

Supplementary data

Supplementary Table 1. Effect of confounders on RT, PA, LT, and MY patterns by disorder.

	MET ¹	MAST ²
Rumination time (min/d; LSM ± SEM)		
Primiparous ³	518.5 ± 7.8	504.1 ± 11.6
Multiparous ³	543.0 ± 8.0	540.9 ± 10.6
<i>P</i> -value	< 0.001	< 0.001
Risk factor ⁴	525.6 ± 7.8	516.8 ± 11.6
No Risk factor ⁴	536.7 ± 8.1	525.6 ± 10.9
<i>P</i> -value	0.11	0.54
Warm season ⁵	556.8 ± 7.2	551.0 ± 10.6
Cool season ⁵	504.7 ± 8.8	493.9 ± 11.8
<i>P</i> -value	< 0.001	< 0.001
Physical activity (min/d; LSM ± SEM)		
Primiparous	888.1 ± 8.3	903.7 ± 10.9
Multiparous	881.6 ± 8.6	894.3 ± 12.0
<i>P</i> -value	0.36	0.21
Risk factor	872.5 ± 8.3	888.4 ± 11.9
No Risk factor	897.2 ± 8.6	909.6 ± 11.1
<i>P</i> -value	0.09	0.006
Warm season	902.7 ± 7.7	923.2 ± 10.9
Cool season	867.0 ± 9.4	874.8 ± 12.2
<i>P</i> -value	< 0.001	< 0.001
Lying time (min/d; LSM ± SEM)		
Primiparous	698.6 ± 6.5	664.6 ± 13.8
Multiparous	805.0 ± 9.7	758.5 ± 12.5
<i>P</i> -value	< 0.001	< 0.001
Risk factor	759.0 ± 9.4	724.6 ± 13.9
No Risk factor	744.7 ± 10.0	709.4 ± 13.0
<i>P</i> -value	0.09	0.27
Warm season	748.5 ± 9.0	708.1 ± 12.7
Cool season	761.2 ± 11.0	725.9 ± 14.3
<i>P</i> -value	0.16	0.11
Milk yield (kg/d; LSM ± SEM)		
Primiparous	18.0 ± 0.5	18.6 ± 0.9
Multiparous	28.5 ± 0.5	29.9 ± 0.8
<i>P</i> -value	< 0.001	< 0.001
Risk factor	24.1 ± 0.5	25.3 ± 0.8
No Risk factor	22.3 ± 0.6	23.2 ± 0.8
<i>P</i> -value	< 0.001	< 0.001
Warm season	23.2 ± 0.5	24.1 ± 0.8
Cool season	23.4 ± 0.6	24.6 ± 0.9
<i>P</i> -value	0.64	0.55

¹MET = model run for cows that had non-severe metritis and no other clinical health disorder (MET), compared with cows with severe metritis and another clinical health disorder (i.e., mastitis, pneumonia,

or metabolic-digestive disorder; MET+) detected ± 7 d around clinical diagnosis (CD) of metritis and cows with no clinical health disorders (NCHD).

²MAST = model run for cows that had non-severe mastitis and no other clinical health disorder (MAST), compared with cows with severe mastitis and another clinical health disorder (i.e., metritis, pneumonia, or metabolic-digestive disorder; MAST+) detected ± 7 d around clinical diagnosis (CD) of mastitis and cows with no clinical health disorders (NCHD).

³Parity.

⁴Presence of risk factor from 2 to 21 DIM.

⁵Season of calving.

All values presented as LSM \pm SEM.