

Sugar content of portioned sweet snacks retailed to children in Switzerland and the United Kingdom



A comparative market survey of an EU and non-EU country



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Background

Free sugars - mainly enclosed in processed food, soft drinks and sweet snacks - represent a substantial driver of childhood obesity [1-2]. Very little is known about nutritional values of sweet children snacks sold in supermarkets in different countries. This study compares sugar levels of portioned sweet children snacks (PSCS) in the United Kingdom (UK) and Switzerland (CH) and interprets the findings in the context of EU and non-EU regulatory regimes.

Inclusion criteria	Exclusion criteria
<ul style="list-style-type: none"> ✓ Single-portioned sweet children snacks retailed in the 4 marked-leading supermarkets in CH & the UK. 	<ul style="list-style-type: none"> ✗ Baby snacks / food for children < 1y
Criteria for children snacks: <ul style="list-style-type: none"> ✓ Specific age range e.g. 2-5 years ✓ Children-related terms [children, kids etc.] ✓ Comic, TV or game characters ✓ Fairy and other fantasy themes ✓ Children-targeted bright colours/shapes/lettering 	<ul style="list-style-type: none"> ✗ Salty / savoury snacks ✗ Larger packages of snacks ✗ Beverages ✗ Snacks with missing information about sugar content /port. size

Table 1: Inclusion and exclusion criteria of PSCS

Method

A cross-sectional market survey has been conducted within the four leading supermarkets in CH and UK. Sugar levels of PSCS (see criteria in Table 1) were analysed by comparing calories from sugar per 100g and per portion in the categories of 1. Dairy snacks, 2. Cereals & fruit-based snacks and 3. Confectionery. Additionally, proportion of PSCS with high sugar profiles ($\geq 20\%$ of calories derived from sugar) and numbers of free sugar sources were evaluated.

Results

Overall, 691 PSCS were collected with 383 (55%) from the UK and 308 (45%) from CH. In dairy snacks, CH derived significant higher amounts of calories (cal.) from sugar per 100 g (CH: 87cal. vs. UK: 61cal. $p < 0.001$) and per portion (CH: 56cal. vs. UK: 34cal. $p < 0.001$) compared to the UK. UK was significantly higher than CH in cereals & fruit-based snacks per 100g (UK: 155cal. vs. CH: 105cal. $p < 0.001$) and in confectioneries per portion (UK: 58cal. vs. CH: 48cal. $p = 0.001$). Overall, CH has significant less PSCS which are categorised as "high in sugar" compared to UK ($p = 0.006$), especially in the category of cereals and fruit-based snacks ($p = 0.006$; see fig. 1). The term "sugar" was the most frequently listed free sugar source in both countries ($\geq 90\%$) followed by "glucose" and "fruit juice concentrate".

Sugar profiles of PSCS in UK/CH

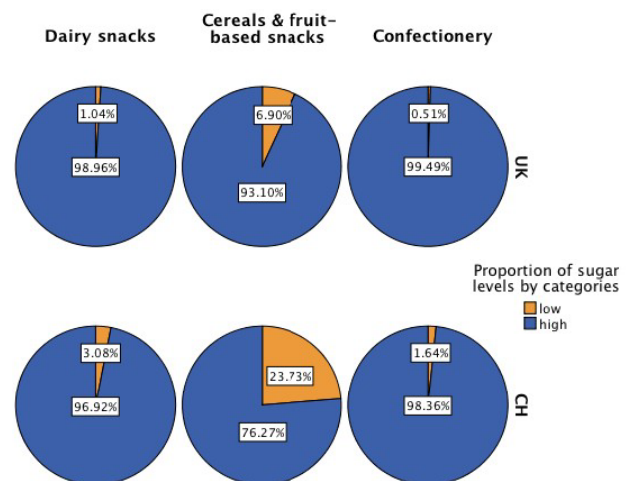


Figure 1: Proportion of PSCS with high/low sugar profiles ($\geq 20\%$ of calories from sugar) by country and category

Conclusion

Comparable high levels of sugar and free sugar sources were found within three categories of PSCS in CH and the UK. CH, as a country surrounded by EU-member states, is highly dependent on the cooperation with the EU. Hence, the results of this study are less influenced by EU- and non-EU regulations but by the governmental approaches in each country. UK implemented numerous policies in order to reduce the amount of sugar in children products whereas CH seems reluctant to follow UK's example. Estimates indicate that CH obesity rates will increase at a faster pace over the next decade [2]. To prevent this prediction, the CH should consider adopting some of the best practices from UK.