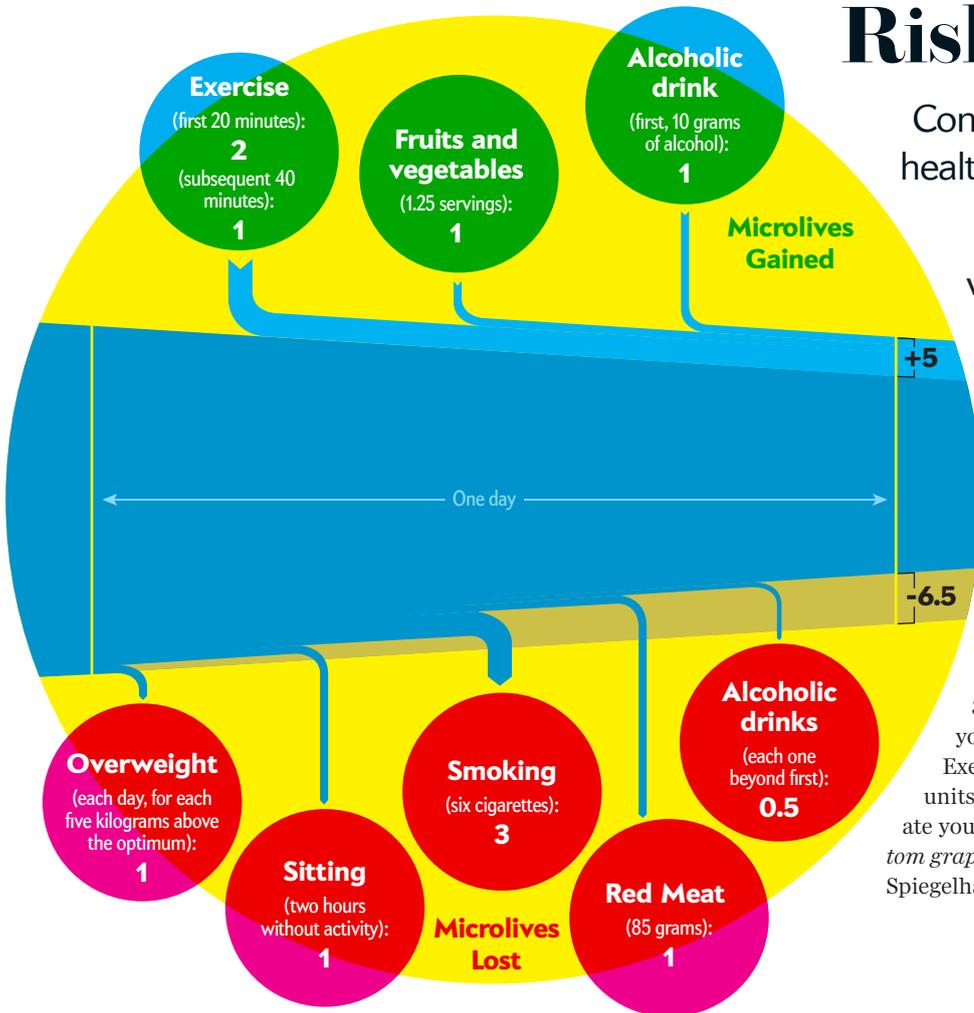


The True Cost of Risky Behavior

Consequences of good and bad health habits are boiled down to 30-minute slices of your life



We all know that smoking is bad for our health and that eating vegetables is good for it. Yet *how* bad and *how* good are they? Without a clear notion of threat and reward, it is that much harder to avoid a cigarette or to choke down a serving of broccoli. “I hate when someone tells me that something is risky,” says David Spiegelhalter, a professor of risk assessment at the University of Cambridge. “Well, compared to *what*?”

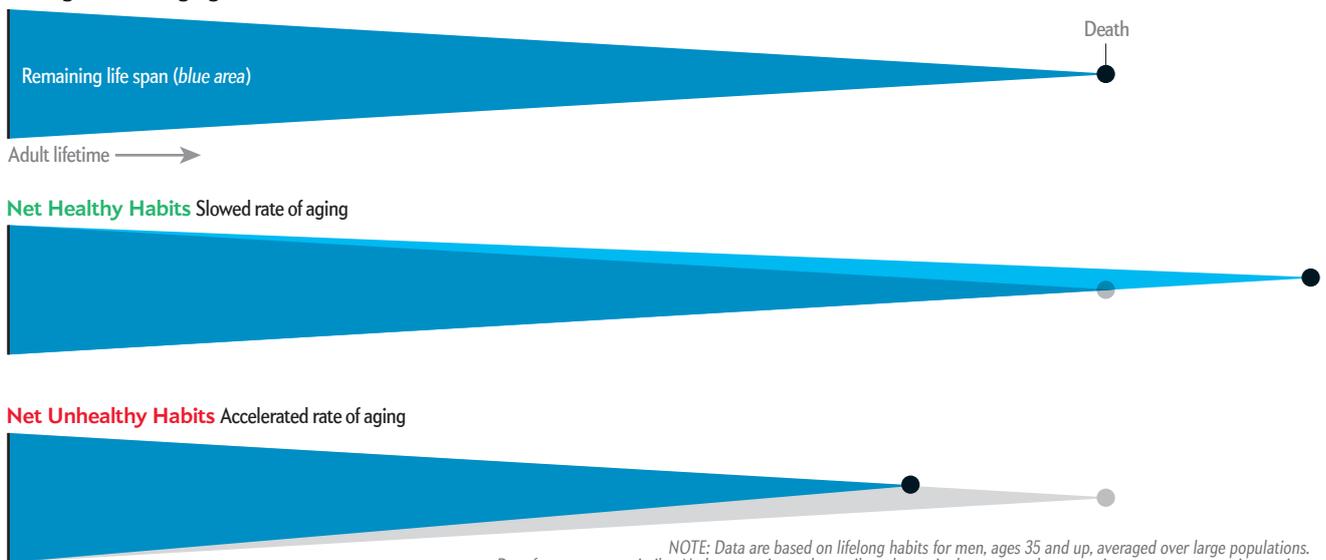
To answer his own question, Spiegelhalter converted reams of statistical risk tables into a simple metric: a microlife—30 minutes. If you smoke two cigarettes, you lose 30 minutes of your life (*top graphic*). Exercise for 20 minutes, and you gain two units of microlife. Over time bad habits accelerate your aging, and good habits slow it down (*bottom graphic*). “That seems to resonate with people,” Spiegelhalter says. “No one likes to get older faster.”

—Mark Fischetti

SCIENTIFIC AMERICAN ONLINE

For a video about your risk of immediate death, see ScientificAmerican.com/jan2013/graphic-science

Average Rate of Aging



NOTE: Data are based on lifelong habits for men, ages 35 and up, averaged over large populations. Data for women are similar. No loss or gain can be attributed to a single event, such as one cigarette or one exercise session.

SOURCE: DAVID SPIEGELHALTER, Statistical Laboratory, University of Cambridge