This file is a(n) Supplemental data of:

- -

A longitudinal study of eating behaviours in childhood and later eating disorder behaviours and diagnoses

- -

Herle, Moritz; Stavola, Bianca De; Hübel, Christopher; Abdulkadir, Mohamed; Ferreira, Diana Santos; Loos, Ruth J F; Bryant-Waugh, Rachel; Bulik, Cynthia M; Micali, Nadia

Supplement Tables

Supplement Table 1a: Associations between overeating trajectories and disordered eating and EDs outcomes age 16 years, girls only

Childhood overeating			
Binge eating, girls only (n= 2,767)			
	BR*	**95% CI**	**p-value**
Low overeating$ (N=1929)	0.15	0.13, 0.16	<0.001
	RD	**95% CI**	**p-value**
Low transient (N=333)	0.01	-0.04, 0.05	0.705
Late increasing (N=369)	**0.07**	**0.03, 0.12**	**0.001**
Early increasing (N=136)	0.07	-0.01, 0.15	0.052
Purging, girls only (n=2,779)			
	BR	**95% CI**	**p-value**
Low overeating $ (N=1938)	0.08	0.07, 0.10	<0.001
	RD	**95% CI**	**p-value**
Low transient (N=334)	0.03	-0.01, 0.07	0.104
Late increasing (N=370)	0.02	-0.01, 0.05	0.185
Early increasing (N=137)	0.06	-0.004 , 0.13	0.066
Binge eating disorder, girls only (n= 2,804) (not adjusted for maternal education)			
	BR	**95% CI**	**p-value**
Low overeating$ (N=1937)	0.01	0.01, 0.02	<0.001
	RD	**95% CI**	**p-value**
Low transient (N=336)	0.01	-0.01, 0.03	0.217
Late increasing (N=372)	**0.02**	**0.00, 0.04**	**0.016**
Early increasing (N=138)	0.01	-0.02, 0.04	0.501

BR= Baseline risk; RD = Risk difference, $ Reference class

Supplement Table 1b. Associations between undereating trajectories and disordered eating and EDs outcomes age 16 years, girls only

Childhood undereating			
Anorexia Nervosa, girls only (N=2,804)			
	BR*	**95% CI**	***p-value***
Low undereating$ (N=679)	0.02	0.01, 0.03	<0.001
	RD	**95% CI**	***p-value***
Low transient (N=1,050)	0.00	-0.01, 0.02	0.760
Low and decreasing (N=565)	0.01	0.00, 0.03	0.156
High transient (N=363)	0.01	-0.01, 0.03	0.273
High decreasing (N=93)	0.02	-0.02, 0.06	0.376
High persistent (N=54)	**0.06**	**0.00, 0.13**	**0.043**
Fasting, girls only (N=2,760)			
	BR*	**95% CI**	***p-value***
Low undereating $ (N=667)	0.23	0.20, 0.26	<0.001
	RD	**95% CI**	***p-value***
Low transient (N=1,035)	**-0.04**	**-0.08, 0.00**	**0.033**
Low and decreasing (N=557)	-0.04	-0.09, 0.01	0.113
High transient (N=359)	-0.02	-0.08, 0.03	0.442
High decreasing (N=89)	0.00	-0.09, 0.09	0.975
High persistent (N=53)	0.00	-0.13, 0.12	0.991
Bulimia Nervosa, girls only (N= 2,804)			
	BR*	**95% CI**	***p-value***
Low undereating $ (N=679)	0.02	0.001, 0.03	<0.001
	RD	**95% CI**	***p-value***
Low transient (N=1,050)	-0.01	-0.02, 0.001	0.336
Low and decreasing (N=565)	-0.01	-0.02, 0	0.060
High transient (N=363)	0.01	-0.01, 0.022	0.454
High decreasing (N=93)	0.02	-0.02, 0.05	0.364
High persistent (N=54)	0.01	-0.01, 0.05	0.605
Excessive exercise, girls only (N=2,526)			
	BR*	**95% CI**	***p-value***

Low undereating $^{\$}$ (N=600)	0.08	0.06, 0.11	<0.001
	RD	**95% CI**	*p-value*
Low transient (N=962)	-0.01	-0.04, 0.02	0.476
Low and decreasing (N=503)	**-0.03**	**-0.06, 0.00**	**0.040**
High transient (N=330)	-0.02	-0.05, 0.02	0.327
High decreasing (N=83)	0.01	-0.05, 0.08	0.699
High persistent (N=48)	0.00	-0.08, 0.09	0.920

$^{\$}$ Reference class; BR= Baseline risk; RD = Risk difference

Supplement Table 1c. Associations between fussy eating trajectories and disordered eating and EDs outcomes age 16 years, girls only
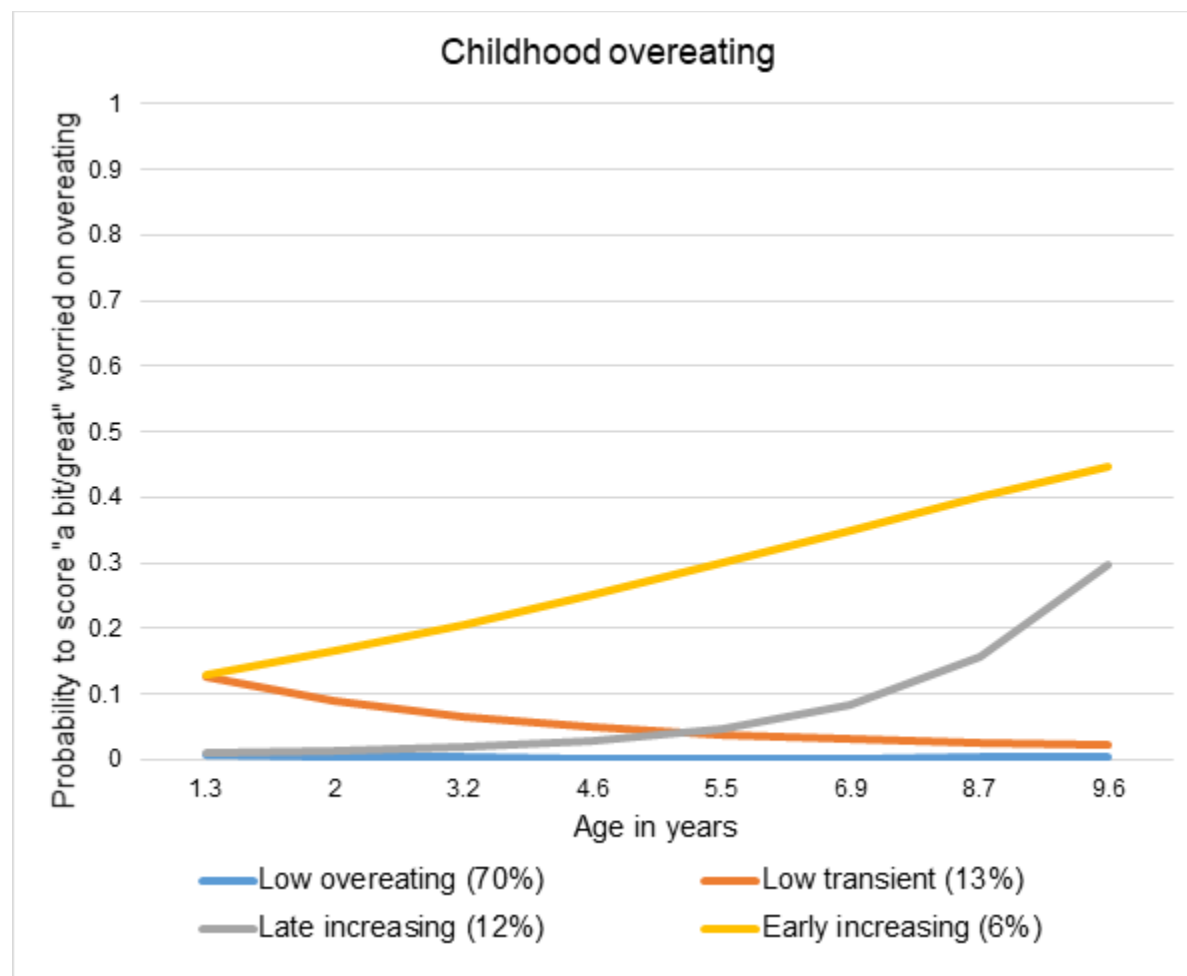
Childhood fussy eating			
Anorexia Nervosa, Girls only (N=2,804)			
	BR*	**95% CI**	*p-value*
Low fussy eating [$] (N=605)	0.02	0.01, 0.03	<0.001
	RD*	**95% CI**	*p-value*
Low transient (N=404)	0.00	-0.02, 0.01	0.780
Low and increasing (N=753)	0.00	-0.01, 0.01	0.935
Early and decreasing (N=455)	0.03	0.01, 0.05	0.009
Rapidly increasing (N=347)	-0.01	-0.02, 0.01	0.414
High persistent (N=240)	0.03	0.00, 0.06	0.029
Fasting, girls only (N=2,760)			
	BR*	**95% CI**	*p-value*
Low fussy eating [$] (N=598)	0.21	0.18, 0.24	<0.001
	RD*	**95% CI**	*p-value*
Low transient (N=400)	-0.04	-0.09, 0.01	0.153
Low and increasing (N=735)	0.00	-0.04, 0.05	0.961
Early and decreasing (N=447)	-0.01	-0.06, 0.04	0.766
Rapidly increasing (N=345)	0.01	-0.05, 0.06	0.801
High persistent (N=235)	-0.03	-0.09, 0.03	0.302
Excessive exercise, girls only (N=2,526)			
	BR*	**95% CI**	*p-value*
Low fussy eating [$] (N=538)	0.08	0.06, 0.10	<0.001
	RD	**95% CI**	*p-value*
Low transient (N=369)	-0.02	-0.05, 0.02	0.338
Low and increasing (N=669)	0.00	-0.03, 0.03	0.920
Early and decreasing (N=420)	-0.03	-0.06, 0.00	0.087
Rapidly increasing (N=314)	-0.02	-0.05, 0.02	0.378
High persistent (N=216)	-0.02	-0.06, 0.03	0.460

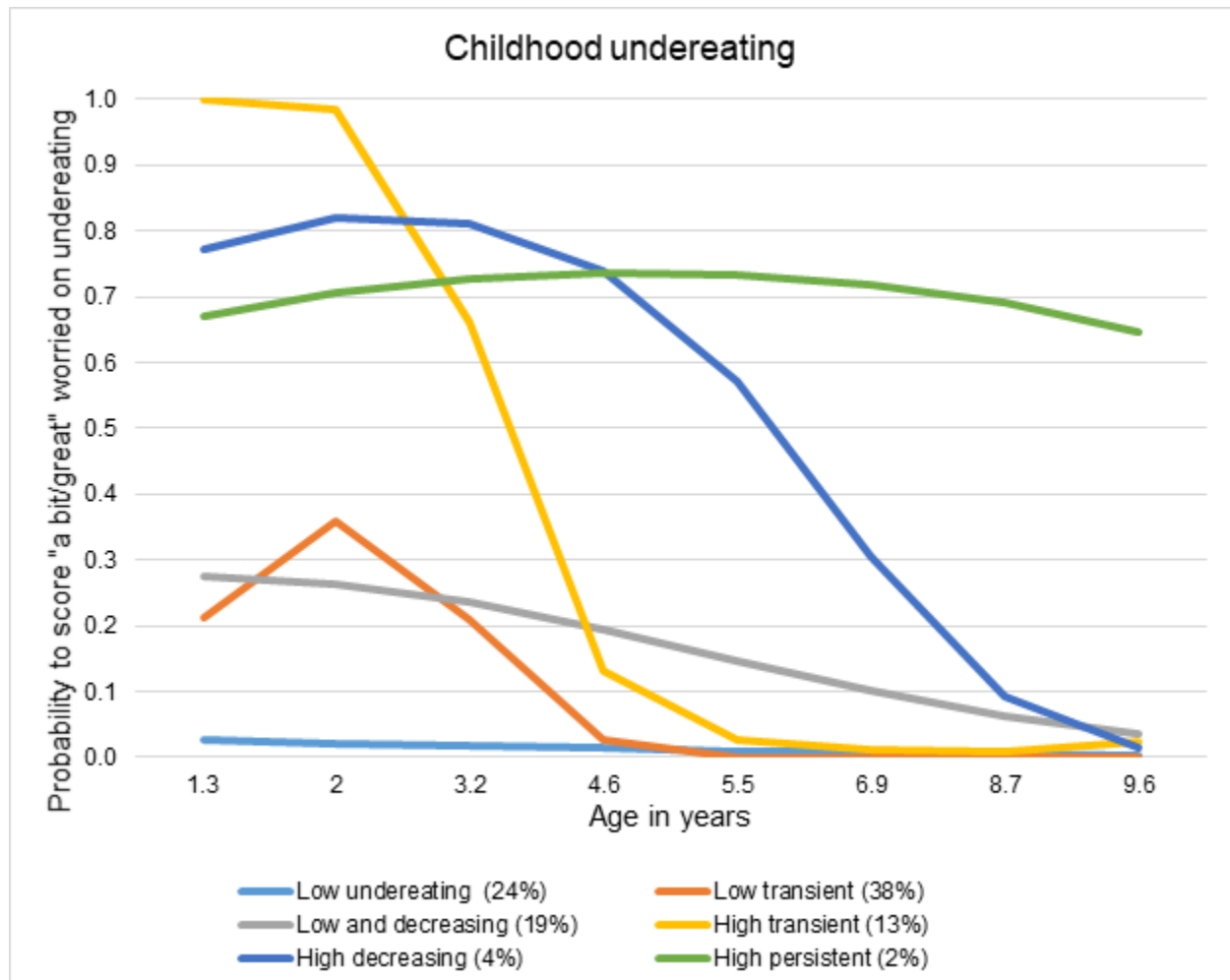| Bulimia Nervosa, girls only (N=2,804)			
	BR*	95% CI	*p-value*
Low fussy eating $ (N=605)	0.01	0.00, 0.02	<0.001
	RD	95% CI	*p-value*
Low transient (N=404)	0.01	-0.01, 0.03	0.253
Low and increasing (N=753)	-0.00	-0.01, 0.01	0.602
Early and decreasing (N=455)	0.00	-0.01, 0.02	0.558
Rapidly increasing (N=347)	-0.01	-0.02, 0.00	0.239
High persistent (N=240)	-0.01	-0.02, 0.01	0.502

$ Reference class; BR= Baseline risk; RD = Risk difference

Supplementary Figures

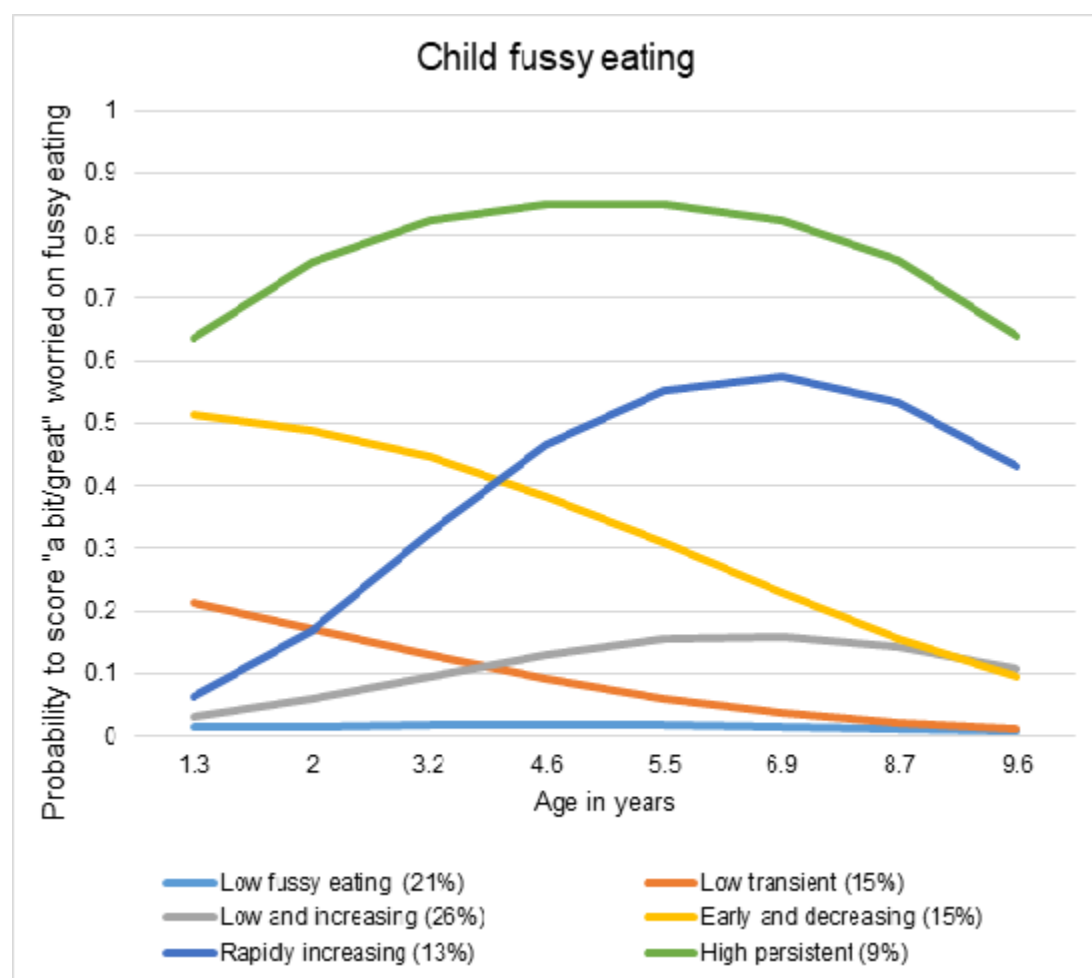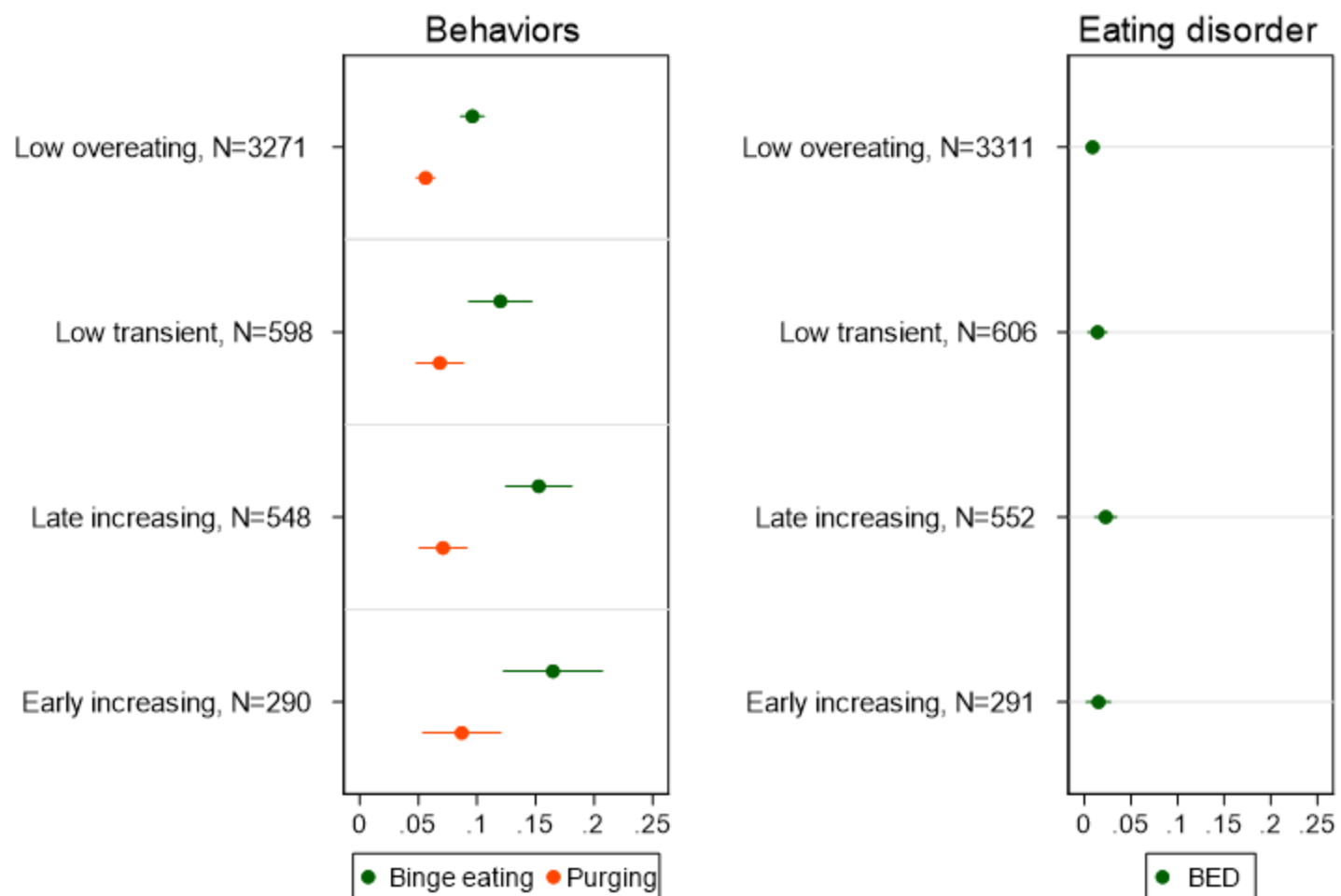Supplement Figure 1. Groups of childhood overeating across the first 10 years of life

Childhood overeating

Supplement Figure 2. Groups of childhood undereating across the first 10 years of life

Childhood undereating

Legend:
- Low undereating (24%)
- Low and decreasing (19%)
- High decreasing (4%)
- Low transient (38%)
- High transient (13%)
- High persistent (2%)

Y-axis: Probability to score "a bit/great" worried on undereating

X-axis: Age in years

Supplement figure 3. Groups of childhood fussy eating across the first 10 years of life

Child fussy eating

Y-axis: Probability to score "a bit/great" worried on fussy eating

X-axis: Age in years

- Low fussy eating (21%)
- Low transient (15%)
- Low and increasing (26%)
- Early and decreasing (15%)
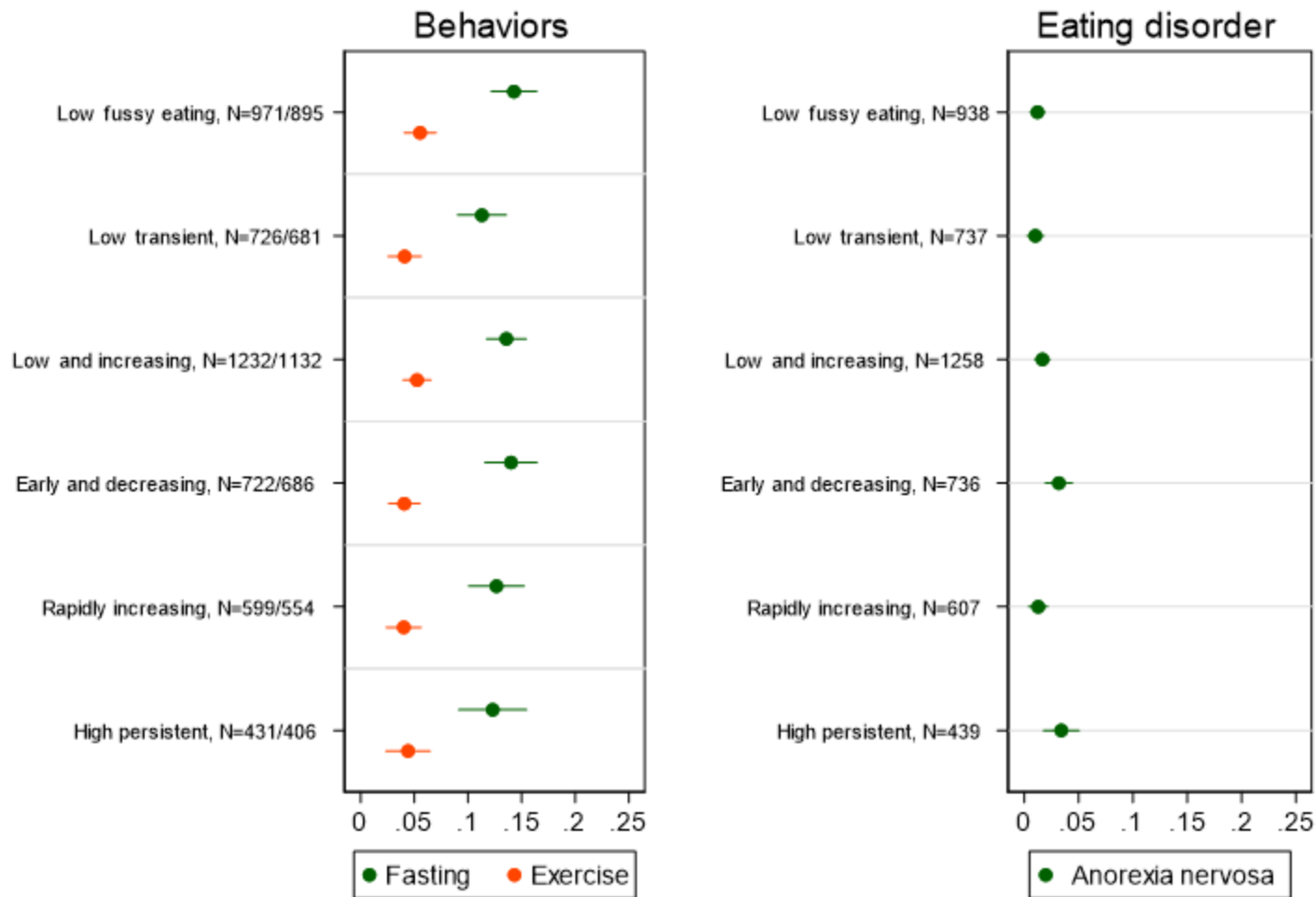- Rapidly increasing (13%)
- High persistent (9%)

Supplement Figure 4 Estimated mean probability of disordered eating behaviors and eating disorder (ED) diagnoses by overeating trajectory, derived from logistic regression models adjusted for sex, gestational age, birthweight, maternal age, and maternal education. BED = binge-eating disorder
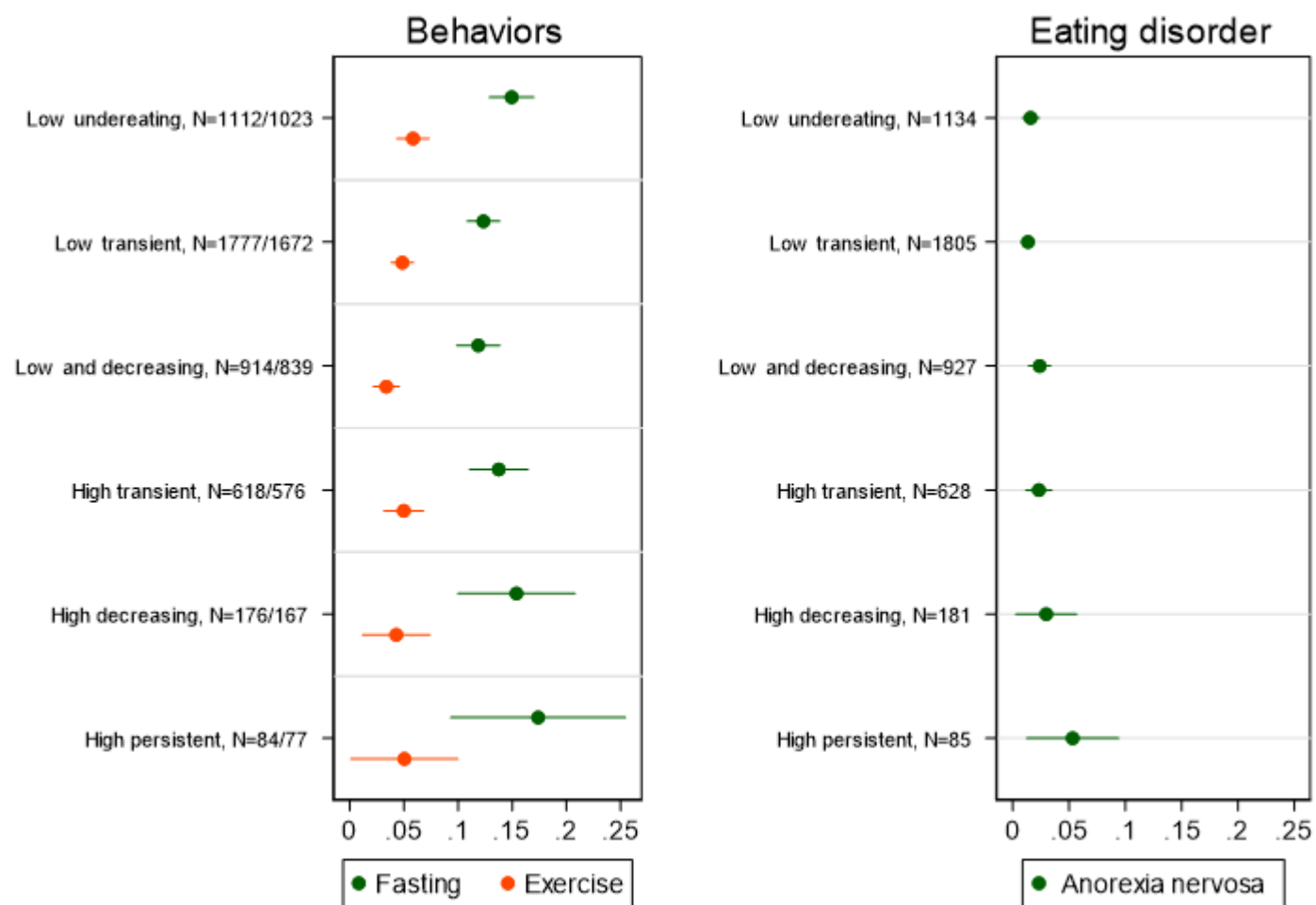
Supplement Figure 5 Estimated mean probability of disordered eating behaviors and eating disorder (ED) diagnoses by undereating, derived from logistic regression models adjusted for sex, gestational age, birth weight, maternal age, and maternal education

Supplement Figure 6 Estimated mean probability of disordered eating behaviors and eating disorder (ED) diagnoses by fussy eating trajectory, derived from logistic regression models, adjusted for sex, gestational age, birthweight, maternal age, and maternal education