



A team led by Michael Whitfield, Ph.D., has discovered distinct genetic profiles for different types of scleroderma, an autoimmune disorder that affects the connective tissues in the body.

## Parental example proves to be all-powerful

Children as young as two years old pay close attention to the food choices their parents make, according to a recent DMS paper. When preschoolers took a doll grocery shopping as part of a study, they “bought” food items that generally were as healthy—or unhealthy—as their parents’ purchases from real grocery stores. “Kids start forming their habits at a very young age,” says the paper’s lead author, Lisa Sutherland, Ph.D.

**Grocery store:** The researchers did a new analysis of data from a 2005 role-playing study initially conducted to evaluate the attitudes of 120 young children toward alcohol and tobacco. The children, who were between two and six years old, took a Barbie or Ken doll shopping in a miniature grocery store. In addition, their parents filled out questionnaires about their own food shopping habits. (For more on the 2005 alcohol and tobacco analysis, see [dartmed.dartmouth.edu/winter05/html/disc\\_barbie.php](http://dartmed.dartmouth.edu/winter05/html/disc_barbie.php).)

In the recent food-choice analysis, published in the *Archives of Pediatrics and Adolescent Medicine*, Sutherland and her colleagues classified the 47 food and beverage items in the pretend store as less healthy or more healthy. Those with more added sugars and salt, such as cake and potato chips, were rated as less healthy than products such as fruit and milk.

**Junk:** “Most nutritionists would have suspected that kids fill their baskets with junk food when given the opportunity,” says Sutherland. In fact, about 11% of the children had shopping carts judged “most healthy” by the researchers; they had

chosen more than four healthy products for each less-healthy one. About 18% had carts judged “somewhat healthy.” And 71% had about equal numbers of more- and less-healthy items; their carts were judged “least healthy.”

It turned out that the only predictor of the healthiness of the children’s food purchases was their parents’ shopping habits. Kids with parents who reported buying healthier foods themselves were more likely to do the same in the pretend store. The finding may seem intuitive, says Sutherland. But “it’s the first time we’ve been able to show with a scientific study that at a very young age, children really mimic their parents’ [food choices].”

**Effect:** Factors such as age, gender, access to television, and parents’ education level appeared to have no significant effect on a child’s food choices. But, the researchers point out, a larger study might yield different results.

Sutherland, “a firm believer that parents have a huge impact on their children,” says parents can use their influence to help their children develop healthy eating habits. For instance, parents can allow their children to select which vegetables to buy for dinner.

They should also explain why products such as candy and soda aren’t very nutritious.

Yet even Sutherland, the mother of two, buys a popular but less-nutritious cereal every few months. When she does, however, she emphasizes to her children that it’s “not an everyday breakfast cereal for us” due to its sugar content. KATHERINE VONDERHAAR

**Even two-year-olds pay close attention to their parents’ food choices.**



### Web and the M.D.

Many doctors make less use than their patients do of web-based medical information. DMS researchers carried out a study of internet use by primary-care providers in Vermont and New Hampshire. “Studies suggest,” they wrote in *Family Medicine*, “that while patients want recommendations of online health resources from their providers, few receive them.” The researchers found that supplying providers with computers, high-speed internet access, and training did increase their use of web-based resources—but the doctors still remained loyal to other, less up-to-date sources of information.



### Pain in the brain

Glial cells are often overshadowed by neurons, their more famous neighbors in the nervous system, but they may be essential to an understanding of chronic pain. A group of DMS researchers reported in the journal *Brain Research* that two types of glial cells—microglia and astrocytes—play an important role in the onset and maintenance of long-term pain in rats. Chronic pain can be sparked by major surgery or cancer, among other causes, and current treatments are often ineffective or have serious side effects. The DMS team wrote that their work “may help in developing innovative strategies to treat chronic pain conditions.”

