

Supporting Information

Gettler et al. 10.1073/pnas.1105403108

Table S1. Predicting 2009 partnering and parenting status from 2005 T among single nonfathers at baseline (*n* = 465)*

Partnered [†]	OR [‡]	<i>P</i> value
AM T	1.20 (1.01, 1.44)	0.044
PM T	1.08 (0.90, 1.30)	0.393
Partnered and fatherhood [§]	OR	<i>P</i> value
AM T	1.21 (1.00, 1.45)	0.048
PM T	1.11 (0.92, 1.34)	0.276

*Values of T adjusted for time of saliva collection (AM and PM) and usual wake time (AM). T converted to z score, OR reflects the effects of a 1-SD change.

[†]Odds of becoming partnered between 2005 and 2009 among single men at baseline.

[‡]OR (95% CI).

[§]Odds of becoming partnered and a first-time father between 2005 and 2009 among single nonfathers at baseline.

Table S2. Predicting longitudinal change in AM T among men who were single nonfathers at baseline (*n* = 465)

	ΔAM T*			
	Model 1	<i>P</i> value	Model 2	<i>P</i> value
Change in partnering/fatherhood [†]				
Newly P, never fathers [‡]	-9.2 ± 13.6	0.50	-8.9 ± 13.7	0.52
Newly P, new fathers [§]	-31.3 ± 8.5	0.0003	-30.9 ± 8.6	0.0004
Average self-reported stress [¶]			0.8 ± 1.4	0.59
Average sleep quality [¶]			0.2 ± 2.6	0.95
Model <i>R</i> ²	0.028		0.029	

*β ± (SEM) values of ΔT adjusted for time of saliva collection and usual wake time.

[†]Excluded comparison: men who were not partnered (P) in 2005 or 2009 and were never fathers (*n* = 257).

[‡]Men who became P between 2005 and 2009 and were never fathers (*n* = 46).

[§]Men who became P and first-time fathers between 2005 and 2009 (*n* = 162).

[¶]Average of 2005 and 2009 values for self-reported psychosocial stress and sleep quality.

Table S3. Predicting longitudinal change in PM T among men who were single nonfathers at baseline (*n* = 465)

	ΔPM T*			
	Model 1	<i>P</i> value	Model 2	<i>P</i> value
Change in partnering/fatherhood [†]				
Newly P, never fathers [‡]	-13.4 ± 10.0	0.18	-14.0 ± 9.9	0.16
Newly P, new fathers [§]	-22.5 ± 5.8	0.0001	-23.2 ± 5.8	0.0001
Average self-reported stress [¶]			-0.9 ± 0.9	0.35
Average sleep quality [¶]			-1.5 ± 1.8	0.42
Model <i>R</i> ²	0.030		0.032	

*β ± (SEM) values of ΔT adjusted for time of saliva collection. Regression models were calculated with robust SEs.

[†]Excluded comparison: men who were not partnered (P) in 2005 or 2009 and were never fathers (*n* = 257).

[‡]Men who became P between 2005 and 2009 and were never fathers (*n* = 46).

[§]Men who became P and first time fathers between 2005 and 2009 (*n* = 162).

[¶]Average of 2005 and 2009 values for self-reported psychosocial stress and sleep quality.

Table S4. Comparison of within-group changes in T between 2005 and 2009* (n = 624)

No. subjects	Partnered/fatherhood status			Mean \pm SD, pg/mL	P value
	2005	2009			
257	Neither	Neither	AM T 05	190.8 \pm 69.9	0.0001
			AM T 09	168.9 \pm 64.2	
			PM T 05	119.6 \pm 53.1	
46	Neither	Newly P, not father	PM T 09	100.6 \pm 39.8	0.0001
			AM T 05	199.4 \pm 91.6	
			AM T 09	168.3 \pm 55.7	
9	Neither	Separated [†] , not father	PM T 05	119.2 \pm 48.6	0.001
			PM T 09	86.9 \pm 43.3	
			AM T 05	191.1 \pm 38.7	
12	Neither	Not P, new father	AM T 09	219.3 \pm 106.1	0.50
			PM T 05	120.3 \pm 20.0	
			PM T 09	96.8 \pm 50.8	
162	Neither	Newly P, new father	AM T 05	178.6 \pm 47.7	0.42
			AM T 09	159.6 \pm 48.8	
			PM T 05	131.7 \pm 96.3	
35	P only	P, new father	PM T 09	92.0 \pm 46.7	0.25
			AM T 05	206.6 \pm 78.6	
			AM T 09	153.4 \pm 56.1	
3	P only	Separated, new father	PM T 05	125.1 \pm 52.3	0.0001
			PM T 09	83.6 \pm 33.8	
			AM T 05	172.9 \pm 74.2	
4	Father only	Not P, father	AM T 09	140.1 \pm 64.8	0.05
			PM T 05	108.7 \pm 45.9	
			PM T 09	75.8 \pm 28.7	
11	Father only	Newly P, father	AM T 05	229.6 \pm 36.3	0.24
			AM T 09	173.0 \pm 56.8	
			PM T 05	176.3 \pm 47.7	
2	P, father	Separated, father	PM T 09	150.0 \pm 66.0	0.89
			AM T 05	253.9 \pm 153.2	
			AM T 09	150.2 \pm 36.6	
83	P, father	P, father	PM T 05	138.0 \pm 56.7	0.61
			PM T 09	139.4 \pm 57.2	
			AM T 05	193.9 \pm 80.6	
2	P, father	Separated, father	AM T 09	136.7 \pm 30.8	0.03
			PM T 05	124.6 \pm 51.3	
			PM T 09	85.0 \pm 28.7	
83	P, father	P, father	AM T 05	147.6 \pm 108.8	0.77
			AM T 09	165.5 \pm 42.8	
			PM T 05	85.3 \pm 7.3	
83	P, father	P, father	PM T 09	114.6 \pm 12.2	0.28
			AM T 05	178.4 \pm 61.1	
			AM T 09	161.3 \pm 61.1	
83	P, father	P, father	PM T 05	96.0 \pm 37.2	0.37
			PM T 09	91.1 \pm 38.4	

*Values adjusted for time of saliva collection (AM and PM) and usual wake time (AM).

[†]Not partnered (P) in 2005, became P, and then separated from partner between 2005 and 2009.

Table S5. Predicting longitudinal change in AM T among men who were single nonfathers at baseline: Comparing new fathers with men who remained nonfathers (*n* = 465)

	ΔAM T*			
	Model 1	<i>P</i> value	Model 2	<i>P</i> value
New fathers (stratified by youngest child's age) [†]				
Fathers of newborns [‡]	-81.3 ± 21.1	0.0001	-81.3 ± 21.2	0.0001
Fathers of nonnewborn infants [§]	-18.8 ± 12.3	0.13	-18.1 ± 12.4	0.15
Fathers of children older than 1 y	-27.1 ± 10.2	0.008	-26.7 ± 10.2	0.01
Average self-reported stress			0.9 ± 1.4	0.52
Average sleep quality			0.7 ± 2.6	0.77
Model <i>R</i> ²	0.043		0.044	

*β ± (SEM) values of ΔT adjusted for time of saliva collection and usual wake time.

[†]Excluded comparison: men who were not partnered (*P*) in 2005 and were never fathers (*n* = 303).

[‡]Not *P* in 2005 and first-time fathers between 2005 and 2009; youngest child is 1 mo old or less (*n* = 17).

[§]Not *P* in 2005 and first-time fathers between 2005 and 2009; youngest child is older than 1 mo of age but 1 y old or less (*n* = 56).

^{||}Not *P* in 2005 and first-time fathers between 2005 and 2009; youngest child is older than 1 y of age (*n* = 89).

^{||}Average of 2005 and 2009 values for self-reported psychosocial stress and sleep quality.

Table S6. Predicting longitudinal change in PM T among men who were single nonfathers at baseline: Comparing new fathers with men who remained nonfathers (*n* = 465)

	ΔPM T*			
	Model 1	<i>P</i> value	Model 2	<i>P</i> value
New fathers (stratified by youngest child's age) [†]				
Fathers of newborns [‡]	-51.1 ± 16.0	0.002	-51.0 ± 16.1	0.002
Fathers of nonnewborn infants [§]	-25.4 ± 6.9	0.0003	-26.1 ± 6.9	0.0002
Fathers of children older than 1 y	-11.5 ± 6.7	0.09	-12.0 ± 6.7	0.08
Average self-reported stress			-0.8 ± 0.9	0.38
Average sleep quality			-1.1 ± 1.8	0.56
Model <i>R</i> ²	0.040		0.042	

*β ± (SEM) values of ΔT adjusted for time of saliva collection. Regression models were calculated with robust SEs.

[†]Excluded comparison: men who were not partnered (*P*) in 2005 and were never fathers (*n* = 303).

[‡]Not *P* in 2005 and first-time fathers between 2005 and 2009; youngest child is 1 mo old or less (*n* = 17).

[§]Not *P* in 2005 and first-time fathers between 2005 and 2009; youngest child is older than 1 mo of age but 1 y old or less (*n* = 56).

^{||}Not *P* in 2005 and first-time fathers between 2005 and 2009; youngest child is older than 1 y of age (*n* = 89).

^{||}Average of 2005 and 2009 values for self-reported psychosocial stress and sleep quality.

Table S7. Predicting longitudinal change in AM T among men who were single nonfathers at baseline: Comparing fathers without newborn infants with fathers of newborns (*n* = 162)

	ΔAM T*			
	Model 1	<i>P</i> value	Model 2	<i>P</i> value
New fathers (stratified by youngest child's age) [†]				
Fathers of nonnewborn infants [‡]	62.5 ± 23.8	0.009	65.6 ± 24.1	0.007
Fathers of children older than 1 y [§]	54.2 ± 22.7	0.018	53.0 ± 23.0	0.023
Average self-reported stress			-2.3 ± 2.7	0.391
Average sleep quality			2.5 ± 4.6	0.590
Daily physical care				
3 h or more of care			-54.2 ± 29.9	0.072
Model <i>R</i> ²	0.043		0.070	

*β ± (SEM) values of ΔT adjusted for time of saliva collection and usual wake time.

[†]Excluded comparison: men who were not partnered (*P*) in 2005 and first-time fathers between 2005 and 2009; youngest child is 1 mo old or less (*n* = 17).

[‡]Not *P* in 2005 and first-time fathers between 2005 and 2009; youngest child is older than 1 mo of age but 1 y old or less (*n* = 56).

[§]Not *P* in 2005 and first-time fathers between 2005 and 2009; youngest child is older than 1 y of age (*n* = 89).

^{||}Average of 2005 and 2009 values for self-reported psychosocial stress and sleep quality.

^{||}Excluded comparison: fathers reporting no involvement in daily physical care of their children in 2009.

