

## Comparison of the nutritional quality of takeaway and ready to eat meals

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The consumption of takeaway and ready meals has grown considerably in recent years, which may be related to increased feelings of time scarcity<sup>(1)</sup>. Although numerous studies reported that takeaway and ready meals are rich in energy, fat, salt and sugar<sup>(2)</sup>, there is no data comparing the nutritional quality of similar types of takeaway and ready meal options.

This study evaluated the content of energy, fat and salt in Chinese-style takeaway and ready meal options. The samples of selected takeaway meals were collected from small independent takeaway establishments and were analysed by an accredited public analyst laboratory. The nutritional quality of ready meals was assessed based on the information provided on the nutrition label. Mean nutrient levels were compared between takeaway and ready to eat meals using Student's *t*-test, statistical significance  $P < 0.05$ . The results are presented as mean (minimum–maximum).

The different type of takeaway and ready to eat meals varied significantly in mean nutrient content. Takeaway sweet and sour dish was characterised by the highest level of energy (815.88 kJ/100 g (195 kcal/100 g)) and fat (8.1 g/100 g) when compared to all other takeaway and ready to eat meals. Whereas takeaway chicken chow mein was the most salty meal (1.3 g/100 g). The lowest energy, fat and salt were found in ready to eat chicken chow mein. The comparison of ready meals with takeaway dishes showed that generally ready meals had lower content of energy, fat and salt (per 100 g) regardless of the type of meal analysed.

**Table 1.** Energy, fat and salt content in takeaway and ready meals

Meal	Energy kJ*/100 g		Fat g/100 g		Salt mg/100 g	
	Takeaway	Ready meal	Takeaway	Ready meal	Takeaway	Ready meal
Chicken blackbean	384.93 (305.43–497.9)	114 (82–130)	4.6 (3.0–7.0)	3.8 (1.5–6.3)	1.1 (0.4–1.4)	0.7 (0.5–0.9)
Chicken chow mein	531.37 (476.98–627.6)	113 (89–140)	5.2 (4.3–6.5)	2.7 (2.4–2.8)†	1.3 (0.8–1.7)	0.6 (0.5–0.7)†
Chicken sweet and sour	815.88 (573.21–945.58)	133 (105–170)†	8.1 (6.3–10.1)	3.7 (0.8–8.1)†	0.7 (0.4–1.2)	0.7 (0.2–0.9)

\*1 kcal = 4.184 kJ.

†Indicate significant differences between takeaway and ready to eat meals.

The results indicate the generally poor nutritional quality of takeaway and ready meals; although a substantial variability in the nutrient composition of analysed meals was observed. However, the variation in the nutrient content was smaller between ready meals than takeaway meals. Observed results suggest there is more potential for nutritional improvement in takeaway meals than similar style ready meal options. Recipe reformulation of takeaway foods may have a potential positive impact on public health.

1. Jabs J & Devine CM (2006) *Appetite* **47**, 196–204.
2. Stender S, Dyerberg J & Astrup A (2007) *Int J Obes* **31**, 887–890.