

**Supplemental table S1. Characteristics of the included nutritional intervention RCTs**

| Study /Title  | Age   | Setting  | N participants<br>Control/<br>Intervention | Malnutrition inclusion<br>criteria  | Intervention  | Duration | Reported<br>intervention<br>effect HGS              | Reported<br>intervention<br>effect<br>mortality | Reported<br>compliance  |
|---|-------|----------|--|---|---|----------|---|---|---|
| Beck 2013 Follow-up home visits with registered dietitians have a positive effect on the functional and nutritional status of geriatric medical patients after discharge: a RCT | > 65y | Hospital | 79/73                                      | BMI <20.5 kg/m <sup>2</sup> ; and/or weight loss within the last three months; and/or reduced dietary intake in the last week; and/or serious ill (Level 1 screening in NRS2002)    | Three individualized nutritional counselling visits by a dietitian complemented with three follow-up visits by general practitioners or three follow-up visits by general practitioners alone. ONS if needed. | 12 weeks | HGS improved, N (%) 27 (45)/31 (50) P= 0.844        | OR 0.60 (95% CI 0.17 to 2.13)                   | All three visits n (%)56 (97%).   |
| Beck 2015 Does adding a dietician to the liaison team after discharge of geriatric patients improve nutritional outcome: a RCT  | > 70y | Hospital | 37/34                                      | WL >5% in 2 months; or BMI 18.5–20.5 kg/m <sup>2</sup> plus impaired general condition or food intake 25–60% of normal in past week or major disease (Level 2 screening in NRS2002) | Liaison-Team in cooperation with a dietician. The dietician performed 3 home visits, the first visit together with the discharge Liaison-Team, the remaining visits   | 12 weeks | Max kg, change median (95% CI) 0.5 / -0.4 P = 0.151 | OR 0.323 (95% CI 0.060; 1.724).                 | Of the 31 participants who completed the study, 30 (97%) received the planned remaining two dietician visits. |

performed by a dietician alone. ONS if needed.

|  |       |                    |        |  |   |          |  |   |  |
|--|-------|--------------------|--------|--|---|----------|--|---|--|
| Feldblum 2011<br>Individualized nutritional intervention during and after hospitalization: the nutrition intervention study clinical trial | > 65y | Hospital           | 181/78 | MNA-sf score < 10; or WL ≥ 10% in previous 6 months. | Dietetic treatment in hospital; 3 home visits after discharge.  | 24 weeks | n.a.   | 3.8% had died in Group 1, versus 11.6% in Groups 2 and 3 (P=.046) | n.a.   |
| de Jong 2000 Dietary supplements and physical exercise affecting bone and body composition in frail elderly persons.                       | > 70y | community-dwelling | 40/59  | BMI ≤25 kg/m <sup>2</sup> ; or recent WL.            | 2X2 design: 1) Enriched food 2) Exercise 3) Both 4) Neither. 2 products per day: 1 from a series of fruit products and 1 from a series of dairy products. | 17 weeks | Not mentioned in the article although it was measured. | n.a.  | Not mentioned in the article although it was measured. |

|   |       |                   |         |  |  |          |  |   |  |
|---|-------|-------------------|---------|--|--|----------|--|---|--|
| Manders 2009 Effect of a nutrient-enriched drink on dietary intake and nutritional status in institutionalised elderly. | > 60y | Institutionalized | 57/119  | BMI $\leq$ 30 kg/m <sup>2</sup> .  | 2 servings of 125ml of a complete nutrient-enriched dairy drink  | 24 weeks | Not mentioned in the article although it was measured.   | n.a.  | In the group of participants who completed the full protocol, median compliance was 78% (range 19–94%) and 80% (range: 44–92%) for intervention and placebo group, respectively. |
| Neelemaat 2011 Post-Discharge nutritional support in malnourished elderly individuals improved functional limitation.   | > 60y | Hospital          | 105/105 | BMI $\leq$ 20 kg/m <sup>2</sup> ; and/or $\geq$ 5% unintentional WL in the previous month and/or $\geq$ 10% unintentional WL in the previous 6 months. | 2 servings of ONS, 6x Telephone counseling by dietitian. Energy and protein enriched diet (during the in-hospital period); Supplement of 400 IE vitamin D3 and 500 mg calcium per day. | 3 months | change in kilo mean ( $\pm$ SD) 0.2 (5.6) / 1.0 (6.7). Difference (95% confidence interval)–0.8 (–3.0–1.5) | Not mentioned in the article although it was measured | Adherence to oral nutritional support was 80%,   |

|  |            |                    |       |  |   |          |  |   |  |
|--|------------|--------------------|-------|--|---|----------|--|---|--|
| Schilp 2013 Effects of a dietetic treatment in older, undernourished, community-dwelling individuals in primary care: a RCT.                                       | > 65y      | Community-dwelling | 74/72 | MUAC <25 cm; and/or ≥4 kg unintentional WL within the past 6 months.   | Dietetic treatment, 1,000 mg calcium plus vitamin D 800 IU. ONS if needed.  | 3 months | (b = 0.49 kg, 95 % CI: -0.62–1.60)   | Not mentioned in the article although it was measured.  | n.a.   |
| Stange 2013 Effect of a low-volume, nutrition- and energy-dense oral nutritional supplement on nutritional and functional status: a RCT in nursing home residents. | 87 +/- 6 y | institutionalized  | 42/45 | MNA score < 24 points; BMI ≤22 kg/m <sup>2</sup> ; a low food intake according to the nurses' perception; or WL ≥ 5% in the past 3 months or ≥10% or more in the past 6 months.                            | 2 servings of 125 ml ONS, Care personnel were instructed to encourage residents to consume the amount offered, and to support compliance. | 12 weeks | HGS, kPa T1<br>32 (25-43)<br>34 (20-42)<br>control 40 (35-54)43 (30-58) P = .407 | Three participants of the IG (6.7%) and 7 of the CG (16.7%) died during the study period (P= .144). | Median compliance of 72.9% (23.6%-86.6%)   |
| Tieland 2012 Protein supplementation improves physical performance in frail elderly people: a randomized, double-blind, placebo-controlled trial.                  | > 65y      | community-dwelling | 31/34 | Fried criteria: prefrail when 1 or 2 criteria were applicable, frail when ≥3 criteria. (1) unintentional WL; (2) weakness; (3) self-reported exhaustion; (4) slow walking speed;(5) low physical activity. | 2 servings, 250-mL containing 15 g protein.   | 24 weeks | After 24 weeks, handgrip strength in both groups had not improved (P > .05).     | n.a.  | After 24 weeks of dietary intervention, at least 92% of the provided drinks were consumed in both the protein and placebo supplemented groups. |

Abbreviations: BMI = body mass index, MNA= mini nutritional assessment, MUAC = mid-upper arm circumference, ONS = oral nutritional support, WL= weight loss.