

## Nutrition Considerations for Patients With Rheumatoid Arthritis

The following are nutrition management goals to consider during assessment, diagnosis, intervention, monitoring, and evaluation of patients with rheumatoid arthritis (RA):

- achievement of nutritional adequacy and correction of nutrient deficiencies;
- management of medication side effects and medication-nutrient interactions;
- achievement and maintenance of a healthy BMI while preserving fat-free mass;
- prevention or treatment of comorbidities such as cardiovascular disease and osteoporosis;
- reduction of pain and inflammation; and
- optimization of food-related activities of daily living and quality of life.

Assessment	Reasoning
Body weight/BMI (use more than two indicators if older adult: current weight, recent changes in weight, weight history, BMI, height, waist circumference, and body composition)	<ul style="list-style-type: none"> <li>• Recent weight loss or gain</li> <li>• BMI less than 20 or more than 30 can affect outcomes and comorbidities</li> </ul>
Labs	<ul style="list-style-type: none"> <li>• Homocysteine, C-reactive protein, albumin, lipid panel, etc</li> <li>• May be affected by level of disease activity or malnutrition</li> </ul>
Activities of daily living	<ul style="list-style-type: none"> <li>• May affect shopping for, preparing, or eating food</li> </ul>
Diet history	<ul style="list-style-type: none"> <li>• History of treating RA with diet</li> <li>• History of weight-loss dieting</li> </ul>
Medications	<ul style="list-style-type: none"> <li>• Nutrition-related side effects such as abdominal pain, stomatitis, weight gain, and ulcers</li> <li>• Drug-nutrient interactions, especially with methotrexate and steroids</li> </ul>
Supplements	<ul style="list-style-type: none"> <li>• Safety and effectiveness</li> <li>• Most not recommended</li> </ul>
Fluids	<ul style="list-style-type: none"> <li>• Meeting recommended targets</li> <li>• Limiting trips to the bathroom because of RA pain</li> </ul>
Sex	<ul style="list-style-type: none"> <li>• Women often affected more severely in all respects</li> </ul>
Economic status	<ul style="list-style-type: none"> <li>• Food insecurity possible</li> </ul>
Mental health	<ul style="list-style-type: none"> <li>• Anxiety or depression often seen with RA</li> </ul>
Other	

Diagnosis/Comorbidities	Considerations
Level of disease activity	<ul style="list-style-type: none"> <li>• Can affect labs, resting energy expenditure, activities of daily living, weight, loss of fat-free mass, etc</li> <li>• Can vary over the course of the disease</li> </ul>

Cardiovascular disease	<ul style="list-style-type: none"> <li>• Will likely need intervention to minimize risk</li> </ul>
Osteoporosis	<ul style="list-style-type: none"> <li>• Will likely need intervention to minimize risk</li> <li>• Risk of fracture is higher if long-standing RA, low BMI, or corticosteroid use</li> </ul>
Rheumatoid cachexia/weight loss	<ul style="list-style-type: none"> <li>• Possible loss of fat-free mass</li> <li>• Can affect outcomes and comorbidities</li> </ul>
Temporomandibular disorder	<ul style="list-style-type: none"> <li>• May have difficulty chewing</li> </ul>
Sjogren's Syndrome	<ul style="list-style-type: none"> <li>• May experience dry mouth</li> </ul>
Infections	<ul style="list-style-type: none"> <li>• Higher risk of infection</li> </ul>
Other	

<b>Intervention</b>	<b>Recommendations</b>
Calories	<ul style="list-style-type: none"> <li>• Resting energy expenditure may be elevated, but physical activity may be reduced</li> <li>• Additional calories generally not necessary</li> <li>• Carefully consider appropriateness of weight-loss intervention</li> </ul>
Protein	<ul style="list-style-type: none"> <li>• No clear guidelines</li> <li>• 0.8 g/kg body weight is adequate</li> <li>• 1 to 1.6 g/kg body weight also suggested for seniors</li> </ul>
Fat	<ul style="list-style-type: none"> <li>• Monounsaturated fat encouraged, no specific amounts</li> <li>• Saturated fat discouraged, no specific amounts</li> <li>• Use of fish or fish oil supplements up to health care provider</li> <li>• To target cardiovascular disease risk, use standard guidelines and address dyslipidemia, if present</li> </ul>
Vitamins and minerals	<ul style="list-style-type: none"> <li>• Use Dietary Reference Intakes as goal</li> <li>• Special attention to folate, calcium, zinc, selenium, and vitamins A, B<sub>6</sub>, B<sub>12</sub>, D, and E</li> <li>• Food sources recommended over supplements</li> <li>• Iron supplements not recommended for anemia</li> </ul>
Fruits and vegetables	<ul style="list-style-type: none"> <li>• Address any issues with acquiring and consuming them</li> <li>• Important sources of antioxidants, vitamins, and minerals</li> </ul>
Dietary patterns	<ul style="list-style-type: none"> <li>• Mediterranean, vegetarian, vegan, elemental, and elimination common</li> <li>• No practice guidelines endorsing any specific diet</li> <li>• May be worthwhile if adequacy can be ensured</li> <li>• Individual patients may identify unique problem foods</li> <li>• Makes sense to recommend general healthful eating habits</li> </ul>
Barriers	<ul style="list-style-type: none"> <li>• Diet may be hard to maintain</li> <li>• Unintended weight loss from RA-specific diets</li> <li>• Social influences and family may negatively affect success</li> </ul>
Referrals and resources	<ul style="list-style-type: none"> <li>• Occupational therapist, fitness expert, or other as needed</li> <li>• Websites or health organizations as appropriate (eg, Arthritis Foundation at <a href="http://www.arthritis.org">www.arthritis.org</a>, American Heart Association at <a href="http://www.heart.org">www.heart.org</a>)</li> </ul>
Other	