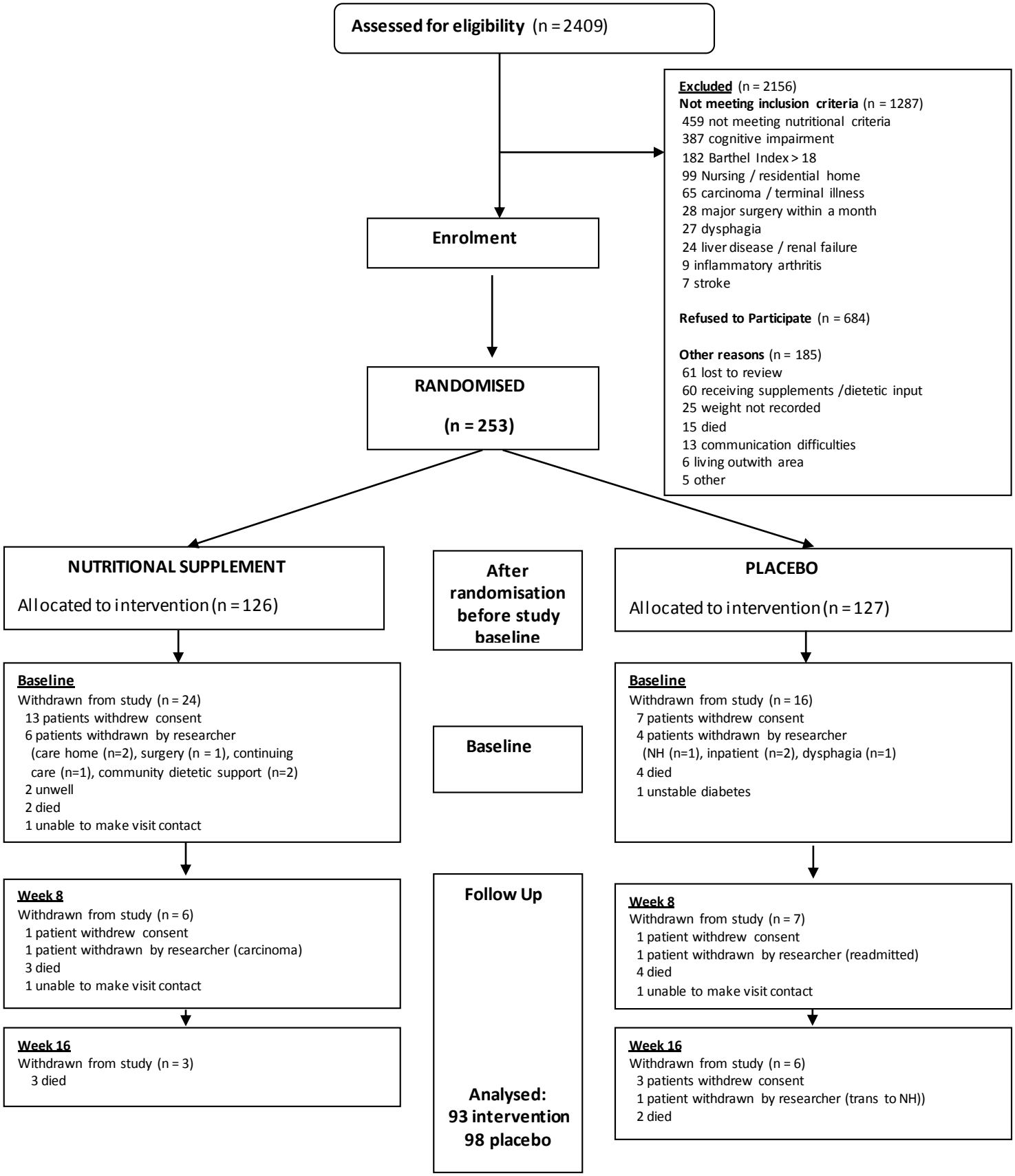
Participant flow



Baseline characteristics

	Nutritional supplement n = 126	Placebo n = 127
Age (years)(SD)	81.4 (6.2)	82.2 (6.2)
Female sex (%)	85 (68)	70 (55)
Weight (kg) (SD)	54.9 (10.0)	56.1 (10.1)
Body mass index (kg/m^2) (SD)	21.2 (2.3)	21.2 (2.7)
10-point Abbreviated Mental Test score (SD)	8.9 (1.6)	9.2 (1.1)
Marital status (%)		
Single	23 (18)	21 (16)
Married	22 (18)	33 (26)
Widowed / separated / divorced	81 (64)	73 (58)
Median number of medications / day (range)	7 (1 – 16)	8 (0 – 18)
Current smoker (%)	32 (26)	31 (25)
Scottish Index of Multiple Deprivation		
Codes 1 – 5 (deprived) (%)	90 (71)	84 (66)
Codes 6 – 10 (less deprived) (%)	36 (29)	42 (33)
Accommodation /care (%)		
Alone	72 (57)	64 (50)
With spouse/family/carer	35 (28)	37 (29)
Sheltered housing/men's hostel	19 (15)	26 (21)
Use of walking aids (%)	100 (79%)	86 (68%)
Grip strength (kg) (SD)	16.0 (7.2)	17.1 (7.8)
Sit to stand time (s) (SD)	43.1 (20.4)	41.9 (20.0)
20 point Barthel Index score (SD)	17.4 (2.2)	17.1 (2.0)
EuroQoL EQ5D score (SD)	0.59 (0.30)	0.55 (0.35)
EuroQoL thermometer (SD)	60 (18)	57 (21)
Accelerometry		
Counts per 24 hr (SD)	46049 (26662)	51773 (44682)
Minutes walked per 24 hr (SD)	48 (41)	52 (51)

Dietary intake		
Daily Protein intake, (g) (SD)	56.6 (17.1)	61.3 (18.0)
Daily Energy intake (kcal) (SD)	1365 (424)	1573 (470)

Outcome measures

Change between baseline and follow up

		Supplement	Placebo	p
Primary outcomes:				
Grip strength (kg) (SD)	0 v 8 wks	0.7 (3.1)	0.1 (2.5)	0.75
	0 v 16 wks	1.3 (3.6)	0.3 (3.6)	0.46
Change in Barthel score (SD)	0 v 8 wks	-0.2 (2.5)	0.1 (1.8)	0.31
	0 v 16 wks	0.1 (2.1)	0.1 (1.9)	0.95
Secondary outcomes:				
Sit to stand time (s) (SD)	0 v 8 wks	1.4 (11.3)	-0.3 (10.0)	0.70
	0 v 16 wks	-2.1 (13.5)	0.6 (12.3)	0.08
Weight (kg) (SD)	0 v 8 wks	1.1 (2.8)	0.7 (2.5)	0.29
	0 v 16 wks	1.6 (4.2)	0.8 (3.4)	0.18
%change in energy intake*	0-8 wks v 8-16 wks	11.4 (37.4)	6.7 (31.4)	0.61
%change in Log10 accelerometry counts per 24 h (SD)	0 v 16 wks	2.9 (4.4)	0.9 (4.1)	0.01
EuroQoL EQ5D score	0 v 8 wks	-0.03 (0.31)	0.00 (0.30)	0.43
	0 v 16 wks	-0.01 (0.34)	-0.01 (0.32)	0.90
EuroQoL thermometer	0 v 8 wks	2.4 (22.7)	2.8 (15.6)	0.91
	0 v 16 wks	1.1 (22.8)	3.1 (21.4)	0.53

*subset of 28 in supplement group and 29 in placebo group

Unplanned hospital readmissions

	Supplement n = 126	Placebo n = 127	p
Total number of readmissions	77	65	0.11
Number of participants readmitted one or more times	49	42	0.34
Total number of days spent in hospital	858	937	
Length of stay (days), median (IQR)	12 (6 – 26)	12 (7 – 30)	

Adverse events

	Supplement n = 126	Placebo n = 127	p value
Upper GI symptoms (vomiting, nausea)	18	12	0.23
Lower GI symptoms (diarrhoea, constipation, abdominal pain)	20	18	0.71
Infections			
Number of participants diagnosed with infection (i.e. prescribed antibiotics)	24	15	0.11
Total number of infections	31	17	
Cardiovascular events (MI, angina, chest pain, angioplasty, pacemaker insertion, congestive cardiac failure, atrial fibrillation, palpitations)	8	11	0.15
Respiratory events (pneumonia, exacerbation of COPD, pleural effusion, dyspnoea)	9	5	0.12
Renal (renal failure)	3	3	0.32
Gastroenterology (bowel obstruction, food obstruction)	2	0	0.25
Musculo-skeletal (degenerative changes, decreased mobility, back pain, fractured neck of femur, fractured collarbone, sciatica)	7	9	0.18
Institutionalisation (transferring to nursing, residential home)	2	1	0.38
Cancer (lymphadenopathy, brain mets, myelodysplasia, gastric cancer)	4	0	0.06
Miscellaneous events (unstable diabetes, increasing confusion, leg ulcers, anxiety)	3	3	0.32
Deaths	8	10	0.64