sume such enormous quantities of food in such short periods of time.”

In the study, a world-class eater and a control subject were asked to eat as many hot dogs (without buns) as possible. Both ingested barium and were placed on a fluoroscopy table, in a semiprone position, to allow the capture of x-ray images of their stomachs in real time. The control subject ate seven hot dogs before stopping. The competitive eater ate 36 hot dogs in 10 minutes and still didn’t feel bloated or full, only stopping at the insistence of the researchers, who observed his massively distended abdomen and worried he would suffer a gastric perforation.

There are several theories about how people such as Czerwinski are able to eat so much, so quickly. It has been attributed to factors such as a strong jaw, extreme mental focus, high pain tolerance and a deadened gag reflex. Some competitors seem able to completely relax all the muscles in their esophagus, creating a hollow tube, in effect, that can be crammed with food.

But it is the unusual stomachs of gustatory athletes that seem to hold the most potential for helping people with dyspepsia. A normal stomach is around the size of two fists and can hold 2–4 litres of food. When someone eats, the brain informs the muscles in the stomach to relax to accommodate the food. The stomach contracts when full, pushing food into the intestine, and sends a signal of discomfort to the brain to stop the consumption. In people with dyspepsia, this signal is sent prematurely. In competitive eaters, on the other hand, the signal is delayed. Or perhaps it isn’t sent at all.

“People usually feel full after 20 minutes,” says Czerwinski. “I never really get that sensation.”

In Metz’s study, the stomach of the competitive eater was described as an “enormous flaccid sac.” Some competitors increase the capacity of their stomachs through training, such as chugging gallons of water. This can be dangerous, though, posing risks such as water intoxication, a potentially deadly dilution of electrolytes in the body. Then there are people like Czerwinski, who don’t need to train.

“Part of it is natural, being born with a big stomach and the ability to fill it up, to relax and expand it,” says Metz.

A better understanding of the ability of a competitive eater to consume such large quantities of food without experiencing pain, however that comes about, may be the key to helping those for whom eating regular-sized meals are discomforting experiences, suggests Metz. “Our hope is that for people with dyspepsia, we could potentially train them to take bigger volumes of food.”

— Roger Collier, CMAJ

CMAJ 2013. DOI:10.1503/cmaj.109-4394

Competitive consumption: Ten minutes. 20 000 calories. Long-term trouble?

It all started, according to legend, as an argument between four immigrants about who loved their adopted homeland the most. The heated discussion took place in 1916 at Nathan’s Famous, a hot dog stand that had recently opened on Coney Island in New York City. The establishment’s owner, Nathan Handwerker, feared fisticuffs might ensue, so he proposed a contest.

Whoever could eat the most hot dogs in 12 minutes would be declared the most patriotic of the bunch. James Mullen, a native of Ireland, claimed the title by downing 13 hot dogs, buns included. That contest continues to this day. Held annually on July 4, it is considered the top dog of all eating competitions, with $10 000 going to the champ.

Do today’s winners eat more than 13 hot dogs? Ah, yeah, a few more. Let’s just say masticating a baker’s dozen of sodium-rich beef tubes isn’t much to brag about anymore. Reigning six-time champion Joey Chestnut took Nathan’s coveted Mustard Belt in 2012 by laying waste to a record-tying 68 hot dogs in 10 minutes. Mullen had eaten just over one hot dog per minute. Chestnut ate one every nine seconds.

The annual contest at Nathan’s Famous is but one of dozens of events sanctioned by Major League Eating, the franchise behind the professional competitive eating circuit. Other competitions include Ben’s Chili Bowl’s World Chilli Eating Championship (total cash purse: US$3000), Western Days Festival World Tamale Eating Championship (total cash purse: US$3500) and the Oktoberfest Zinzinnati World Bratwurst-Eating Championship (total cash purse: US$2000).

If an item is edible, there is probably somebody somewhere eating a whole lot of them in hopes of winning a prize.

Reactions to the rise in popularity of the “sport” of extreme eating generally fall into two categories. There are those who marvel at the ability of these rubber-bellied gurgitators to wolf down (and keep down) mountains of food. The Nathan’s Famous contest draws about 40 000 spectators and is broadcast internationally on ESPN. Then there are those who find the whole affair grotesque. Celebrating overconsumption in a nation suffering an obesity epidemic, they argue, is just plain wrong, and competitive eaters are setting themselves up for a lifetime of health problems.

But are participants in speed-eating contests really putting their health at risk? And if so, to what extent?

“The bottom line is, there is such minimal data that we are doing a lot of conjecture,” says Dr. David Metz, professor of medicine at the University of Pennsylvania in Philadelphia, who contributed to a study of competitive eating (Am J Roentgenol 2007;189:681-6).

That said, physicians do know enough about how the human body works to take some educated guesses about the possible effects of repeatedly bingeing on massive quantities of food. According to the study, these risks include gastroparesis (slowing of food movement out of the stomach), intractable nausea, vomiting, gastric perforation, Mallory-Weiss tear (tear in
When Douglas Fraser’s back pain became acute in April 2011, he asked to see a doctor at the Bath Institution, a medium-security federal prison in southern Ontario where he’d been incarcerated for four years. But it was two months before the 58-year-old got his wish, and another four months of searing pain and weight loss, as well as constant demands from family and friends that prison officials escalate his health services, before Fraser was finally taken to Kingston General Hospital for assessment. He was soon diagnosed with pancreatic cancer. In the remaining three months of his life, Fraser contended the delay in providing him access to external care, constituted a death warrant.

Fraser’s mother, Muriel, a soft-spoken native of Tillsonburg, Ontario, is convinced the Correctional Service of Canada (CSC) issued just such a decree. “My son was clearly denied his right to health care equal to what non-prisoners expect.”

Dr. Ivan Stewart, the palliative care physician who treated Fraser in the final months of his life, doesn’t go quite that far. But Stewart does believe CSC failed to provide equitable health care

Limited options for redress

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