

Menu board calories: Surprises and considerations.



Championing Public Health Nutrition

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Not all results have been rosy

- For some costs may count more than calories.
- Marketing trumps menus.
- Can we trust the numbers?
- Without an anchor we're lost.

NYC - June 18th, 2009



Costs count more than calories

- Elbel B et al. Calorie Labeling And Food Choices: A First Look At The Effects On Low-Income People In New York City, *Health Affairs* 2009 **28(6)**:1110-1121
- Tracked receipts from 1,156 adults at fast food restaurants in low-income, minority, New York communities before and after menu labeling.
- Compared choices to similar population in New Jersey where labeling laws not enacted.

The Restaurants



Data Collection

- Customers paid \$2 to bring their receipts back to researchers and were not told why receipts were being collected.
- “After” menu-labeling collections occurred 4 weeks after labeling laws enacted.
- Tracked calories, saturated fat, sodium and sugar.
- Also enquired as to education, income, ethnicity etc.

The Survey

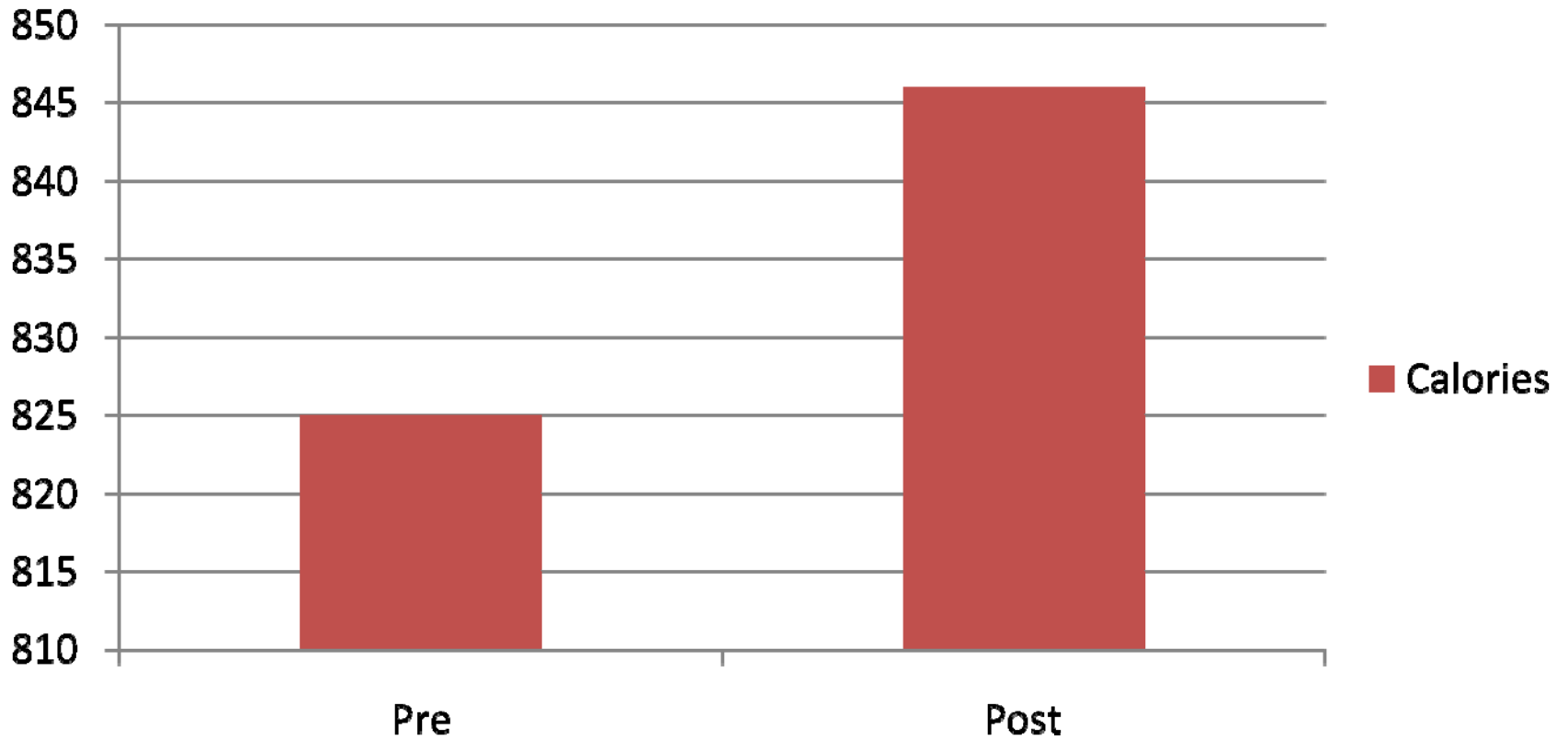
1. Did you notice calorie information posted?
2. If yes, did it influence your food choices?
3. Did posting cause you to purchase more or fewer calories?

The Results?

- Nearly half had only a high school diploma or less.
- Average age 38
- Post labeling 54% noticed calories in NYC vs. 17% in Jersey.
- Of the 54%, 27.7% of post labeling New Yorkers indicated information influenced their choices and of these 88% reported they purchased fewer calories (12.8% of total).

The Rub

Calories



Thoughts

- Very specific study population.
- Fast food menu variety may matter (are there low-calorie burgers and fries?)
- Did study design select for poorest of the poor?
- Only 4 weeks had passed since labeling laws enacted – was study too soon?
- Perhaps cost matters more than calories to the poor.

Marketing trumps menus

- Talk presented at 2009 Obesity Society Annual Scientific Assembly.
- Researchers analyzed consumer choices at 13 different fast food restaurants and over 275 locations in NYC prior to, and 10 months after menu labeling legislation.
- All told looked at 10,965 receipts pre-legislation (2007) and 12,153 receipts post legislation (2009).

The Results?

- According to researchers (and similar to prior study in poor neighbourhoods of NYC) a total of 13% of subjects reported using menu board calories to help make decisions.
- In 11 of 13 restaurants studied, post legislation calories consumed went down.

The Rub

- In Subway, calories consumed **increased** by an average of 114 post legislation.
- This increase corresponded to a dramatic increase in the number of foot long subs purchased compared with 6 inchers.
- (Good news though, calories in foot longs ordered post labeling were lower than the foot longs ordered pre-labeling.)



NEW

SUBWAY
EVERY DAY
VALUE MENU

FOOTLONGS
CHOOSE FROM 8 GREAT SUBS

Thoughts

- Marketing trumps menu boards
- Study still stuck in fast food restaurants where variety perhaps not comparable to fast casual
- Economy different in 2009 compared with 2007 which may impact purchasing trends
- Study would fail to capture those who actually stopped or markedly reduced eating out post legislation

Can we trust the numbers?

- Urban L et al The Accuracy of Stated Energy Contents of Reduced-Energy, Commercially Prepared Foods *J. Am. Diet. Assoc.* 2010 **110**:116-123
- What good is legislation if values are inaccurate?

The study

- Measured energy content of 29 “low” calorie commercially prepared restaurant foods whose parent restaurants provided nutrient content information.
- 3 criteria for item choice:
 1. <500 kcal
 2. “typical” American food
 3. Among lowest stated energy contents on menu

The Results

- $P=0.12$ for overall difference between measured and stated caloric values of restaurant food.
- On average restaurant foods contained 18% more energy than stated with a great deal of variability.
- Wide range. Some foods contained 200% more energy than reported.

The Rub/Thoughts

- These results are were in fact reported as “good”.
- In the US, FDA regulations for packaged foods deems a product compliant if it falls within an allowable 20% overage.
- Average of 18% overage in calories is exceedingly significant for those managing their weight.

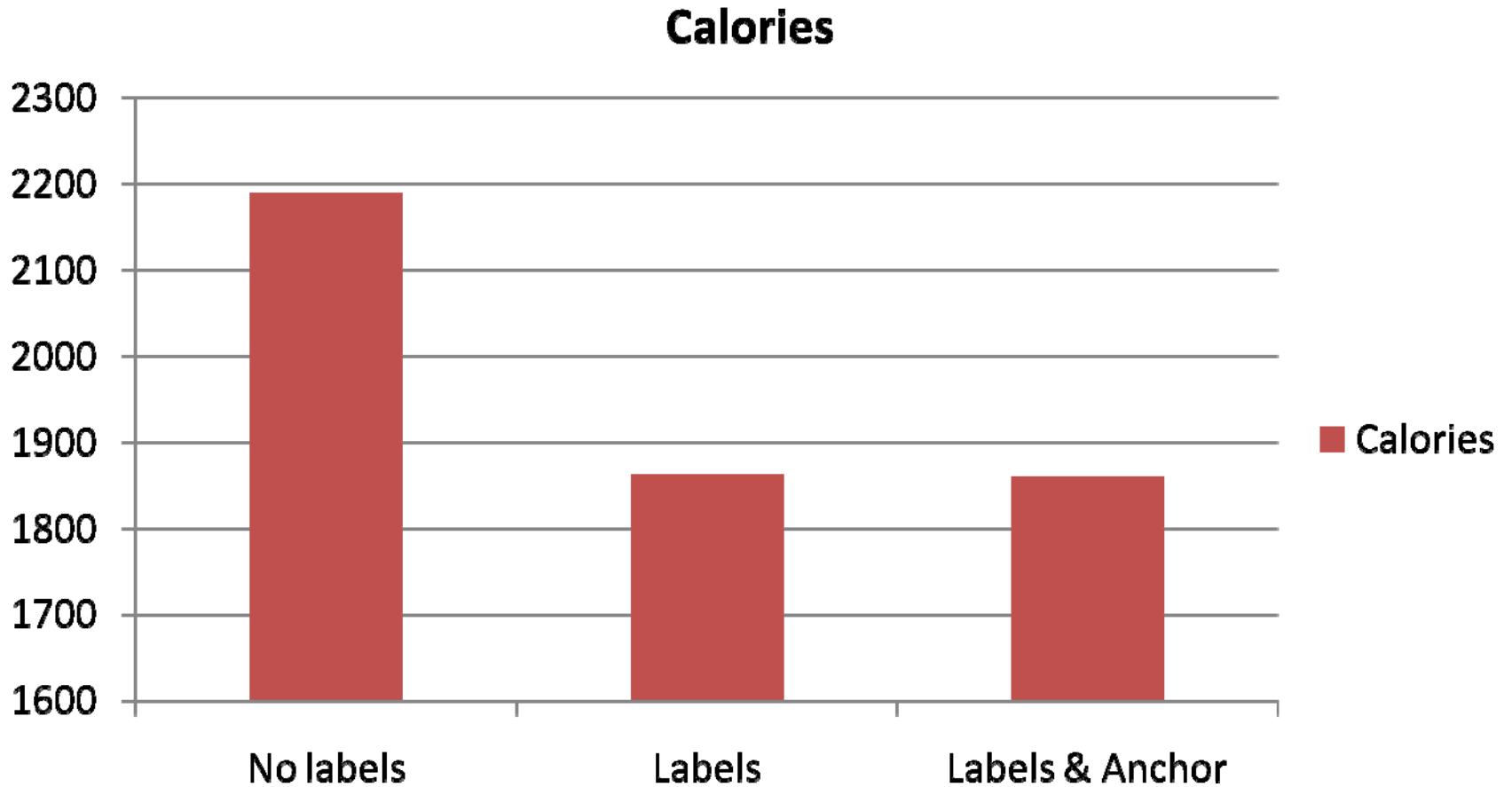
The need for anchors!

- Roberto et al. Evaluating the impact of menu labeling on food choices and intake. *Am. J. Pub. Health* 2010 **100(2)**:312-318
- Non-legislated study population
- 303 folks from New Haven, Connecticut who were invited to dinner and told they were part of a food marketing study on dining preferences.

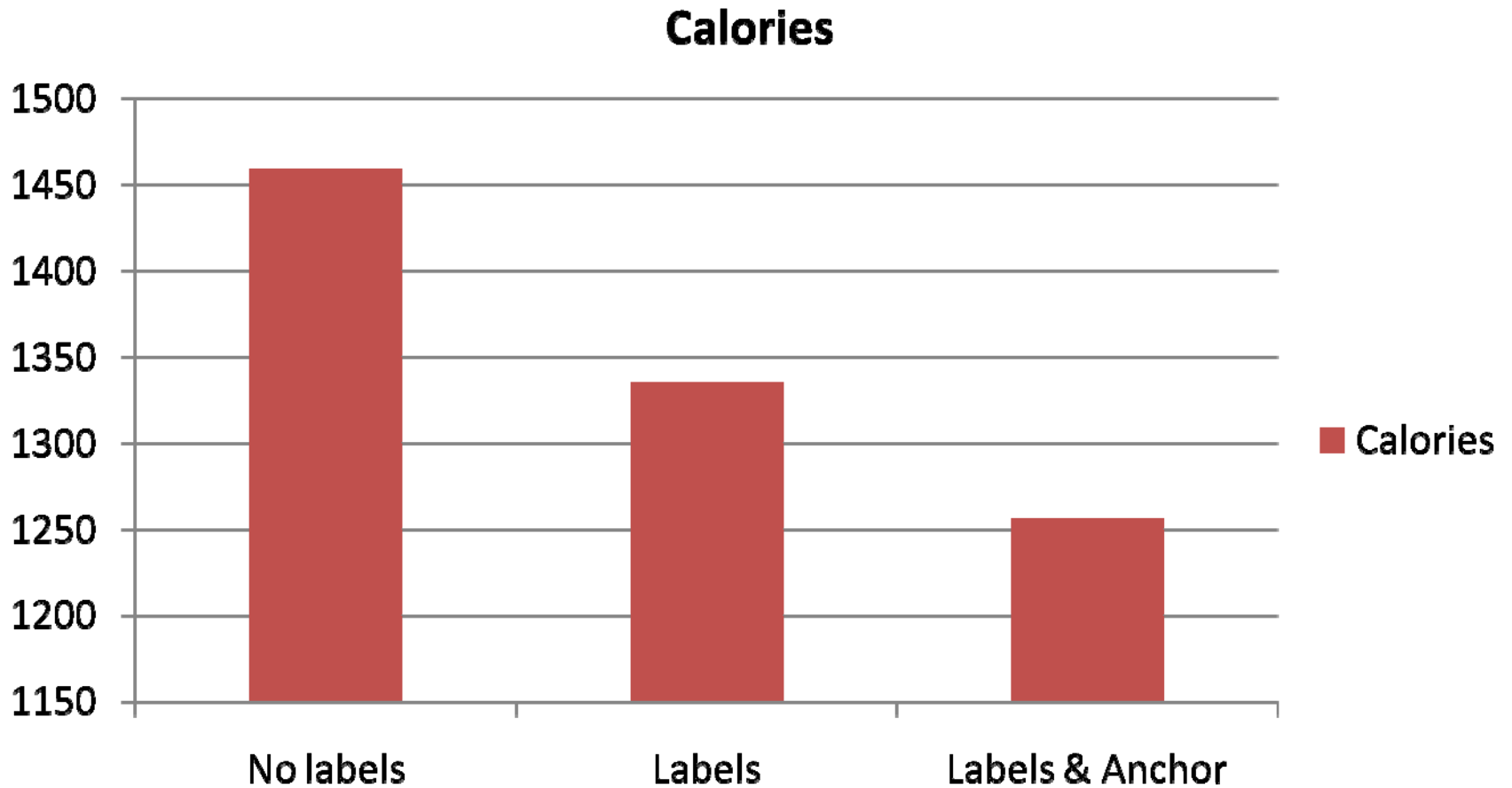
The study

- Randomized participants to one of:
 1. A menu with no calorie labels
 2. A menu with calorie labels
 3. A menu with calorie labels **and** a caloric anchoring statement.
- Anchor read, *“The recommended daily caloric intake for an average adult is 2000 calories”*
- Calories tracked at dinner (plate waste) and participants then dietary recall surveys next day explored what participants ate post dinner that night.

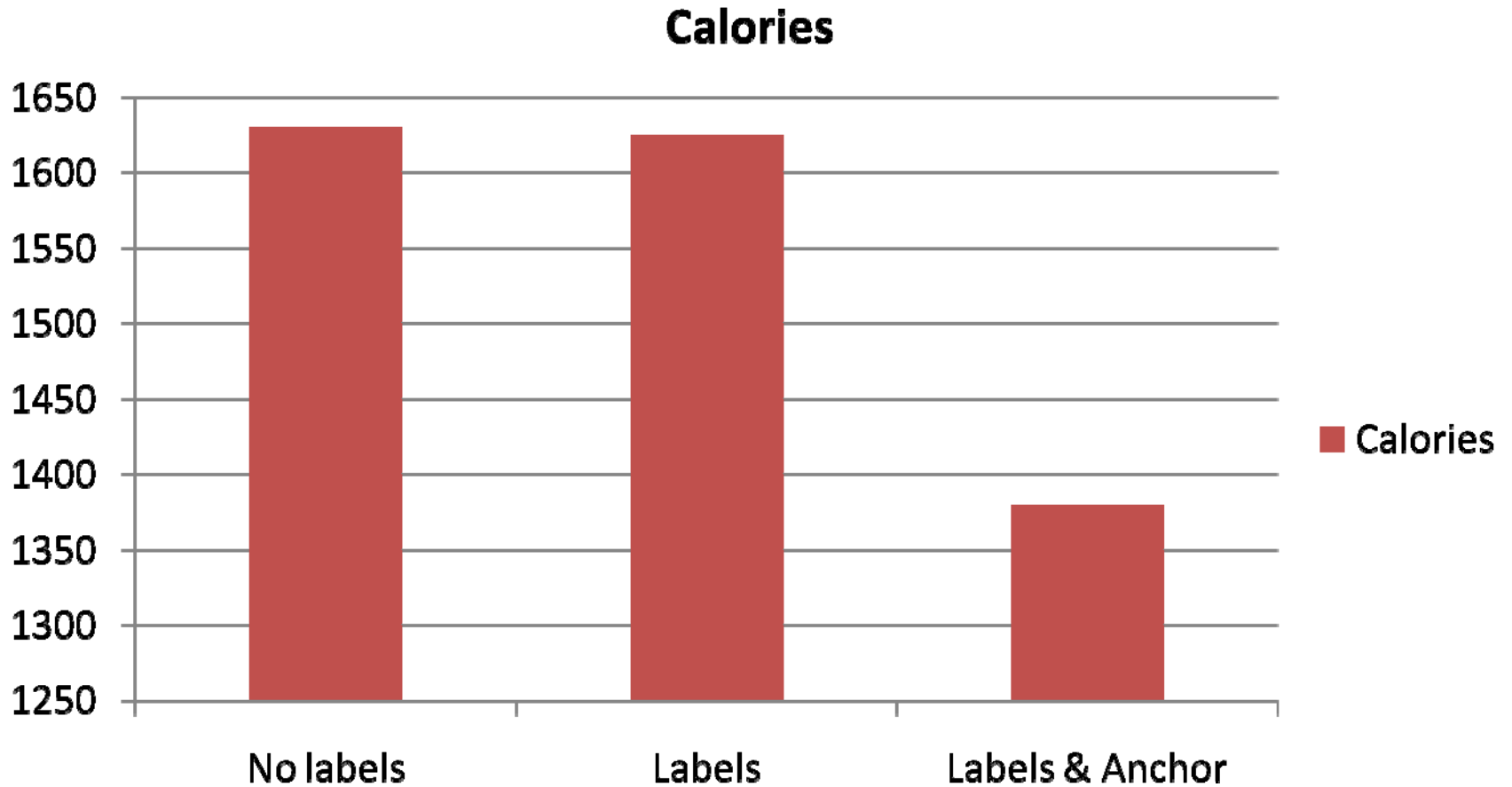
Ordered calories?



Real calories consumed?

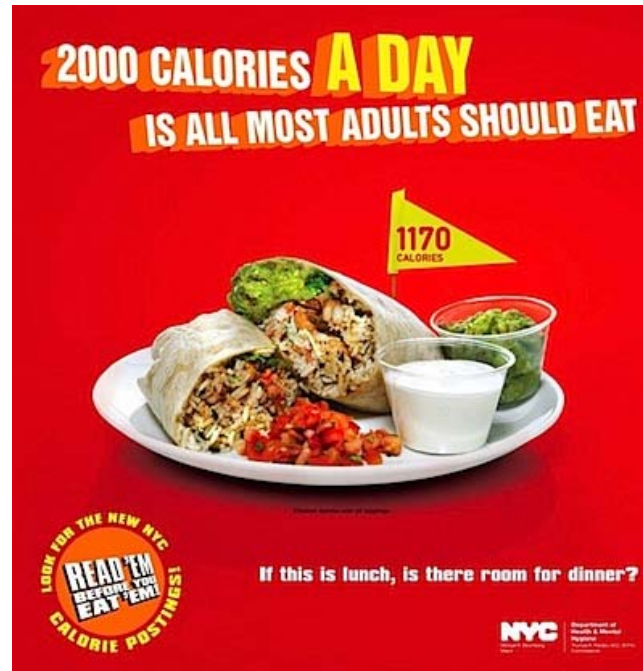


The rub. Real & post-dinner calories?



Thoughts

- Calorie labeling without anchors may dramatically change impact on total calories consumed.



Summary

- Mandatory menu board calorie labeling is not going to be a cure-all for obesity – it's akin to a pricetag.
- Even with labeling, marketing and cost are important consumer considerations.
- We need means to monitor and encourage accuracy.
- Calories abhor a vacuum – we need to provide people with not only calories but also an understanding of energy balance.

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