Nutrition Screening Tools for Community-Dwelling Older Adults

This guide was created to help healthcare providers make informed decisions when selecting a tool to screen community-dwelling older adults for nutrition risk. The guide has information on **administrators**, **recommendations for use**, **validity**, and **scoring** for each tool.

TOOL 1: Seniors in the Community: Risk Evaluation for Eating and Nutrition (SCREEN©)

Population:
- Community-dwelling older adults (aged ≥ 55 years)

Administrators:
- Trained interviewers can administer SCREEN© in-person or over the phone, no anthropometric measurements required
- Older adults can self-administer SCREEN©

Recommendations for use:
- At initial visit with patient
- Re-administer annually, or sooner if there is concern (e.g., hospitalization)

Learn more at: https://olderadultnutritionscreening.com/

Version	Comparator	Sensitivity	Specificity	TRR	IRR
SCREEN-3 (<22 cut-point)	SCREEN-8	83.0%[a]	73.0%[a]	-	-
SCREEN-8 (<38 cut-point)	Dietitian Nutrition Risk Rating	84.0%[b]	58.0%[b]	ICC = 0.84[b]	ICC = 0.79[b]
SCREEN-14 (<50 cut-point)	Dietitian Nutrition Risk Rating	84.0%[b]	62.0%[b]	ICC = 0.83[b]	ICC = 0.83[b]

TRR = Test-Retest Reliability; IRR = Inter-Rater Reliability; ICC = Intraclass Correlation Coefficient

[a] Morrison, J. M., Laur, C. V., & Keller, H. H. (2019). *Eur J Clin Nutr*, 1.
[b] Keller, H. H., Goy, R., & Kane, S. L. (2005). *Eur J Clin Nutr*, 59(10), 1149.

Number of items:

- SCREEN-14 assesses 14 items: weight change*†, intentionality of weight change, perception of weight, skipping meals*, food avoidance, appetite*†, vegetable and fruit intake*, protein food intake, dairy and soy intake, fluid intake*, difficulty swallowing*†, difficulty chewing, meal replacement use, eating with others*, meal preparation*, meal satisfaction, and ability to grocery shop
- SCREEN-8 assesses items marked with * in the list above
- SCREEN-3 assesses items marked with † in the list above

Risk categories:

- **SCREEN-14:** < 50 = high nutrition risk
  - Most informative and preferred tool for nutrition screening
- **SCREEN-8:** < 38 = high nutrition risk
  - Quick nutrition screening tool for when time is limited
- **SCREEN-3:** < 22 = potential nutrition risk; > 22 = not likely at nutrition risk
  - Tool helps triage patients who are likely to be at nutrition risk
  - The remaining 5 questions for SCREEN-8 are completed to confirm risk

TOOL 2: **M**ini **N**utritional **A**ssessment (**MNA**)

Population:

- Older adults (aged ≥ 65 years) in hospital, community, and other care settings

Administrators:

- Health professionals in hospital, community and other care settings
- Older adults can self-administer the MNA-short form using Self-MNA

Recommendations for use:

- At initial visit with patient
- Re-administer on a regular basis to monitor nutrition risk

Learn more at: https://www.mna-elderly.com/forms/mna_guide_english_sf.pdf

Tool	Comparator	Sensitivity	Specificity
Full MNA	Physician Assessment	96.0%[a,b]	98.0%[a,b]
MNA-short form	Full MNA	89.3%[c,*]	81.8%[c,*]

*Sensitivity and specificity values are based on the upper cut-point of 11. The MNA-SF was only validated against the full MNA, which potentially inflates the values for sensitivity and specificity.

[a] Vellas, B. et al. (1999). *Nutrition*, 15(2), 116-122.
[b] Guigoz, Y. & Vellas, B. (1995). *Médecine et Hygiène*, 53(2087), p. 1965-1969.
[c] Kaiser, M. J. et al. (2009). *J Nutr Health Aging*, 13(9), 782.

Number of items:

- The full MNA assesses 18 items: food intake*, weight loss*, mobility*, psychological stress or acute disease*, neuropsychological problems*, measured body mass index*, living situation, prescription drug usage, pressure sores, full meals eaten daily, protein intake, vegetable and fruit intake, fluid intake, mode of feeding, self-view of nutrition status as compared to others, and measured mid-arm and calf circumference
- MNA-short form assesses items marked with * in the list above

Risk categories:

- **Full MNA:** 17-23.5 = malnutrition risk; < 17 = malnourished
- **MNA-short form:** 8-11 = malnutrition risk; 0-7 = malnourished

TOOL 3: Malnutrition Universal Screening Tool (MUST)

Population:

- All adults in hospital, community, and other care settings

Administrators:

- Any trained health professional can administer MUST

Recommendations for use:

- At initial visit with patient
- Re-administer on a regular basis to monitor nutrition risk

Learn more at:

- https://www.bapen.org.uk/pdfs/must/must_full.pdf
- https://www.bapen.org.uk/pdfs/must/must_explan.pdf

Tool	Comparator	Sensitivity	Specificity
MUST	PG-SGA	69.7%[a]	75.8%[a]

PG-SGA = Patient-Generated Subjective Global Assessment

[a] Sharma, Y. et al. (2017). *Asia Pac J Clin Nutr*, 26(6), 994.

Number of items:

- The 3 items assessed are body mass index based on measured weight and height, unintentional weight loss, and acute disease effects

Risk categories:

- **Score of 0** = low risk of malnutrition
- **Score of 1** = medium risk of malnutrition
- **Score of ≥ 2** = high risk of malnutrition

Note: underlined items indicate required anthropometric measurements

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