



# A Day in the Life: The Role of a Dietitian in Wound Care

By Andrea Illyas, RD



**T**here is no doubt that members of the interprofessional team share responsibilities for the prevention and treatment of wounds. Because nutrition plays a key role in any comprehensive care plan for the prevention and treatment of pressure ulcers, the registered dietitian is an essential team member, particularly in long-term-care settings.

Ontario's Long-Term Care Homes Act, 2007, requires all homes to have a wound program to promote skin integrity, prevent the development of wounds (including pressure ulcers) and provide effective skin and wound interventions.

Adequate nutrition is especially important when working with older, frail and/or malnourished residents. Compromised nutritional status in this population can include unintentional weight

loss, protein energy malnutrition (PEM), hyperglycemia, dehydration, iron deficiency anemia and other vitamin or mineral deficiencies. Other nutrition-related risk factors associated with increased risk of pressure ulcers and other types of skin breakdown include low body mass index



(BMI), reduced food intake, impaired ability to eat independently as well as decreased mobility and loss of muscle mass. These factors become barriers to healing once a wound has developed. Adequate calories, protein, fluids, vitamins and minerals are required for the body to maintain tissue integrity and prevent tissue breakdown.

As a dietitian in long-term care, my role is to ensure that residents are provided with optimal nutrition. When a resident is first admitted to a home, I complete a comprehensive nutrition assessment, which includes obtaining information on the resident's personal dietary habits, medical history, medication review, laboratory results and anthropometric information.

From these data, I can create an individualized nutrition plan for each resident, including the resident's individualized diet and texture needs, provision of special snacks and nutritional supplements as well as other specific dietary interventions.

I complete these nutrition assessments on at least a quarterly basis for every resident so that I have an ongoing opportunity to reassess and make appropriate changes to the resident's nutritional care plan. The nursing staff takes weights monthly for all residents and the nurse will complete a referral for any significant weight loss. I then complete a nutrition review to make individualized adjustments in the resident's plan of care. For residents with wound issues, we recommended obtaining weekly weights.<sup>1</sup> Through



the assessment process, I must take into account the resident's interest in food, ability to chew and swallow, management of pain, need for assistance with meals and other factors that can sometimes affect a resident's oral food intake significantly. For residents with intact skin, this detailed focus on nutrition and hydration works toward keeping the skin healthy and preventing skin breakdown.

It has been shown that adequate nutrition and hydration aid in skin health to reduce hospital admissions, improve residents' activity levels and improve quality of life. Adequate nutrition and hydration also lower health-care costs because wound prevention is much less expensive than wound treatment.<sup>1</sup> Further, expensive wound treatments are sometimes used unsuccessfully because of inadequate nutrition; however once nutrition and hydration deficits are rectified, the wound treatments are much more effective.

To stay on top of each resident's skin integrity issues, I receive a dietary referral from nursing



## Screening and Assessment Recommendations<sup>1,2</sup>

- **Nutrition and Hydration Screening:** Use a validated screening tool to identify those at nutritional risk upon admission.
- **Comprehensive Nutrition Assessment:** Assessment is to be completed upon admission, with each change in condition and when progress toward pressure ulcer closure is not observed.
- **Weight Monitoring:** Regular weight monitoring is the most non-invasive, time-efficient, inexpensive, most reliable indicator of nutritional adequacy. Failure to monitor weight is a barrier to healing. Weekly monitoring is recommended.
- **Blood Work Screening:** Screening identifies underlying, resolvable barriers to wound healing.

## Key Nutrient Recommendations<sup>1,2</sup>

- **Water:** A minimum intake of 27 ml/kg body weight with considerations made to wound and hydration status and fluid losses.
- **Energy:** Caloric intake is individualized based on underlying medical conditions and level of activity. Provide 30–35 kcal/kg body weight for those with or at risk of a pressure ulcer who are assessed as being at risk for malnutrition.
- **Protein:** Provide 1.25–1.5 g/kg body weight for adults (as high as 2.0 g/kg) who are at risk for or have existing pressure ulcers and are assessed as

being at risk for malnutrition. Reassess as condition changes. It is important to note that whey protein is superior in the treatment of pressure ulcers.

- **High-Calorie/Protein Supplements:** Offer high-calorie, high-protein oral nutritional supplements between meals in addition to the usual diet for those with nutritional and pressure ulcer risk if nutritional requirements cannot be achieved by dietary intake.
- **Vitamins/Minerals:** Provide and encourage those with or at risk of pressure ulcers to consume a balanced diet that includes good sources of vitamin and minerals. If dietary intake is poor or deficiencies are suspected or confirmed for these individuals, provide a vitamin and mineral supplement.



staff for any resident who has a reddened area, skin tear or any open area of skin. Although pressure ulcers are the most prevalent type of wound in long-term care, I must also be made aware of surgical wound healing, venous and arterial leg ulcers or other possible skin breakdown concerns. While the causes of pressure ulcers can vary, early assessment, prevention and treatment are all essential as part of a preventative approach.

As in any setting, it is important that all members of the interprofessional team—which includes the physician, dietitian, pharmacist, occupational therapist, physiotherapist, social worker, nursing staff, resident and family members—be involved and work together as a team to develop comprehensive care plan.<sup>1,2,3</sup> 🍷

**Andrea Illyas, RD** is a corporate dietitian with Seasons Care Dietitian Network and has been working in long-term care for the past 12 years. She is an active member of Dietitians of Canada's Ontario Long Term Care Action Group as well as a member of Ontario Woundcare Interest Group.

## Resources

1. Food for Thought: Nutrition and Hydration for Pressure Ulcer Prevention and Management presentation at the Dietitians of Canada Gerontology Network Fall 2015 workshop by Chris Fraser, HBSc, RD.
2. National Pressure Ulcer Advisory Panel (NPUAP) guidelines for pressure ulcers at [www.npuap.org](http://www.npuap.org).
3. Registered Nurses' Association of Ontario (RNAO) best practice guidelines at [www.rnao.org](http://www.rnao.org).