

**Table S1.** Correlations and descriptions of kinetic and physiological variables depending on the interaction of test intensity (100, 80, 60 and 50 % of Maximal Velocity) and menstrual phase (Bleeding, Follicular, Luteal).

Variables	R or Rho with Vmax.	Rho or Tau with mean FC	Intensity 50 % Vmax.			Intensity 60 % Vmax.			Intensity 80 % Vmax.			Intensity 100 % Vmax.		
			Bleed	Follic	Lutea	Bleed	Follic	Lutea	Bleed	Follic	Lutea	Bleed	Follic	Luteal
			M (DT)	M (DT)	M (DT)	M (DT)	M (DT)	M (DT)	M (DT)	M (DT)	M (DT)	M (DT)	M (DT)	M (DT)
Kinetics														
Shock (G)	.379**	.103	11.68(2 )	10.01(3 .1)	10.01(3 .1)	12.02(1.8)	11.31(2.4)	11.29(2.3)	13.49(1.7)	13.45(2.3)	13.05(2.3)	11.84(1.4)	12.01(1.9)	11.85(1.8)
Braking (G)	.422**	-.027	8.98(2.7)	8.2(3.2)	8.31(3.3)	9.34(2.7)	8.8(3)	8.88(3)	9.58(2.55)	9.91(2.3)	10.08(2.1)	9.3(2)	9.82(2.1)	9.49(2)
Peak Vertical GRF (F(Bw))	.560**	.394***	2.68(0.59)	2.39(0.8)	2.53(0.7)	2.88(0.6)	2.93(0.5)	2.94(0.5)	3.38(0.7)	3.44(0.6)	3.43(0.6)	3.2(0.7)	3.16(0.6)	3.06(0.7)
V GRF Rate (N/kg/s)	.694**	.509***	30.7(3.4)	29.4(5.9)	29.6(5.5)	33.06(4.1)	33.78(3.4)	33.15(3.6)	37.92(4.5)	38.84(3.8)	38.24(3.9)	36.6(4.6)	36.39(3.5)	34.95(4.4)
Power (w)	.649**	.413***	176.9(9.9)	179.7(14.5)	160.9(21.1)	195.3(6.1)	199.1(6)	191.7(8.1)	223.4(6.6)	235(5.8)	227.1(7.1)	206(15.7)	221.3(4.6)	215.1(17.5)
H GRF Rate (N/kg/s)	.703**	.318***	4.91(0.41)	4.96(0.54)	4.73(0.33)	5.41(0.42)	5.58(0.36)	5.31(0.36)	7.05(0.51)	7.40(0.43)	7.3(0.5)	9.8(3.1)	6.63(0.33)	8.05(1.13)
Swing Force Rate (N/kg/s)	.671***	.302***	0.99(0.04)	1.04(0.06)	0.93(0.07)	1.01(0.06)	1.05(0.04)	0.98(0.06)	1.25(0.06)	1.34(0.05)	1.29(0.06)	1.56(0.34)	1.25(0.04)	1.46(0.18)
Total Force Rate (N/kg/s)	.790**	.390***	79.9(3.2)	79.9(5.3)	76.3(4)	84.8(3.7)	87.6(2.6)	83.7(3.2)	103.9(4.4)	109.1(3.6)	106(4.2)	123.7(2.3)	100(2.4)	111.3(10)
V Spring Stiffness (KN/m)	.030	-.169	29.33(20.2)	44.01(48.5)	25.73(20.9)	17.76(6.6)	16.36(3.3)	15.7(3.3)	16.98(1.6)	17.34(1.4)	16.94(1.8)	21.45(7)	27.86(18.9)	23.13(8.4)
Physiological	R or Rho with Vmax.	Rho or Tau with mean FC	Intensity 50 % Vmax.			Intensity 60 % Vmax.			Intensity 80 % Vmax.			Intensity 100 % Vmax.		
			Bleed	Follic	Lutea	Bleed	Follic	Lutea	Bleed	Follic	Lutea	Bleed	Follic	Luteal

HR_max (bpm)	.691***	.881***	129.9(3 .7)	144.9(6 .8)	127(3.5 )	144.2(5.5)	147.4(5.1)	144.7(6.2)	167(4.5)	169.6(4.4)	167.4(4.7)	176.4(3.1)	177.4(4.3)	178.7(3.7)
HR_mean (bpm)	.516***	1	121.7(2 .7)	133.1(4 .8)	120.4(3 .2)	137.1(4.4)	139.4(4.8)	137.7(5.8)	158.4(4.8)	161.9(4.4)	158.6(4.9)	146.4(3.8)	148.1(3.7)	149(4.1 )
HR_min (bpm)	.049	.520***	104.7(3 .7)	104.8(2 .4)	100.3(2 .9)	102.6(5.4)	108.6(5.3)	101.7(7.8)	111.3(6.6)	123.1(3.8)	109.3(8.1)	98(6.7)	101.3(3.4)	105.8(4.8)
Final_lactate (mmol/l)	.680***	.607***	1.35(0.24)	1.08(0.32)	1.38(0.25)	1.03(0.16)	1.13(0.35)	1.32(0.33)	2.42(0.29)	4.08(1.08)	4.15(1.22)	5.15(2.07)	6.1(0.88)	5.4(0.87)
Perceived effort	Rho with Vmax	Rho or Tau with mean FC	Intensity 50 % Vmax.			Intensity 60 % Vmax.			Intensity 80 % Vmax.			Intensity 100 % Vmax.		
			Bleed	Follic	Lutea	Bleed	Follic	Lutea	Bleed	Follic	Lutea	Bleed	Follic	Luteal
Before the test	-.017	-.254**	DNR	DNR	DNR	DNR	DNR	DNR	3(1.7)	1.5(1.2)	1.75(1.6)	1.63(1.3)	1(1.3)	1.5(1.3)
During the test	.274**	-.028	DNR	DNR	DNR	DNR	DNR	DNR	3(0.6)	2.25(0.2)	2.25(0.5)	3.37(0.4)	2.75(0.5)	2.25(0.6)
After the test	.354***	.140	DNR	DNR	DNR	DNR	DNR	DNR	3.25(0.5)	2.5(0.4)	2.6(0.4)	3.75(0.5)	4(0.4)	3.6(0.4)

Bleed = Bleeding phase; Follic= Follicular phase; Lutea= Luteal phase; DNR= Data Not Registered; V = Vertical; H = Horizontal; N= Newton; Kg= Kilogram; m= metre; G= Gravity; w= Watts; bpm = beats/minute; HR= heart rate. V max = maximum test speed; V average = average test speed; mmol/L = one thousandth of a mole/litre; \*\*\*=p<.001; \*\*=p<.01.