Healthiness of popular fast food items in New Zealand: plenty of room for improvement

Fast food provides an increasing contribution to dietary energy and nutrient intakes in New Zealand (NZ). A recent (2014) World Health Organization (WHO)-commissioned study found that per capita fast food consumption in NZ increased 10% between 1999 and 2008; one of the sharpest increases in intake of all countries in the Organization for Economic Development (OECD). Such an increase is likely to be associated with ease of access given that the median distance to a fast-food outlet is less than 1 km.

The rise in fast food availability and consumption is concerning because this food is generally high in fat, sugar, sodium, and energy, and high intakes are associated with increased body mass index (BMI) and obesity risk. As such, there have been calls for guidelines around the nutrient composition of fast food and availability of healthier options.

We undertook a survey of the most popular items available for sale at NZ fast food restaurants to determine their mean nutrient content and contribution to recommended daily intakes (RDIs) of energy, saturated fat, sugar, and sodium. We included the four fast food chains with the highest number of outlets in NZ: McDonalds (McD; n=212 restaurants), Kentucky Fried Chicken (KFC; n=98), Pizza Hut (PH; n=84) and Burger King (BK; n=80). The most popular fast food items were determined using an online survey (n=104 NZ adults; January 2014) asking about fast food consumption over the past month. The nutrient content of fast food items was determined using the 2013 version of Nutritrack, a brand-specific supermarket and fast food composition database. Burgers, pizza, chicken, sandwiches, salads, sides/other, and beverages sold for lunch and dinner were included.

Our analysis showed that burgers (n=46) had the highest mean (SD) energy (2242 [709]kJ), saturated fat (8.6 [5.8]g), sugar (7.0 [3.1]g) and sodium (1063 [345]mg) content per serve. The most popular burger combo meals and pizza would contribute between one-third and a half of the adult RDI for energy and nutrients (Table 1). Combo meals provided at least 94% of the RDI for sugar when applying the new WHO guideline (5%RDI). Our findings are conservative because they focus on regular-size combo meals and pizza without large or extra-large portion size options.

Three of the four restaurants offered salads (BK, KFC and McD), which had the healthiest nutrient profile of all main menu items in terms of mean energy (305kJ), saturated fat (0.5g) and sodium (143mg) per serve (mean serving size 279g). However, on average they contained more sugar per serve (5.5g), than pizza (mean 3.1g), chicken (0.9g) and sides (2.3g). Further, the mean (SD) range in sodium content of salads available at different chains was wide, ranging from 133 (172)mg per serve at KFC to 967 (809)mg per serve at BK.

Nonetheless, salads were not popular with survey respondents: no-one indicated they had consumed a salad from one of the four fast food chains in the past month.
### Table 1

<table>
<thead>
<tr>
<th>Combo Meals (burger, fries, soft/fizzy drink)</th>
<th>Energy</th>
<th>Saturated fat</th>
<th>Sugar</th>
<th>Sugar WHO&lt;sup&gt;b&lt;/sup&gt;</th>
<th>Sodium</th>
</tr>
</thead>
<tbody>
<tr>
<td>KFC (n=2) Male</td>
<td>25-28%</td>
<td>5-6%</td>
<td>35-36%</td>
<td>100-101%</td>
<td>51-62%</td>
</tr>
<tr>
<td>Female</td>
<td>34-38%</td>
<td>7-9%</td>
<td>48%</td>
<td>135-136%</td>
<td>51-62%</td>
</tr>
<tr>
<td>McD (n=4) Male</td>
<td>23-30%</td>
<td>8-18%</td>
<td>33-35%</td>
<td>94-98%</td>
<td>50-62%</td>
</tr>
<tr>
<td>Female</td>
<td>31-41%</td>
<td>11-26%</td>
<td>44-47%</td>
<td>127-132%</td>
<td>50-62%</td>
</tr>
<tr>
<td>BK (n=4) Male</td>
<td>26-41%</td>
<td>11-20%</td>
<td>36-49%</td>
<td>102-138%</td>
<td>32-76%</td>
</tr>
<tr>
<td>Female</td>
<td>35-54%</td>
<td>16-28%</td>
<td>48-65%</td>
<td>137-185%</td>
<td>32-76%</td>
</tr>
<tr>
<td>PH (n=4) Male</td>
<td>17-20%</td>
<td>15-19%</td>
<td>5-8%</td>
<td>13-24%</td>
<td>49-68%</td>
</tr>
<tr>
<td>Female</td>
<td>23-26%</td>
<td>19-27%</td>
<td>6-11%</td>
<td>18-32%</td>
<td>49-68%</td>
</tr>
<tr>
<td>Pizza (3 slices)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KFC (n=2) Male</td>
<td>17-20%</td>
<td>15-19%</td>
<td>5-8%</td>
<td>13-24%</td>
<td>49-68%</td>
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<td>49-68%</td>
</tr>
</tbody>
</table>

<sup>a</sup> RDI values used include (for males/females respectively): energy 13,300/9900kJ; saturated fat 42.3/31.5g; sugar 117.4/87.4g; sodium 2,300mg.

<sup>b</sup> WHO guideline for sugar intake (5%RDI).
Our results illustrate that there is plenty of room for improvement in the nutrient composition of fast food items in NZ. In addition, our data show that some popular items were considerably lower in saturated fat, sodium, and sugar than others, illustrating that it is possible to improve nutrient composition.

The major limitation of this study is the relatively small sample size (n=104 adults) used to determine the most popular fast food items. Electronic sales data, or data collected from the till receipts of consumers across a range of fast food restaurants would have been much better for this purpose.

Unfortunately, the fast food chains we surveyed refused to allow us to collect till receipt data from customers at their stores indicating some hesitance to cooperate with public health research.7 This analysis indicates the need for regulation, in particular around the nutrient composition of fast food and availability of healthier options.

International experience suggests that voluntary initiatives led by industry often may not have the intended results (a study conducted by the Yale Rudd Centre found that 97% of studied kids fast food meals failed to meet even the industry’s own Children’s Food and Beverage Advertising Initiative’s nutrition standards 8). Should this be the case for NZ then stricter government-led policies and guidelines should be introduced to achieve adequate public health outcomes.9,10

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References:


