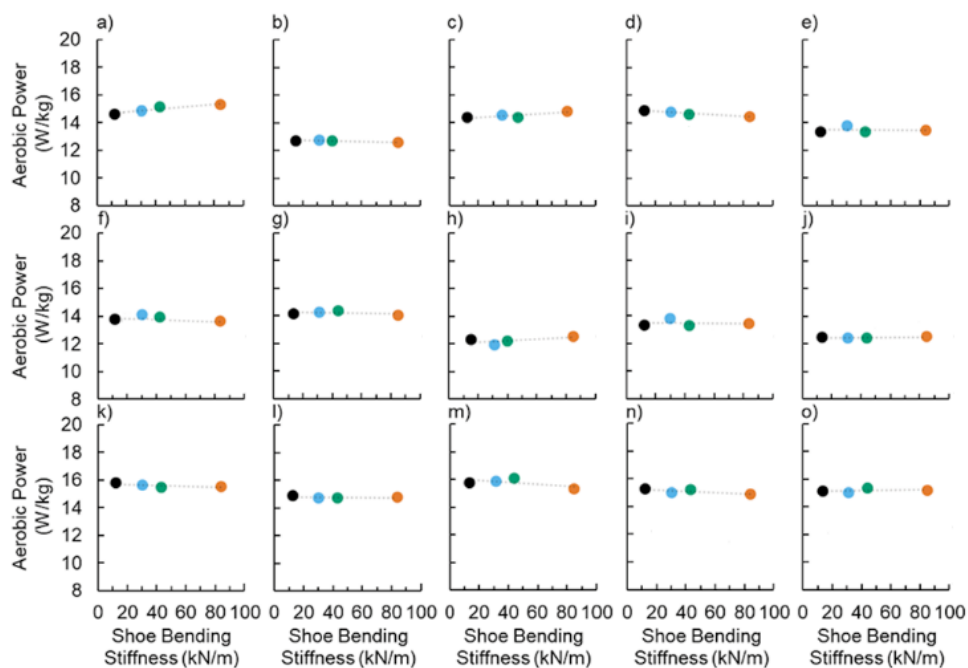


20 **Supplementary Table 1.** Number of participants that yielded the lowest and highest value for select biomechanical variables.

Footwear Bending Stiffness (kN/m)	Ground Contact Time		Hip Moment		Knee Moment		Ankle Moment		Soleus Force		Soleus Fascicle Length*		Soleus Fascicle Velocity*	
	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High
13.0 ± 1.0	6	1	7	1	6	3	1	8	4	7	1	3	4	2
31.0 ± 1.5	3	4	1	4	3	4	6	2	4	2	2	3	1	4
43.1 ± 1.6	3	3	4	4	1	3	4	1	4	3	5	1	2	4
84.1 ± 1.1	3	7	3	6	5	5	4	4	3	3	3	4	4	1

21 *n=11 participants due to technical difficulties.

22



23

24 **Supplementary Figure 1.** Gross aerobic power versus footwear bending stiffness for each participant.