Concerns about young women’s nutrition

Doris E. Gillis, MSC, MACHED, PDT Patricia L. Williams, PHD, PDT

During late adolescence and into their early 20s, women risk a multitude of nutritional imbalances as nutrient requirements peak while lifestyle choices can compromise dietary intake. Most focus on this age group tends to be about issues of weight: obesity, dysfunctional eating, and eating disorders. Although these are important, this emphasis does not capture the full spectrum of nutritional health concerns of today's young women.

Dietary deficiencies, most notably iron, calcium, and folate, are commonly related to inadequate energy intake or the omission of whole food groups. This article highlights current knowledge about the nutritional health of young Canadian women, profiles trends in their eating patterns, and suggests how family practitioners can support these patients in achieving and maintaining good nutrition.

Good nutrition and dietary intake
A recent survey of the food consumption patterns of Canadian adults (18 to 65 years) and adolescents (13 to 17 years) revealed that women’s nutritional habits were not good. While energy and fat intakes were close to current recommendations, a substantial number of young women were reported to consume inadequate amounts of calcium, folate, and iron, nutrients critically important during their reproductive years.

Mean fat intake was reported to be no more than 30% of total energy as fat for both age groups. When their diets were compared with Canada's Food Guide to Healthy Eating, however, younger women had marginal or below recommended intake of all four food groups. High-energy, nutrient-poor foods accounted for 27% to 29% of total energy and 29% to 32% of total fat intake in the diets of both age groups.

Poor food choices combined with limited physical activity contribute to the escalating problem of overweight. The prevalence of overweight among girls aged 7 to 13 years increased from 15% to 23.6% between 1981 and 1996, while the prevalence of obesity more than doubled, from 5% to 11.8%.

Overweight adolescents are at increased risk not only of obesity-associated chronic diseases but also of the cycle of emotional and socioeconomic problems associated with obesity. Focusing on dietary restraint is clearly not the answer to this problem, given its link with the growing prevalence of eating disorders.

Iron deficiency is the most common nutrient...
deficiency among older adolescent girls and young women due to iron losses during menses and poor dietary intake. Compared with other age groups, female teens have the highest requirement for iron and the lowest intake. Between 29% and 84% of young Canadian women are not thought to consume the recommended amount of iron. The subtle but serious consequences of iron deficiency can include negative effects on work performance, inadequate body-temperature regulation, and poor intellectual performance.

Although the prevalence of calcium deficiency among young Canadian women is unknown, concern about calcium intake has increased because of its association with bone health. Maximizing peak bone mass during the first 2 to 3 decades of life can prevent or delay onset of osteoporosis. About 60% of girls aged 13 to 17 years are reported to consume less than the recommended amount of milk and milk products, the best source of calcium. Vitamin D is needed along with calcium to build strong bones; excess sodium, protein, caffeine, and phosphorus can compromise bone health. The common practice of choosing soft drinks over milk not only displaces the nutrients found in milk, but also impairs calcium absorption due to the high phosphorus content of soft drinks.

Folate intake, yet another concern in this reproducively active age group, is associated with consumption of fruits and vegetables. In particular, young women from low socioeconomic backgrounds and disconnected from their families tend to consume too little fruit and too few vegetables.

**Trends in eating patterns**

Lifestyle trends can influence young women’s diets. Less structured eating, the shift in food consumption from meals to snacks, is widely accepted. Dwyer and colleagues reported that, as the number of eating episodes increased, mean intake of energy, total carbohydrates, and sugars increased. Eating away from home is common; American data suggest that the iron content of away-from-home food is substantially lower than that of food consumed at home. In their study of American adolescents, Dwyer and colleagues found that overweight students were more likely to omit breakfast, eat fewer than two meals a day, and consequently have lower energy intake than their peers. Results of a survey of college and university students in Vancouver, BC, revealed that only 54% of both male and female students reported always eating breakfast, despite acknowledging that eating breakfast helped them work better. Family food-purchasing patterns, food costs, and storage and cooking facilities were the main influences on breakfast choices.

Increasing numbers of young women are shifting to various patterns of vegetarian eating. One in five Canadian teenage girls reported not consuming any meat or alternatives, and a further 35.5% consumed less than the recommended two servings a day. The more limited the intake of animal foods, the greater the likelihood of nutrient inadequacy, with protein, iron, calcium, and vitamins D and B12 being of particular concern. To compensate for the less biologically available iron in a plant-based diet, vegetarians need to consume twice as much iron as meat-eaters and combine nonheme sources, such as cereals, with foods rich in vitamin C. Because vitamin B12 is found only in animal foods, vegans must include foods fortified with vitamin B12 or take supplements. Evidence suggests that well-informed and motivated vegetarians can achieve healthy diets.

**What can family practitioners do?**

Health care providers are viewed as valuable sources of information on diet, nutrition, and exercise. Practitioners must consider all factors that shape their patient’s health, such as income and social status, education, social support networks, culture, health practices, and personal coping mechanisms. Family physicians can have an important role in encouraging young women to have good nutritional habits, habits that will be a good investment as they confront the nutrient demands of their childbearing years with a view to preventing diet-related chronic diseases in later life. Family physicians can:

• begin by considering the issues important to young women’s health and lifestyles and seek their input in making recommendations for improving their eating practices;
• promote prevention of obesity through healthy lifestyle practices including physical activity, healthy eating, and positive self-esteem. Avoid recommending restrictive dieting, a practice that has a dismal success rate and can trigger dysfunctional eating behaviour;
• identify young women who could be especially vulnerable to low intake of calcium, iron, and folate, especially if they routinely limit the quantity or variety of food eaten;
• encourage young women to include daily at least three servings of low-fat milk and milk products as a source of calcium for bone health, at least five servings of fruit and vegetables, two to three servings of meat or alternatives, and five or more
servings of grain products, depending on energy requirements;

- direct vegetarians to reliable and practical information on healthy vegetarian eating. Focus special attention on incorporating iron combined with a good source of vitamin C and calcium-rich foods into the plant-based diet. Vegans should include dietary sources of vitamin B<sub>12</sub>, such as B<sub>12</sub>-fortified soy or rice beverages and fortified cereals, or vitamin B<sub>12</sub> supplements;

- recognize that lifestyles at this age are likely to result in erratic eating patterns. Encourage young women to have nutritious food available for on-the-run meals and snacks, and to make wise food choices when eating away from home; and

- focus on healthy eating practices and recommend appropriate vitamin-mineral supplements to young women who are unable to select foods that provide a nutritionally adequate diet. Supplements, however, can never replace healthy eating.

Acknowledgment

We thank Dr Kelley Cavan, an Assistant Professor in the Department of Human Nutrition at St Francis Xavier University, for reviewing the draft of this article.

References


