

Table S1: Subgroup analysis in participants with and without concerns regarding menstrual blood leak

		M1	M2	MF	P for interaction
TIB, min	Yes (N = 36)	394.3 ± 60.8	367.3 ± 69.8	397.2 ± 77.3	0.555
	No (N = 9)	413.7 ± 68.7	355.1 ± 81.2	402.3 ± 62.6	
TST, min	Yes (N = 36)	351.0 ± 60.5	333.1 ± 68.9	367.0 ± 71.8	0.376
	No (N = 9)	380.9 ± 65.9	324.3 ± 76.4	376.8 ± 61.7	
SOL, min	Yes (N = 36)	14.0 (25.3)	14.3 (16.8)	10.3 (13.8)	0.857
	No (N = 9)	15.5 (7.6)	16.5 (11.9)	14.5 (12.3)	
SE, %	Yes (N = 36)	89.2 ± 8.7	90.8 ± 6.9	93.0 ± 5.6	0.695
	No (N = 9)	92.0 ± 3.4	91.4 ± 5.5	93.7 ± 4.0	
WASO, min	Yes (N = 36)	8.5 (9.8)	9.5 (12.3)	6.5 (8.0)	0.520
	No (N = 9)	17.0 (13.1)	8.0 (8.0)	9.5 (8.3)	
% of REM sleep, %	Yes (N = 36)	26.8 ± 6.9	25.1 ± 6.1	26.9 ± 4.1	0.472
	No (N = 9)	26.6 ± 5.7	28.0 ± 4.9	28.6 ± 4.3	
% of N3 sleep, %	Yes (N = 36)	24.6 ± 9.4	24.4 ± 7.9	24.2 ± 6.7	0.453
	No (N = 9)	22.2 ± 7.9	25.0 ± 9.6	25.9 ± 5.9	
Ar I, events/h of sleep	Yes (N = 36)	7.2 ± 2.8	6.8 ± 2.6	6.6 ± 2.0	0.133
	No (N = 9)	8.1 ± 2.7	6.0 ± 2.5	7.0 ± 3.5	

Note: Continuous data are summarized using the mean ± SD or median (interquartile range).

Abbreviations: ArI, arousal index; M1/2, 1st and 2nd night after menses onset; MF, mid-follicular phase; N3, deep non-REM sleep; REM, rapid eye movement; SE, sleep efficiency, SOL, sleep onset latency; TST, total sleep time; WASO, wake after sleep onset

Table S2: Subgroup analysis in participants with and without concerns regarding stuffiness around the crotch associated with sanitary products

		M1	M2	MF	P for interaction
TIB, min	Yes (N = 9)	391.0 ± 74.7	370.0 ± 90.4	407.1 ± 88.7	0.771
	No (N = 36)	400.0 ± 59.7	363.6 ± 67.3	396.0 ± 71.0	
TST, min	Yes (N = 9)	353.4 ± 58.8	326.8 ± 89.0	380.9 ± 85.6	0.710
	No (N = 36)	357.8 ± 63.6	332.5 ± 65.4	366.0 ± 65.8	
SOL, min	Yes (N = 9)	14.0 (22.3)	20.5 (23.4)	9.0 (11.6)	0.412
	No (N = 36)	19.8 (15.0)	13.8 (11.5)	13.0 (14.5)	
SE, %	Yes (N = 9)	91.0 ± 6.8	88.8 ± 11.0	93.8 ± 5.4	0.349
	No (N = 36)	89.4 ± 8.3	91.4 ± 5.0	93.0 ± 5.3	
WASO, min	Yes (N = 9)	15.0 (20.4)	9.5 (14.5)	11.0 (11.9)	0.858
	No (N = 36)	8.8 (10.3)	8.8 (9.8)	6.8 (7.8)	
% of REM sleep, %	Yes (N = 9)	28.7 ± 4.4	28.0 ± 3.8	25.3 ± 2.8	0.054
	No (N = 36)	26.3 ± 7.0	25.1 ± 6.2	27.8 ± 4.3	
% of N3 sleep, %	Yes (N = 9)	28.2 ± 13.7	25.0 ± 11.5	26.7 ± 8.3	0.410
	No (N = 36)	23.1 ± 7.4	24.4 ± 7.3	24.0 ± 6.0	
Ar I, events/h of sleep	Yes (N = 9)	7.0 ± 2.3	6.3 ± 2.4	6.4 ± 2.2	0.991
	No (N = 36)	7.5 ± 2.9	6.8 ± 2.6	6.8 ± 2.4	

Note: Continuous data are summarized using the mean ± SD or median (interquartile range).

Abbreviations: ArI, arousal index; M1/2, 1st and 2nd night after menses onset; MF, mid-follicular phase; N3, deep non-REM sleep; REM, rapid eye movement; SE, sleep efficiency, SOL, sleep onset latency; TST, total sleep time; WASO, wake after sleep onset