

Reading Between the Lines of Food Labels

Lydia Mack¹, Patrick Quieroz², Kayla Holland³

1- Department of Exercise and Nutrition Sciences, 2-Department of Biomedical Sciences, 3- Special Major- Nutrition Science
 Research Mentor- Peter J. Horvath, PhD¹
 Director of UG Research Exploration Academy

Abstract

The ambiguity of food labels and packaging is a global issue because the design is more towards selling a product rather than informing a consumer. The deceptive nature has led to the exploitation of consumers which has resulted in exacerbating health issues. Dietary guidelines, artificial claims, and targeted packaging are all at fault. Exaggerated claims and complicated food labels harm consumers' trust towards the food industry. These manipulations target those who may not be well-informed in the subject of nutrition. It is imperative that specific and accurate modalities of universal labeling for food items be introduced globally. Packaging and labeling should include mandated warnings, as well as simplified laymen terms for complicated chemical terminology.

Future of Food Labels

- On Feb 27, 2014, FDA Commissioner Hamburg, and First Lady Michelle Obama introduced the Proposed Rule on [Food Labeling: Revision of the Nutrition and Supplement Facts Labels](#).
- The new labels **bring more attention to calories and serving size**.
- They would also address **“per serving” AND “per package”** calorie and nutrition information.
- The proposed rule will also **require declaration of “Added Sugars”** to help consumers understand how much sugar is naturally occurring and how much has been added to the product.
- There would also be a **removal of “Calories From Fat”**. While continuing to require “Total Fat,” “Saturated Fat,” and “Trans Fat” on the label, “Calories from Fat” would be removed because research shows the type of fat is more important than the amount.

Food Labels Around the World

Currently national governments enforce regulations at their own discretion creating a dearth of uniformity among global standards. Future efforts enforcing uniform requirements of food standards to protect consumer health by the United Nations Food and Agricultural Organization and the World Health Organization will create less confusion and variability between nations. Improved nutrition labelling would positively affect the incidence of diseases such as heart disease, stroke, diabetes and cancer, which are responsible for up to two-thirds of all deaths globally, and are increasingly a burden in undeveloped nations. Unfortunately, current regulations regard national discernment as more of a priority than consumer health. Global food label standards can benefit both consumers and governments to make healthy decisions.

Background and History

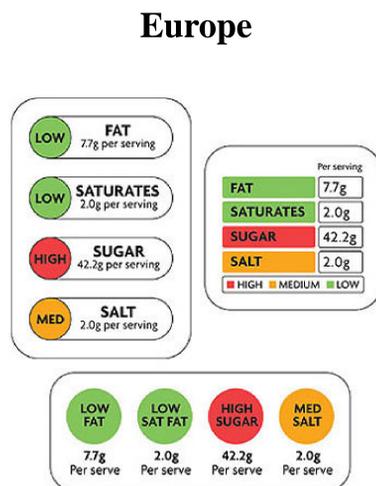
The history of food labels officially began in 1990 when the Nutrition Labeling and Education Act (NLEA) passed. The law requires all packaged foods to include nutrition labels as well as have consistent health claims. Since then, there have been several regulations standardized among packaged foods. However, some claims made by large industries have been ambiguous and misleading in an attempt to convince consumers that the foods are healthier than they truly are. This is where the issue of health illiteracy plays a significant role. Consumers that aren't well educated in nutrition may be contributing to their own health complications over time.

Misleading Labels

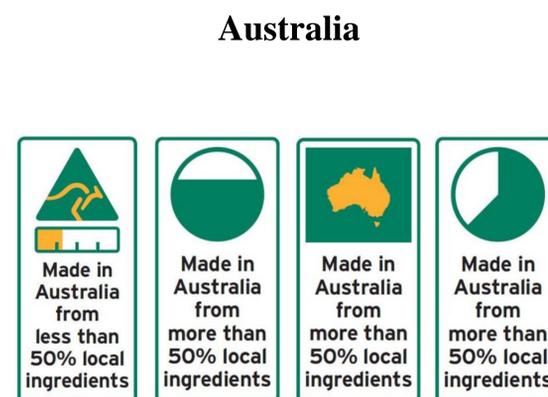
Since 2011, consumer advocacy groups and plaintiffs have filed more than 150 food labeling class action lawsuits against food and beverage companies. According to a recent study, the number of these consumer protection class actions brought in federal court climbed from 19 cases in 2008 to more than 102 in 2012. The FDA should define misleading terms such as “natural” to achieve uniformity and consistency for consumers and food manufacturers. The issue of whether genetically modified ingredients are “natural” is at the core of many recent food labeling class-action suits. The agency should address the controversial genetically modified organism (GMO) labeling issue to prevent the state-by-state patchwork of laws that is beginning to develop. The FDA should address the misleading nature of health and nutrition claims on foods and revise its regulations accordingly. Research conducted by the FDA and other groups proves that consumers are confused about these claims, particularly structure/function claims which do not require the FDA's pre-approval or authorization. However, the FDA has not increased its enforcement efforts, nor has it provided clear guidance to manufacturers about the level of scientific support required to assert such claims. The “significant scientific agreement” standard should be required for each type of claim included on food labels. The FDA should increase its monitoring and enforcement of labeling practices by coordinating efforts with the FTC, developing a comprehensive food labeling monitoring system, and instructing inspectors on how to identify potentially misleading claims.

References

Brusco, Jennifer. “The Future of the Nutrition Label.” Trace Gains. Retrieved April 13, 2017.



This European label is simple, color coordinated, and consumer-friendly since it is easy to read.



An Australian food label points more attention to the amount of local ingredients that are incorporated in their food.

China

Nutrition Information 營養資料			
Serving Per Package / 每包食用量	Per (100g) / 每 100 克	Per Serving / 每食用分量	% Chinese NRV per 100 g/每 100 克的中國營養素參考值百分比
Energy / 能量	1176 kcal / 千卡	1004 kcal / 千卡	59%
Protein / 蛋白質	2711.9 g / 克	2315.1 g / 克	4520%
Total fat / 總脂肪	1547.6 g / 克	1321.2 g / 克	2579%
- Saturated fat / 飽和脂肪	5296 g / 克	4521.1 g / 克	26480%
- Trans fat / 反式脂肪	1458.7 g / 克	1245.3 g / 克	
Carbohydrates / 碳水化合物	3766.2 g / 克	3215.2 g / 克	1370%
- Sugars / 糖	6258.9 g / 克	5343.1 g / 克	
Sodium / 鈉	2851 mg / 毫克	2434 mg / 毫克	143%

List of ingredients: Protein Concentrated Skim Milk, Skim Milk, Sugar, Xanthan Gum, Pasteurized Milk and Cream
 Contains: Crustaceans, Eggs, Fish, Peanuts, Soybeans, Milk, Tree Nuts, Gluten, Sulphites
 配料表: 濃縮蛋白脫脂牛奶, 脫脂牛奶, 糖, 黃原膠, 巴氏殺菌乳和奶油
 含有: 甲殼類動物, 蛋, 魚, 花生, 大豆, 牛奶, 堅果, 麵筋, 亞硫酸鹽

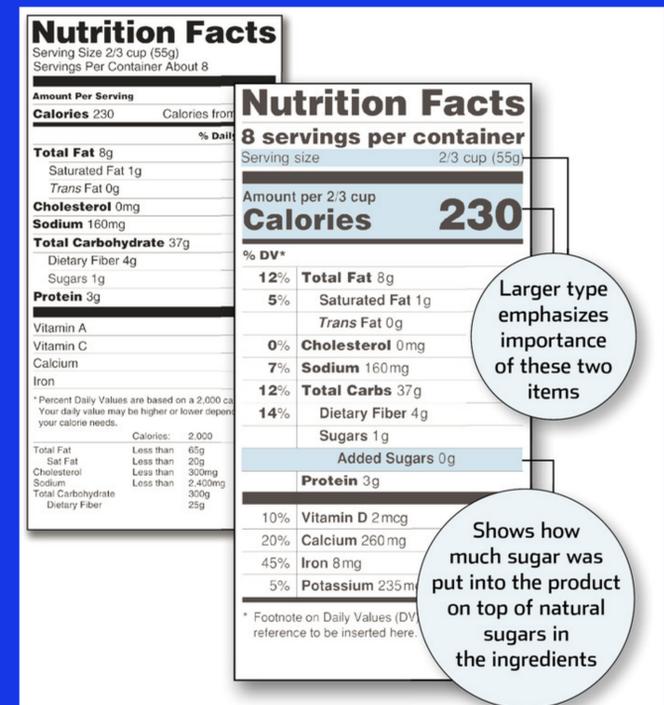
This Chinese label is similar to that of the US. It also shows the nutrition amounts per 100g, which is helpful. However, it is still boring to look at as a consumer.

South Africa

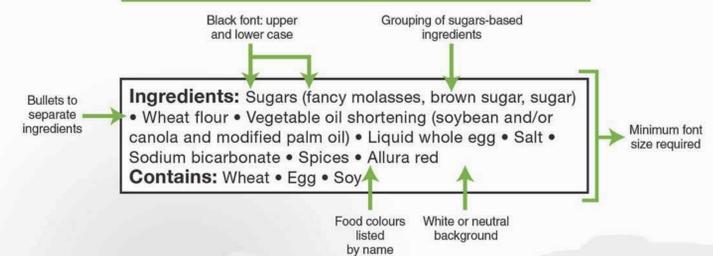
TYPICAL NUTRITIONAL INFORMATION			
Single Serving: 1 x 114 g cake slice (Butter used)			
TYPICAL NUTRITIONAL VALUES*	Unit	Per 100 g ready to eat product	Per single serving (1 cake slice)
Energy	kJ	1811	2045
Protein	g	3.6	4.1
Glycaemic Carbohydrate	g	57	65
of which Total Sugar	g	34.2	39.0
Total Fat	g	21.1	24.1
of which Saturated Fat	g	6.4	7.3
Dietary Fibre ^a	g	1.8	2.1
Total Sodium	mg	344	392

* Values from SANAS Accredited Laboratory.
^a Test method: ADAC 995.19.

This South African label is relatively easy to read, but is boring to look at which may not draw in the attention of consumers.



PROPOSED LIST OF INGREDIENTS



This proposed list of ingredients is very straightforward and easier to read than old ingredient lists that was confusing to consumers.

United States Government Accountability Office, FDA Needs to Reassess Its Approach to Protecting Consumers from False or Misleading Claims GAO-11-102, pg. 18-19, Jan 14, 2011.

Margaret Hamburg, M.D., Comm'r FDA, Remarks at the Atlantic Food Summit, Washington, D.C. (March 4, 2010) <http://www.fda.gov/newsevents/speeches/ucm209924.htm>.