110.470	14.765	6	102.161	6.838	7
2	10 min	135.927	19.398	6	129.333	8.572	7
3	20 min	198.169	10.464	6	175.535	20.813	7
4	30 min	190.744	14.922	6	169.672	14.693	7
5	40 min	184.206	15.172	6	168.358	17.508	7

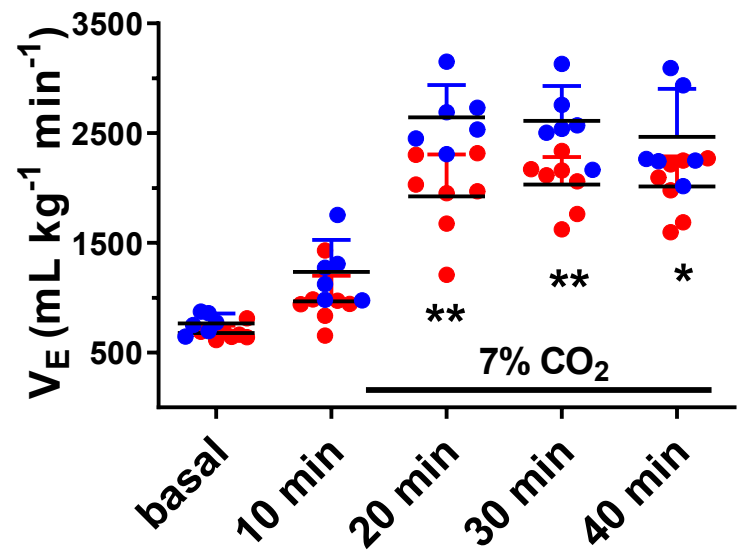
Row stats		A			B		
		Vehicle			MCH		
		Mean	SD	N	Mean	SD	N
1	basal	734.351	48.271	4	603.180	34.329	6
2	7%CO <sub>2</sub>	2272.687	242.675	4	1914.344	228.931	6

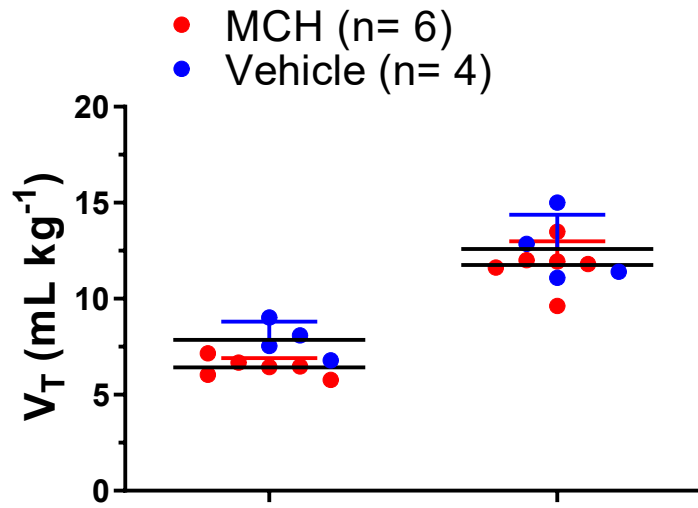
Row stats		A			B		
		Veículo			MCH		
		Mean	SD	N	Mean	SD	N
1	basal	7.863	0.941	4	6.426	0.483	6
2	7%CO <sub>2</sub>	12.587	1.784	4	11.751	1.236	6

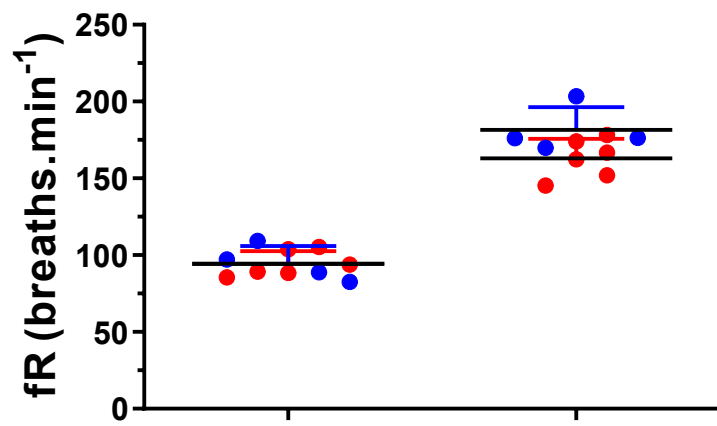
Row stats		A			B		
		Vehicle			MCH		
		Mean	SD	N	Mean	SD	N
1	basal	94.505	11.518	4	94.319	8.388	6
2	7%CO <sub>2</sub>	181.484	14.934	4	163.116	12.644	6

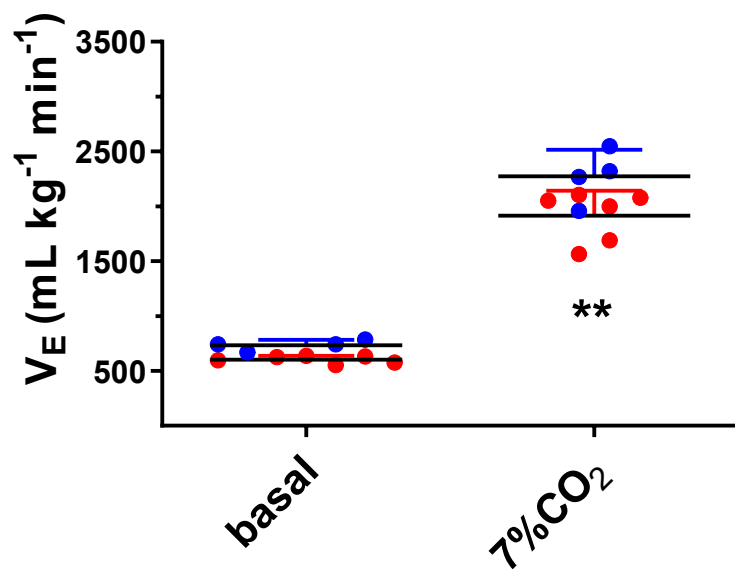


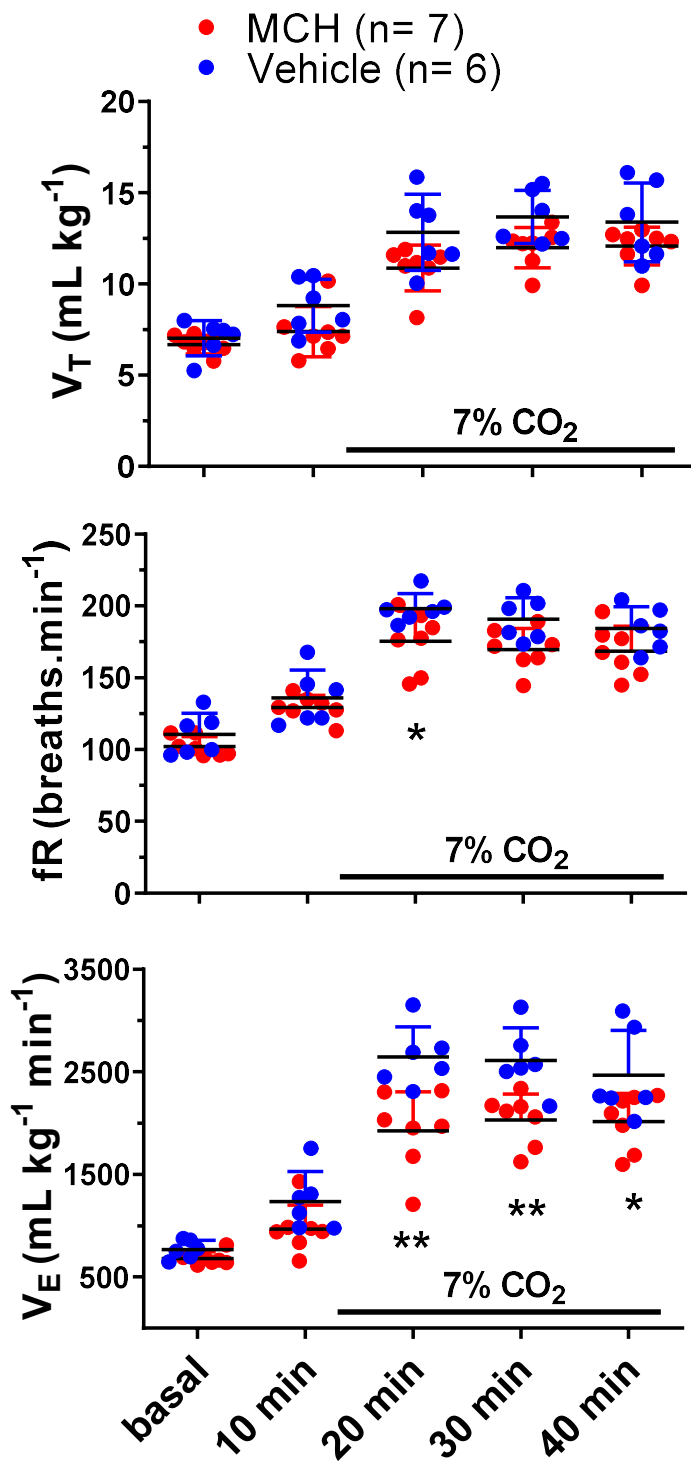


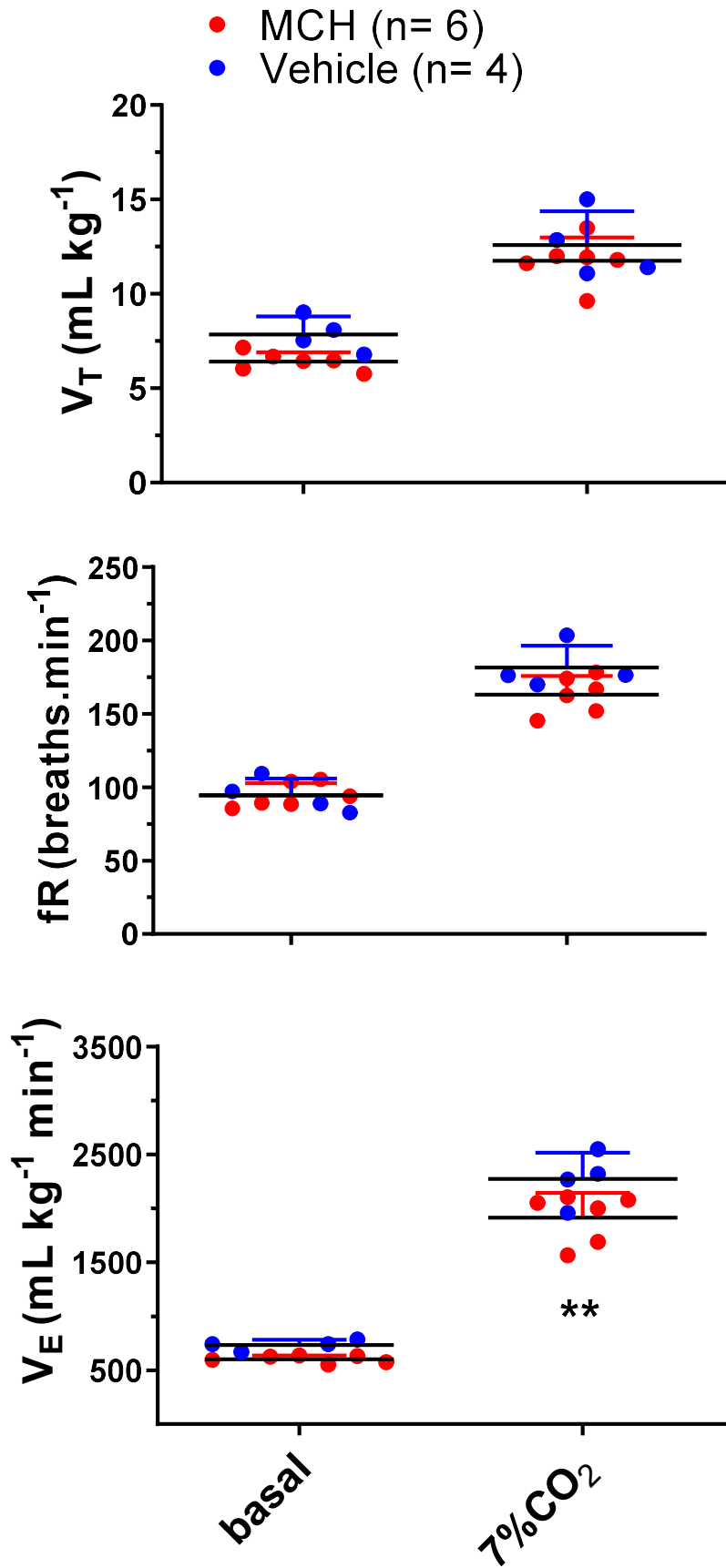


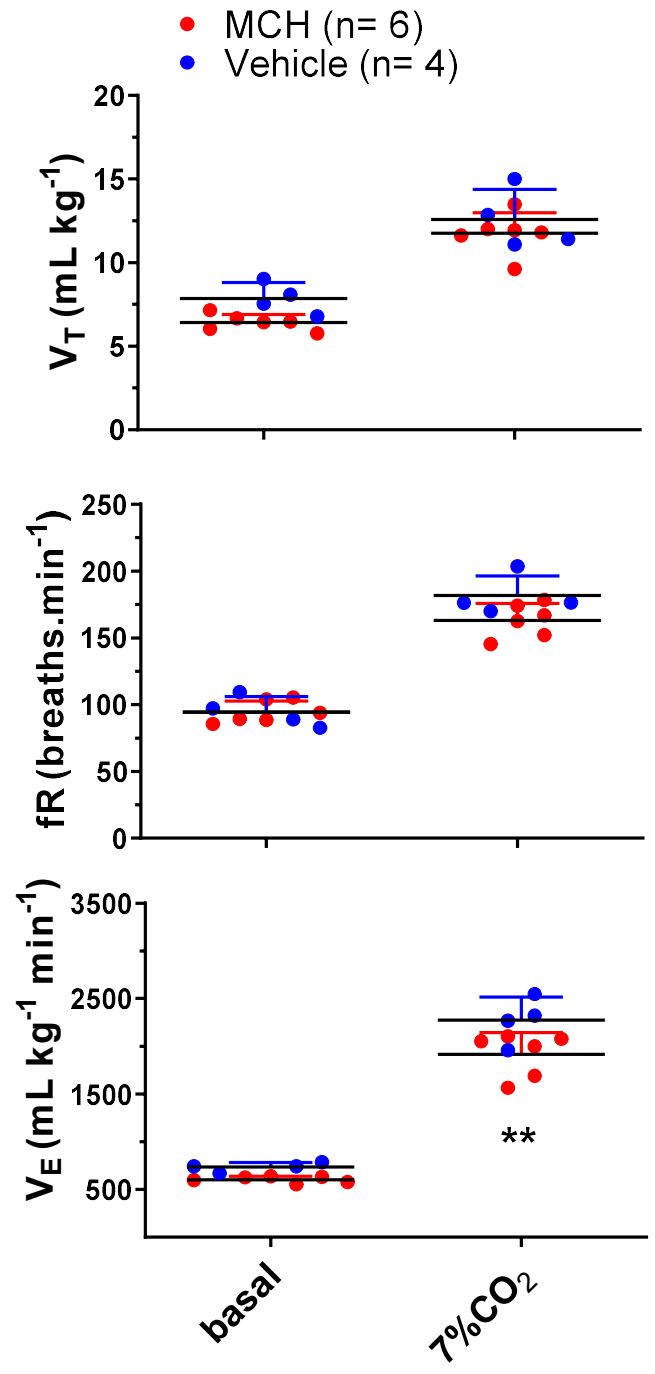
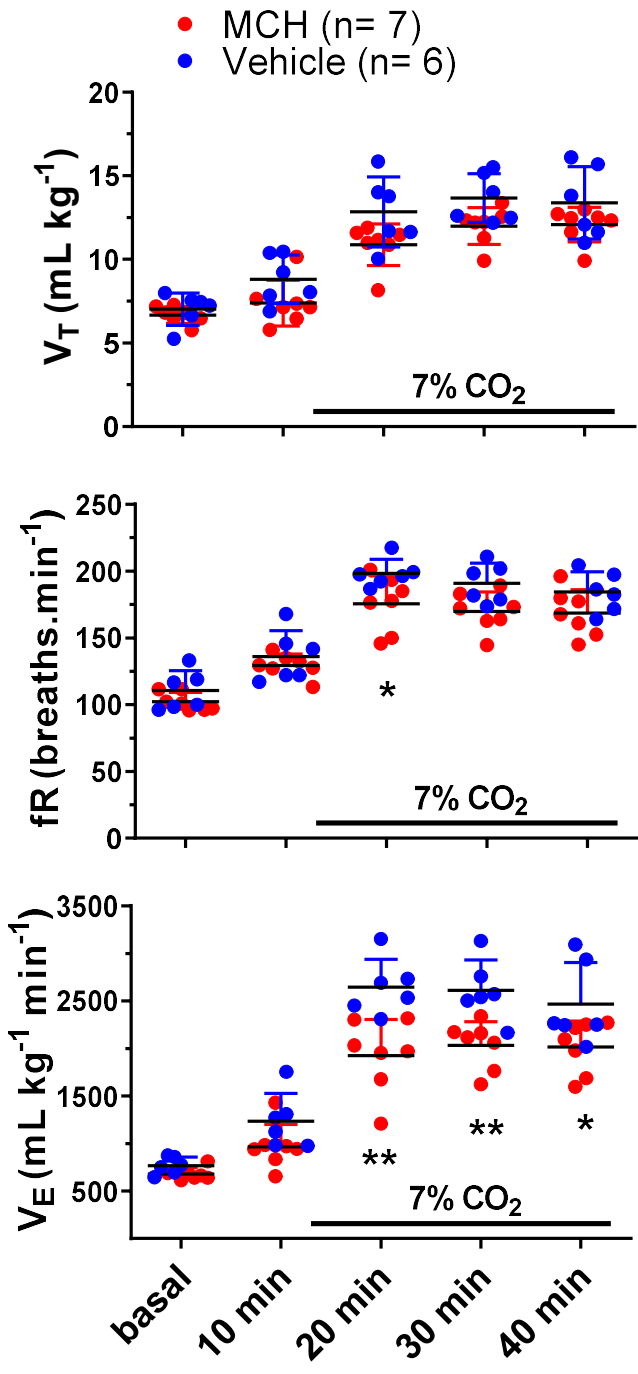












Constant	Value
Experiment Date	mar-25-2021
Experiment ID	
Notebook ID	
Project	
Experimenter	
Protocol	