

## Epicurean Food Marketing

### Aligning business and health by making eaters happier to spend more for less food

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#### Key messages

- > Food marketers can no longer ignore the impact of their actions on customers' health and wellbeing.
- > The standard solution – food reformulation – is limited by 'health halos' (the tendency to overeat foods that are perceived to be healthy) as well as by the dissolving consensus on what makes a food healthy.
- > Epicurean marketing shifts the focus from what we eat to how much we eat: from health and nutrition to making smaller portions more appealing.
- > Marketers must shift from selling food as fuel – making money by selling more calories – to marketing food as pleasure – making money by selling less food and more pleasure.

Food marketing has worked very well. Without giving it much thought, we routinely eat a great variety of foods that our grandparents would not recognize. This new food is safe, cheap and convenient, tastes great and almost always claims to be healthy for one reason or another. Food marketers are also great at creating placebo effects – for example, by making people feel drunker than they really are.<sup>1</sup>

Indeed, food marketing has worked too well. It has contributed to a worldwide obesity epidemic, with consequences that range from the stigmatization of overweight people to Type 2 diabetes.

**“Food marketing has worked too well: it has contributed to a worldwide obesity epidemic”**

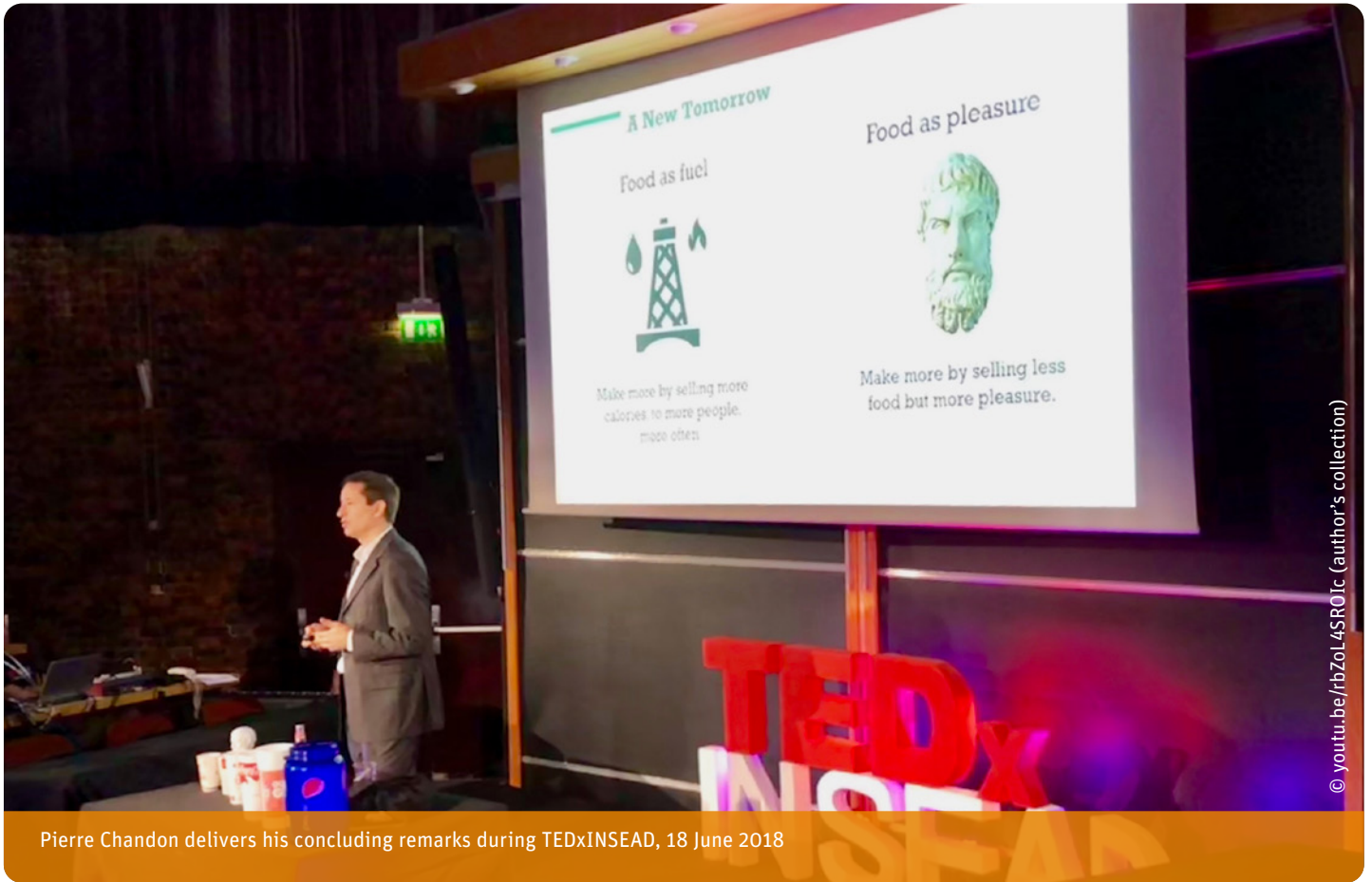
Its effects are particularly acute in low- and middle-income countries, which are now shouldering the double burden of obesity and malnutrition. A comparison of current World Health Organization obesity data with those from the 1990s shows that much of the increase took place in developing countries. In fact, the countries with the highest prevalence of adult and childhood obesity are Pacific Islands such as the Cook Islands and Samoa. Multinational food companies have a particularly strong presence in emerging countries, where people associate Western foods with modernity and status.<sup>2</sup>

Having won the battle for innovation and growth, food marketing lost the war for public and scientific opinion. Gone are the days when soda manufacturers could claim that they did not make people fat or point the finger at parents who fail to make children exercise.<sup>2</sup> Almost all of the food marketers I know acknowledge that they can no longer continue to grow the business without taking its societal consequences into account. But what can they do?

#### Can food marketing not make people overweight?

The classic approach is to reformulate food by removing fat, and now sugar, from their mainstream brands, or by launching a brand extension. Clearly, these are worthy initiatives and have worked well for some brands, such as Halo Top ice cream, which have been able to drastically improve their nutrient profile without impairing the taste. Yet, this tends to be the exception rather than the rule, especially when sugar is critical to texture and taste.

There are two general limitations to food reformulation. First, it can create a misleading health halo, which can lead to overeating.<sup>3</sup> For example, one of my studies showed that labeling



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Pierre Chandon delivers his concluding remarks during TEDxINSEAD, 18 June 2018

chocolate candies ‘low fat’ led to a 46 percent consumption increase among overweight people compared with when they were labeled ‘regular.’<sup>4</sup> That single claim – low fat – led people to categorize candies as healthy and to conclude that they could eat more of them, guilt-free and consequence-free.

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**“There are now four distinct meanings of ‘healthy’”**  
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Second, reformulation is being rejected by a growing number of consumers on both hedonic and health grounds. There are now four distinct meanings of ‘healthy.’<sup>5</sup> The first two are about nutritionally improving the food, by either ‘removing something bad’ or ‘adding something good.’ The other two are about preserving the natural properties of the food by either ‘not removing anything good’ or ‘not adding anything bad.’ Even though the four types of food claims are often uncorrelated with nutritive value, they still influence the inferences and choices made by consumers. For these reasons, food reformulation claims should be mentioned only when they fit the consumption goals of the consumer (e.g., a low-calorie claim for dieters), or only after the reformulation has been implemented and accepted.

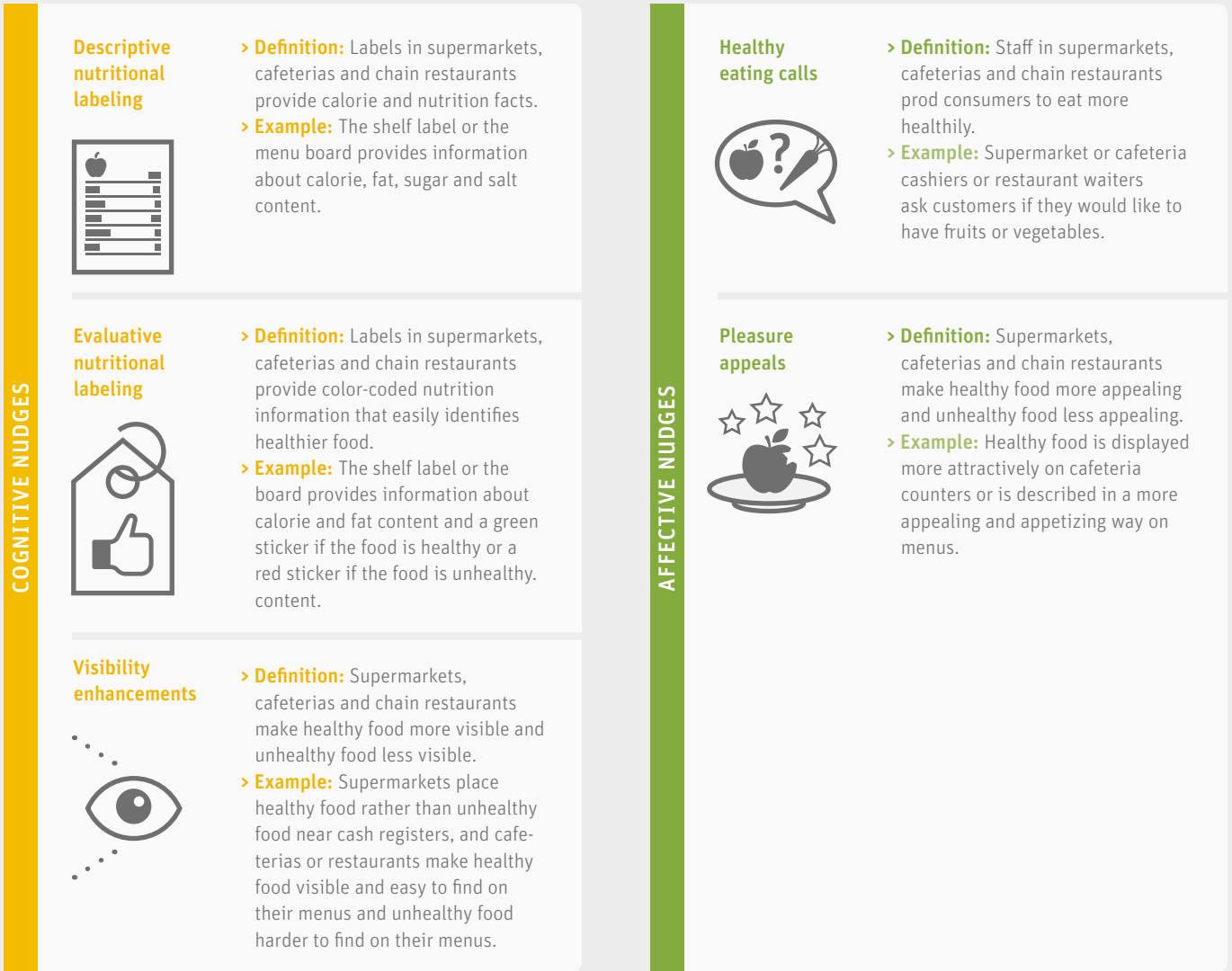
**Nudging consumers to eat more healthily**

Given the shortcomings of industry-led food reformulation, governments and consumer advocates have stopped believing in the ability of industry to regulate itself, let alone change the business model. In the public health domain, it is widely believed that ‘Big Food’ has no ‘constructive role’ to play in resolving the crisis,<sup>6</sup> and is as bad as – and perhaps even worse than – ‘Big Tobacco’; hence, regulators should follow Chile’s lead and impose tougher warnings, advertising restrictions and taxes.<sup>7</sup> However, this adversarial approach has run up against clever industry lobbying, as well as consumers who resent the taxes and paternalistic restrictions on their freedom to eat what they want. Another approach is necessary.

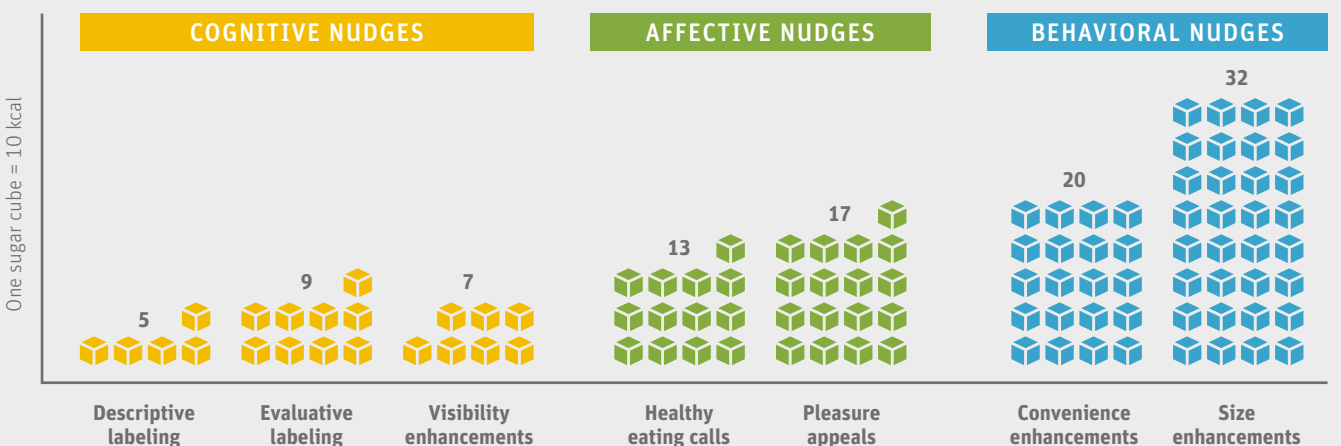
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**“Food marketers should nudge people to eat in a healthier way the food that they already consume”**  
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Instead of making changes to the food itself, food marketers should nudge people to eat in a healthier way the food that they already consume. By nudging we mean influencing behavior without resorting to economic incentives or restricting freedom

**FIGURE 1:** Seven ways to nudge people to eat more healthily



**FIGURE 2:** The effectiveness of healthy eating nudges increases as the focus shifts from information, to affect, to directly influencing behaviors



**Convenience enhancements**

> **Definition:** Cafeterias and chain restaurants include healthy food by default on their menus, and supermarkets make unhealthy food physically harder to reach on the shelves.

> **Example:** Vegetables are included by default in combo-meals or on fixed menus in cafeterias and chain restaurants, but customers can ask for a replacement. Ask customers if they would like to have fruits or vegetables.

**Size enhancements**

> **Definition:** Supermarkets, cafeterias and chain restaurants reduce the size of the packages or portions of unhealthy food that they sell and increase the size of the packages or portions of healthy food that they sell.

> **Example:** Cafeterias and restaurants serve smaller portions of fries and larger portions of vegetables, and supermarkets sell smaller candy bars and larger strawberry trays.

of choice. Reorganizing a menu or a grocery shelf is a nudge; taxing soda or banning energy drinks is not.

In a recent meta-analysis of 96 field experiments,<sup>8</sup> Romain Cadario and I categorized nudges into seven types, which we grouped in three broad categories, as shown in **Figure 1**.

We measured the effectiveness of each type of nudge and estimated the daily reduction in energy intake that one could expect from the implementation of each nudge.<sup>9</sup> For the average nudge tested, the expected energy reduction is 124 kcal per day, which is equivalent to 12 fewer sugar cubes per day. But when we separate the results into cognitive, affective and behavioral groups, it is clear that some nudges work better than others (see **Figure 2**).

**Cognitive, affective and behavioral nudges**

**Cognitive nudges** provide information and trust the consumer to make a better choice. We estimated that descriptive label-

ing would cut energy intake by only 54 kcal per day. Evaluative labeling, which adds interpretative cues such as a smiley face or traffic light colors, fared significantly better: 91 kcal per day. Visibility enhancements make healthy options more visible by putting them in the center of the shelf or on the first page of the menu. This approach is slightly more effective (70 kcal per day) than simply giving calorie and fat information, but not as effective as when the information was put into context.

**Affective nudges** rely on emotions and social cues to motivate people to eat better. Healthy eating calls are signs that encourage people to ‘make a fresh choice,’ or verbal encouragement from staff. Their estimated calorie reduction potential is 129 kcal per day. Hedonic enhancements emphasize the taste experience of food using descriptions such as ‘twisted citrus-glazed carrots’ or appealing displays. They are estimated to be able to reduce daily calorie intake by 172 kcal.

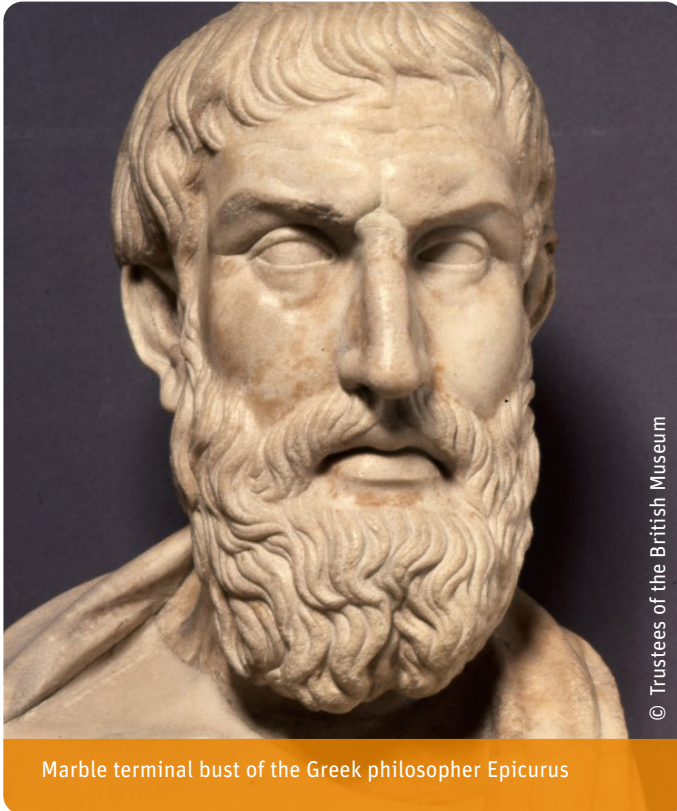
**Behavioral nudges** are the most effective because they try to change behavior without necessarily changing what people think or what they want. Convenience enhancements make healthier options easier to select or eat, such as putting healthier food options at the front of a cafeteria when consumers have an empty tray to fill up, or providing pre-cut fruit or vegetables. Taken together, they could cut 199 kcal per day. Reducing the size of the plates, glasses or food portion itself is the best way to reduce the amount of unhealthy food consumed and could cut daily calorie consumption by 317 kcal.

**Epicurean marketing: shifting from *what we eat* to *how we eat it***

The most effective interventions are not those that people think about.<sup>10</sup> Although the policy debate is around how best to inform people, when it comes to eating, feelings beat information, and behaviors beat feelings. If food marketers want to help us eat better, they should focus on our hands and hearts, rather than our heads.

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Informed by the meta-analyses results, Epicurean marketing focuses on affective and behavioral interventions. It is termed ‘Epicurean food marketing’ because it is consistent with the teachings of the ancient Greek Epicurus, who more than 2,300 years ago remarked that the wise person does not choose the largest amount of food, but the most pleasurable. Epicurean



nudging makes it possible to guide people towards healthier, more enjoyable – and profitable – eating behaviors, thereby aligning the interests of government, business and consumers.

Epicurean food marketing is based on the realization that overeating is largely driven by the ever-increasing availability of large portions, and most solutions focus on influencing what people eat instead of *how and how much* they eat – which is easier.<sup>11</sup> It is like a two-pronged fork that helps people enjoy smaller portions of the food that they already like. The first prong is behavioral and focuses on making smaller portion sizes seem normal. The second is affective and appeals to the pleasure dimension (not the health benefits) so that people are happier eating smaller portions.

#### Reducing sizes: making smaller normal

The size of food portions and packaging has increased enormously. Forty years ago, a 16 oz bottle of soda was advertised as large enough for three adults; now, 16 oz (50 cl) is a normal single serving. The problem is that supersized food portions look a lot smaller than they are. In one of my studies,<sup>12</sup> despite accurately estimating the number of calories in small fast-food meals, people underestimated the number of calories in a 1,000-calorie meal by 25 percent. In another,<sup>13</sup> people estimated that a large cup contained 296 candies when in reality it contained about twice as many (592).

The underestimation bias is related to portion size, not body size: people of normal weight are as inaccurate as those who are

overweight.<sup>12</sup> Perceived size increases more slowly than actual size – and this is true for children and adults alike, even professional chefs and dieticians.<sup>14</sup>

This and other biases in size impression occur because our senses are ‘bad at geometry.’<sup>15</sup> This leads consumers to choose cheap supersize portions that are larger than they think while being reluctant to pay for the extra quantity. The net effect is overeating and food waste – a lose-lose scenario.<sup>16</sup>

Why, then, are all companies not downsizing their portions? Because people are better at noticing decreases than increases in size. This happens because two reference points are available when estimating the decreasing quantities: the original size and zero, given that quantities can never be negative.<sup>13</sup> For increasing quantities, however, only the reference size is known, as the portion could increase to infinity (and it sometimes feels like it does).

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An effective strategy to encourage people to choose smaller portions is to add a smaller size to the range available.<sup>17</sup> Because size perception is relative, adding a smaller size transforms the old ‘small’ into a ‘medium’ – making consumers more likely to buy it rather than the ‘large’ size. Another approach is to communicate volume – e.g., Starbucks branding its smallest size the ‘tall’ cup. Finally, rather than making packaging and portions smaller, increasing the height while reducing the base masks the size reduction and facilitates downsizing. For example, in one study we were able to downsize a product by 24 percent without people noticing, even when they were able to weigh the product in their hand.<sup>16</sup> The height appeared to compensate for the decrease in length and width, which our senses fail to multiply.

#### More pleasure: putting the sensory experience of eating at the center of food decisions

The second idea of Epicurean marketing is to help people enjoy – and be willing to pay more for – smaller portions. Most people choose large portions because they provide value for money and will not leave them hungry, but do not consider how they will actually feel when eating them. People tend to forget that sensory pleasure peaks during the first few bites and diminishes with each subsequent bite. More importantly, it is the last bite that determines the overall enjoyment of the food. Because pleasure in food is influenced by the average (not the sum) of the pleasure

experienced in each bite, the last bite of a large portion yields less eating enjoyment. Hence, people tend to consume portions that are too large from a pleasure standpoint.<sup>18</sup>

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“Because they forget that sensory pleasure doesn’t increase with quantity but with quality, people tend to choose portions that are often too big from a pure pleasure standpoint”

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In a series of studies, we found various ways to put eating enjoyment at the center of portion-size decisions. One way, which we call ‘sensory imagery,’ was to ask people to visualize the sensory experience of eating hedonic food, evoking its taste, texture and aroma. Across many experiments, this simple technique led schoolchildren, French and American adults, and restaurant customers to choose more reasonable portions of desserts. For example, after sensory imagery, hungry 7–11-year-old children chose to eat 7.1 percent less brownie for an afternoon snack.<sup>19</sup> Sensory imagery works particularly well among normal (non-restrained) eaters and when they are hungry. In another study, it reduced the size of the dessert chosen by 367 non-restrained adult women by 24 percent.<sup>20</sup> Even better, sensory imagery led them to choose the (relatively smaller) portions that were optimal size for eating enjoyment.<sup>20</sup> In other words, sensory imagery made people happier with less food.

Another way, which we call ‘Epicurean menu labeling,’ consists of adding words such as ‘aromatic,’ ‘bold,’ ‘golden,’ ‘velvety’ – which emphasize the multisensory, aesthetic properties of food. In a field experiment in a French cafeteria,<sup>21</sup> Epicurean menu labeling reduced food intake by 17 percent yet increased the perceived value of the meal by 16 percent because it increased savoring (rather than simply eating) the food. In contrast, adding nutrition information on the menu made people choose smaller desserts but feel bad about it, reducing their evaluation of the fair value of the experience. Consistent with our distinction between visceral and Epicurean eating pleasure,<sup>18</sup> an analysis of the price and menu descriptions in 6,511 US restaurants showed that items with Epicurean descriptors (but not ‘visceral’ descriptors associated with eating impulses) had a higher price. The word cloud shown in **Figure 3** shows the relative frequency of sensory descriptors used in these restaurants, which are categorized as Epicurean (in blue), visceral (in red) or those that could not be categorized (in gray). Food marketers have a rich lexicon of Epicurean descriptors at their disposal.

**FIGURE 3:** Epicurean and visceral sensory descriptors used in US restaurant menus. The sensory descriptors are listed in alphabetical order and a difference of two font sizes indicates that the word is 100 times more frequent. The identification of the 162 sensory descriptors and the menu data are from Jurafsky, Chahuneau, Smith, and colleagues.<sup>22,23</sup> An asterisk indicates that hyphenated variations were included

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“Food marketers and the food industry should stop acting as if they are in the energy business”

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#### From food as fuel to food as pleasure

Food marketers and the food industry need to shift to a new model. They should stop acting as if they are in the energy business (making profits by selling more calories to more people, more often) and move to an Epicurean business model whereby food is a source not of fuel but pleasure. Instead of making more by selling more, they will profit by selling smaller portions but more pleasure – a triple win for health, pleasure and business, and a strong refutation of the accusation that food marketing has no role to play in the fight against overeating.

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