

## Supplementary Table S1: List of potential determinants of malnutrition in aged persons used to develop the DoMAP Model

DoMAP = Determinants of Malnutrition in Aged Persons

In bold: Factors finally included in the DoMAP Model

\* Factors identified in a systematic literature review about determinants of protein-energy malnutrition in community-dwelling older adults (van der Pols-Vijlbrief et al. 2014)

Modifications resulting from the Delphi rounds (r1 = first round, r2 = second round) are indicated in the right column.

### Socio-demographic aspects

- **Older age** \*
- **Low education** \* moved from level 3 to surrounding space
- **Living alone** \*
- **Eating alone** \*
- **Poverty** moved from level 2 to level 3
- **Poor quality of care** added (r1) and retained (r2)
- Female sex \* removed (poor agreement in r1 and r2)
- Region \*
- Marital status \*
- Ethnicity \*
- Race \*
- Religion \*
- Low income \*
- Not enough money for medication \*
- Not enough money for food \*
- Few friends \*
- Death of spouse \*
- Having partner \*
- Reduced social activity \*
- Family network \*
- Social support \*

### Lifestyle

- **Physical inactivity** \*
- Smoking \* removed (poor agreement in r1 and r2)
- Alcohol use \*
- Self-reported weight loss \*

- High BMI \*
- Weight change \*
- Trying to lose weight \*
- High baseline weight \*

#### Mental and psychological function

- **Depression** \*
- **Dementia** \*
- **Loneliness** \*
- **Loss of interest in life** \*
- **Psychological distress / stress** \*
- **Cognitive impairment**
- **Forgetting to eat**
- **Unwilling to eat**
- Cognitive decline \*
- Anxious \*
- Feeling happy \*
- Cutting down things \*
- Psychiatric diagnosis \*

suggested to remove (r1) but retained (r2)

#### Physical function

- **Difficulty with eating** \*
- **Difficulty preparing meals** \*
- **Difficulty shopping** \*
- **Mobility limitations** \*
- **Frailty** \*
- **Sensory impairment**
- **Age-related functional decline**
- Low physical performance
- Difficulty walking stairs \*
- Low handgrip strength \*
- Vision decline \*
- ADL dependency \*
- Physical functioning \*
- Functional vulnerability \*
- Drive \*
- Falls \*
- IADL dependency \*

renamed (taste / smell / vision impairment)

added (r1) and retained (r2)

removed (poor agreement in r1 and r2)

- Institutionalized \*
- Traveling with assistance \*
- Hearing impairment \*
- Not out of house last week \*
- Staying in bed \*

#### Oral function

- **Dysphagia** \*
- **Chewing problems** \*
- **Dry mouth** \*
- **Poor dental state** renamed (poor oral care)
- **Oral pain** renamed (oral health problems)
- Edentulousness \*
- Denture use \*
- Probing depth (extent of sites) \*
- Chewing pain \*
- Mouth pain during eating \*
- Low masticator performance \*
- Low occlusal force \*
- Teeth/mouth problems \*
- Dental type (edentulous vs normal) \*
- Number of teeth \*

#### Health status

- **Polypharmacy** \* suggested to retain (r1) and retained (r2)
- **Vomiting** \*
- **Diarrhea** \*
- **Pain** \*
- **COPD** \*
- **Infection** \*
- **Stroke** \*
- **Parkinson's disease** \*
- **Cancer** \*
- **Gastro-intestinal disease** \*
- **Hospitalization** \*
- **Tremor** \* added (r1) and retained (r2)
- **Medication**
- **Nausea**

- **Malabsorption**
- **Hyperactivity**
- **Inflammation**
- **Increased metabolic rate**
- **Surgery**
- **Inflammatory disease**
- **Multimorbidity**
- Inflamm-Aging
- Increased breathing work
- Severe cough
- Burns
- Poor self-rated health \*
- Delirium \*
- Anti-inflammatory medication \*
- Infection markers (IL6/TNF-alpha) \*
- No diabetes \*
- High number of disease \*
- Disease / chronic problem \*
- Heart and coronary failure \*
- Hospital visits \*
- Constipation \*
- Hypertension \*
- Arthritis \*
- Pressure ulcers \*
- Disease affecting eating habits \*
- Burden of disease \*
- Anemia \*
- Flair up chronic disease \*
- Frequency of care \*
- Medication not available \*
- Blood disease \*
- Caregiver \*
- Doctor visit \*
- Emergency at home \*
- Emergency unit visit \*

specification suggested (r1: congestive heart failure) but not accepted (r2)

removed (poor agreement in r1 and r2)

removed (poor agreement in r1 and r2)

suggested to remove (r1) and removed (r2)

suggested to remove (r1) and removed (r2)

suggested to remove (r1) and removed (r2)

added (r1) and removed (r2)

- Hip fracture \*
- Musculoskeletal disorders \*
- Terminal prognosis \*
- Time since admission \*
- Unstable condition \*
- Use of formal service \*

#### Nutrition

- **Poor appetite \***
- **Restrictive diet**
- **Poor quality of meals**
- **Anorexia of aging**
- **Lack of food** added (r1) and retained (r2)
- Not allowed to eat added (r1) and removed (r2)
- Taste complaints about the food \*
- Less meals a day/number of meals \*
- Low diet score \*
- Severe malnutrition \*
- Snacking \*
- Eating less \*
- Fruit (less intake) \*
- Hunger \*
- Insufficient fluid/food intake \*
- Nutritional/health link \*
- Supplement use \*
- Tube feeding \*