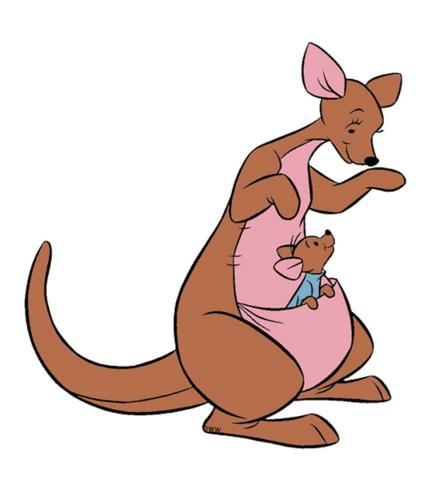
(Alternative) Perspectives on the Future of Obesity Solutions: Economics

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COI statement: No current COI. In past have received consulting income from Novo Nordisk Inc, Johnson & Johnson, RWJF.

Happy 10th Anniversary to ROOS!





Economic Rationale for Government Intervention

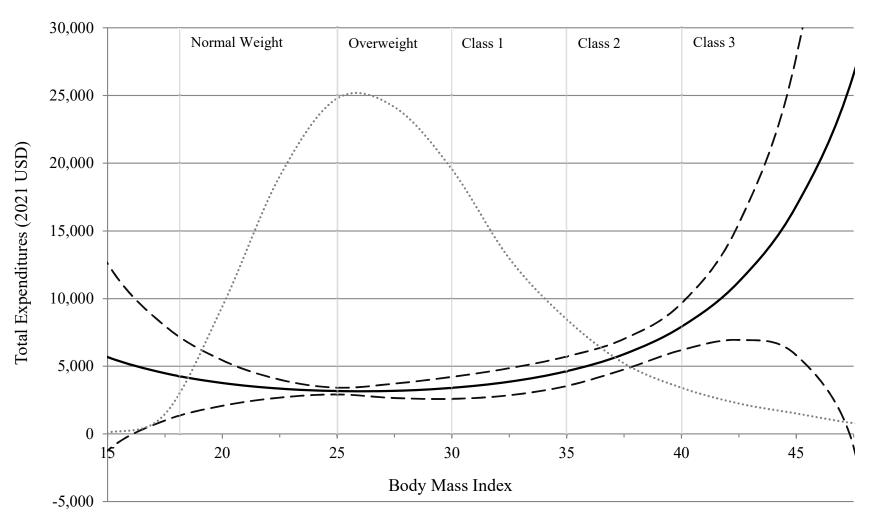
- Useful feature of economic perspective: explicit criteria for when and how govt should intervene
 - Organizing framework, principles
 - Avoids paternalism
- Economic rationale for government intervention: <u>fix market</u> failures
 - 1. "Internalize" any negative externalities
 - 2. Ensure consumers have necessary information to make informed decisions
 - 3. Protect consumers if/when not acting "rationally" (in own best interest)

Externalities Associated with Obesity

- Obesity raises annual medical care costs (relative to those with healthy weight):
 - Obesity: by \$2,781 (107%)
 - Class 1 obesity: \$1,902 (73%)
 - Class 2 obesity: \$3,336 (129%)
 - Class 3 obesity: \$6,493 (253%)
 - Roughly 95% of all costs of treating obesity-related illness borne by third-party payers – i.e. there are substantial externalities

All figures in 2021 USD. Source: Biener, Cawley and Meyerhoefer (2024), *Handbook of Obesity, 5th Edition*, ed. By Bray, Bouchard & Katzmarzyk

Predicted Adult Medical Expenditures by BMI



Notes: Predicted medical expenditures denoted by the solid line are from an IV two-part model and are expressed in 2021 USD. Dashed lines represent the 90% confidence interval, which has been adjusted for the complex design of the MEPS. The distribution of individuals in the population is indicated by the dotted line. BMI is calculated using self-reports or proxy reports of height and weight. Data: MEPS 2006-2013. N = 31,591.

Source: Biener, Cawley and Meyerhoefer (2024), *Handbook of Obesity, 5th Edition*, ed. By Bray, Bouchard & Katzmarzyk

Sugary drink taxes around the world



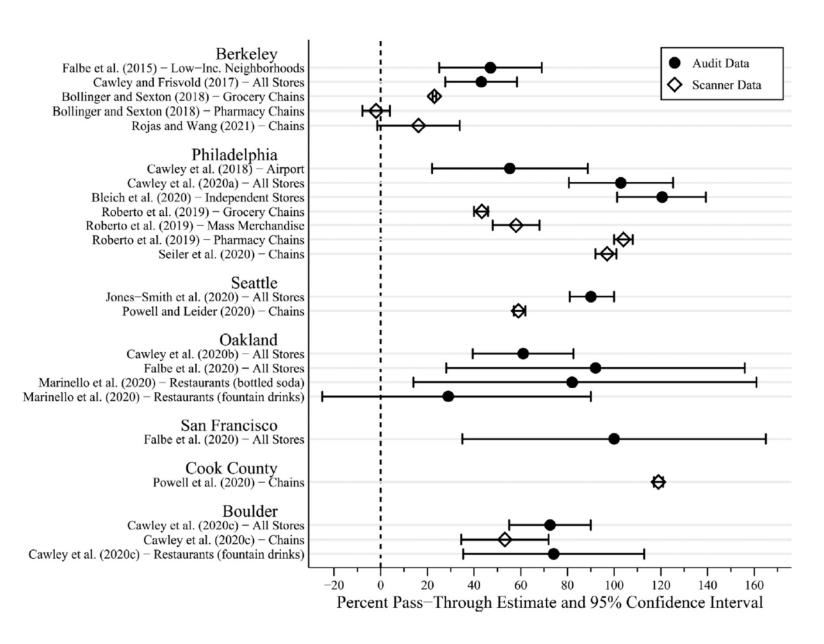


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Impact of SSB Taxes on Prices



Source: Cawley, Frisvold, Jones and Lensing, Am J Agric Econ (2021)

Improve Consumer Information e.g. Calorie Labels on Menus

- Venues: two full-service, sit-down restaurants
- Entire party randomized upon coming to maître d':
 - C group: usual menus
 - T group: same menu with calorie labels (format required by ACA)
- At conclusion of meal patrons asked to complete survey; data linked to orders
- Large sample size: N=5,551
- Number of calories in each dish determined using MenuCalc (developed by USDA & NRA)
- Experiment approved by Cornell IRB (protocol ID # 1509005830)





Source: Cawley, Susskind, and Willage, JPAM, 2018

Menu Labels Reduced # Calories Ordered

Table 2. Effect of menu labeling on calories ordered.

	Estimated effect
Appetizer Calories	-22.5 [*]
Mean = 376.6	(12.7) $N = 5551$
Entrée Calories	-26.6^*
Mean = 811.7	(13.8) $N = 5551$
Dessert Calories	-6.4
Mean = 164.6	(11.3) $N = 5551$
Drink Calories	N = 3331 3.2
Mean = 104.2	(5.2) $N = 5551$
Total Calories	-44.9^*
Mean = 1474.4	(23.3)
	N = 5551

Notes: Standard errors are in parentheses (se); clustered at the party level. Covariates: treated, day of week FE, month-by-year FE, table FE, seat FE, server FE, party size, gender, age, Hispanic, race, and education. * p<0.10; ** p<0.05; *** p<0.01.

Source: Cawley, Susskind, and Willage, JPAM, 2018

Third Market Failure: Consumers Not Acting Rationally

- "Rationally" = in own best interest
- Apply cautiously, because risk of paternalism
 - Strongest case is when people say they keep making mistakes and ask for help
- Cases to consider:
 - Children; neocortex isn't fully developed vis-à-vis the limbic system until roughly age 25 (Giedd, 2015)
 - Regulate advertising of energy-dense foods to children? (Difficult in US)
 - Time-inconsistent preferences
 - Offer pre-commitment devices: bariatric surgery, AOM

Going Forward

- Internalize externalities associated with obesity
 - Broader taxes on energy-dense food and drink, with size of tax determined by externality
 - Subsidize cost-effective methods of treatment and prevention
- Provide consumers missing useful information *in a way* they can easily use it
 - Food at home: FOP labels on groceries
 - Food away from home: info on menus
- Reduce harm from "irrational" behavior
 - Protect children from harmful marketing
 - Offer pre-commitment devices to limit overconsumption (bariatric surgery, AOMs)

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