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Unintended Consequences of ‘Healthy’ Food Labels: Promoting Health or Licensing Indulgence?

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Conflicting Goals of Consumers
Consumers often seek to reconcile conflicting goals of indulgence/pleasure with goals of health/weight-maintenance.

**Compensatory Health Beliefs (CHBs)**
- Assumption that unhealthy or indulgent behavior can be compensated by healthy behavior

**Who are Susceptible to CHBs?**
- **Restrained eaters** maintain active yet conflicting goals to indulge but also restrict food intake
  - Denying indulgence for health or weight-management goals
- Restrained eaters may be especially susceptible to CHBs
  - CHBs as a means to satisfy goals of both indulgence and health

**CHBs and Exercise**
- Restrained eaters consume more snacks when anticipating exercise (vs. sedentary) compared to non-restrained eaters

Knauper et al., 2004; Rabia et al., 2006; Fishbach & Dhar, 2005

Sim, Lee, & Cheon, 2018 Appetite
CHBs and Judgments of Food

- Consumers seeking to license indulgent consumption (vices) with healthy patterns of consumption (virtues)
- **Dieter’s Paradox** - mere presence of ‘healthy’ option reduces perceived total calories in a meal

![Graph showing estimated calories for weight concerned and weight indifferent with unhealthy and unhealthy + healthy options](Chernev_2011)

Labels Signaling ‘Healthiness’

- Front-of-pack labels can communicate ‘healthiness’ explicitly or implicitly
- Labels that activate health-related goals may function as:
  - **Reminders** of healthy behavior
  - **Licenses** to indulgence

![Labels signaling healthiness with examples](labels)

Study 1: Impending ‘Healthy’ Food

- **N** = 20 Singaporeans (12 females). Participants provided standardized lunch.
- Randomized counter-balanced cross-over design with two conditions (sessions):
  - Impending Healthy Food (IHF) – dinner meal framed as ‘healthy’
  - Impending Conventional Food (ICF) – dinner meal framed as traditional style
Fabricated article to manipulate perception that impending dinner meal was ‘healthy’
(low GI, vitamins, antioxidants, cardiovascular benefits)

Dinner was perceived to be healthier, more filling, and tastier in impending healthy food condition (IHF)

Study 1: Results

- Participants consumed less snacks when ‘healthy’ food anticipated (IHF) [label as reminder of health goals]
- No difference in dinner food intake (‘healthy’ vs. conventional meal) between IHF and ICF conditions

Study 1: Dietary Restraint and Snack Intake

Dietary restraint associated with decreased snack intake in healthy food condition (relative to conventional food)

‘Healthy’ vs. Low Calorie Labels

Anticipated Healthy Behavior

- Exercise

Compensation

Increased Snack Intake

‘Low Calorie’ Meal?

Health Goal Priming

Decreased Snack Intake

‘Healthy’ Meal

Does an anticipated meal labeled as having LOW CALORIES promote greater snack intake compared to a ‘healthy’ label?
**Study 2: Impending ‘Healthy’ Food vs. ‘Low Calorie’ Food**

- **N = 48 Singaporeans (32 female)**
- Randomized, between-subjects design with two conditions:
  - Impending meal with **Healthy Properties (HP)** (n=27)
  - Impending meal with **Lower Calories (LC)** (n=21)

**Measuring Desired Quantity of Energy Intake**

- **Portion Selection Task (PST)**
  Participants select desired portion sizes for foods if they were to be consumed now (10 snack foods).

**Study 2: Results**

- Average size of snack portions selected (kcal) was **lower** in the healthy meal condition (HP) compared to low calorie meal condition (LC).
Study 2: Dietary Restraint and Snack Portion Selection

Dietary restraint associated with decreased snack portion sizes in ‘healthy’ food condition

Conclusions

- Labels that signal a food as being ‘healthy’ may have unseen consequences on selection and intake of other foods
- Some consumers (restrained eaters) may be especially susceptible to effects of health-relevant labels
- How a food is portrayed as being ‘healthy’ matters:
  - Low calories: may be more likely to promote compensatory indulgence
  - Healthy properties: may act as reminders of health goals that inhibit indulgence

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Questions?
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