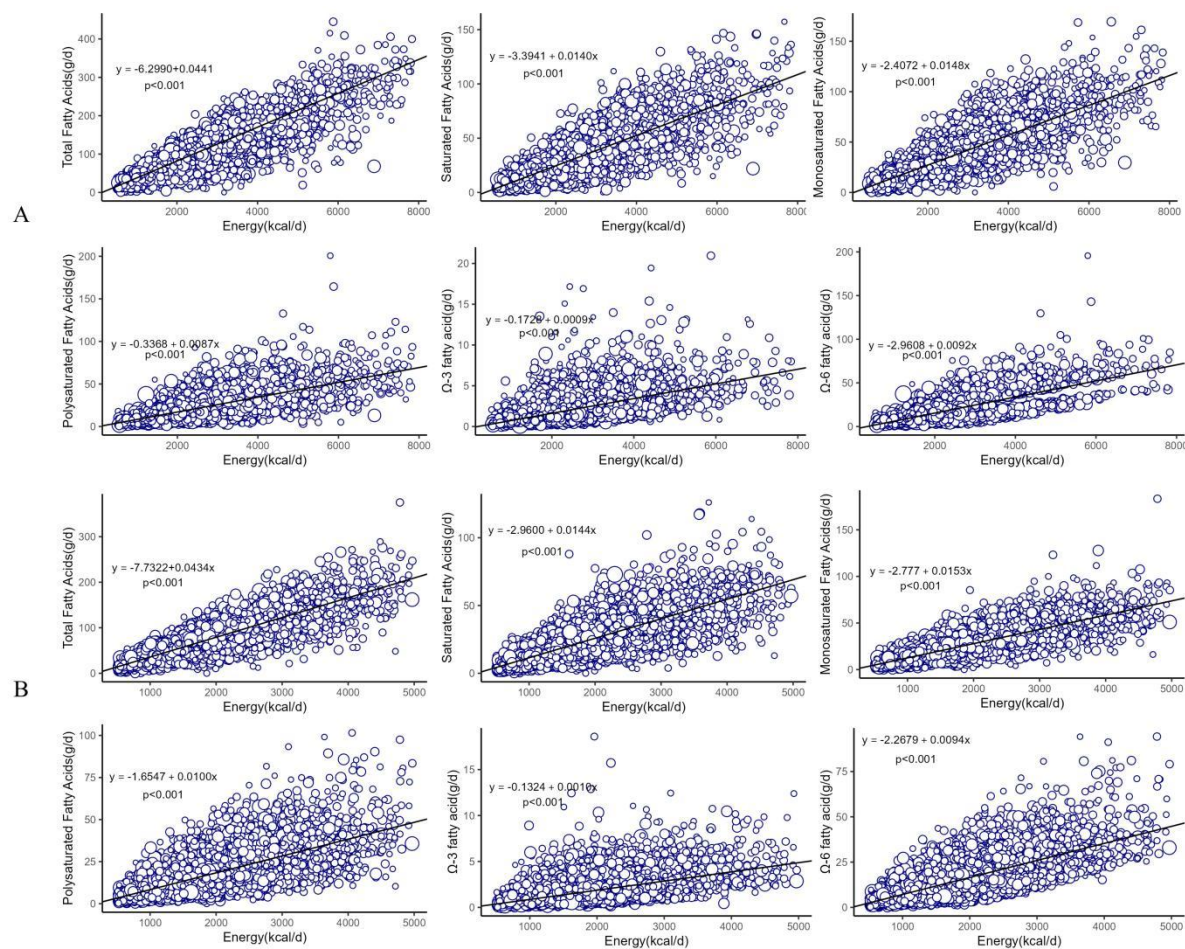


Supplementary Figure 1. Weighted linear regression model of energy and fatty acid intake



Notes: (A) weighted linear regression model for men; (B) weighted linear regression model for women.

Supplementary Table 1. Quartiles of different fatty acid type according to the full population.

Method	Sex	Type	Q1	Q2	Q3	Q4
Nutrient residual Model	Men	Total fatty acid	~82.67	82.67~97.47	97.47~112.29	112.29~
		Saturated fatty acid	~25.15	25.15~31.52	31.52~38.08	38.08~
		Monounsaturated fatty acid	~28.48	28.48~34.51	34.51~40.70	40.70~
		Polyunsaturated fatty acid	~15.75	15.75~20.44	20.44~26.06	26.06~
		n-3 polyunsaturated fatty acid	~1.44	1.44~1.93	1.93~2.62	2.62~
		n-6 polyunsaturated fatty acid	~14.68	14.68~19.43	19.43~24.81	24.81~
		n-6/n-3 ratio	~7.98	7.98~9.43	9.43~11.16	11.16~
	Women	Total fatty acid	~60.47	60.47~70.87	70.87~82.02	82.02~
		Saturated fatty acid	~18.30	18.30~22.66	22.66~27.52	27.52~
		Monounsaturated fatty acid	~20.29	20.29~24.51	24.51~29.26	29.26~
		Polyunsaturated fatty acid	~12.07	12.07~15.58	15.58~20.01	20.01~
		n-3 polyunsaturated fatty acid	~1.11	1.11~1.48	1.48~2.00	2.00~
		n-6 polyunsaturated fatty acid	~10.82	10.82~14.01	14.01~17.98	17.98~
		n-6/n-3 ratio	~7.65	7.65~9.07	9.07~10.93	10.93~
Multi-nutrient density Model	Men	Total fatty acid	~28.11	28.11~34.37	34.37~40.34	40.34~
		Saturated fatty acid	~8.32	8.32~10.90	10.90~13.60	13.60~
		Monounsaturated fatty acid	~9.66	9.66~12.12	12.12~14.64	14.64~
		Polyunsaturated fatty acid	~5.10	5.10~7.28	7.28~9.91	9.91~
		n-3 polyunsaturated fatty acid	~0.45	0.45~0.65	0.65~0.96	0.96~
	Women	n-6 polyunsaturated fatty acid	~4.53	4.53~6.48	6.48~8.91	8.91~
		n-6/n-3 ratio	~7.64	7.64~9.20	9.20~11.54	11.54~
		Total fatty acid	~28.80	28.80~34.64	34.64~40.74	40.74~

Saturated fatty acid	~8.50	8.50~11.04	11.04~13.65	13.65~
Monounsaturated fatty acid	~9.56	9.56~11.93	11.93~14.53	14.53~
Polyunsaturated fatty acid	~5.63	5.63~7.53	7.53~10.01	10.01~
n-3 polyunsaturated fatty acid	~0.50	0.50~0.70	0.70~1.00	1.00~
n-6 polyunsaturated fatty acid	~4.97	4.97~6.69	6.69~8.93	8.93~
n-6/n-3 ratio	~7.51	7.51~9.03	9.03~11.26	11.26~