

HealthConnections

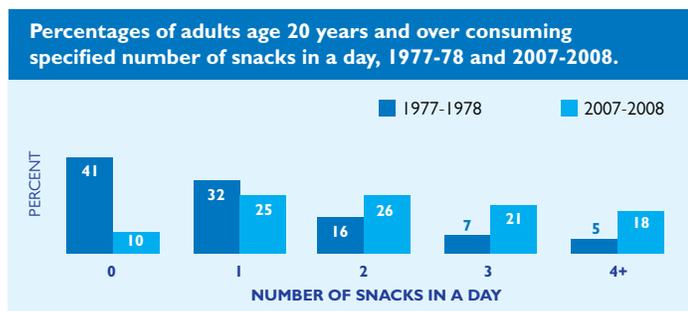
Taking Snacks Seriously: Optimizing Nutrient Intakes

Snacking ranks among America's favorite pastimes and for some consumers has replaced 3 square meals a day. Since the introduction of the potato chip more than a century ago, snacks have evolved into an actual meal category with endless choices to meet consumers' wide-ranging tastes and the demands of active, mobile lifestyles. This issue of *Health Connections* looks at how health professionals can help clients use snacking occasions as opportunities to improve overall nutrient intakes and meet nutrition goals.

Research Update: Snacking—from Occasional to Ubiquitous to Opportune

As recently as 30 years ago, most adults snacked only once a day or not at all. Now both the number of adults snacking and the number of snacks eaten have increased. Two-thirds of adults snack 2 or more times a day, and some report consuming 4 or more snacks daily.

According to market research, more than a third of millennials reported snacking more compared to a year ago, with 26- to 30-year-olds indicating 3 or more snacking occasions per day. Snacking by teens has also increased,



with 83 percent of adolescents eating at least one snack on any given day. Children consume about 3 snacks per day, comprising more than 27 percent of their calories and consisting mostly of desserts and sweetened beverages.



Rather than defining snacks by time of day and/or by type of sweet or salty treat, distinctions between meals and snacks are now blurred. Foods can be eaten as snacks or alongside main meals since food manufacturers have made it easier for consumers to decide for themselves whether a food is a meal or snack by not pigeonholing products into defined categories through packaging, portion size or type of ingredients.

As traditional meals at the table occur less often, grazing throughout the day and solo dining have contributed to increases in snacking behavior and types of snacks available. Restaurants are tapping into snacking behavior, catering to round-the-clock customers by offering portable items for between-meal grazing and menus for different times of day.

In addition, perceptions of snacking have shifted from a behavior to be avoided to a means of sensible eating. Better-for-you snacking is on the rise, being considered a way to add nutrients or eat more sensibly throughout the day. Market research NPD Group said more people today disagree with the statement, "I try to avoid snacking,"

Continued on Page 2



HEALTH CONNECTIONS EDITOR

Mary Jo Feeney, MS, RDN, FADA, FAND, specializes in nutrition communications and marketing. With over 30 years experience in public health nutrition and education, she currently is a leading consultant to the food, agriculture and health care industries. A charter Fellow of the Academy of Nutrition and Dietetics, Mary Jo served on the Academy and its Foundation's Board of Directors, and received the Academy's Medallion Award in 1996.

compared to 30 years ago. Generation X (ages 38 to 48), millennials (ages 24 to 37) and Generation Z (up to age 23) are seeking better-for-you snack foods, and they “have positive attitudes about snacking, a desire to eat more healthfully and a need for convenience.”

Drivers of Snacking Behavior

In addition to consumers’ desire for convenience and portability, social situations and other experiences serve as reasons to snack. Writing in the January 2015 issue of *Appetite* (“It’s My Party and I Eat if I Want to: Reasons for Unhealthy Snacking”), researchers assessed a broad range of motives for snacking, defined as all foods eaten between breakfast, lunch and dinner and containing high amounts of ingredients like fats and sugar. While not an exhaustive list, reasons for snacking include:

- Enjoying a special occasion (the biggest driver)
- Having opportunity to eat
- Gaining energy
- Coping with negative emotions
- Rewarding oneself
- Feeling social pressure

The reasons for unhealthy snacking differed most notably by age and gender, with younger respondents identifying more often with these reasons and women

more than men identifying coping with negative emotions, enjoying a special occasion and gaining energy. This study and the market research on better-for-you snacking suggest there are many situations and reasons for snacking, including positive motives, that health professionals can assess when working with clients.

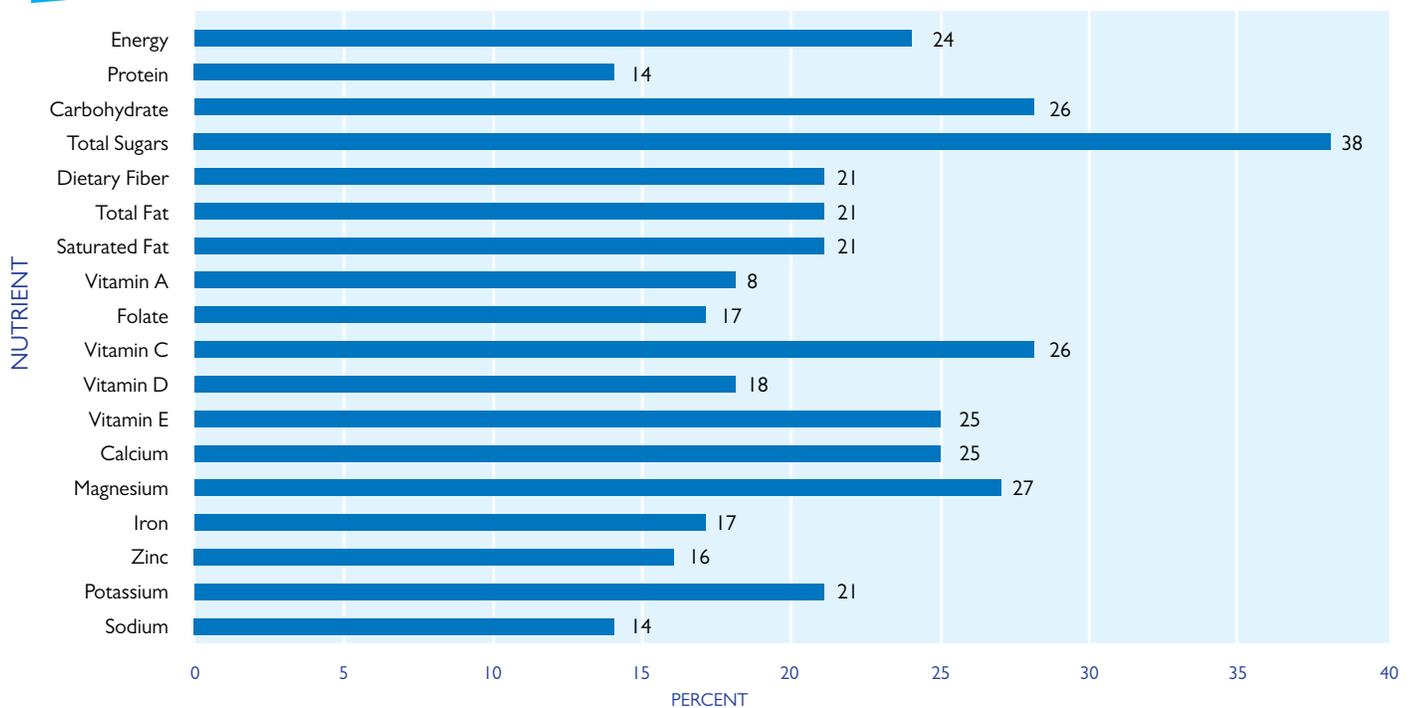
Smart Snacking and Nutrient Quality

The 2015 Dietary Guidelines Advisory Committee (DGAC), in its review of the current status of nutrient intake, identified vitamin D, calcium, potassium and fiber as under-consumed nutrients by the entire US population, and iron as a nutrient of concern for adolescents and premenopausal women. Across all age groups the vast majority of consumers are not meeting the recommended intakes from the dairy, vegetables, fruits and grains food groups. Young children consume the recommended amounts of vegetables and fruits, but their intake drops when they reach school age and beyond.

The increase in snacking among all age groups, and its caloric contribution, suggests snacks are a great opportunity to provide shortfall nutrients in consumers’ diets. Snacks provide approximately one-fourth of adult consumers’ daily calories (See Side bar). Although greater proportions of these snack calories currently come from carbohydrates and total sugars, health professionals can advise consumers to

Sidebar

Percent of Nutrients Contributed by Snacks, Ages 2 and Over



Source: *What We Eat in America*, NHANES 2009–2010.

choose snacks from the core food groups so the percentage of calories from less nutritious foods decreases. Snacking can thus improve micronutrient and food-group intake in young children, growing teens, pregnant and lactating women with higher nutrient needs, active adults needing additional energy and older adults who eat small meals.

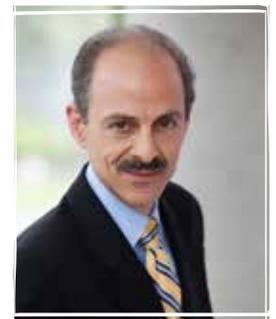
Researchers have studied 12 snacking/eating patterns for nutrient composition, overall diet quality and contribution to cardiovascular risk factors such as blood pressure, high- and low-density cholesterol levels, triglycerides, blood glucose and insulin levels. Most of the snacking patterns resulted in a higher total energy intake compared to no snacks; a higher Healthy Eating Index (HEI-2005) was associated with

some snacking patterns. Nevertheless, the mean HEI-2005 scores for all of the snacking patterns (including no snacks) were low. This suggests that overall diet quality in adults was poor and that consumers in general can benefit from specific tips on how to choose snacks wisely to meet the shortfall nutrients identified by the DGAC.

While more research is needed to evaluate how snacking relates to long-term health, it is clear that snacking is increasingly prevalent in American culture among all age groups. Choosing convenient, healthy, nutritious snacks can greatly impact clients' success in reaching nutrition and health goals.

Interview

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How can health professionals use snacking trends to improve nutrient quality of their clients' food choices?

Snacking is no longer merely a trend, but a new lifestyle that is not “good” or “bad.” The number of adults snacking as well as the number of snacks eaten has flipped in just a few decades. Because snacking is no longer an occasional treat, but engaged in multiple times a day and each day by the majority of consumers, snacks are now considered mini-meals. Snack choices need to provide nutrients such as calcium and potassium that are sorely lacking in diet; they need to be good for you AND taste good. Snacking doesn't have to be an either/or. The best combinations meet dietary gaps, particularly if meals are skipped.

When working with clients, dive into how an individual snacks. Some may snack once a day; others may snack only occasionally perhaps every 1 to 2 days. If snacking is a treat, consider whether calories or physical activity need to be adjusted to prevent weight gain, or physical activity increased to lose weight. Also, ask about timing as it may depend on how someone defines a snack. Someone may skip lunch but have something in the midmorning and consider it a snack, not breakfast or lunch.

A snack often depends on the definition of time, not the size of what is eaten. Some teens may stop after school and down about 700 calories at a fast food restaurant or minimart and call it a snack. Finally, because tastes and demographics have changed over time—who would have

thought that hummus would be on school lunch menus?—what once was a novelty is now mainstream. This means health professionals need to be aware of foods and beverages available in the retail and quick-service food industries so their messages are matched to the marketplace.

How can health professionals help clients address barriers to choosing healthy snacks?

Advice needs to be customized. Like any project someone undertakes, eating well for taste and nutrition needs a well-designed plan, but it doesn't have to be complicated. Barriers don't work anymore as excuses—most everyone is on the go. There is a plethora of healthy choices that can be purchased, including individual portions of fresh fruit, nuts and yogurt.

If clients work in places not well located for nutritious snack choices, then it's time to suggest they get into the habit of packing portable snacks at home. There's plenty of variety in fruit, nuts and yogurt and good reasons to eat each of these foods daily. Clients need to understand that simple snacks are OK, often the best, and prepping them at home is even economical. Grazing on a variety of low-fat dairy, vegetables, fruits and whole-grain crackers is nutritious, portable and convenient. If consumers truly want to snack well, it has never been easier, so now the focus needs to be on pointing out how and sustaining their motivation.

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Taking Snacks Seriously

Smart Snacking: Tips for Consumers

1. Enjoy snacks—even healthful snacks—within daily calorie needs and control portion sizes.
2. Set a snack schedule—perhaps every 3 to 4 hours—to minimize mindless nibbling and avoid feeling deprived.
3. Plan, prepare and pack on-the-go nutritious snacks that include more than one food group (see tip 8) for a greater variety of nutrients:
 - Whole-grain crackers and string cheese
 - Low-fat yogurt and fresh fruit or a yogurt dip with crisp vegetables
 - Whole-grain cereal and low-fat milk
 - Nuts and dried fruit
 - Chopped hard-cooked egg and celery on rye rounds
 - Quesadilla with salsa
 - Rice cakes with nut butter
4. Swap out less nutritious snacks gradually—it isn't all or nothing. Small changes over time can help sustain a new snacking pattern.
5. Be aware of social or emotional situations that might trigger selection of less nutritious choices. Suggest non-food rewards such as exploring that new walking path with a friend with whom they've been meaning to connect.
6. Include protein-rich snacks such as nuts, hard-cooked eggs and low-fat dairy for satiety or for a small-meal occasion. Make sure you have a way to keep perishable items cold.
7. Make snacks fun for picky children by cutting colorful fruits and vegetables into small portions; use cookie cutters for different shapes.
8. Use [MyPlate resources](#) for healthy snack suggestions, focusing on food-group foods for most snacks.



Articles cited in this issue include:

Snacking Patterns of U.S. Adults: What We Eat in America NHANES 2007-2008. *Food Surveys Research Group Dietary Data Brief* No. 4. June 2011.

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Trends in Snacking among U.S. Children. Piernas C, Popkin BM. *Health Affairs* (Millwood). 2010 Mar – Apr; 29(3):398-404.

Snacking patterns, diet quality, and cardiovascular risk factors in adults. Nicklas TA, O'Neil CE and Fulgoni III VL. *BMC Public Health* 2014, 14:388.

Develop Healthy Eating Habits – Snack Ideas. USDA MyPlate available at <http://www.choosemyplate.gov/preschoolers/healthy-habits/snack-ideas.html>

Smart Snacks in Schools flyer http://www.fns.usda.gov/sites/default/files/allfoods_flyer.pdf

California Department of Education's Competitive Foods and Beverages <http://www.cde.ca.gov/ls/nu/he/compfoods.asp>

Grains	Dry cereal, whole-grain crackers, mini rice cakes, sliced bread, mini bagels, graham crackers, whole-wheat tortillas
Vegetables	Vegetable “matchsticks” (thin sticks) made from fresh carrots* or zucchini*, bell pepper rings, cherry tomatoes*, steamed broccoli, green beans, sugar peas, avocados
Fruits	Apple slices*, tangerine sections, strawberry halves, bananas, pineapple, kiwi, peach, mango, nectarine, melon, grapes*, berries, dried apricots*
Dairy	Low-fat cheese slices or string cheese, mini yogurt cups, fat-free or low-fat milk, low-fat cottage cheese
Protein Foods	Egg slices or wedges, peanut butter*, bean dip, hummus, slices of lean turkey* or chicken*, shelled pumpkin seeds

*If not prepared correctly, these foods could be choking hazards for young children.


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