eTable 1. The inclusion, exclusion, and withdrawal criteria for participants

Criterion Type	Specific Criteria
Inclusion Criteria	①Patients diagnosed with ischemic or hemorrhagic stroke by a tertiary hospital, meeting the diagnostic criteria of Chinese Guidelines for the Diagnosis and Treatment of Acute Ischemic Stroke (2023)[1]and Chinese Guidelines for the Diagnosis and Treatment of Intracerebral Hemorrhage (2019)[2]; ②Within 14 days of acute stroke onset and in stable condition; ③Age ≥18 years; ④Clear consciousness and no cognitive impairment (Mini-Cog score <3[3]); ⑤Voluntarily participated in baseline and follow-up surveys and provided signed informed consent.
Exclusion Criteria	①Presence of dysphagia or inability to consume food orally (Modified Water Swallowing Test Grade 3-5[4]); ②Comorbidities with other severe diseases (e.g., malignant tumors, end-stage renal disease).
Withdrawal Criteria	①Fewer than 2 follow-up records; ②Incomplete dietary data collection within 6 months post-discharge.

eTable 2. The FRAIL Scale.

Components	Questions
1. Fatigue	Have you felt tired most or all of the time during the past 4 weeks?
2. Resistance	Without using any aids (e.g., cane, walker, stair rail) or help from another person, do you have difficulty climbing one flight of stairs without resting?
3. Ambulation	Without using any aids (e.g., cane, walker) or help from another person, do you have difficulty walking 100 meters?
4. Illnesses	Has a doctor ever told you that you have more than 5 of the following illnesses: hypertension, diabetes, acute heart attack, stroke, malignancy (excluding minor skin cancers), congestive heart failure, asthma, arthritis, chronic lung disease, kidney disease, angina, etc.?
5. Loss of Weight	In the past year or less, have you lost more than 5% of your body weight without dieting or exercising?

Note: Scoring and Interpretation: a “Yes” response scores 1 point, a “No” scores 0 points. The total score ranges from 0 to 5, with higher scores indicating greater frailty. A score of 0 indicates non-frailty, 1–2 indicates pre-frailty, and 3–5 indicates frailty.

eTable 3. Food categories and item in the FFQ-25.

Food category	Food item
Rice	Rice
Congee	Congee, porridge, soaked rice
Wheat-based products	Steamed buns, bread, noodles, pancakes
Confectioneries	Pastries, cakes, sweet bread
Fried foods	Fried dough sticks, fried pancakes, fried French fries
Stuffed foods	Baozi, wonton, dumplings
Whole grains	Brown rice, millet, corn, barley, oats, red beans, mung beans
Tubers	Sweet potato, potato, taro, Chinese yam, konjac
Dairy products	Milk, yogurt, milk powder
Eggs	Chicken egg, duck egg
Red meats	Pork, beef, lamb
Poultry	Chicken, duck, goose meat
Processed meats	Sausage, smoked meat, luncheon meat, ham
Freshwater food	Black carp, perch, eel, river shrimp
Seafood	Hairtail, croaker, yellow croaker, sea shrimp
Soy products	Tofu, dried tofu, dried bean curd, bean curd knots
Nuts	Watermelon seeds, sunflower seeds, walnuts, peanuts, pistachios
Dark-colored vegetables	Bok choy, spinach, water spinach, tomato, green pepper, carrot
Light-colored vegetables	Chinese cabbage, radish, cucumber
Edible fungi	Button mushrooms, shiitake, straw mushrooms, oyster mushrooms
Fruits	Apple, pear, peach, banana, grape, orange, tangerine, watermelon
Sugar-sweetened beverages	Cola, Sprite, iced black tea, sports drinks
Beer	Beer
Yellow wine	Yellow wine
Baijiu	Baijiu

Note: FFQ-25= the semi-quantitative Food Frequency Questionnaire.

eTable 4 Baseline characteristics of the stroke patients（*N*=390）

Variable	Total (*N*=390)	Patients included in analysis (*n*=341,87.4%)	Patients lost to follow-up (*n*=49,12.6%)	χ^2/H	*P*
age (Median [IQR])	66.0 [59.0,73.0]	66.0 [60.0,73.0]	64.0 [55.0,71.0]	1.248	0.264[a]
sex *n* (%)				0.936	0.333[b]
male	270(69.2)	239(70.1)	31(63.3)		
female	120(30.8)	102(29.9)	18(36.7)		
marital status *n* (%)				N/A	0.502[c]
single	3(0.8)	2(0.6)	1(2.0)		
married	350(89.7)	305(89.4)	45(91.9)		
divorced	5(1.3)	5(1.5)	0(0.0)		
widowed	32(8.2)	29(8.5)	3(6.1)		
education level n (%)				1.863	0.601[b]
primary school / illiterate	99(25.4)	84(24.6)	15(30.6)		
junior high school	142(36.4)	123(36.1)	19(38.8)		
senior high school	109(27.9)	97(28.4)	12(24.5)		
college or above	40(10.3)	37(10.9)	3(6.1)		
residence *n* (%)				0.570	0.450[b]
urban	285(73.1)	247(72.4)	38(77.6)		
rural	105(26.9)	94(27.6)	11(22.4)		
living alone status *n* (%)				0.005	0.943[d]
no	367(94.1)	321(94.1)	46(93.9)		
yes	23(5.9)	20(5.9)	3(6.1)		
economic status *n* (%)				N/A	0.140[c]
<1000	2(0.5)	2(0.6)	0(0.0)		

Variable	Total (*N*=390)	Patients included in analysis (*n*=341,87.4%)	Patients lost to follow-up (*n*=49,12.6%)	χ^2/H	*P*
1000-1999	83(21.3)	66(19.4)	17(34.7)		
2000-4999	227(58.2)	201(58.9)	26(53.1)		
5000-9999	67(17.2)	61(17.9)	6(12.2)		
＞10000	11(2.8)	11(3.2)	0(0.0)		
occupation *n* (%)				0.075	0.784[b]
manual labor	272(69.7)	237(69.5)	35(71.4)		
non-manual labor	118(30.3)	104(30.5)	14(28.6)		
smoking status *n* (%)				N/A	0.818[c]
never	176(45.1)	153(44.9)	23(47.0)		
occasionally	3(0.8)	3(0.9)	0(0.0)		
quit smoking ≥6 months ago	58(14.9)	51(15.0)	7(14.3)		
quit smoking <6 months ago	23(5.9)	22(6.4)	1(2.0)		
regularly	130(33.3)	112(32.8)	18(36.7)		
sleep quality *n* (%)				N/A	0.689[c]
very good	154(39.5)	137(40.2)	17(34.7)		
good	144(36.9)	121(35.5)	23(46.9)		
fair	56(14.3)	50(14.7)	6(12.3)		
bad	33(8.5)	30(8.7)	3(6.1)		
very bad	3(0.8)	3(0.9)	0(0.0)		
BMI level *n* (%)				2.380	0.497[d]
underweight	14(3.6)	11(3.2)	3(6.1)		
normal	127(32.5)	113(33.1)	14(28.6)		
overweight	175(44.9)	155(45.5)	20(40.8)		
obese	74(19.0)	62(18.2)	12(24.5)		
number of stroke episodes				2.016	0.365[b]

Variable	Total (*N*=390)	Patients included in analysis (*n*=341,87.4%)	Patients lost to follow-up (*n*=49,12.6%)	χ^2/H	*P*
n (%)					
once	237(60.8)	209(61.3)	28(57.2)		
twice	112(28.7)	99(29.0)	13(26.5)		
three times or more	41(10.5)	33(9.7)	8(16.3)		
stroke type *n* (%)				N/A	0.741[c]
ischemic	360(92.3)	313(91.8)	47(95.9)		
hemorrhagic	26(6.7)	24(7.0)	2(4.1)		
both ischemic and hemorrhagic	4(1.0)	4(1.2)	0(0.0)		
mRS *n* (%)				N/A	0.988[c]
no symptoms	52(13.3)	46(13.5)	6(12.2)		
symptoms without disability	101(25.9)	88(25.8)	13(26.5)		
slight disability	68(17.4)	59(17.3)	9(18.4)		
moderate disability	79(20.3)	68(19.9)	11(22.5)		
moderately severe disability	83(21.3)	74(21.7)	9(18.4)		
Severe disability	7(1.8)	6(1.8)	1(2.0)		
NIHSS *n* (%)				N/A	0.296[c]
normal	159(40.8)	139(40.8)	20(40.8)		
mild stroke	149(38.2)	133(39.0)	16(32.7)		
moderate stroke	80(20.5)	68(19.9)	12(24.5)		
moderate to severe stroke	2(0.5)	1(0.3)	1(2.0)		
frailty status *n* (%)				0.721	0.654[c]
non-frailty	78(20.0)	69(20.2)	9(18.4)		

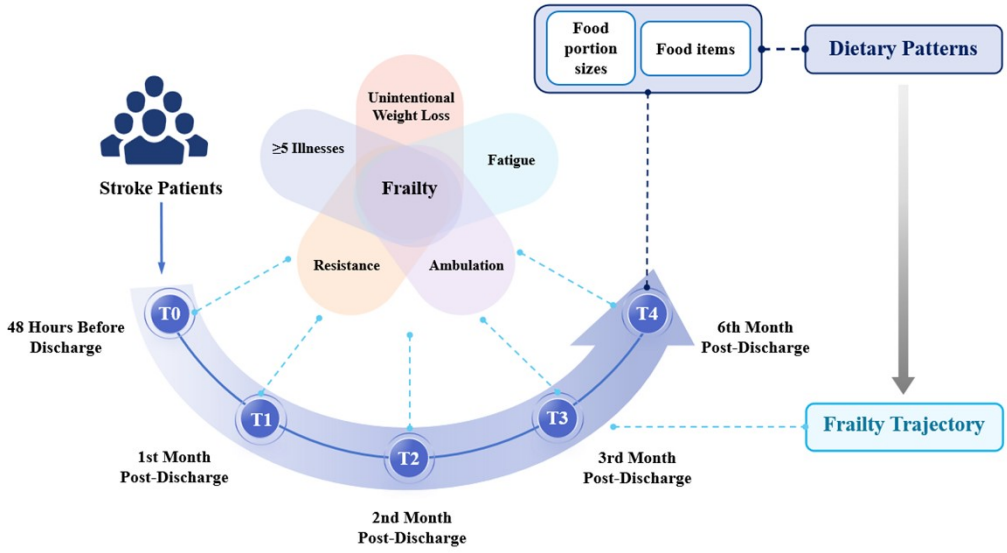
Variable	Total (*N*=390)	Patients included in analysis (*n*=341,87.4%)	Patients lost to follow-up (*n*=49,12.6%)	χ^2/H	*P*
pre-frailty	173(44.4)	153(44.9)	20(40.8)		
frailty	139(35.6)	119(34.9)	20(40.8)		

Note: Median [IQR] = median [interquartile range]; mRS = modified Rankin Scale; NIHSS = National Institutes of Health Stroke Scale; BMI = body mass index; [a] Kruskal–Wallis H test; [b] Pearson's chi-square test; [c] Fisher's exact test; [d] Continuity corrected chi-square test; Frailty status presented here refers to baseline frailty status at T0.

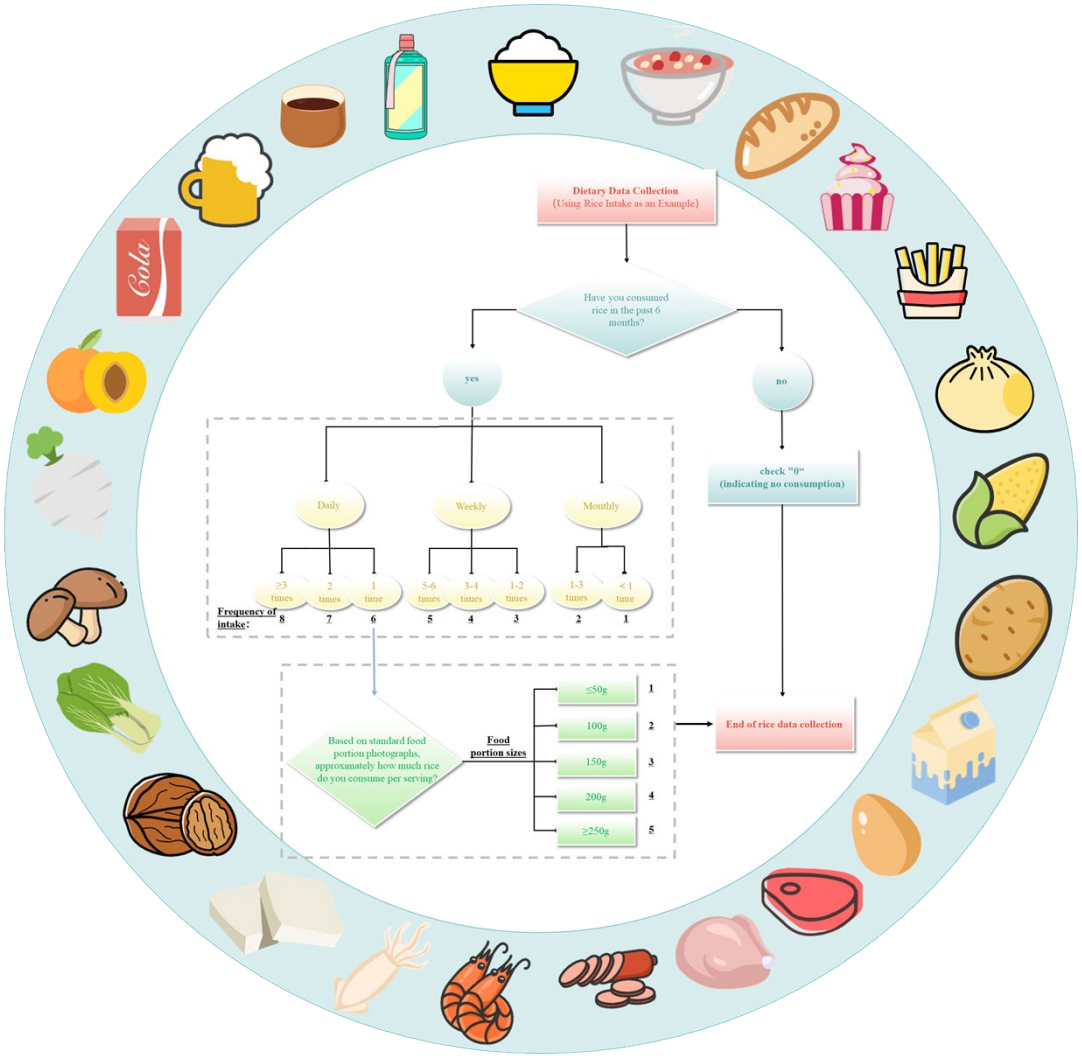
eTable 5. Baseline frailty status across different dietary patterns.

Dietary Pattern	Frailty Score	Mean Rank	Mean Rank Difference (vs. Pattern 1)	Adj. p-value (vs. Pattern 1)
1.Alcoholic Beverages-Red Meat-Processed Meat	3	214.66	–	–
2. Seafood-Freshwater-Soy Products	2	153.47	61.19	< 0.001
3. Nuts-Fruits-Dairy Products	2	167.27	47.39	0.014
4. Dark-colored Vegetables-Light-colored Vegetables	2	183.29	31.37	0.229

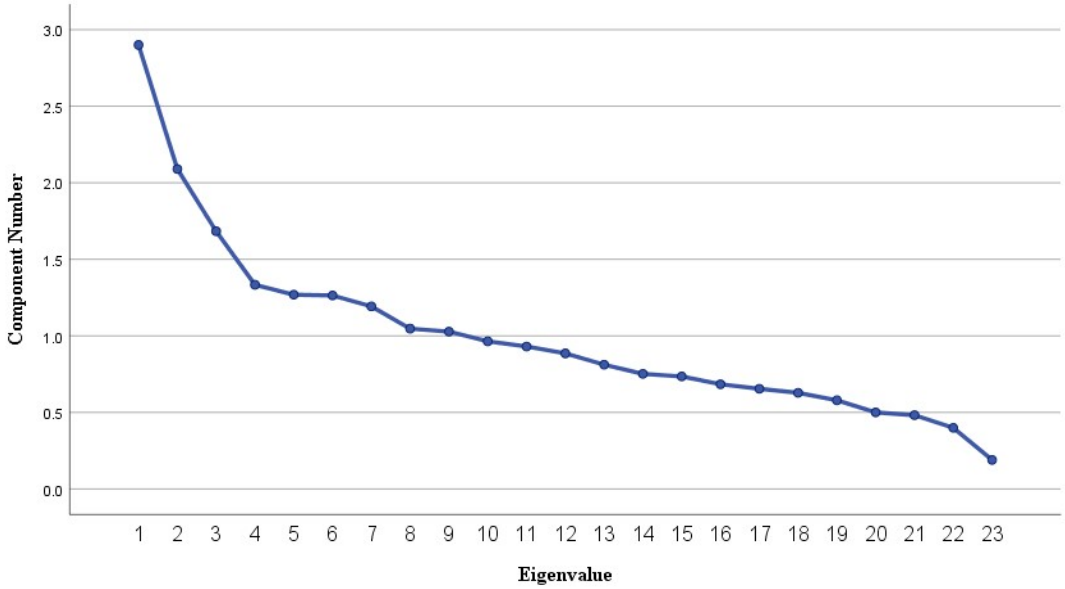
Note: Adj. p-values were adjusted for multiple comparisons using the Bonferroni method.



eFigure 1. Research Framework Diagram.

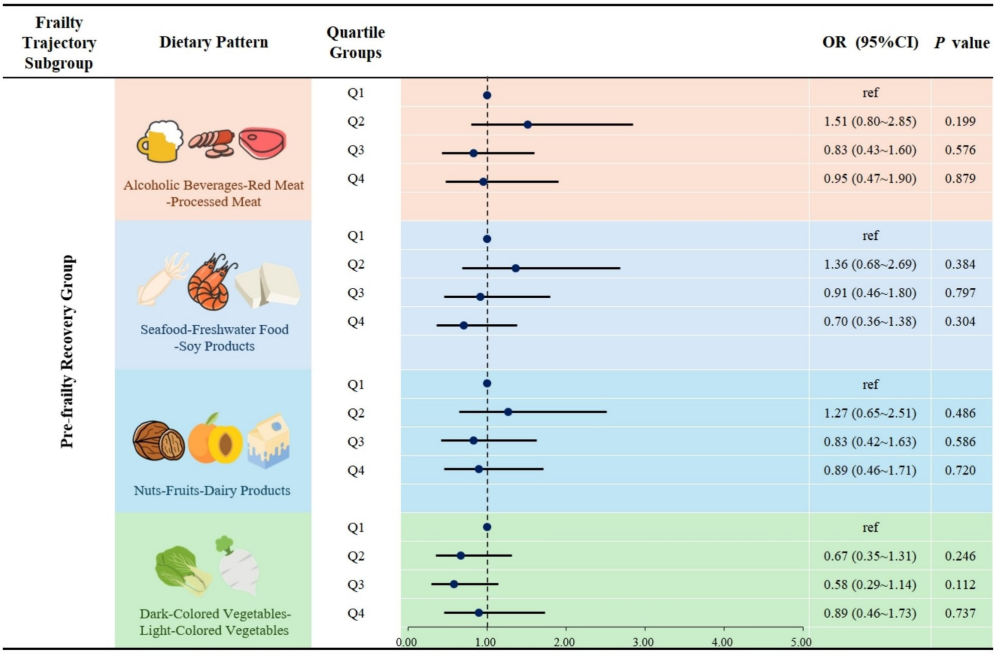


eFigure 2. Flowchart of Dietary Data Collection. Note: This figure illustrates the standardized procedure for collecting dietary intake data. First, the interviewer asked the patient whether they had consumed rice in the past six months. If the patient reported no consumption, the frequency column was marked "0" (indicating "never"), and data collection for rice ended. If the patient reported consumption, the interviewer proceeded to ask about the specific consumption frequency: daily, weekly, or monthly. For instance, if the patient reported consuming rice once per day, the interviewer marked "6" in the frequency column (indicating "once daily"). The interviewer then asked about the typical portion size per eating occasion. The patient estimated their portion by referring to standardized food portion photographs—for example, describing it as "about the size of an adult fist." Based on this response, the interviewer entered the corresponding code for portion size (e.g., "2" representing 100 g) into the box next to the selected frequency. Data collection for rice was then concluded. This procedure was applied consistently to all 25 food categories in FFQ-25.

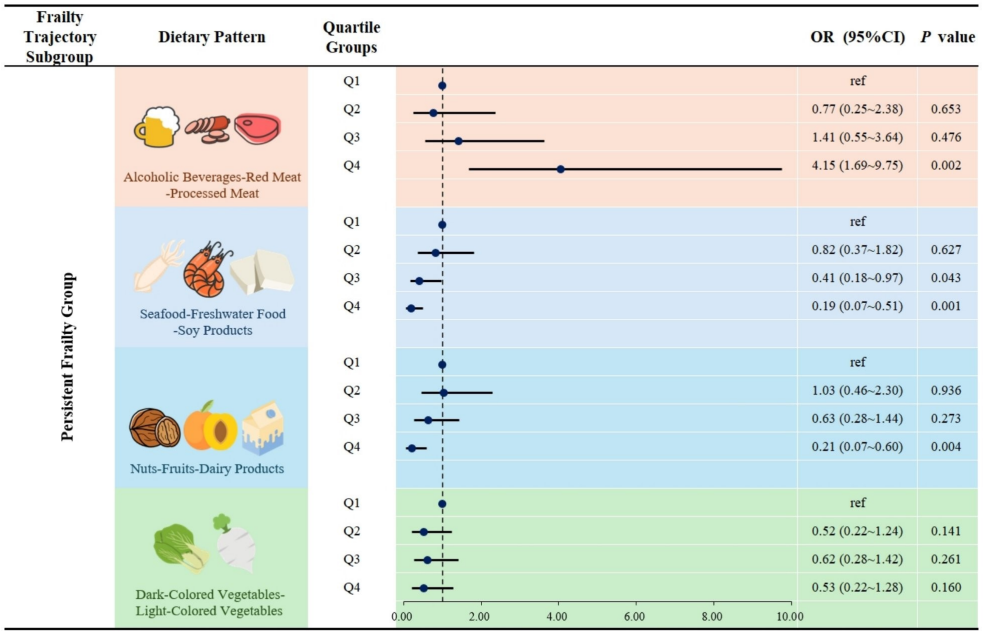


eFigure 3. Scree plot of factor analysis for dietary patterns among stroke patients.

（a）**Pre-frailty recovery group vs. Stable non-frailty group.**

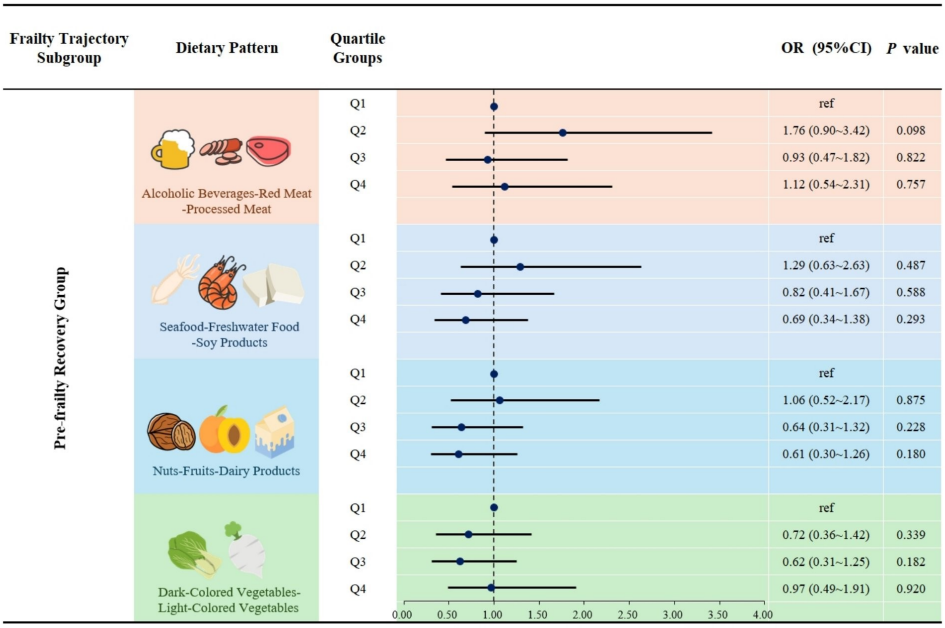


（b）**Persistent frailty group vs. Stable non-frailty group.**

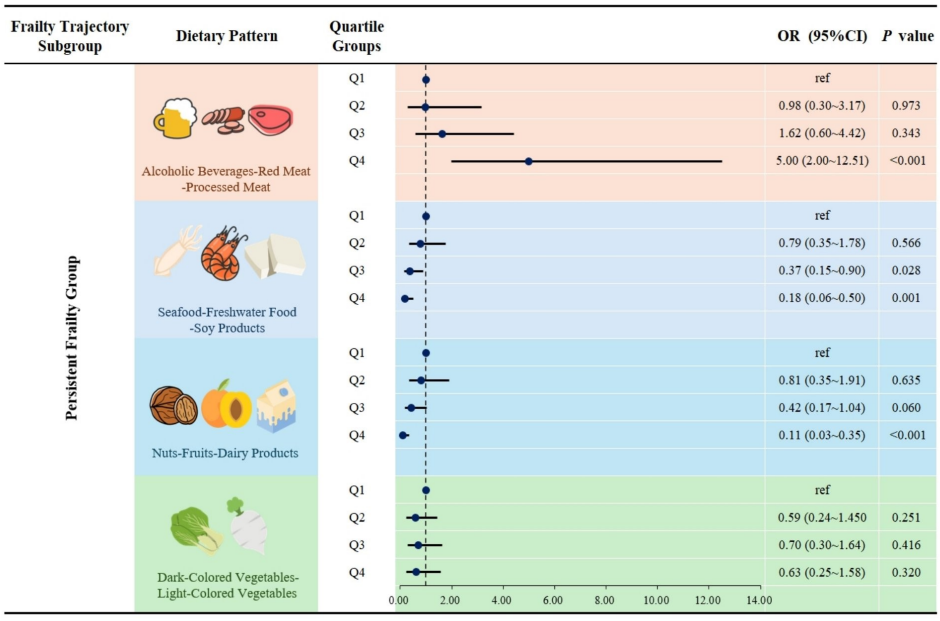


eFigure 4. Analysis of the Association Between Dietary Pattern Adherence Levels and Frailty Trajectories. Notes:1. Dietary pattern factor scores were categorized into quartiles (Q1-Q4) from lowest to highest.2. Control group: Q1 quartile and stable non-frailty group.3. Covariates: No covariates were adjusted.4. OR = Odds ratio; 95%CI = 95% confidence interval.

（a）**Pre-frailty recovery group vs. Stable non-frailty group.**

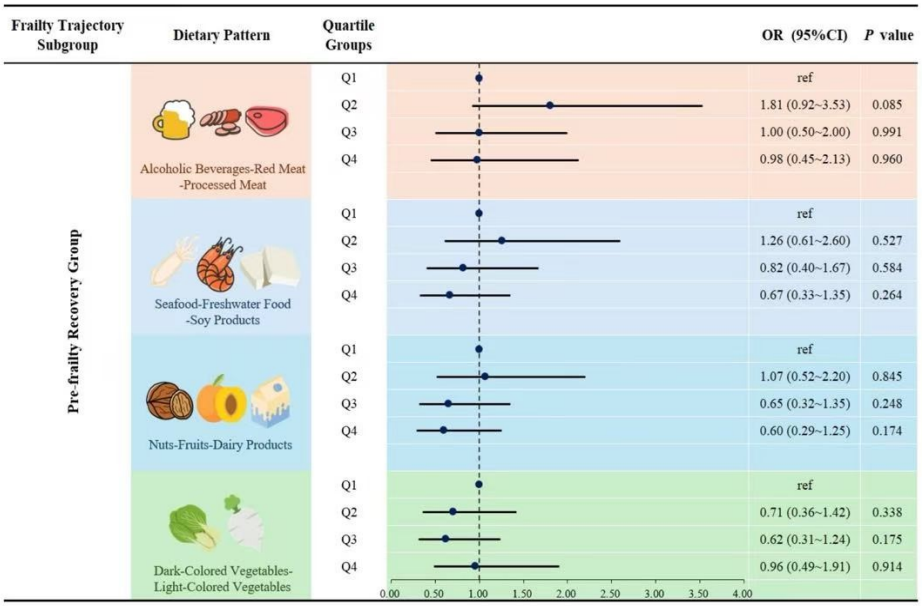


（b）**Persistent frailty group vs. Stable non-frailty group.**

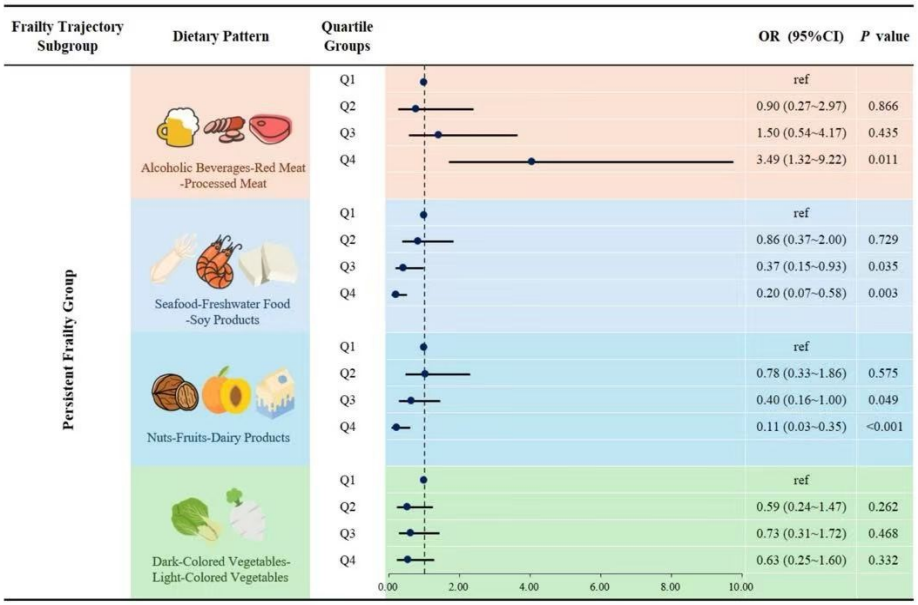


eFigure 5. Analysis of the Association Between Dietary Pattern Adherence Levels and Frailty Trajectories. Notes:1. Dietary pattern factor scores were stratified into quartiles (Q1-Q4) in ascending order.2. Control group: Q1 group and stable non-frailty group.3. Covariates: Adjusted for age.4. OR = odds ratio; 95%CI = 95% confidence interval.

（a）Pre-frailty recovery group vs. Stable non-frailty group.



（b）Persistent frailty group vs. Stable non-frailty group.



eFigure 6. Analysis of the Association Between Dietary Pattern Adherence Levels and Frailty Trajectories. Notes:1. Dietary pattern factor scores were stratified into quartiles (Q1-Q4) in ascending order.2. Control group: Q1 group and non-frailty group.3. Covariates: Adjusted for age and smoking status.4. OR = odds ratio; 95%CI = 95% confidence interval.

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