

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	9.754694	7.095834	7.123604	7.172239	7.521760			9.699676						
2	10 min	8.963324	8.271434	7.145584	8.425956	8.170890			7.838122						
3	20 min	18.664910	13.610700	11.256380	12.250320	12.264340			15.259570						
4	30 min	18.586720	13.703750	11.237260	12.184060	15.294100			16.006690						
5	40 min	15.161700	13.502090	10.937100	12.507100	14.819610			14.613180						

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	104.734400	120.452800	120.771700	103.945600	120.633200			86.020940	86.360270	99.556060	96.612350	107.139100
2	10 min	111.724300	133.080000	173.421300	111.339600	105.534500			142.579300	142.653800	133.676800	132.427500	156.579500
3	20 min	152.183500	176.492500	180.817300	168.614000	178.908500			177.025700	182.909300	198.388400	182.120800	192.107800
4	30 min	156.162500	174.601000	172.420500	163.951500	155.257000			176.443300	185.121800	192.234000	165.361700	179.780900
5	40 min	168.088000	157.720800	173.175300	162.229000	167.040000			171.268400	180.407800	188.322100	164.929500	172.369000

	B:6	B:7
1	05.967200	
2	57.585300	
3	84.166500	
4	85.625500	
5	87.472800	

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	1023.090000	850.676300	843.134700	738.585400	904.398300			833.088300	683.576900	922.273300	840.992900
2	10 min	1001.395000	1100.727000	1239.196000	939.366800	861.143200			1117.554000	1164.274000	1131.596000	1111.111000
3	20 min	2840.778000	2402.186000	2035.074000	2062.438000	2198.076000			2697.288000	2175.174000	2746.310000	2375.669000
4	30 min	2894.304000	2392.688000	1938.264000	1997.387000	2374.508000			2818.232000	2207.126000	2723.628000	2165.886000
5	40 min	2548.500000	2131.980000	1890.740000	2029.000000	2475.460000			2503.030000	2158.887000	2616.510000	2032.295000



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	9.858049	7.852457	8.048129	8.029030				7.673526						
2	7%CO <sub>2</sub>	17.174930	13.796030	11.115770	11.076800				12.929900						

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	B:6
1	basal	88.472530	95.614700	89.959780	84.829300			92.917890					
2	7%CO <sub>2</sub>	145.171200	165.682100	167.348300	168.377000			169.550000					

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
1	basal	872.365400	750.810300	720.807500	678.428			714.623400	613.981600	807.360100	675.705000	
2	7%CO <sub>2</sub>	2493.277000	2281.904000	1859.821000	1865.080			2192.251000	2189.046000	2557.663000	2081.460000	

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

2way ANOVA ANOVA results						
1	Table Analyzed	Vt vigilia				
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	0.6781	0.8600	ns	No	
8	Tempo	76.41	<0.0001	****	Yes	
9	Tratamento	0.007975	0.9022	ns	No	
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	3.300	4	0.8251	F (4, 45) = 0.3247	P=0.8600
13	Tempo	371.9	4	92.97	F (4, 45) = 36.58	P<0.0001
14	Tratamento	0.03882	1	0.03882	F (1, 45) = 0.01527	P=0.9022
15	Residual	114.4	45	2.541		
16						
17	<b>Difference between column means</b>					
18	Predicted (LS) mean of Veículo salina estéril	11.43				
19	Predicted (LS) mean of MCH	11.37				
20	Difference between predicted means	0.05335				
21	SE of difference	0.4317				
22	95% CI of difference	-0.8161 to 0.9228				

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	0.7710	-1.825 to 3.367	No
11	10 min	0.2210	-2.375 to 2.817	No
12	20 min	-0.3100	-2.906 to 2.286	No
13	30 min	-0.6063	-3.203 to 1.990	No
14	40 min	-0.3425	-2.939 to 2.254	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	8.505	7.734	0.7710
21	10 min	8.416	8.195	0.2210
22	20 min	13.30	13.61	-0.3100
23	30 min	13.59	14.20	-0.6063
24	40 min	13.04	13.39	-0.3425

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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	0.9653	6	5	0.7988	45.00
21	0.9653	6	5	0.2289	45.00
22	0.9653	6	5	0.3212	45.00
23	0.9653	6	5	0.6281	45.00
24	0.9653	6	5	0.3548	45.00

Data analyzed: Vt vigilia

Source of Variation	Degrees of Freedom	Sum of Squares	Mean square
Tratamento	1	0.03882	0.03882
Tempo	4	371.9	92.97
Interaction	4	3.300	0.8251
Residual (error)	45	114.4	2.541
Total	54	486.7	

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

Interaction accounts for 0.6781 of the total variance.

$F = 0.32$ .  $DFn = 4$ ,  $DFd = 45$

The P value = 0.8600

If there is no interaction overall, there is a 86% chance of randomly observing so much interaction in an experiment of this size. The interaction is considered not significant.

Does Tratamento affect the result?

Tratamento accounts for 0.007975 of the total variance.

$F = 0.02$ .  $DFn = 1$ ,  $DFd = 45$

The P value = 0.9022

If Tratamento has no effect overall, there is a 90% chance of randomly observing an effect this big (or bigger) in an experiment of this size. The effect is considered not significant.

Does Tempo affect the result?

Tempo accounts for 76.41 of the total variance.

$F = 36.58$ .  $DFn = 4$ ,  $DFd = 45$

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	FR vigília				
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	4.202	0.0084	**	Yes	
8	Tempo	78.53	<0.0001	****	Yes	
9	Tratamento	1.828	0.0124	*	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	2305	4	576.2	F (4, 45) = 3.902	P=0.0084
13	Tempo	43071	4	10768	F (4, 45) = 72.91	P<0.0001
14	Tratamento	1003	1	1003	F (1, 45) = 6.790	P=0.0124
15	Residual	6646	45	147.7		
16						
17	<b>Difference between column means</b>					
18	Predicted (LS) mean of Veículo	148.5				
19	Predicted (LS) mean of MCH	157.1				
20	Difference between predicted means	-8.575				
21	SE of difference	3.291				
22	95% CI of difference	-15.20 to -1.947				

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	-17.16	-36.96 to 2.627	No
11	10 min	17.23	-2.561 to 37.02	No
12	20 min	14.72	-5.075 to 34.51	No
13	30 min	16.28	-3.509 to 36.07	No
14	40 min	11.81	-7.981 to 31.60	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			
20	basal	96.94	114.1	-17.16
21	10 min	144.3	127.0	17.23
22	20 min	186.1	171.4	14.72
23	30 min	180.8	164.5	16.28
24	40 min	177.5	165.7	11.81

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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	7.359	6	5	2.333	45.00
21	7.359	6	5	2.342	45.00
22	7.359	6	5	2.000	45.00
23	7.359	6	5	2.213	45.00
24	7.359	6	5	1.605	45.00

Data analyzed: FR vigilia

Source of Variation	Degrees of Freedom	Sum of Squares	Mean square
Tratamento	1	1003	1003
Tempo	4	43071	10768
Interaction	4	2305	576.2
Residual (error)	45	6646	147.7
Total	54	54843	

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

Interaction accounts for 4.202 of the total variance.

$F = 3.90$ .  $DF_n = 4$ ,  $DF_d = 45$

The P value = 0.0084

If there is no interaction overall, there is a 0.84% chance of randomly observing so much interaction in an experiment of this size. The interaction is considered very significant.

Since the interaction is statistically significant, the P values that follow for the row and column effects are difficult to interpret.

Does Tratamento affect the result?

Tratamento accounts for 1.828 of the total variance.

$F = 6.79$ .  $DF_n = 1$ ,  $DF_d = 45$

The P value = 0.0124

If Tratamento has no effect overall, there is a 1.2% chance of randomly observing an effect this big (or bigger) in an experiment of this size. The effect is considered significant.

Does Tempo affect the result?

Tempo accounts for 78.53 of the total variance.

$F = 72.91$ .  $DF_n = 4$ ,  $DF_d = 45$

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	VE vigilia				
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</b>	<b>Signific</b>	
7	Interaction	0.3547	0.7765	ns	No	
8	Tempo	88.82	<0.0001	****	Yes	
9	Tratamento	0.5629	0.1003	ns	No	
10						
11	<b>ANOVA table</b>	<b>SS (Type III)</b>	<b>DF</b>	<b>MS</b>	<b>F (DFn, P value</b>	
12	Interaction	99346	4	24837	F (4, 45) P=0.776	
13	Tempo	24877114	4	6219278	F (4, 45) P<0.000	
14	Tratamento	157653	1	157653	F (1, 45) P=0.100	
15	Residual	2519888	45	55998		
16						
17	<b>Difference between column means</b>					
18	Predicted (LS) mean of Veículo	1749				
19	Predicted (LS) mean of MCH	1856				
20	Difference between predicted means	-107.5				
21	SE of difference	64.08				
22	95% CI of difference	-236.6 to 21.54				

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	-52.76	-438.2 to 332.6	No
11	10 min	188.1	-197.3 to 573.5	No
12	20 min	165.7	-219.7 to 551.1	No
13	30 min	135.9	-249.5 to 521.3	No
14	40 min	100.7	-284.7 to 486.1	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			
20	basal	819.2	872.0	-52.76
21	10 min	1216	1028	188.1
22	20 min	2473	2308	165.7
23	30 min	2455	2319	135.9
24	40 min	2316	2215	100.7

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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	143.3	6	5	0.3682	45.00
21	143.3	6	5	1.313	45.00
22	143.3	6	5	1.157	45.00
23	143.3	6	5	0.9482	45.00
24	143.3	6	5	0.7025	45.00

Data analyzed: VE vigília

Source of Variation	Degrees of Freedom	Sum of Squares	Mean square
Tratamento	1	157653	157653
Tempo	4	24877114	6219278
Interaction	4	99346	24837
Residual (error)	45	2519888	55998
Total	54	28008334	

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

Interaction accounts for 0.3547 of the total variance.

$F = 0.44$ .  $DFn = 4$ ,  $DFd = 45$

The P value = 0.7765

If there is no interaction overall, there is a 78% chance of randomly observing so much interaction in an experiment of this size. The interaction is considered not significant.

Does Tratamento affect the result?

Tratamento accounts for 0.5629 of the total variance.

$F = 2.82$ .  $DFn = 1$ ,  $DFd = 45$

The P value = 0.1003

If Tratamento has no effect overall, there is a 10% chance of randomly observing an effect this big (or bigger) in an experiment of this size. The effect is considered not significant.

Does Tempo affect the result?

Tempo accounts for 88.82 of the total variance.

$F = 111.06$ .  $DFn = 4$ ,  $DFd = 45$

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 sono				
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	0.04772	0.8336	ns	No	
9	Time	74.11	0.0001	***	Yes	
10	Treatment	0.8019	0.6336	ns	No	
11	Subject	19.09	0.0908	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	0.05748	1	0.05748	F (1, 6) = 0.04813	P=0.8336
15	Time	89.27	1	89.27	F (1, 6) = 74.75	P=0.0001
16	Treatment	0.9659	1	0.9659	F (1, 6) = 0.2520	P=0.6336
17	Subject	23.00	6	3.833	F (6, 6) = 3.210	P=0.0908
18	Residual	7.165	6	1.194		
19						
20	<b>Difference between row means</b>					
21	Mean of basal	8.261				
22	Mean of 7%CO <sub>2</sub>	12.99				
23	Difference between means	-4.724				
24	SE of difference	0.5464				
25	95% CI of difference	-6.061 to -3.387				
26						
27	<b>Difference between column means</b>					
28	Mean of Veículo	10.87				
29	Mean of MCH	10.38				
30	Difference between means	0.4914				
31	SE of difference	0.9789				

2way ANOVA ANOVA results						
32	95% CI of difference	-1.904 to 2.887				
33						
34	<b>Interaction CI</b>					
35	Mean diff, A1 - B1	0.3715				
36	Mean diff, A2 - B2	0.6113				
37	(A1 - B1) - (A2 - B2)	-0.2397				
38	95% CI of difference	-2.914 to 2.434				
39	(B1 - A1) - (B2 - A2)	0.2397				
40	95% CI of difference	-2.434 to 2.914				
41						
42	<b>Data summary</b>					
43	Number of columns (Treatment)	2				
44	Number of rows (Time)	2				
45	Number of subjects (Subject)	8				

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	0.3715	-2.499 to 3.242	No
11	7%CO <sub>2</sub>	0.6113	-2.259 to 3.481	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	8.447	8.075	0.3715
18	7%CO <sub>2</sub>	13.29	12.68	0.6113

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7	<b>Summary</b>	<b>Adjusted P Value</b>			
8					
9					
10	ns	>0.9999			
11	ns	>0.9999			
12					
13					
14	<b>SE of diff.</b>	<b>N1</b>	<b>N2</b>	<b>t</b>	<b>DF</b>
15					
16					
17	1.121	4	4	0.3314	12.00
18	1.121	4	4	0.5452	12.00

2way ANOVA ANOVA results						
1	Table Analyzed	fR sono				
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	1.265	0.0598	ns	No	
9	Time	95.28	<0.0001	****	Yes	
10	Treatment	0.6350	0.1508	ns	No	
11	Subject	1.406	0.5032	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	351.1	1	351.1	F (1, 6) = 5.364	P=0.0598
15	Time	26435	1	26435	F (1, 6) = 403.9	P<0.0001
16	Treatment	176.2	1	176.2	F (1, 6) = 2.710	P=0.1508
17	Subject	390.0	6	65.00	F (6, 6) = 0.9931	P=0.5032
18	Residual	392.7	6	65.45		
19						
20	<b>Difference between row means</b>					
21	Mean of basal	88.35				
22	Mean of 7%CO <sub>2</sub>	169.6				
23	Difference between means	-81.29				
24	SE of difference	4.045				
25	95% CI of difference	-91.19 to -71.40				
26						
27	<b>Difference between column means</b>					
28	Mean of Vehicle	125.7				
29	Mean of MCH	132.3				
30	Difference between means	-6.637				
31	SE of difference	4.031				

2way ANOVA ANOVA results						
32	95% CI of difference	-16.50 to 3.227				
33						
34	<b>Interaction CI</b>					
35	Mean diff, A1 - B1	2.732				
36	Mean diff, A2 - B2	-16.00				
37	(A1 - B1) - (A2 - B2)	18.74				
38	95% CI of difference	-1.060 to 38.53				
39	(B1 - A1) - (B2 - A2)	-18.74				
40	95% CI of difference	-38.53 to 1.060				
41						
42	<b>Data summary</b>					
43	Number of columns (Treatment)	2				
44	Number of rows (Time)	2				
45	Number of subjects (Subject)	8				

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	2.732	-11.89 to 17.35	No
11	7%CO <sub>2</sub>	-16.00	-30.62 to -1.385	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	89.72	86.99	2.732
18	7%CO <sub>2</sub>	161.6	177.6	-16.00

1					
2					
3					
4					
5					
6					
7	<b>Summary</b>	<b>Adjusted P Value</b>			
8					
9					
10	ns	>0.9999			
11	*	0.0319			
12					
13					
14	<b>SE of diff.</b>	<b>N1</b>	<b>N2</b>	<b>t</b>	<b>DF</b>
15					
16					
17	5.711	4	4	0.4783	12.00
18	5.711	4	4	2.803	12.00

2way ANOVA ANOVA results						
1	Table Analyzed	VE sono				
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	0.3694	0.3733	ns	No	
8	Row Factor	94.38	<0.0001	****	Yes	
9	Column Factor	0.06624	0.7022	ns	No	
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	33405	1	33405	F (1, 12) = 0.8553	P=0.3733
13	Row Factor	8535777	1	8535777	F (1, 12) = 218.6	P<0.0001
14	Column Factor	5991	1	5991	F (1, 12) = 0.1534	P=0.7022
15	Residual	468652	12	39054		
16						
17	<b>Difference between column means</b>					
18	Predicted (LS) mean of Vehicle	1440				
19	Predicted (LS) mean of MCH	1479				
20	Difference between predicted means	-38.70				
21	SE of difference	98.81				
22	95% CI of difference	-254.0 to 176.6				
23						
24	<b>Difference between row means</b>					
25	Predicted (LS) mean of basal	729.3				
26	Predicted (LS) mean of 7%CO <sub>2</sub>	2190				
27	Difference between predicted means	-1461				
28	SE of difference	98.81				
29	95% CI of difference	-1676 to -1246				
30						
31	<b>Interaction CI</b>					

2way ANOVA ANOVA results						
32	Mean diff, A1 - B1	52.69				
33	Mean diff, A2 - B2	-130.1				
34	(A1 - B1) - (A2 - B2)	182.8				
35	95% CI of difference	-247.8 to 613.4				
36	(B1 - A1) - (B2 - A2)	-182.8				
37	95% CI of difference	-613.4 to 247.8				

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	MCH - Vehicle			
10	basal	-52.69	-410.4 to 305.1	No
11	7%CO <sub>2</sub>	130.1	-227.7 to 487.8	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	MCH - Vehicle			
17	basal	702.9	755.6	-52.69
18	7%CO <sub>2</sub>	2255	2125	130.1

1					
2					
3					
4					
5					
6					
7	<b>Summary</b>				
8					
9					
10	ns				
11	ns				
12					
13					
14	<b>SE of diff.</b>	<b>N1</b>	<b>N2</b>	<b>t</b>	<b>DF</b>
15					
16					
17	139.7	4	4	0.3770	12.00
18	139.7	4	4	0.9309	12.00

Data analyzed: VE sono

Source of Variation	Degrees of Freedom	Sum of Squares	Mean square
Column Factor	1	5991	5991
Row Factor	1	8535777	8535777
Interaction	1	33405	33405
Residual (error)	12	468652	39054
Total	15	9043824	

Does Column Factor have the same effect at all values of Row Factor?

Interaction accounts for 0.3694 of the total variance.

$F = 0.86$ .  $DF_n = 1$ ,  $DF_d = 12$

The P value = 0.3733

If there is no interaction overall, there is a 37% chance of randomly observing so much interaction in an experiment of this size. The interaction is considered not significant.

Does Column Factor affect the result?

Column Factor accounts for 0.06624 of the total variance.

$F = 0.15$ .  $DF_n = 1$ ,  $DF_d = 12$

The P value = 0.7022

If Column Factor has no effect overall, there is a 70% chance of randomly observing an effect this big (or bigger) in an experiment of this size. The effect is considered not significant.

Does Row Factor affect the result?

Row Factor accounts for 94.38 of the total variance.

$F = 218.56$ .  $DF_n = 1$ ,  $DF_d = 12$

The P value is  $< 0.0001$

If Row Factor 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.

Row stats		A			B		
		Veículo salina estéril			MCH		
		Mean	SD	N	Mean	SD	N
1	basal	7.734	1.143	5	8.505	0.864	6
2	10 min	8.195	0.662	5	8.416	0.561	6
3	20 min	13.609	2.948	5	13.299	1.189	6
4	30 min	14.201	2.895	5	13.595	1.382	6
5	40 min	13.386	1.731	5	13.043	1.019	6

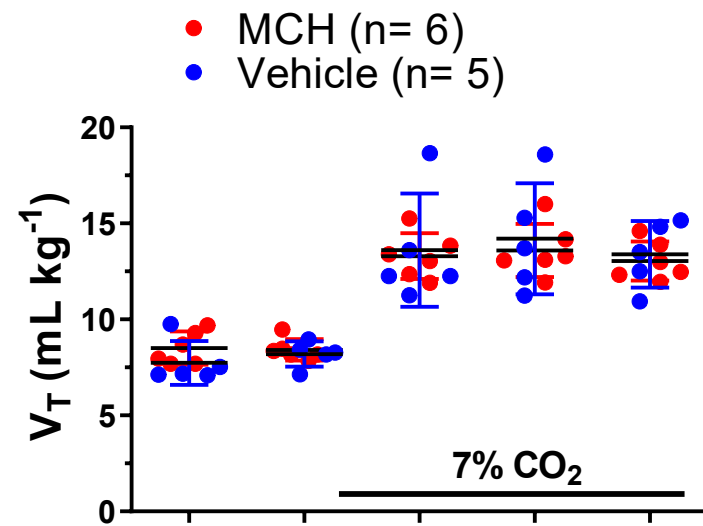
Row stats		A			B		
		Veículo			MCH		
		Mean	SD	N	Mean	SD	N
1	basal	114.108	8.922	5	96.943	9.205	6
2	10 min	127.020	27.979	5	144.250	10.833	6
3	20 min	171.403	11.705	5	186.120	7.736	6
4	30 min	164.479	8.944	5	180.761	9.285	6
5	40 min	165.651	5.897	5	177.462	9.468	6

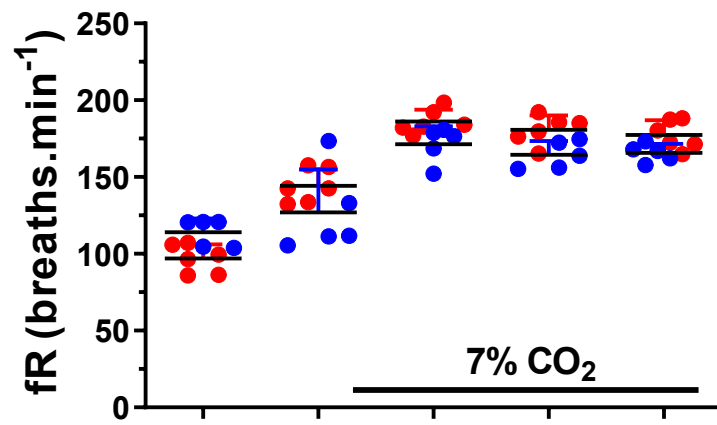
Row stats		A			B		
		Veículo			MCH		
		Mean	SD	N	Mean	SD	N
1	basal	871.977	103.640	5	819.215	77.091	6
2	10 min	1028.366	146.882	5	1216.487	147.500	6
3	20 min	2307.710	331.510	5	2473.449	233.490	6
4	30 min	2319.430	383.367	5	2455.293	266.120	6
5	40 min	2215.136	285.348	5	2315.792	233.354	6

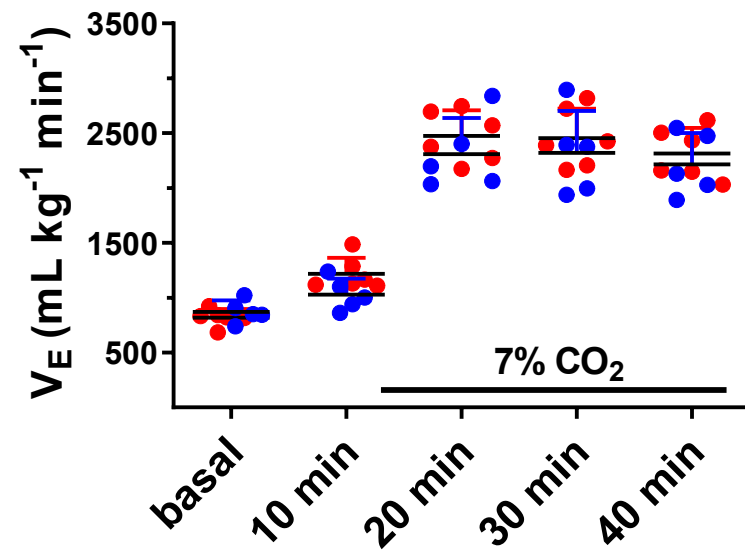
Row stats		A			B		
		Veículo			MCH		
		Mean	SD	N	Mean	SD	N
1	basal	8.447	0.945	4	8.075	0.598	4
2	7%CO <sub>2</sub>	13.291	2.885	4	12.680	0.692	4

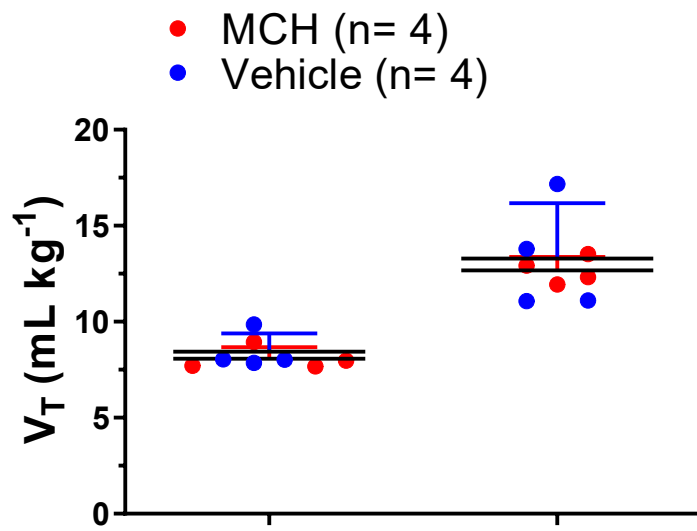
Row stats		A			B		
		Vehicle			MCH		
		Mean	SD	N	Mean	SD	N
1	basal	89.719	4.483	4	86.987	7.013	4
2	7%CO <sub>2</sub>	161.645	11.038	4	177.650	8.354	4

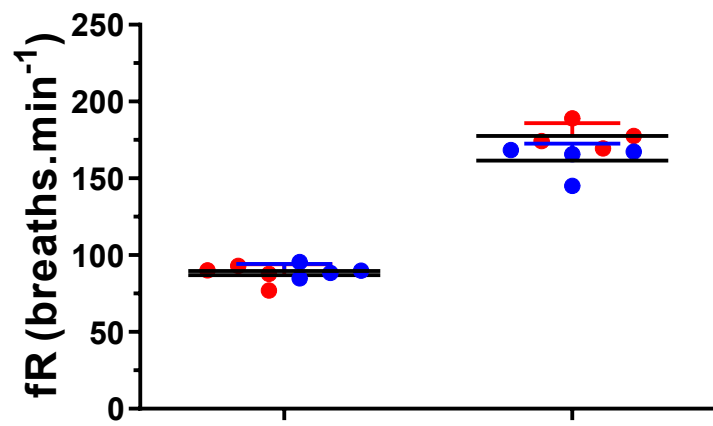
Row stats		A			B		
		Vehicle			MCH		
		Mean	SD	N	Mean	SD	N
1	basal	755.603	83.313	4	702.918	81.026	4
2	7%CO <sub>2</sub>	2125.021	315.238	4	2255.105	208.173	4

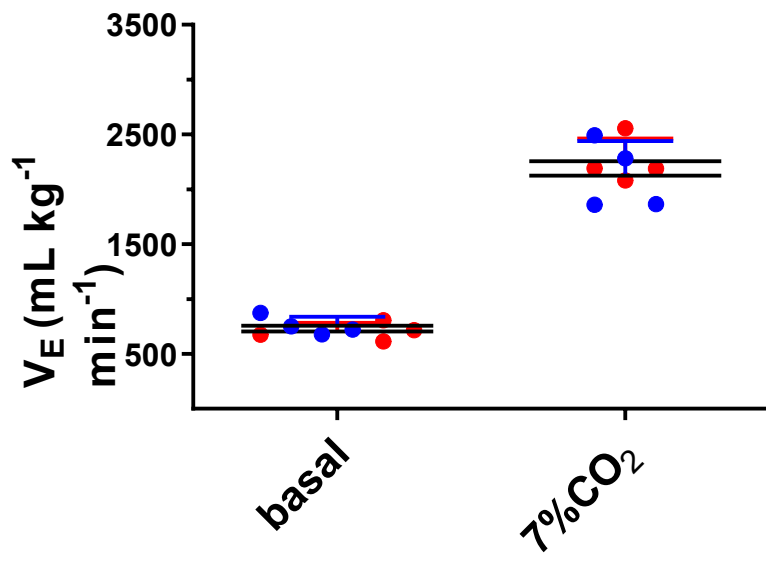


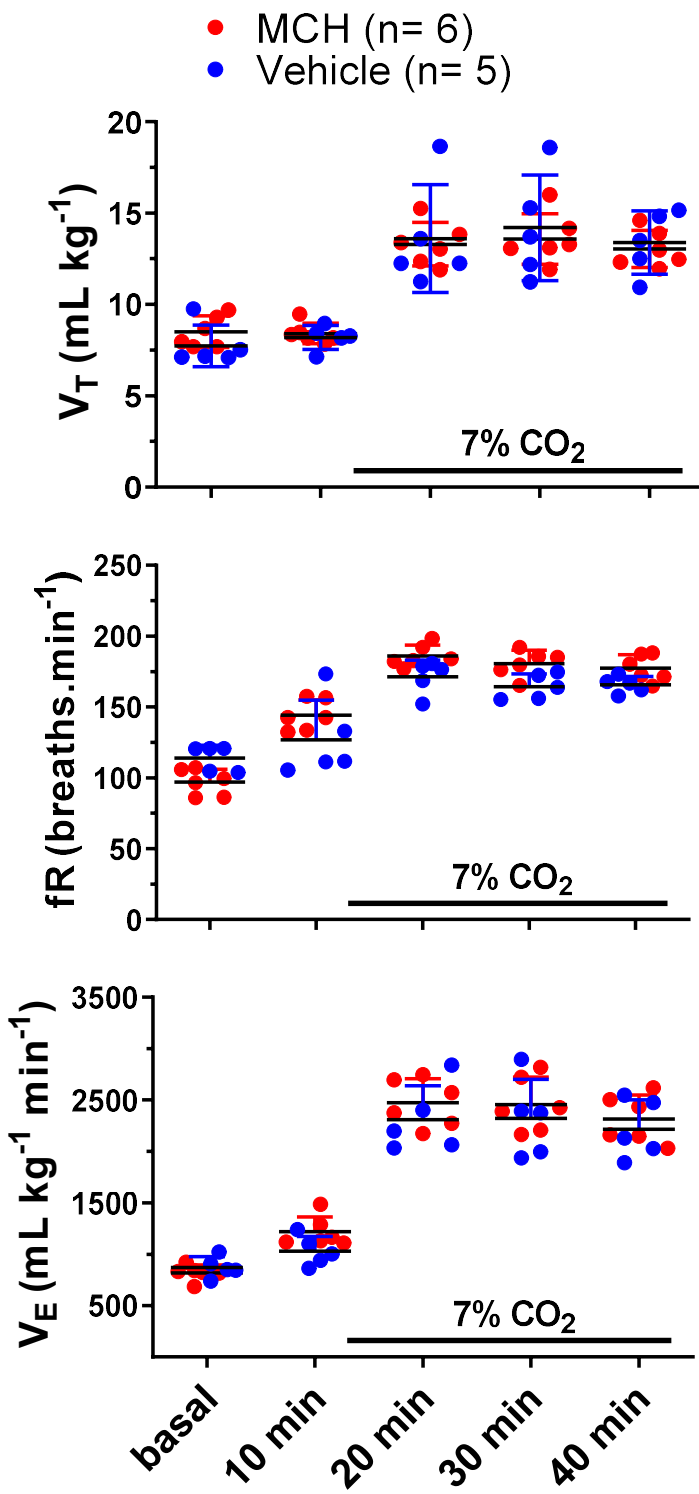




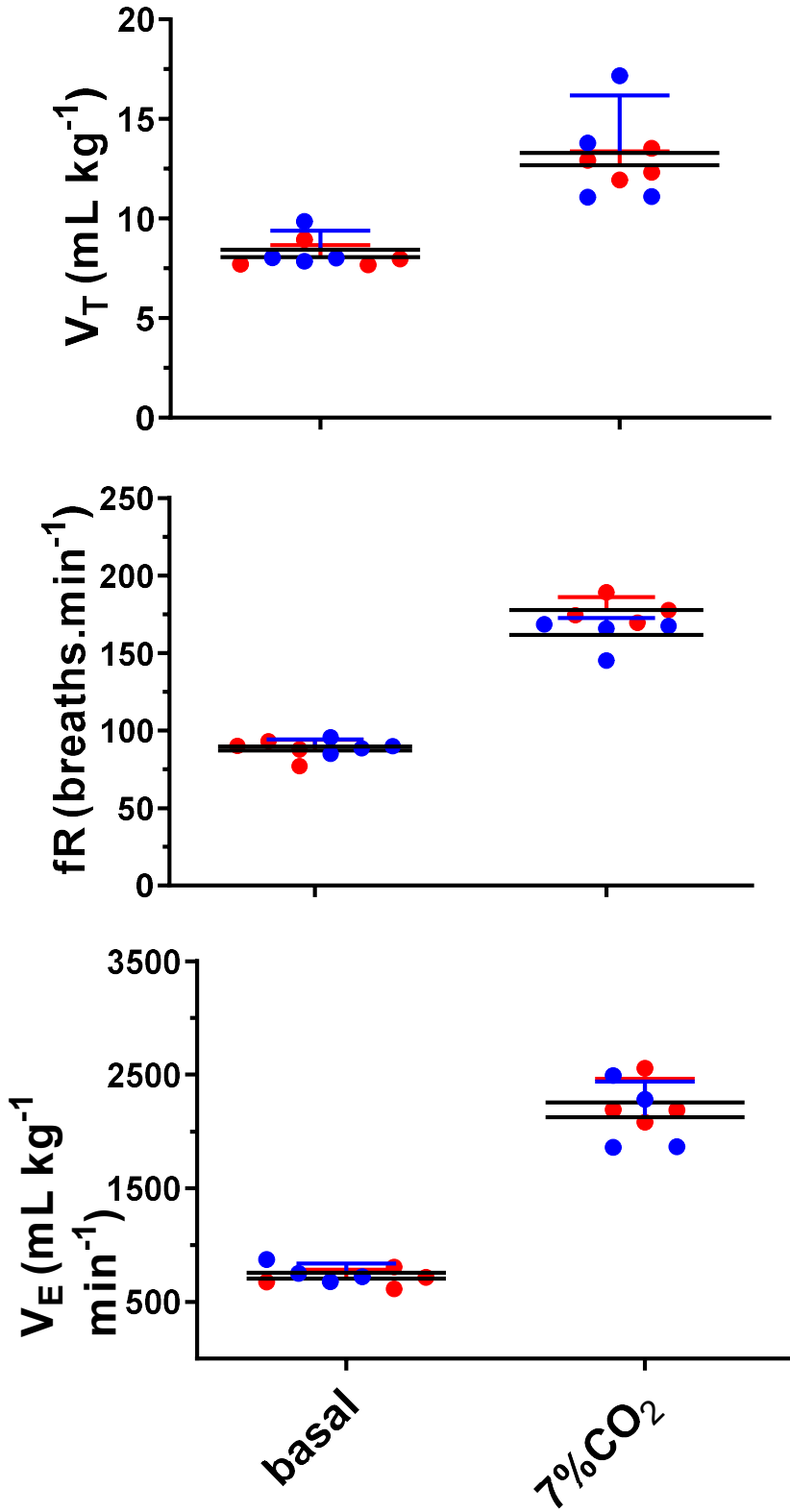


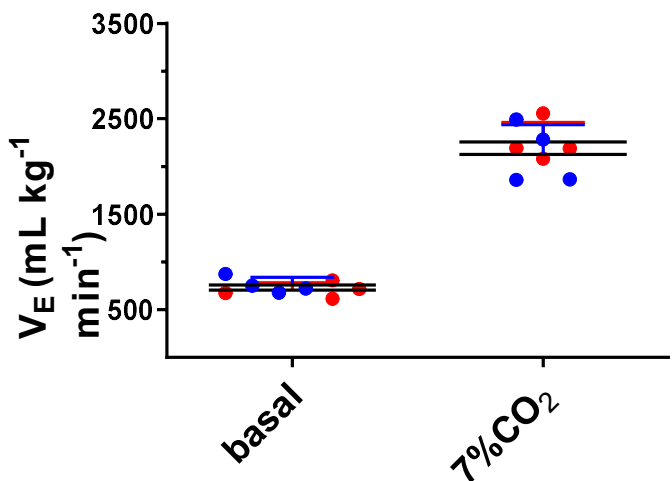
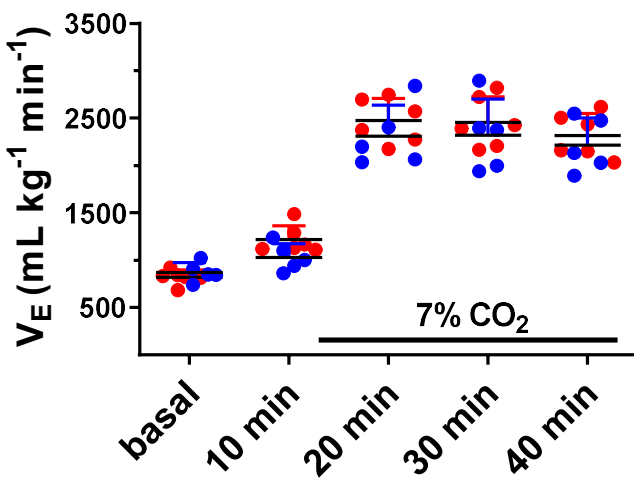
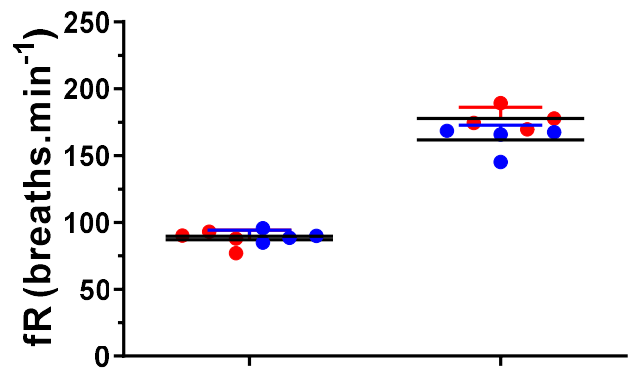
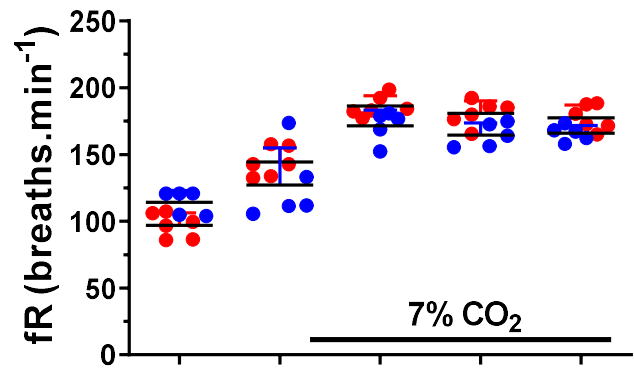
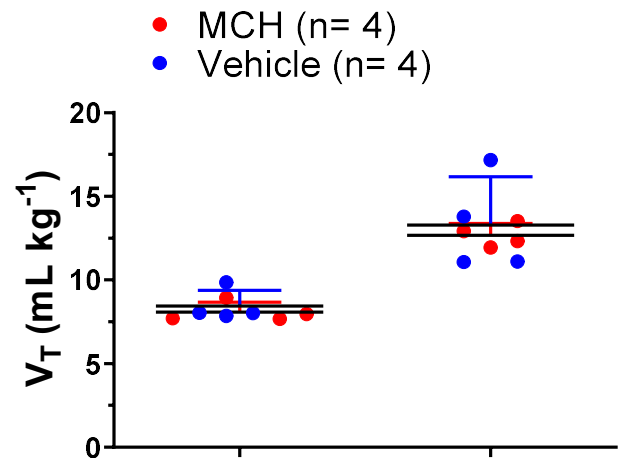
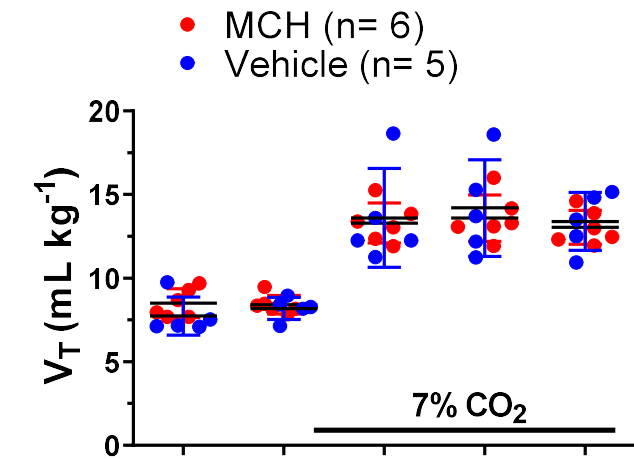






- MCH (n= 4)
- Vehicle (n= 4)





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