

## Profiling children's snack products in Ireland

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Infancy and childhood are critical periods for growth and development, requiring adequate nutrition. Early feeding experiences can have a lasting impact on food preferences and life-long eating habits<sup>(1)</sup>. The high rate of childhood obesity, along with the establishment of new healthy eating guidelines in Ireland, demonstrates the importance of developing best practice in infant feeding. While 'healthy' snacks may be offered 2-3 times a day, a wide range of commercial snack products, varying in nutrient content and textures, now exists. Many of these are known to be marketed inappropriately, in other European countries<sup>(2)</sup>, due to their age recommendations and/ or their nutrient content. The aim of this study was to analyse the available infant snack foods on the Irish market and examine their energy and nutrient content, recommended ages, and potential messages around marketing.

A database of commercially-available infant snack products in Ireland was created, focusing on those recommended for ages 4–12 months. Information collected included the name, brand, price, packaging, nutrient content per 100 g and per recommended portion, ingredients, recommended age and any nutrition/health claims. n = 148 products were identified, which fell into nine categories of snack type. Statistical analyses was conducted using SPSS v26 for Mac (IBM). One-way Analysis of Variance (ANOVA) was used to compare nutrient content across categories.

Nine snack categories were identified ('Extruded snacks', 'Fruit-based pouches', 'Fruit-based snacks', 'Biscuits', 'Rice cakes', 'Fruit & veg snacks', 'Bars', 'Wafers', and 'Houmous snacks'. Snack products overall were relatively energy-dense, nutrient-poor and contributed only limited micronutrients. The majority contained relatively high levels of total sugars and fat as defined by the WHO<sup>(3)</sup>; with almost one-third of products (n = 44) containing 30% or more energy from total sugars, and n = 94 products containing over 4.5 g of fat per 100 g. 'Houmous' products and 'Extruded snacks' contained the greatest energy from fat, at 47% and 29.2% energy, on average, respectively, followed by 'bars' (26.7% energy) and 'biscuits' (23.9% energy). Fruit-based pouches and fruit-based snacks contained the greatest energy from total sugars, at 75.7% and 69.7%, respectively. Regarding age recommendations, 12.2% of products were advertised as suitable from 4 months of age.

A high proportion of the available snack food products targeted at young children aged 4–12 months contained high levels of energy from fat, and from total sugar, in this supermarket analysis. Of the 148 products in this study, 12.2% were advertised as suitable for infants from 4 months of age, which contradicts WHO recommendations that no foods should be recommended to children before 6 months of age.

### References

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