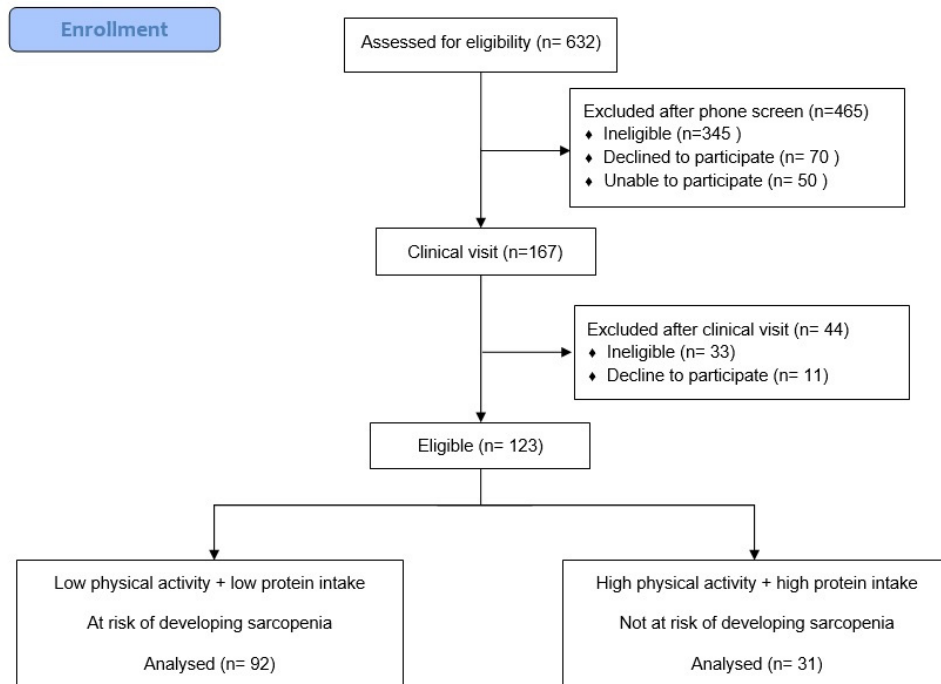**Supplementary Figure S1.** CONSORT Participant Flow Diagram

Supplementary Table S1. Body composition, strength and physical function in participants who meet functional criteria of sarcopenia versus high risk participants

	Functional Sarcopenia (n=17)	Other High Risk (n=75)	p-values
Age	72.2 (68.8-79.3)	72.3 (68.6-75.3)	0.530
Female n (%)	14 (82%)	57 (80%)	0.753
Body Composition			
Weight (kg)	80.7 (12.1)	82.2 (14.9)	0.699
BMI (kg·m²)	31.3 (5.1)	30.2 (4.7)	0.370
FFM (kg)	44.79 (42.33-46.88)	44.43 (41.48-52.00)	0.669
FFMI (kg·m²)	17.27 (16.46-18.83)	16.77 (15.88-18.86)	0.597
Lean mass (%)	50 (10)	60 (10)	0.350
ASMM (kg)	18.90 (17.23-19.88)	18.43 (16.99-22.15)	0.536
ASMMI (kg·m²)	7.12 (6.70-8.15)	7.07 (6.46-8.03)	0.829
Fat mass (kg)	37.18 (26.33-45.17)	33.82 (27.65-41.07)	0.721
Fat mass index (kg·m²)	15.12 (10.52-17.26)	12.41 (10.37-15.23)	0.347
Fat (%)*	50 (40-50)	40 (40-50)	0.241
VAT mass (kg)	1.12 (0.90-1.51)	1.36 (0.99-1.93)	0.263
Total body bone mineral content (kg)	2.10 (2.03-2.58)	2.31 (2.07-2.77)	0.170
Spine BMD g/cm2	1.19 (0.24)	1.21 (0.20)	0.770
Spine BMD T-scores,	0.07 (1.95)	0.16 (1.62)	0.832
Total hip BMD g/cm2	0.91 (0.19)	0.95 (0.12)	0.205
Total hip BMD T-scores	-0.90 (1.52)	-0.55 (0.92)	0.226
Strength			
Five chair stand test (s)	*12.3 (10.0-17.2)*	*11.0 (9.4-13.2)*	*0.099*
Thirty second sit-to-stand (stands)*	10.9 (2.7)	13.1 (2.8)	**0.006**
Grip strength, total (kg)	25.0 (20.0-28.0)	26.0 (23.0-30.0)	0.113
Shoulder adduction strength (kg)	8.0 (3.0-10.0)	12.0 (7.5-16.5)	**0.002**
Shoulder abduction strength (kg)	4.5 (3.0-7.5)	7.5 (4.0-11.5)	**0.049**
Physical Function			
SPPB score (total)	8.0 (8.0-11.0)	11.0 (10.0-12.0)	**<0.001**
Gait speed (m·s⁻¹)	0.8 (0.8-0.8)	1.0 (1.0-1.2)	**<0.001**
TUG (s)	7.9 (7.0-11.0)	7.0 (6.6-7.5)	**0.006**

Supplementary Table S2. Macronutrient dietary intake in participants who meet functional criteria of sarcopenia versus high risk participants

	Functional Sarcopenia (n=17)	Other High Risk (n=75)	*p-values*	*Energy- adjusted p-values*
Macronutrients				
Energy (kJ·day^{-1})	5992 (1265)	6257 (1477)	0.506	
Energy (kJ·kg^{-1}·day^{-1})	76.8 (17.2)	77.6 (18.9)	0.872	
Protein (g·day^{-1})	65.1 (13.7)	64.5 (12.7)	0.867	0.321
Protein (g·kg^{-1}·day^{-1})	0.8 (0.7-0.9)	0.8 (0.7-0.9)	0.552	0.238
Carbohydrate (g·day^{-1})	138.9 (132.7-163.7)	150.5 (121.3-184.4)	0.359	0.460
Fibre (g·day^{-1})	18.6 (17.5-27.7)	19.7 (15.0-25.3)	0.925	0.546
Fat (g·day^{-1})*	62.5 (42.8-67.9)	53.7 (44.1-69.1)	0.942	0.564
SFA (g·day^{-1})	22.0 (8.3)	22.0 (8.4)	0.989	0.571
MUFA (g·day^{-1})	20.8 (14.5-27.9)	20.2 (16.1-26.0)	0.859	0.334
PUFA (g·day^{-1})	7.5 (6.0-9.0)	8.0 (6.4-10.2)	0.307	0.410

Supplementary Table S3. Physical activity levels in participants who meet functional criteria of sarcopenia versus high risk participants

	Functional Sarcopenia (n=17)	Other High Risk (n=75)	*p-values*
Activity Dimension Indices			
Vigorous Activity index (units·month^{-1})	0.0 (0.0-10.0)	5.0 (0.0-15.0)	0.555
Leisure walking index (units·month^{-1})	8.0 (4.0-24.0)	16.0 (8.0-24.0)	*0.099*
Moving index (units·month^{-1})	7.9 (3.0)	8.6 (2.7)	0.378
Standing index (units·month^{-1})	4.0 (2.0-4.0)	4.0 (2.0-4.0)	0.854
Sitting index (units·month^{-1})	2.4 (0.6)	2.3 (0.8)	0.875
Total activity dimension indices	33.2 (18.4)	37.9 (15.4)	0.278
Activities			
Brisk walking (hours·week^{-1})	0.0 (0.0-0.3)	0.0 (0.0-2.0)	0.108
Stretch/yoga/tai chi (hours·week^{-1})	0.0 (0.0-1.0)	0.0 (0.0-1.0)	0.845
Aerobics (hours·week^{-1})	0.0 (0.0-0.0)	0.0 (0.0-0.0)	0.498
Cycling (hours·week^{-1})	0.0 (0.0-0.0)	0.0 (0.0-0.0)	0.469
Lap swimming (hours·week^{-1})	0.0 (0.0-0.0)	0.0 (0.0-0.0)	0.404
Strength exercise (hours·week^{-1})	0.0 (0.0-0.0)	0.0 (0.0-0.0)	0.318
Leisurely walking (hours·week^{-1})	0.5 (0.0-1.8)	1.0 (0.0-2.0)	0.550

Supplementary Table S4. Quality of life in participants who meet functional criteria of sarcopenia versus high risk participants

	Functional Sarcopenia (n=17)	Other High Risk (n=75)	*p-values*
Physical function	70 (40-80)	85 (75-95)	**0.002**
Role limitations due to physical function	75 (50-100)	100 (75-100)	**0.035**
Pain			
General health	72 (57-82)	82 (67-87)	**0.046**
Energy	60 (55-65)	70 (60-80)	**0.005**
Social function	88 (75-100)	100 (88-100)	0.011
Role limitations due to emotional health	100 (33-100)	100 (100-100)	0.255
Emotional well-being	80 (64-88)	84 (76-88)	0.242
Physical component score	44 (35-49)	51 (47-55)	**0.004**
Mental component score	53 (45-58)	56 (52-58)	0.222

Supplementary Table S5. Quality of life SF-36 sub-domains and overall component scores by group

	High risk (*n*=92)	Low risk (*n*=31)	*p-values*
Physical function	85 (70-95)	95 (90-100)	**<0.001**
Role limitations due to physical function	100 (75-100)	100 (100-100)	**0.034**
Pain	74 (62-100)	74 (72-84)	0.815
General health	81 (67-87)	85 (77-92)	**0.006**
Energy	68 (60-80)	80 (70-85)	**0.011**
Social function	100 (75-100)	100 (88-100)	0.469
Role limitations due to emotional health	100 (100-100)	100 (100-100)	0.054
Emotional well-being	84 (76-88)	84 (80-92)	0.240
Physical component score	50 (44-55)	54 (50-57)	**0.013**
Mental component score	55 (51-58)	56 (53-58)	0.378

Data presented as median (IQR).