

Supplementary Table 1 Objective criteria for determining the optimal number of trajectory groups

Number of groups	Polynomial order of each group	BIC	AIC	Entropy
1	2	68495.14	68475.06	< 0.001
2	22	62256.27	62216.11	0.947
3	222	60086.30	60026.07	0.936

BIC: Bayesian information criterion; AIC: Akaike information criterion

Supplementary Table 2 Parameter estimates of polynomial functions for each group in trajectory models

Model	Group	Polynomial order	β	SE	t	P value
2-1 ¹	1	Intercept	88.54	0.61	145.37	< 0.01
		Linear term	-10.16	0.14	-72.35	< 0.01
	2	Intercept	99.43	0.66	149.55	< 0.01
		Linear term	-3	0.15	-20.51	< 0.01
2-2 ²	1	Intercept	122.51	0.92	132.96	< 0.01
		Linear term	-32.56	0.52	-63.2	< 0.01
		Quadratic term	2.74	0.06	44.5	< 0.01
	2	Intercept	104.88	1.02	102.34	< 0.01
		Linear term	-6.68	0.57	-11.71	< 0.01
		Quadratic term	0.43	0.07	6.67	< 0.01
2-3 ³	1	Intercept	151.92	1.58	96.05	< 0.01
		Linear term	-64.97	1.53	-42.56	< 0.01
		Quadratic term	11.71	0.4	29.14	< 0.01
		Cubic term	-0.7	0.03	-22.62	< 0.01
	2	Intercept	109.03	1.72	63.56	< 0.01
		Linear term	-10.99	1.61	-6.84	< 0.01
		Quadratic term	1.54	0.41	3.74	< 0.01
		Cubic term	-0.08	0.03	-2.62	< 0.01

¹Model 2-1 for two groups and each group is a linear trajectory.

²Model 2-2 for two groups and each group is a quadratic trajectory.

³Model 2-3 for two groups and each group is a cubic trajectory.

Supplementary Table 3 The fitting evaluation metrics of trajectory model 2-3

Model	Group	AvePP (%)	OCC	Proportions per group (%)
2-3 ¹	1	98.79	68.14	54.47
	2	97.29	42.99	45.53

¹Model 2-3 for two groups and each group is a cubic trajectory.

AvePP: Average posterior probability; OCC: Odds of correct classification.

Supplementary Table 4 Assignment method of independent variables

Independent variables	Assignment method
Daily physical exercise time	< 30 minute/day = 0, 30-59 minute/day = 1, 60-89 minute/day = 2, 90-119 minute/day = 3, ≥ 120 minute/day = 4
Age	< 35 years = 0, ≥ 35years = 1
Education	Primary/Junior high = 0, Senior high = 1, College and above = 2
Monthly income	≤ 5000 RMB = 0, 5001-10000 RMB = 1, > 10000 RMB = 2
Residency status	Local resident = 0, non-local resident = 1
Pre-pregnancy BMI	< 24 kg/m ² = 0, ≥ 24 kg/m ² = 1
Balanced diet with suggestion	Yes = 0, no = 1
Pregnant status	Primipara = 0, multipara = 1

BMI: Body mass index.