Book Review

Sassi, Franco. Obesity and the Economics of Prevention: Fit Not Fat OECD, 2010, 270 pp., \$37 (free to institutional subscribers)

Though obesity has been on the rise for more than a century, the rate of increase has doubled or tripled in many countries since 1980, lending urgency to calls for more and better research that could support an effective public policy response. This book is the product of a larger effort by the OECD (in conjunction with the World Health Organization) to use the theoretical and empirical methods of economics to better inform public policies aimed at what Sassi refers to (perhaps with tongue in cheek) as "one of the largest epidemics in the history of mankind" (p. 3). The book provides an excellent summary of the current state of knowledge and includes new analyses of data from selected countries, along with a number of "Special Focus" articles by contributing experts.

Following introductory remarks discussing obesity in economic perspective (in Chapter 1 and a companion piece contributed by Marc Suhrcke) the book proceeds to give a comprehensive overview of obesity rates (cross-section, BMI distribution, historical trends, and projections) for selected countries (Chapter 2), and a critical review of the literature on the incidence of obesity across gender, age, education, and socio-economic status (Chapter 3 and a companion piece by Tim Lobstein). I expect that most readers, including even the most well-informed researchers in the field, will find this material useful and a good overview of the current state of knowledge.

Sassi then turns, however, to a more difficult task: teasing out the underlying cause(s) of the modern obesity epidemic (Chapter 4 and a companion piece by Donald Kenkel), and coming up with recommendations for public policy (Chapter 7). In the process, the book reviews international experience with country-level obesity-related policies

(Chapter 5 and companion pieces by Francesco Branca, Jonathan Porter, and Stephan Loerke), and performs a limited cost-benefit analysis of such policies (Chapter 6). This material is in some ways very informative, but readers looking for a cohesive action plan to take back to the legislature will be sorely disappointed.

To be fair, there is a simple reason that strong policy prescriptions are not forthcoming when it comes to the obesity epidemic: the research community has yet to agree upon a causal "smoking gun" that can explain the phenomenon. But where Sassi could have trained a critical economist's eye on the empirical literature and emphasized the need for better identification strategies, perhaps paired with controlled experiments, he instead offers a surprisingly uncritical catalog of purported explanations for the phenomenon. For example, a section entitled "The main driving forces behind the epidemic" includes the following statement: "Falling relative prices of food contributed to up to 40% of the increase in BMI over the period 1976 to 1994 in the United States..." (p. 121). Sassi cites the 2002 working paper from which it is drawn, but fails to mention that when the study in question was eventually published—in 2009—no such claim was included. Observing the multitude of factors that seem to have marginal effects on obesity, Sassi concludes that the obesity epidemic must be "...the result of multiple, complex and interacting dynamics, which have progressively converged to produce lasting changes in people's lifestyles" (p. 115). An alternative interpretation of the data might allow that there could be causal factors—or even just a single factor—that the research community has overlooked.

There is no shortage of "omitted variable" theories purporting to explain the modern obesity epidemic, and it can be hard to know which are credible without doing the hard work of examining the quality of the evidence. But doing so would make clear that it is quite

2 Amer. J. Agr. Econ.

possible that even the multi-pronged "comprehensive strategies" recommendation Sassi arrives at in Chapter 7 (p. 234) may not have much impact on obesity.

Consider, for example, the well known experiment described by Granfeldt, Bjorck, and Hagander (1991), in which human subjects were given a meal of either white bread or spaghetti. Subjects fed white bread experienced dramatic upward surges in blood glucose and insulin levels, followed by a crash in both several hours later. Those who consumed the spaghetti, on the other hand, experienced much less severe aftereffects, in spite of the fact that the pasta was prepared using precisely the same ingredients, in precisely the same amounts, as the bread. As blood glucose and insulin are potent physiological drivers of both appetite and fat deposition, these findings and others like it have led some to suggest that more attention should be paid to the hidden effects of food processing (Ludwig 2002, Taubes 2007). Though glycemic load is exceedingly difficult to measure, it has been noted that the obesity epidemic has coincided with an increase in consumption of notoriously high-glycemic fast foods (Isganaitis and Lustig 2005).

If there is indeed a "magic bullet" out there that can explain our expanding waistlines, it is not hard to imagine what it might look like. Given that hard evidence has yet to emerge, it should be difficult to measure in populationlevel data. For the same reason, it might be expected to affect consumer behavior below the level of conscious awareness. And given the prominent role played by industry groups in the obesity debate (Sassi describes how "the WHO was almost brought to its knees by the sugar industry" when it considered recommending that added sugars be limited to 10% of total energy intake [p. 229]), it would not be surprising if our hypothetical magic bullet posed a threat to politically powerful interest groups. These conditions adequately characterize the "glycemic hypothesis" described above, but there are other plausible candidates. A variant of the glycemic hypothesis zeroes in instead on fructose-based sweeteners (Lustig 2009). Others have argued that the obesity epidemic has grown in parallel with structural changes in household-level financial insecurity, which could be driving stress-related changes in BMI (Offer, Pechey, and Ulijaszek 2010, Wisman and Capehart 2010). Explanations such as these are not incompatible with the behavioral science we call economics.

It is difficult to build good public policy on a foundation of unsettled science. A good deal of careful research has examined the more conventional economic explanations for the obesity epidemic, but the evidence remains surprisingly weak, and even the best of obesity prevention programs remain (as Sassi acknowledges) surprisingly ineffective. The policy-oriented mandate under which the book was clearly written is perhaps to be commended, but its closing chapter would be more credible had it been tempered with a healthy admixture of skepticism.

This book does provide a very good international perspective on the modern obesity epidemic. In addition to being a useful reference for researchers in the field, it could be utilized as a supplemental text for courses in public choice, health economics, or even behavioral economics. But it might also one day prove to be an excellent case study in the dangers of engaging in policy analysis before scientific uncertainties have been resolved.

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doi: 10.1093/ajae/aar141