

Table S1. Unadjusted differences between active and inactive women in infant anthropometrics, neonatal and obstetric outcomes.

	Time Point	Active		Inactive		Effect Size (95% CI)	<i>p</i> Value
		<i>n</i>	Mean ± SD	<i>n</i>	Mean ± SD		
Anthropometrics							
Birth Weight, g	T0	<i>n</i> = 893	3338.0 ± 527.9	<i>n</i> = 1008	3337.4 ± 508.9	0.58 (-46.04, 47.21)	0.980
	T1	<i>n</i> = 1061	3364.5 ± 481.0	<i>n</i> = 827	3341.4 ± 492.5	23.09 (-21.08, 67.26)	0.306
Birth Length, cm	T0	<i>n</i> = 885	51.3 ± 2.6	<i>n</i> = 1000	51.4 ± 2.6	-0.05 (-0.28, 0.18)	0.674
	T1	<i>n</i> = 1056	51.4 ± 2.4	<i>n</i> = 824	51.3 ± 2.6	0.12 (-0.11, 0.35)	0.294
Head Circumference, cm	T0	<i>n</i> = 875	34.7 ± 1.6	<i>n</i> = 989	34.7 ± 1.6	-0.04 (-0.19, 0.11)	0.588
	T1	<i>n</i> = 1047	34.8 ± 1.5	<i>n</i> = 814	34.7 ± 1.6	0.05 (-0.09, 0.20)	0.452
BMI, kg/m²	T0	<i>n</i> = 885	12.7 ± 1.3	<i>n</i> = 1000	12.6 ± 1.2	0.02 (-0.10, 0.14)	0.737
	T1	<i>n</i> = 1056	12.7 ± 1.3	<i>n</i> = 824	12.7 ± 1.2	0.03 (-0.08, 0.15)	0.583
BMI-z-score ^a	T0	<i>n</i> = 884	0.05 ± 1.07	<i>n</i> = 1000	0.03 ± 0.98	0.02 (-0.07, 0.11)	0.683
	T1	<i>n</i> = 1055	0.07 ± 1.04	<i>n</i> = 824	0.04 ± 0.96	0.03 (-0.06, 0.12)	0.557
Neonatal and obstetric outcomes							
LGA	T0	<i>n</i> = 893	74 (8.3)	<i>n</i> = 1006	66 (6.6)	1.29 (0.91, 1.82)	0.152
	T1	<i>n</i> = 1061	87 (8.2)	<i>n</i> = 826	54 (6.5)	1.28 (0.90, 1.82)	0.174
SGA	T0	<i>n</i> = 893	72 (8.1)	<i>n</i> = 1006	92 (9.1)	0.87 (0.63, 1.20)	0.402
	T1	<i>n</i> = 1061	100 (9.4)	<i>n</i> = 826	61 (7.4)	1.31 (0.94, 1.82)	0.116
Low Birth Weight	T0	<i>n</i> = 893	49 (5.5)	<i>n</i> = 1008	46 (4.6)	1.21 (0.80, 1.84)	0.357
	T1	<i>n</i> = 1061	46 (4.3)	<i>n</i> = 827	34 (4.1)	1.06 (0.67, 1.66)	0.810
High Birth Weight	T0	<i>n</i> = 893	81 (9.1)	<i>n</i> = 1008	80 (7.9)	1.16 (0.84, 1.60)	0.376
	T1	<i>n</i> = 1061	92 (8.7)	<i>n</i> = 827	66 (8.0)	1.10 (0.79, 1.52)	0.591
Macrosomia	T0	<i>n</i> = 893	10 (1.1)	<i>n</i> = 1008	8 (0.8)	1.42 (0.56, 3.60)	0.466
	T1	<i>n</i> = 1061	11 (1.0)	<i>n</i> = 827	7 (0.8)	1.23 (0.47, 3.18)	0.673
Preterm Birth	T0	<i>n</i> = 893	61 (6.8)	<i>n</i> = 1006	62 (6.2)	1.12 (0.78, 1.61)	0.555
	T1	<i>n</i> = 1061	52 (4.9)	<i>n</i> = 826	57 (6.9)	0.70 (0.47, 1.02)	0.066
Caesarean Section	T0	<i>n</i> = 893	264 (29.6)	<i>n</i> = 1008	278 (27.6)	1.10 (0.90, 1.35)	0.339
	T1	<i>n</i> = 1060	301 (28.4)	<i>n</i> = 827	232 (28.1)	1.02 (0.83, 1.25)	0.870

Depicted are mean \pm SD and proportions (n (%)).^a BMI-z-score was calculated using German standards [24]. *Active*: Women meeting physical activity recommendations defined as ≥ 7.5 MET-h/week in category sports activity of moderate-intensity or greater. *Inactive*: Women not meeting physical activity recommendations (< 7.5 MET-h/week in category sports activity of moderate-intensity or greater). Abbreviations: BMI: body mass index; LGA: large for gestational age; OR: odds ratio; SGA: small for gestational age; T0: assessment before or in the 12th week of gestation; T1: assessment after the 29th week of gestation.

Table S2. Differences between active^{T0+T1} and inactive^{T0+T1} women in infant anthropometrics, neonatal and obstetric outcomes.

	Active ^{T0+T1}		Inactive ^{T0+T1}		Effect Size (95% CI)	<i>p</i> Value	Adjusted Effect Size ^a (95% CI)	Adjusted <i>p</i> Value ^a
	<i>n</i>	Mean \pm SD	<i>n</i>	Mean \pm SD				
Anthropometrics								
Birth Weight, g	<i>n</i> = 597	3357.3 \pm 501.1	<i>n</i> = 1207	3353.0 \pm 481.4	4.25 (-43.57, 52.08)	0.862	23.18 (-24.73, 71.10)	0.343
Birth Length, cm	<i>n</i> = 594	51.3 \pm 2.5	<i>n</i> = 1202	51.4 \pm 2.5	-0.05 (-0.29, 0.20)	0.711	0.04 (-0.21, 0.29)	0.774
Head Circumference, cm	<i>n</i> = 589	34.7 \pm 1.5	<i>n</i> = 1188	34.7 \pm 1.6	0.00 (-0.15, 0.16)	0.964	0.04 (-0.12, 0.19)	0.660
BMI, kg/m²	<i>n</i> = 594	12.7 \pm 1.4	<i>n</i> = 1202	12.7 \pm 1.2	0.03 (-0.09, 0.16)	0.591	0.07 (-0.05, 0.19)	0.271
BMI-z-score^b	<i>n</i> = 593	0.08 \pm 1.09	<i>n</i> = 1202	0.05 \pm 0.97	0.03 (-0.07, 0.13)	0.531	0.06 (-0.04, 0.16)	0.240
Neonatal and Obstetric Outcomes								
	<i>n</i> (%)		<i>n</i> (%)		Effect Size (95% CI)	<i>p</i> Value	Adjusted OR ^a (95% CI)	Adjusted <i>p</i> Value ^a
LGA	<i>n</i> = 597	54 (9.0)	<i>n</i> = 1206	81 (6.7)	1.38 (0.96, 1.98)	0.078	1.52 (1.05, 2.20)	0.025
SGA	<i>n</i> = 597	55 (9.2)	<i>n</i> = 1206	101 (8.4)	1.11 (0.79, 1.57)	0.552	1.03 (0.73, 1.47)	0.850
Low Birth Weight	<i>n</i> = 597	28 (4.7)	<i>n</i> = 1207	49 (4.1)	1.16 (0.72, 1.87)	0.533	1.07 (0.66, 1.73)	0.794
High Birth Weight	<i>n</i> = 597	58 (9.7)	<i>n</i> = 1207	94 (7.8)	1.27 (0.90, 1.80)	0.166	1.35 (0.95, 1.91)	0.095
Macrosomia	<i>n</i> = 597	8 (1.3)	<i>n</i> = 1207	10 (0.8)	1.63 (0.64, 4.14)	0.308	1.55 (0.60, 4.00)	0.371
Preterm Birth	<i>n</i> = 597	32 (5.4)	<i>n</i> = 1206	72 (6.0)	0.89 (0.58, 1.37)	0.601	0.86 (0.56, 1.32)	0.485
Caesarean Section	<i>n</i> = 597	172 (28.8)	<i>n</i> = 1207	336 (27.8)	1.05 (0.84, 1.30)	0.665	1.04 (0.83, 1.29)	0.761

Depicted are mean \pm SD and proportions (n (%)).^a adjusted for pre-pregnancy age, pre-pregnancy BMI, parity, group assignment. ^b BMI-z-score was calculated using German standards [24]. Active^{T0+T1}: Women meeting physical activity recommendations (≥ 7.5 MET-h/week in category sports activity of moderate-intensity or greater) at T0 and T1. Inactive^{T0+T1}: Women meeting physical activity recommendations at any or one time point. Abbreviations: BMI: body mass index; LGA: large for gestational age; OR: odds ratio; SGA: small for gestational age; T0: assessment before or in the 12th week of gestation; T1: assessment after the 29th week of gestation.

Table S3. Associations between physical activity intensity and infant anthropometrics and obstetric outcomes (unadjusted data).

	Birth Weight		BMI		Preterm Birth		Caesarean Section	
	Effect Size (95% CI)	p Value	Effect Size (95% CI)	p Value	OR (95% CI)	p Value	OR (95% CI)	p Value
TALIA								
T0	4.75 (1.37, 8.13)	0.006	0.01 (0.00, 0.02)	0.009	1.03 (1.00, 1.06)	0.098	1.00 (0.98, 1.01)	0.534
T1	3.24 (-0.17, 6.65)	0.062	0.01 (0.00, 0.02)	0.033	1.03 (0.99, 1.06)	0.107	1.01 (0.99, 1.03)	0.260
Sedentary-Intensity								
T0	-17.81 (-38.83, 3.21)	0.097	-0.01 (-0.06, 0.05)	0.837	0.87 (0.75, 1.00)	0.052	0.96 (0.88, 1.05)	0.340
T1	-24.73 (-42.45, -7.02)	0.006	-0.02 (-0.07, 0.03)	0.421	0.87 (0.76, 1.00)	0.050	0.99 (0.91, 1.07)	0.721
Light-Intensity								
T0	3.17 (-2.68, 9.01)	0.289	0.01 (-0.01, 0.02)	0.262	1.03 (0.98, 1.08)	0.273	0.98 (0.96, 1.01)	0.183
T1	2.83 (-2.42, 8.09)	0.291	0.01 (-0.01, 0.02)	0.252	1.04 (0.99, 1.09)	0.115	1.01 (0.98, 1.03)	0.651
Moderate-Intensity								
T0	6.63 (2.01, 11.25)	0.005	0.02 (0.00, 0.03)	0.008	1.04 (0.99, 1.08)	0.117	1.00 (0.98, 1.02)	0.876
T1	7.09 (1.04, 13.13)	0.022	0.02 (0.00, 0.03)	0.017	1.03 (0.97, 1.10)	0.293	1.02 (0.99, 1.05)	0.149
Vigorous-Intensity								
T0	-8.69 (-71.65, 54.27)	0.787	-0.03 (-0.18, 0.13)	0.758	0.93 (0.58, 1.48)	0.751	1.10 (0.83, 1.45)	0.504
T1	-56.72 (-150.20, 36.77)	0.234	-0.15 (-0.39, 0.09)	0.215	0.60 (0.33, 1.09)	0.093	1.32 (0.82, 2.12)	0.253

Estimated is the effect of 10 MET-h/week change in intensities on infant anthropometrics and obstetric outcomes. Abbreviations: BMI: body mass index; OR: odds ratio; T0: assessment before or in the 12th week of gestation; T1: assessment after the 29th week of gestation; TALIA: total physical activity of light intensity and above.

Table S4. Associations between physical activity intensity and neonatal outcomes (unadjusted data).

	Low Birth Weight		High Birth Weight		LGA		SGA	
	OR (95% CI)	p Value						
TALIA								
T0	1.04 (1.00, 1.07)	0.045	0.98 (0.96, 1.01)	0.119	0.98 (0.96, 1.00)	0.073	1.03 (1.00, 1.06)	0.034
T1	1.02 (0.98, 1.05)	0.421	0.99 (0.96, 1.01)	0.295	0.99 (0.96, 1.02)	0.418	1.01 (0.99, 1.04)	0.346
Sedentary-Intensity								
T0	0.80 (0.69, 0.94)	0.004	1.06 (0.90, 1.24)	0.484	1.08 (0.91, 1.27)	0.403	1.07 (0.92, 1.25)	0.379
T1	0.80 (0.69, 0.93)	0.003	1.10 (0.96, 1.27)	0.184	1.13 (0.97, 1.32)	0.120	0.96 (0.84, 1.09)	0.508
Light-Intensity								
T0	1.04 (0.99, 1.10)	0.161	1.00 (0.96, 1.04)	0.947	1.00 (0.95, 1.04)	0.838	1.05 (1.01, 1.10)	0.017
T1	1.03 (0.97, 1.09)	0.360	1.01 (0.97, 1.05)	0.779	1.00 (0.96, 1.05)	0.841	1.03 (0.99, 1.08)	0.127
Moderate-Intensity								
T0	1.04 (0.99, 1.09)	0.118	0.97 (0.95, 1.00)	0.040	0.97 (0.94, 1.00)	0.043	1.01 (0.98, 1.05)	0.409
T1	1.02 (0.95, 1.08)	0.663	0.95 (0.92, 0.99)	0.015	0.96 (0.92, 1.00)	0.050	1.01 (0.96, 1.05)	0.845
Vigorous-Intensity								
T0	1.13 (0.62, 2.06)	0.699	1.00 (0.64, 1.54)	0.982	0.98 (0.62, 1.55)	0.927	0.87 (0.59, 1.30)	0.504
T1	0.99 (0.38, 2.53)	0.977	0.77 (0.43, 1.38)	0.378	0.87 (0.45, 1.70)	0.690	0.64 (0.38, 1.09)	0.097

Estimated is the effect of 10 MET-h/week change in intensities on neonatal outcomes. Abbreviations: LGA: large for gestational age; OR: odds ratio; SGA: small for gestational age; T0: assessment before or in the 12th week of gestation; T1: assessment after the 29th week of gestation; TALIA: total physical activity of light intensity and above.