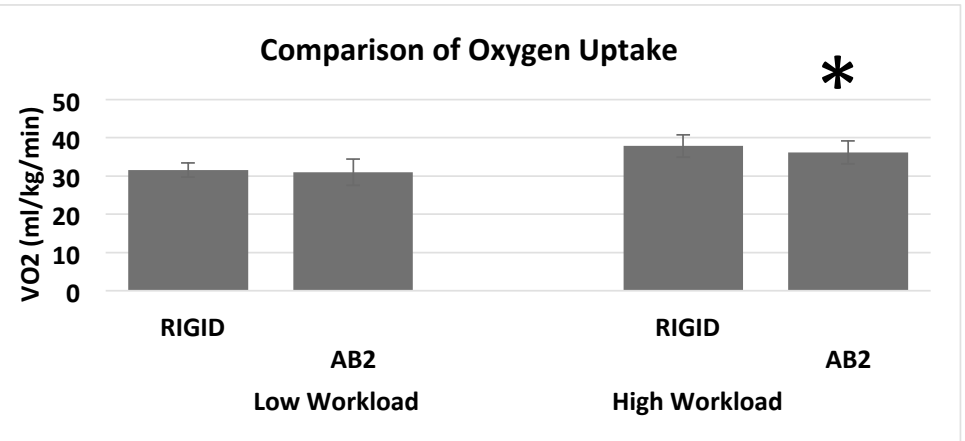


	Rider 1		Rider 2		Rider 3		Rider 4		Rider 5		Rider 6		Rider 7	
	RIGID	AB2 Alter	RIGID	AB2 Alter	RIGID	AB2 Alter	RIGID	AB2 Alter	RIGID	AB2 Alter	RIGID	AB2 Alter	RIGID	AB2 Alter
Workload Low	31.4	35.2	32.8	33.3	28.6	23	27.1	28.7	30.6	33.2	30.1	32.7	32.9	30.4
	31.7	32.1	33.2	37.6	28.9	28.2	30.6	24.8	32.7	30.7	34.7	30.8	31.9	31.2
	33.9	33.4	32.6	35.3	28.3	26.7	31.1	24.1	31.4	33.2	32.6	26.5	32.8	30.1
	33.5	35.1	38.7	32.6	29	28.4	28.2	29.3	29.7	32.4	30.6	29.6	31.9	33.9
	33.5	33	34.3	34.3	30.2	26.7	30.7	26.5	30.2	31.5	27.8	28.5	33.3	29.5
	34.3	32.6	35.6	37.1	31.2	27.4	30.6	27.9	25.9	34.6	28.4	29.2	31.8	30.4
	34.2	34.2	34.3	38.1	28.5	25.7	31.8	27.4	33.5	32.6	32.2	31.2	32.6	31.5
Average	31.3	34.5	35.3	36.7	31.9	26.9	29	26.1	30.8	34.6	30.3	30.3	32.4	34.4
	32.975	33.7625	34.6	35.625	29.575	26.625	29.8875	26.85	30.6	32.85	30.8375	29.85	32.45	31.425

	RIGID	AB2 Alter	RIGID	AB2 Alter	RIGID	AB2 Alter	RIGID	AB2 Alter	RIGID	AB2 Alter	RIGID	AB2 Alter	RIGID	AB2 Alter
	Workload High	38.7	38.6	41.1	40.1	32.3	30.2	34	28.7	35.8	35.4	32.7	33.2	35.2
40.6		38.2	41.1	40	36.2	34.1	41.6	34.2	33.9	37.9	33.3	31.2	33.3	34.9
40.9		36.8	41.6	38.7	35	33.2	38	34.6	38.7	35.6	34.4	31.9	34.3	35.2
40.4		36.9	39.7	43.3	38.9	34.3	38.6	36.9	37.4	38	33.5	35.5	33.8	34.6
43.3		41	42.2	39.3	36.8	33.3	37.7	36	37.3	33.6	33	32.5	35.7	33.8
42.6		40.6	43.3	42.7	38.9	33.5	38.4	34.6	38.2	41.9	35.8	33.3	36.3	33
42.1		39.3	45.3	40.8	39.1	36.2	39	38	40.9	39.2	34.6	34.9	37.3	37.5
Average	39.2	38.9	42.6	42.9	39.1	34.8	41	35.6	38	38.3	33.8	31.4	35.5	33.1
	40.975	38.7875	42.1125	40.975	37.0375	33.7	38.5375	34.825	37.525	37.4875	33.8875	32.9875	35.175	34.425

	Workload Low		Workload Heavy	
	Rigid	AB2 Alter	Rigid	AB2 Alter
Rider 1	32.975	33.7625	40.975	38.7875
Rider 2	34.6	35.625	42.1125	40.975
Rider 3	29.575	26.625	37.0375	33.7
Rider 4	29.8875	26.85	38.5375	34.825
Rider 5	30.6	32.85	37.525	37.4875
Rider 6	30.8375	29.85	33.8875	32.9875
Rider 7	32.45	31.425	35.175	34.425
Average	31.5607143	30.9982143	37.8928571	36.1696429
Std Dev.	1.8356202	3.4232236	2.9444055	2.9653104
Paired T	0.48898998		0.01680973	
	AB2 Alter		AB2 Alter	
	1.7983% Less O2		4.65341% Less O2	

Oxygen Uptake refers to oxygen used - Lower is Better



Conclusion:

At the lower workload, there was a relatively small difference in rider oxygen uptake between the two bicycles.

At the higher workload, riders used significantly less oxygen on the Alter bicycle compared with the RIGID frame bicycle.

The tests were conducted on a computer controlled stationary trainer to assure identical conditions.