

ADA/A.S.P.E.N. Clinical characteristics that the RD can obtain and document to support a diagnosis of malnutrition.

Clinical Characteristic	Malnutrition in the context of acute illness or injury		Malnutrition in the context of chronic illness		Malnutrition in the context of social or environmental circumstances																																																									
	Non-severe (moderate) malnutrition	Severe malnutrition	Non-severe (moderate) malnutrition	Severe malnutrition	Non-severe (moderate) malnutrition	Severe malnutrition																																																								
<p><b>Energy intake<sup>1</sup></b></p> <p>Malnutrition is the result of inadequate food and nutrient intake or assimilation, thus recent intake compared to estimated requirements is a primary criterion defining malnutrition. The RD obtains or reviews the food and nutrition history, estimates optimum energy needs, compares them with estimates of energy consumed and reports inadequate intake as a percentage of estimated energy requirements over time.</p>	< 75% of estimated energy requirement for > 7 days	≤ 50% of estimated energy requirement for ≥ 5 days	< 75% of estimated energy requirement for ≥ 1 month	≤ 75% of estimated energy requirement for ≥ 1 month	< 75% of estimated energy requirement for ≥ 3 months	≤ 50% of estimated energy requirement for ≥ 1 month																																																								
<p><b>Interpretation of weight loss<sup>2-5</sup></b></p> <p>The RD evaluates weight in light of other clinical findings including the presence of under- or over-hydration. The RD assesses weight change over time reported as a percentage of weight lost from baseline.</p>	<table border="1"> <thead> <tr> <th>%</th> <th>Time</th> </tr> </thead> <tbody> <tr> <td>1-2</td> <td>1 week</td> </tr> <tr> <td>5</td> <td>1 month</td> </tr> <tr> <td>7.5</td> <td>3 months</td> </tr> </tbody> </table>	%	Time	1-2	1 week	5	1 month	7.5	3 months	<table border="1"> <thead> <tr> <th>%</th> <th>Time</th> </tr> </thead> <tbody> <tr> <td>&gt;2</td> <td>1 week</td> </tr> <tr> <td>&gt;5</td> <td>1 month</td> </tr> <tr> <td>&gt; 7.5</td> <td>3 months</td> </tr> </tbody> </table>	%	Time	>2	1 week	>5	1 month	> 7.5	3 months	<table border="1"> <thead> <tr> <th>%</th> <th>Time</th> </tr> </thead> <tbody> <tr> <td>5</td> <td>1 month</td> </tr> <tr> <td>7.5</td> <td>3 months</td> </tr> <tr> <td>10</td> <td>6 months</td> </tr> <tr> <td>20</td> <td>1 year</td> </tr> </tbody> </table>	%	Time	5	1 month	7.5	3 months	10	6 months	20	1 year	<table border="1"> <thead> <tr> <th>%</th> <th>Time</th> </tr> </thead> <tbody> <tr> <td>&gt;5</td> <td>1 month</td> </tr> <tr> <td>&gt; 7.5</td> <td>3 months</td> </tr> <tr> <td>&gt;10</td> <td>6 months</td> </tr> <tr> <td>&gt; 20</td> <td>1 year</td> </tr> </tbody> </table>	%	Time	>5	1 month	> 7.5	3 months	>10	6 months	> 20	1 year	<table border="1"> <thead> <tr> <th>%</th> <th>Time</th> </tr> </thead> <tbody> <tr> <td>&gt;5</td> <td>1 month</td> </tr> <tr> <td>&gt; 7.5</td> <td>3 months</td> </tr> <tr> <td>&gt; 10</td> <td>6 months</td> </tr> <tr> <td>&gt;20</td> <td>1 year</td> </tr> </tbody> </table>	%	Time	>5	1 month	> 7.5	3 months	> 10	6 months	>20	1 year	<table border="1"> <thead> <tr> <th>%</th> <th>Time</th> </tr> </thead> <tbody> <tr> <td>&gt;5</td> <td>1 month</td> </tr> <tr> <td>&gt; 7.5</td> <td>3 months</td> </tr> <tr> <td>&gt;10</td> <td>6 months</td> </tr> <tr> <td>&gt;20</td> <td>1 year</td> </tr> </tbody> </table>	%	Time	>5	1 month	> 7.5	3 months	>10	6 months	>20	1 year
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<p><b>Physical Findings<sup>5 6</sup></b></p> <p>Malnutrition typically results in changes to the physical exam. The RD may perform a physical exam and document any one of the physical exam findings below as an indicator of malnutrition.</p>						
<p>Body Fat</p> <p>Loss of subcutaneous fat (e.g. orbital, triceps, fat overlying the ribs).</p>	Mild	Moderate	Mild	Severe	Mild	Severe
<p>Muscle Mass</p> <p>Muscle loss (for example wasting of the temples (temporalis muscle); clavicles (pectoralis &amp; deltoids); shoulders (deltoids); interosseous muscles; scapula (latissimus dorsi, trapezius, deltoids); thigh (quadriceps) and calf (gastrocnemius)).</p>	Mild	Moderate	Mild	Severe	Mild	Severe
<p>Fluid Accumulation</p> <p>The RD evaluates generalized or localized fluid accumulation evident on exam (extremities; vulvar/scrotal edema or ascites). Weight loss is often masked by generalized fluid retention (edema) and weight gain may be observed</p>	Mild	Moderate to severe	Mild	Severe	Mild	Severe

<b>Reduced Grip Strength<sup>7</sup></b>	N/A	Measurably reduced	N/A	Measurably reduced	N/A	Measurably Reduced
Consult normative standards supplied by the manufacturer of the measurement device						

**A minimum of two characteristics is recommended for diagnosis of either severe or non-severe malnutrition.**

Notes:

Height and weight should be measured rather than estimated to determine BMI.

Usual weight should be obtained in order to determine the percentage and to interpret the significance of weight loss.

Basic indicators of nutritional status such as body weight, weight change, and appetite may substantively improve with refeeding in the absence of inflammation. Refeeding and/or nutrition support may stabilize but not significantly improve nutrition parameters in the presence of inflammation.

The National Center for Health Statistics defines “chronic” as a disease/condition lasting 3 months or longer<sup>8</sup>.

Serum proteins such as albumin and prealbumin are not included as defining characteristics of malnutrition because recent evidence analysis shows that serum levels of these proteins do not change in response to changes in nutrient intake<sup>9-12</sup>.

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This table was developed by Annalynn Skipper PhD, RD, FADA. The content was developed by an ADA workgroup composed of Jane White PhD, RD, FADA, LDN, Chair, Maree Ferguson MBA, PhD, RD, Sherri Jones MS, MBA, RD, LDN, Ainsley Malone, MS, RD, LD, CNSD, Louise Merriman, MS, RD, CDN, Terese Scollard MBA, RD, Annalynn Skipper PhD, RD, FADA, and ADA staff member Pam Michael, MBA, RD. Content was approved by an A.S.P.E.N. committee consisting of Gordon L. Jensen, MD, PhD, Co-Chair, Ainsley Malone, MS, RD, CNSD, Co-Chair, Rose Ann Dimaria, PhD, RN, CNSN, Christine M. Framson, RD, PHD, CSND, Niles Mehta, MD, DCH, Steve Plogsted PharmD, RPh, BCNSP, Annalynn Skipper, PhD, RD, FADA, Jennifer Wooley, MS, RD, CNSD, Jay Mirtallo, RPh, BCNSP Board Liaison, and A.S.P.E.N. staff member Peggi Guenter, PhD, CNSN. Subsequently, it was approved by the A.S.P.E.N. Board of Directors. The information in the table is current as of 9/30/2011. Changes in the defining characteristics may be made as new research is published.