

## APPENDIX 10–D

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# NUTRITION SCREENING INITIATIVE ASSESSMENT INSTRUMENTS

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The Determine Your Nutritional Health checklist (Exhibit 10–D1) of the Nutrition Screening Initiative can be administered by any level of healthcare professional. The Level I Screen for seniors (Exhibit 10–D2) can be administered by health and social service professionals to identify those in need of food assistance and nutrition therapy. The Level II screen for seniors (Exhibit 10–D3) contains specific diagnostic questions that health and medical professionals can use to identify seniors at high nutritional risk.

## Exhibit 10–D1 Determine Your Nutritional Health Checklist

*The warning signs of poor nutritional health are often overlooked. Use this checklist to find out if you or someone you know is at nutritional risk.*

Read the statements below. Circle the number in the yes column for those that apply to you or someone you know. For each yes answer, score the number in the box. Total your nutritional score.

## DETERMINE YOUR NUTRITIONAL HEALTH

	Yes
I have an illness or condition that made me change the kind and/or amount of food I eat.	2
I eat fewer than 2 meals per day.	3
I eat few fruits or vegetables or milk products.	2
I have 3 or more drinks of beer, liquor, or wine almost every day.	2
I have tooth or mouth problems that makes it hard for me to eat.	2
I don't always have enough money to buy the food I need.	4
I eat alone most of the time.	1
I take 3 or more different prescribed or over-the-counter drugs a day.	1
Without wanting to, I have lost or gained 10 pounds in the last 6 months.	2
I am not always physically able to shop, cook, and/or feed myself.	2
TOTAL	

**Total Your Nutritional Score. If it's—**

**0–2**      **Good!** Recheck your nutritional score in 6 months.

**3–5**      **You are at moderate nutritional risk.**  
See what can be done to improve your eating habits and lifestyle. Your office on aging, senior nutrition program, senior citizens center, or health department can help. Recheck your nutritional score in 3 months.

**6 or more**      **You are at high nutritional risk.** Bring this checklist the next time you see your doctor, dietitian or other qualified health or social service professional. Talk with him or her about any problems you may have. Ask for help to improve your nutritional health.

*These materials developed and distributed by the Nutrition Screening Initiative, a project of:*

American Academy  
of Family Physicians  
  
The American  
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National Council  
on the Aging

**Remember that warning signs suggest risk, but do not represent diagnosis of any condition. Continue reading to learn more about the warning signs of poor nutritional health.**

Source: Reprinted from Nutrition Screening Initiative. *Report of Nutrition Screening I: Toward a Common View*. Washington, DC: Nutrition Screening Initiative; 1991.

## Exhibit 10–D1 Continued

The nutrition checklist is based on the warning signs described below.  
Use the word DETERMINE to remind you of the warning signs.

**Disease**

Any disease, illness, or chronic condition that causes you to change the way you eat or makes it hard for you to eat puts your nutritional health at risk. Four out of five adults have chronic diseases that are affected by diet. Confusion or memory loss that keeps getting worse is estimated to affect 1 out of 5 or more of older adults. This can make it hard to remember what, when, or if you've eaten. Feeling sad or depressed, which happens to about 1 in 8 older adults, can cause big changes in appetite, digestion, energy level weight, and well-being.

**Eating Poorly**

Eating too little and eating too much both lead to poor health. Eating the same foods day after day or not eating fruit, vegetables, and milk products daily will also cause poor nutritional health. One in five adults skip meals daily. Only 13% of adults eat the minimum amount of fruit and vegetables needed. One in four older adults drink too much alcohol. Many health problems become worse if you drink more than 1 or 2 alcoholic beverages per day.

**Tooth Loss Mouth Pain**

A healthy mouth, teeth, and gums are needed to eat. Missing, loose, or rotten teeth or dentures that don't fit well or cause mouth sores make it hard to eat.

**Economic Hardship**

As many as 40% of older Americans have incomes of less than \$6,000 per year. Having less—or choosing to spend less—than \$25–\$30 per week for food makes it very hard to get the foods you need to stay healthy.

**Reduced Social Contact**

One third of all older people live alone. Being with people daily has a positive effect on morale, well-being, and eating.

**Multiple Medicines**

Many older Americans must take medicines for health problems. Almost half of older Americans take multiple medicines daily. Growing old may change the way we respond to drugs. The more medicines you take, the greater the chance for side effects such as increased or decreased appetite, change in taste, constipation, weakness, drowsiness, diarrhea, nausea, and others. Vitamins or minerals, when taken in large doses, act like drugs and can cause harm. Alert your doctor to everything you take.

**Involuntary Weight Loss/Gain**

Losing or gaining a lot of weight when you are not trying to do so is an important warning sign that must not be ignored. Being overweight or underweight also increases your chance of poor health.

**Needs Assistance in Self-care**

Although most older people are able to eat, 1 out of every 5 have trouble walking, shopping, buying, and cooking food, especially as they get older.

**Elder Years Above Age 80**

Most older people lead full and productive lives. But as age increases, risk of frailty and health problems increase. Checking your nutritional health regularly makes good sense.



The Nutrition Screening Initiative, 2626 Pennsylvania Avenue, NW, Suite 301, Washington, DC 20037. The Nutrition Screening Initiative is funded in part by a grant from Ross Laboratories, a division of Abbott Laboratories.

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Source: Reprinted from Nutrition Screening Initiative. *Report of Nutrition Screening I: Toward a Common View*. Washington, DC: Nutrition Screening Initiative; 1991.



## Exhibit 10–D2 Level I Screen

***A physician should be contacted if the individual has gained or lost 10 pounds unexpectedly or without intending to during the past 6 months. A physician should also be notified if the individual's body mass index is above 27 or below 24.***

**Living Environment**

- ☐ Lives on an income of less than \$6,000 per year (per individual in the household)
- ☐ Lives alone
- ☐ Is housebound
- ☐ Is concerned about home security
- ☐ Lives in a home with inadequate heating or cooling
- ☐ Does not have a stove and/or refrigerator
- ☐ Is unable or prefers not to spend money on food <25–3

**Functional Status**

Usually or always needs assistance with (check each that apply):

- ☐ Bathing
- ☐ Dressing
- ☐ Grooming
- ☐ Toileting
- ☐ Eating
- ☐ Walking or moving about
- ☐ Traveling (outside the home)
- ☐ Preparing food
- ☐ Shopping for food or other necessities

Source: Nutrition Screening Initiative. *Report of Nutrition Screening I: Toward a Common View*. Washington, DC: Nutrition Screening Initiative, 1991.

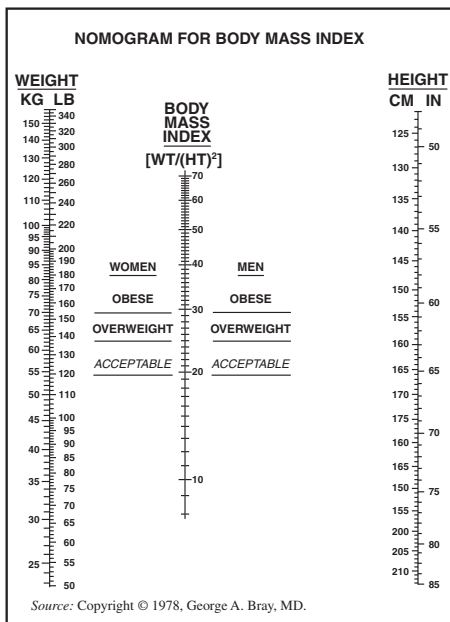
## Exhibit 10–D3 Level II Screen

## Level II Screen

Complete the following screen by interviewing the patient directly and/or by referring to the patient chart. If you do not routinely perform all of the described tests or ask all of the listed questions, please consider including them but do not be concerned if the entire screen is not completed. Please try to conduct a minimal screen on as many older patients as possible, and please try to collect serial measurements, which are extremely valuable in monitoring nutritional status. Please refer to the manual for additional information.

## Anthropometrics

Measure height to the nearest inch and weight to the nearest pound. Record the values below and mark them on the body mass index (BMI) scale to the right. Then use a straight edge (paper, ruler) to connect the 2 points and circle the spot where this straight line crosses the center line (body mass index). Record the number below; healthy older adults should have a BMI between 24 and 27; check the appropriate box to flag an abnormally high



Height (in): \_\_\_\_\_  
 Weight (lbs): \_\_\_\_\_  
 Body mass index  
 (Weight/height): \_\_\_\_\_

Please place a check by any statement regarding BMI and recent weight loss that is true for the patient.

- ☐ Body mass index < 24
- ☐ Body mass index < 27
- ☐ Has lost or gained 10 pounds (or more) of body weight in the past 6 months

Record the measurement of mid-arm circumference to the nearest 0.1 centimeter and of triceps skinfold to the nearest 2 millimeters.

Mid-arm circumference (cm): \_\_\_\_\_  
 Triceps skinfold (mm): \_\_\_\_\_  
 Mid-arm muscle circumference (cm): \_\_\_\_\_

Refer to the table and check any abnormal values:

- ☐ Mid-arm muscle circumference < 10th percentile

- ☐ Triceps skinfold < 10th percentile
- ☐ Triceps skinfold < 95th percentile

Note: mid-arm circumference (cm) – [0.314 × triceps skinfold (mm)] = mid-arm muscle circumference (cm)

For the remaining sections, please place a check by any statements that are true for the patient.

## Laboratory Data

- ☐ Serum albumin below 3.5 g/dl
- ☐ Serum cholesterol below 160 mg/dl
- ☐ Serum cholesterol above 240 mg/dl

## Drug Usa

- ☐ Three or more prescription drugs, OTC medications, and/or vitamin/mineral supplements daily

LEVEL II SCREEN

Name :

Date :

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