

Nutrient profiling assessment of foods in an enclosed retail space reveals healthy and affordable options

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In 2003, a joint WHO/FAO expert consultation presented the critical role of some nutrients in the increase of chronic diseases⁽¹⁾. Nevertheless nutrient profiling models have been developed that classify foods according to their nutrient composition⁽²⁾. These classifications can be an important part of policies that target to promote healthy eating and decrease diet-related chronic diseases. Considering the lunch meal significance during the day, this study assessed the nutrient profile and availability of lunch meal components (as individual foods) in a food court. As food choices are influenced significantly by food cost and availability, the association between lunch components score and their cost was also evaluated.

Two researchers recorded food availability across three outlets in an enclosed food court, during a period of two weeks (November 2015), using a standardised data collection form. All foods available were evaluated with the UK Ofcom nutrient profiling scoring system⁽⁵⁾. Products were ranked according to their scores and meal combinations built (main + drink + side or pudding) from items at either side of the score spectrum. Eight meals combinations were built for each retail shop. The proposed meal combinations were assessed based on UK Ofcom nutrient profiling approach, and their costs evaluated.

Table 1. Distribution of foods in category based on their nutrient profile

| Products Profile | Coffees (%) | Fruit juices (%) | Waters (%) | Savoury snacks (%) | Sweet snacks (%) | Salads (%) | Fruits & yoghurt (%) | Soup | Sandwiches/cold rolls (%) |
|-----------------------------|-------------|------------------|------------|--------------------|------------------|------------|----------------------|------|---------------------------|
| Ofcom score > 4 (healthier) | 67 | 61 | 83 | 56 | 17 | 100 | 100 | 100 | 83 |
| Ofcom score < 4 | 33 | 39 | 17 | 44 | 83 | – | – | – | 17 |

A majority of products, across all food categories scored in the healthy range (Table 1) – yielding the opportunity to create balanced lunch meals. Availability was high (6–20 or > 20 items) throughout the day in all outlets for foods scoring high and low on the scale. The distribution of healthier food did not vary between the three shops for foods (70 %, 60 %, 72 %) or drinks (54 %, 69 %, 89 %). There was no association between scores and prices for meals built from products selected across the shops. The substitution of the less healthy meal component by an apple improved the meal nutritional quality importantly. Especially with the “less healthy” meal proposed shifting from “less healthy” to “healthy”.

The Ofcom nutrient profiling system was not developed for meals – nonetheless, profiling exercises need to take in consideration the food intake in term of meals, and over time (days, weeks). For example, swapping a low scoring snack item in the worst meal combination for an apple had the potential to improve the meal score toward the top half of the selection. While (“healthy”) food availability in the enclosed retail space was appropriate for the building of balanced lunch meals, it was still possible to build less nutritionally attractive meal combinations. Rather than focussing on foods only, more thoughts need to be invested in helping consumer build nutritionally balanced meals, over time.

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