

Coarse and Precise Information in Food Labeling

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Abstract

Public authorities and companies often adopt simple categorical labels to convey information and promote the purchase of healthy, ethical, or environmentally-friendly products. Why are these “coarse” labels favored over more detailed ones which should allow the consumer to make better decisions? This paper investigates whether precise labels can be more effective and informative than coarse ones. In a preregistered online study conducted on a representative US sample, I manipulate front-of-package labels about foods’ calorie content. I find that coarse-categorical labels generate a larger reduction in calories per serving compared to detailed-numerical labels despite providing less information (-3% and -1% calories, respectively). Results also show that participants prefer coarse labels. Choices violate the predictions of Bayesian decision theory, suggesting that consumers are less responsive to detailed information. A bounded rationality model with precision overload can capture the main experimental results: detailed labels are more complex and harder to understand, and consumers face a tradeoff between simplicity and precision. Some information helps, but too much detail can be confusing, and lead to less healthy food choices.

Keywords: Consumer Behavior, Experiment, Attention, Nutrition, Food Labels.

JEL codes: C91, D83, D91, Q28.

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