

# Coarse and Precise Information in Food Labeling

JOB MARKET PAPER

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## Abstract

Public authorities and companies often adopt simple categorical labels to convey information and promote healthy, ethical, or energy-friendly behavior. These labels tend to provide coarse information: for example, food front-of-package labels might report low-fat but not the exact fat content. In this paper I study how labels with different precision affect choices: can precision become “too much” and impair choices?

In a preregistered online study conducted on a representative US sample, I manipulate the precision of front-of-package labels about foods’ calorie content. Coarse labels generate healthier choices compared to more detailed ones (-2% calories, -3% high-calorie products chosen), despite providing less information. Participants also declare they prefer coarse labels.

Choices are at odds with the predictions of a Bayesian updating model, showing that participants are less sensitive to detailed information. A behavioral model with noisy mental representation of the label information can capture the main results. When detailed labels are more complex and harder to understand, 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, Nutrition, Food Labels, Experiment, Attention.

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