

Oral Nutrition Supplement Programs

What We Know

- › Oral Nutrition Supplement (ONS) Programs involve prescribing medical foods or beverages that provide additional calories, protein, or any other nutrients to patients who are undernourished, or unable to take in adequate nutrition or fluids through regular meals. They should be offered to at-risk patients in addition to regular meals and snacks, in an effort to increase body mass index (BMI) or provide additional nutrients in an effort to improve clinical outcomes^(8,11,13)
- Older patients (> 65 years), especially those who are hospitalized, or living in long-term care facilities, are especially at risk of unintentional weight loss and malnutrition^(6,8,11,13)
 - In nursing home patients identified as being at risk of malnutrition by the mini nutritional assessment (MNA), providing ONS has been shown to improve nutritional status and weight^(6,11)
 - Providing ONS to hospitalized patients improves MNA scores, and it may improve wound healing, enhance immune and cognitive function, and reduce the risk of complications in older patients recovering from hip fracture. Early intervention with ONS has also been shown to reduce hospital length of stay, and unplanned 30-day readmissions in malnourished hospitalized adults^(8,11,12,13)
 - A food-first strategy should be employed for all at-risk patients^(6,11)
 - The involvement of a registered dietitian (RD) in screening, prescribing ONS, monitoring, and educating patients on ways to improve their oral intake can minimize inappropriate prescribing practices and provide cost savings⁽⁴⁾
 - Adherence to ONS may be an issue due to tolerance, refusal, or taste. Offering more flavor variety to prevent taste fatigue and chilling sip feeds or incorporating them into other foods can improve adherence^(8,14)
 - In addition to liquid supplements, solid supplements, such as high-energy and protein cookies, have been shown to improve appetite and promote weight gain. Solid supplements can have a synergistic effect when used with liquid supplements because they stimulate the senses and actions of touch, chewing, and hearing⁽¹⁰⁾
 - High-energy snack intake is improved when snacks are served in a group setting rather than eaten alone⁽⁸⁾
- › ONS programs may be especially beneficial for certain subgroups of patients whose medical conditions may be worsened by malnutrition^(1,2,3,9)
 - Because malnutrition both increases the risk of developing chronic wounds, and delays the wound-healing process, patients with pressure ulcers or wound-healing disorders benefit from ONS⁽¹⁾
 - The use of specialized ONS formulas is controversial, as standard formulas, high protein formulas and specialized formulas containing protein, arginine, vitamin C, and zinc have all been shown to be beneficial in preventing and shortening wound healing time^(1,2,13)
 - Unintentional weight loss is common in patients with Alzheimer’s disease. ONS is more effective than nutrition education in this population to improve nutritional status⁽⁹⁾

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January 18, 2019

- Pre and postoperative ONS have been shown to help regulate the immune response and reduce the risk of postsurgical complications. A study that compared the use of standard ONS versus immunonutrition (IN) determined there is no evidence that IN was superior to standard ONS⁽⁵⁾
- Patients with end-stage renal disease and hypoalbuminemia had improved serum albumin levels and fewer hospitalizations after one year of ONS than patients who did not receive supplements⁽³⁾
- › Patient compliance with ONS is usually good, but several factors can influence the efficacy of a nutrition as medicine (NAM) program⁽⁷⁾:
 - Health professionals may not be clear about their role in each step of a NAM program, so ONS may not be delivered as prescribed
 - There may be misconceptions on the part of healthcare staff and patients about the importance and benefits of ONS, and the length of time ONS should be used
 - Patients may find ONS unpalatable, but an alternative is not explored

What We Can Do

- › Learn about ONS programs so you can accurately assess your patient's personal characteristics, ability to benefit from ONS, and health education needs; share this information with your colleagues
 - Remain informed about the latest research on prescribable and non-prescribable ONS formulas available to your facility and patients, as well as best ways to use them
 - Collaborate with your facility's medical education department to conduct in-service presentations on best practices for ONS programs
- › Assess patients for existing malnutrition or the presence of any other feeding problems or medical conditions that might lead to inadequate intake of nutrition or fluids
 - Educate patients and caregivers on ways to incorporate high calorie/protein meals and snacks into their existing diet
 - Prescribe appropriate ONS as needed to maintain or improve nutritional status
 - Monitor patients for tolerance and adherence, improved BMI, and clinical measures
 - Use appropriate techniques (e.g., rotating flavors, chilling, adding ONS to other foods) to improve adherence
 - Provide ONS in a group setting whenever possible to improve intake
- › Emphasize to the patient and caregiver(s) the importance of adhering to the prescribed ONS program, and following up with any nutrition or medical appointments to monitor patient progress and improve clinical outcomes
 - Provide written materials if available
 - Review techniques for improving intake through regular diet and ONS

Coding Matrix

References are rated using the following codes, listed in order of strength:

M Published meta-analysis	RV Published review of the literature	PP Policies, procedures, protocols
SR Published systematic or integrative literature review	RU Published research utilization report	X Practice exemplars, stories, opinions
RCT Published research (randomized controlled trial)	QI Published quality improvement report	GI General or background information/texts/reports
R Published research (not randomized controlled trial)	L Legislation	U Unpublished research, reviews, poster presentations or other such materials
C Case histories, case studies	PGR Published government report	CP Conference proceedings, abstracts, presentation
G Published guidelines	PFR Published funded report	

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