Table S1. Comparison of lactation treatment dosages. We ran a Wilcox Rank Sum Test for each of the four response variables measured, two HPA axis measurements, and two behavioral measurements, to test for an effect of GC treatment dosage (8 mg or 12 mg) in the lactation treatment group. We found no significant difference between the treatment dosage groups, and therefore combined them in all further analyses.

Dependent variable	W	*p*-value
Area under the curve (DEX to ACTH 60 min)	14	0.81
Relative decrease from initial handling-stressed sample to DEX (%)	17	0.93
Activity	27	0.07
Aggression	8	0.21

Table S2. Analyses with time spent in trap by treatment group. Using data from 2016 and 2017 (data from 2015 were not available), we ran two independent ANOVAs to test for any treatment group biases in the estimated amount of time individual squirrels spent in the trap (B) prior to the behavioral trials and (C) prior to the first blood sample. Time spent in the trap is an estimate based on the time the trap was last seen empty for "time in trap prior to behavioral trials". Although we do not know the precise time the squirrel entered the trap, we do know they entered it sometime after that moment, and it is therefore the *maximum* amount of time the squirrel could have spent in the trap, though it is likely the actual amount of time spent in traps is lower. Time in trap prior to first blood sample is the time elapsed since the trap was last seen empty to the start of the first blood sample, which includes the time in trap prior to behavioral trials, and the time that elapsed during the handling of the squirrel and behavioral trials. Summary statistics are provided (A). The ANOVAs and Tukey post-hoc comparisons showed no significant treatment group differences in either duration of time spent in the trap (B) prior to behavioral trials or (C) prior to the first blood sample being drawn.

A) Summary Statistics

	time in trap prior to behavioral trials (min)	**time in trap + handling time prior to first blood sample (min)**
Treatment Group	***mean (± SD)***	***mean (± SD)***
lac control	89.5 (± 45.1)	204 (± 49.7)
lac GC	91 (± 53.8)	151 (± 53.9)
preg control	81.8 (± 44.6)	164 (± 53.2)
preg GC	105 (± 37.7)	195 (± 59.7)

B) Duration of time (min) in trap prior to behavioral trials

ANOVA	**df**	**sum sq**	**mean sq**	***f*-value**	***p*-value**
Treatment Group	3	6318	2106	1.41	0.26
Residuals	42	62962	1499		

Tukey comparison group	**ß**	**SE**	***t*-value**	***p*-value**
lac GC – lac control	8.89	20.41	0.44	0.97
preg control – lac control	5.12	16.13	0.32	0.99
preg GC – lac control	28.76	16.33	1.76	0.30
preg control – lac GC	-3.77	18.54	-0.20	0.99
preg GC – lac GC	19.87	18.70	1.06	0.71
preg GC – preg control	23.64	13.92	1.70	0.33

C) Duration of time (min) in trap prior to the first blood sample

ANOVA	**df**	**sum sq**	**mean sq**	***f*-value**	***p*-value**
Treatment Group	3	18928	6309	2.08	0.12
Residuals	44	133196	3027		

Tukey comparison group	**ß**	**SE**	***t*-value**	***p*-value**
lac GC – lac control	-52.95	27.73	-1.91	0.24
preg control – lac control	-39.92	22.93	-1.74	0.31
preg GC – lac control	-8.54	22.93	-0.37	0.98
preg control – lac GC	13.04	24.93	0.52	0.95
preg GC – lac GC	44.41	24.93	1.78	0.29
preg GC – preg control	31.38	19.45	1.61	0.38

Table S3. Time in trap as predictor of behavior and HPA axis measurements. Using data from 2016 and 2017 (data from 2015 were not available), we ran general linear models to estimate the impact the total maximum time offspring spent in the trap on the (A) behavioral traits and (B) HPA axis measurements, prior to either the behavioral trials or HPA axis hormone challenge respectively. In the model for ACTH area under the curve (AUC), we included the plasma cortisol concentration at the DEX blood sample to control for starting concentrations of cortisol (see statistical methods in main text). Although the amount of time offspring spent in the trap was variable (Table S2), it did not significantly impact either behavior or HPA axis dynamics.

A) Behavioral traits

		Activity			**Aggression**	
Fixed Effect	**ß**	***CI (95%)***	***p-value***	**ß**	***CI (95%)***	***p-value***
Intercept	0.24	-0.43 – 0.91	0.49	0.34	-0.35 – 1.04	0.34
minutes in trap *before behavioral trials*	-0.01	-0.01 – 0.00	0.11	-0.00	-0.01 – 0.00	0.19
Observations	39			39		
R^2 / adjusted R^2	0.07 / 0.041			0.05 / 0.02		

B) HPA axis measurements

		ACTH AUC			**Negative Feedback (%)**	
Fixed Effect	**ß**	***CI (95%)***	***p-value***	**ß**	***CI (95%)***	***p-value***
Intercept	47.75	31.92 – 63.57	**<0.001**	76.59	56.69 – 96.49	**<0.001**
minutes in trap *before first blood sample*	0.05	-0.03 – 0.14	0.25	-0.03	-0.14 – 0.08	0.58
plasma cortisol at DEX (µg/dL)	1.24	0.85 – 1.63	**<0.001**			
Observations	46			46		
R^2 / adjusted R^2	0.52 / 0.50			0.01 / -0.02		

Table S4. Full model results for each hormone challenge time point independently We ran independent general linear models to test for the effect of maternal GC treatment on the raw plasma cortisol concentration values at each of the three time points in the HPA axis hormone challenge: (A) 1 h post-dexamethasone (DEX) injection, (B) 30 mins post-ACTH injection, and (C) 1 h post-ACTH injection. On rare occasions, we did not get a plasma sample at each time point for an individual squirrel. These models only included measured data (no imputed values), therefore the sample size for each model is different. For each time point, we ran independent models for pregnancy and lactation treatment groups. We included the following fixed effects for pregnancy treatment models: treatment group (control or GC), sex (F or M), initial blood sample cortisol concentration, treatment length in days (standardized), year (as categorical factor), offspring age (standardized), and the interaction between treatment group and sex. We included the same fixed effects for lactation treatment models, but we excluded treatment length since there was almost no variation in treatment length for the lactation treated litters. We did not include a random effect for litter identity in these models due to evidence of overfitting if they were included (singular fit). The reference group is control females from 2015.

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