# Assignment 1

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# 1 Analysis and criticism

### 1.1 Analysis of the infographic

The infographic Nutritional Values by Dan Mariglio in Figure ?? pictures the nutritional comparison between processed and natural/wholesome food. The author visualizes three different infographics for the different food categories; the first graph compares the cost per calorie, another one contrasts the calories per 100g and the last shows how much sugar is contained in 100g. The author gives the example that wholesome food is more expensive since the ratio of value to calorie for an apple is higher compared to a bag of potato chips. Mariglio based his visualizations on the layout of common supermarkets and suggests the reader sticking to the periphery of the supermarket to find the natural food. Processed food containing the most calories by weight is located at the centre of the grocery store.

## 1.2 Criticism of the visual design

In this section, the three infographics will be criticised according to the visual design principles from the lecture notes. These design principles were defined by Edward Tufte[?].

#### 1.2.1 Perception and cognition

The author uses the data-driven, Bottom-up approach The graphics are a conventional representation and used the controlled visualization paradigm (reason: data-driven) Which requires the attentive perception of the reader/viewer The attentive approach is slow to perceive and easy to forget information Based on visual processing paradigm and requires the following from the viewer: Parallel processing to extract low-level properties of the visual scene Pattern perception Deficiency for viewers with colour blindness,

see produce aisle/section which is represented in red and green The graphic in 3 dimensions which makes itway more complex than it is Principles of Graphical Integrity (Tufte principles of design) The food graphical components obscure the actual information and data -; hard to perceive actual infographic Preattentive processing: No immediate understanding No preattentive attributes, except food labels but many, are obscured by other components Hard for immediate perception

### 1.2.2 Design priniciples by Edward Tufte

# 2 Assessment of redesign

@Levente this is your section, I will add some notes for you here: How we decided to re design the infographic:

- deemphasize the non data-ink
- augment the data-ink
- declutter
- regroup the data

# 3 Appendix

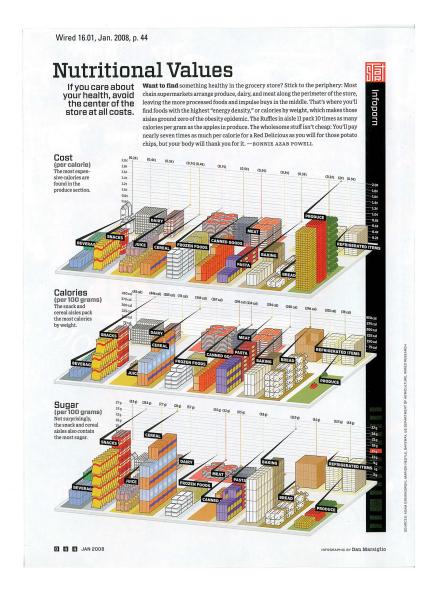


Figure 1: Given graphic to criticize.