SUPPLEMENTAL MATERIAL

Table S1. Analyses of predictors of attrition in young adulthood among the 791 participants selected from the NIYHP for the present study.

Baseline characteristics[*]	Included at YH3 (n=356)	Drop out at YH3 (n=435)	Drop-outs vs. Included		
	Mean (SD), median [IQR] or %	Mean (SD), median [IQR] or %	OR[***]	95% CI	P-value
Perinatal variables					
Gestational age, weeks	39.7 (1.01)	39.7 (1.08)	n/i	-	-
Early term (37-38 weeks), %	12.9	14.7	1.00	-	-
Full term (39-40 weeks), %	68.5	66.4	0.94	0.61; 1.47	0.796
Late term (41-42 weeks), %	18.6	18.9	0.90	0.52; 1.55	0.706
Sex, % female	50.0	50.0	0.92	0.61; 1.40	0.707
Socio-economic status, % manual	19.4	33.8	**1.95**	**1.37; 2.77**	**<0.001**
Birthweight, z-score	0.06 (1.00)	-0.03 (1.04)	0.98	0.83; 1.16	0.836
Mode of delivery					
Vaginal (normal), %	83.4	79.5	1.00	-	-
Vaginal (assisted instrumental), %	11.5	16.3	**1.59**	**1.02; 2.49**	**0.039**
Caesarean, %	5.1	4.2	0.87	0.43; 1.78	0.708
Breast feeding					
Never, %	77.8	86.2	1.00	-	-
≤3 months, %	14.6	8.3	0.63	0.39; 1.01	0.055
>3 months, %	7.6	5.5	0.83	0.46; 1.53	0.558
Maternal age, years	28.2 (5.8)	27.3 (5.3)	0.98	0.96; 1.01	0.127
Maternal BMI, kg/m^2	24.5 (4.0)	24.5 (3.9)	1.00	0.96; 1.04	0.852
Maternal smoking habits					
Non-smoker, %	58.2	69.9	1.00	-	-
Sporadic smoker, %	4.6	2.8	1.87	0.84; 4.22	0.127
Regular smoker, %	37.2	27.3	1.37	0.98; 1.91	0.067
Time–dependent variables [a]					
VO$_2$max, mL/min/kg	45.1 (6.0)	44.0 (5.9)	1.00	0.97; 1.04	0.913
Height, cm	158 (11)	157 (11)	0.99	0.97; 1.02	0.577
Sum of skinfolds, mm (x10)	349 [276; 472]	383 [290; 537]	**1.15**	**1.04;1.27**	**0.009**
Maturity stage, [**] %					
Pre-pubescent (stage I)	26.1	25.8	1.00	-	-
Pubescent (stages II-III)	22.5	20.1	0.83	0.52; 1.38	0.504
Post-pubescent (stages IV-V)	51.4	54.1	0.86	0.45; 1.65	0.656
Cohort, % 15-year olds	45.8	50.1	1.34	0.80; 2.23	0.267

OR, odds ratio; CI, confidence interval; SD, standard deviation; n/I, not included.

[*]for the time-dependent covariates, baseline characteristics are those obtained at the ages of 12 or 15 among the participants in the respective cohorts;

[**]based on Tanner's stages for pubic hair development;

[***]ORs are from a multivariable model including all the variables listed; analysis with gestational age in weeks instead of categories did not change the estimates.

Figure S1. Trajectories of CRF through adolescence to young adulthood in the whole study population and by sex; A, VO_2max in mL/min/kg; B, VO_2max in mL/min/FFM; C, VO_2max in mL/min/kg$^{0.67}$; D, VO_2max in mL/min/kg$^{0.79}$. Mean CRF levels at each age were estimated with GEE models. Error bars indicate 95% confidence intervals.
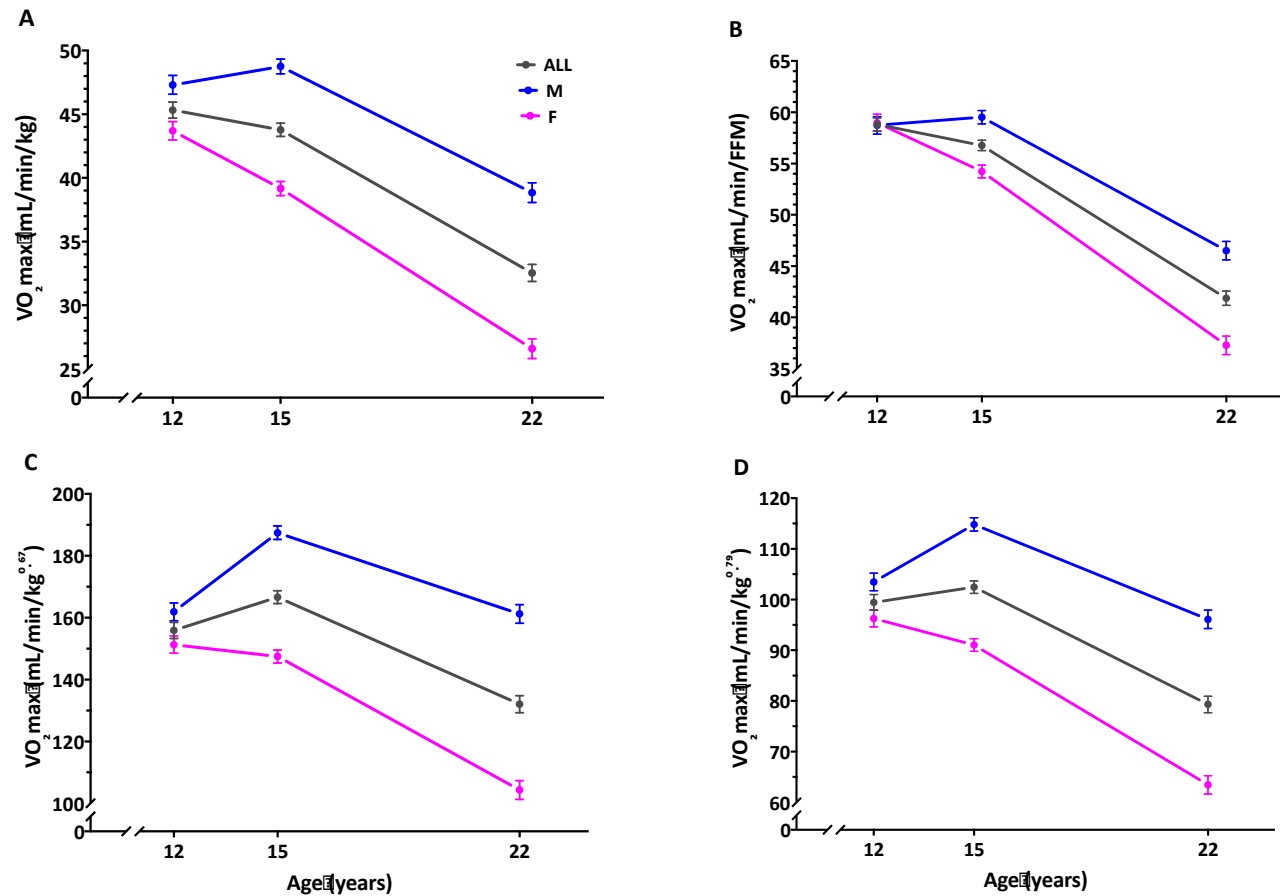
Figure S2. Trajectories of CRF through adolescence to young adulthood by categories of gestational age; A, VO2max expressed by VO_2max in mL/min/FFM, B, VO_2max in mL/min/kg$^{0.67}$; C, VO_2max in mL/min/kg$^{0.79}$. Mean CRF levels or proportions with poor CRF at each age were estimated with GEE models adjusted for sex, age and sex interactions, cohort, birthweight z-scores, socio-economic status, delivery mode, breast feeding, and maternal age, BMI and smoking. Error bars indicate 95% confidence intervals.