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A mapping study of food availability in an area of deprivation: Viewpark, North Lanarkshire, Scotland

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Low availability of fruit and vegetables (F&V) coupled with high availability of energy dense fast foods has been linked to unhealthy dietary patterns that may contribute to poor health in deprived areas^(1–3). Viewpark is an urban Scottish community with high levels of deprivation, high rates of CVD mortality and childhood obesity⁽⁴⁾, which has been targeted by the Scottish government for inclusion in The Healthy Weight Communities Programme to tackle poor health. The aim of this study was to map and characterise all food outlets in the Viewpark area and collect data on availability, quality and price of selected foods in stores and to determine meal popularity and average price from takeaway shops. Data will be used as baseline to inform Healthy Weight Communities Programme.

A cross-sectional survey was conducted in the summer of 2009 to assess food availability using a thirty-six-item food basket⁽⁵⁾, with additional quality and price data⁽⁵⁾ on twelve selected F&V items in small⁽⁶⁾ (<1500 sq ft; *n* 4), medium (1500–10000 sq ft; *n* 4) and large (>10000 sq ft; *n* 1) size stores selling fresh produce in Viewpark. Quality was subjectively assessed by the researcher using a Likert scale (1–5) based on three questions about freshness, edibility and buying decision (a total score of fifteen indicated highest quality). Meal popularity and prices were collected from all outlets selling takeaway foods using a short questionnaire.

A total of twenty-seven outlets were identified and mapped for analysis within the Viewpark boundary. Nine stores identified in the study area sold fresh F&V produce and items from the food basket and therefore food availability, quality and price data could be collected from these outlets with a further eighteen takeaway outlets identified. Food basket availability was 44%, 78% and 100%, respectively for small, medium and large stores. Availability of selected fresh F&V was high ($\geq 70\%$). Commonly available fresh F&V were apples, bananas, oranges, onions and potatoes with a mean average quality scores of 7.4 (range 4–11) in small, 10.6 (6–15) in medium and 13.6 (range 11–15) in large stores. Price and quality of fresh F&V items showed no statistical difference across store size categories. Mobile food units in the industrial estates within the area were the most abundant form of takeaway outlet (*n* 7), mostly selling shallow fried produce (such as bacon rolls). A number of cafes (*n* 4) were found within Viewpark, typically selling shallow fried produce (with chips being the most popular meal) and also reporting homemade vegetable soup as a frequently purchased alternative. Other popular take away meals were reported as follows: Bar/diners (*n* 2, steak pie), Chinese takeaways (*n* 2, chicken curry), Indian takeaways (*n* 2, chicken curry) and a Fish and Chips takeaway (*n* 1, fish supper). The prices for takeaway items varied between outlets, but in general the most popular items could be purchased for less than £1.10 and could be 'doubled up' (another sausage or bacon rasher added to the roll) for an additional 20–30p. All listed popular meals are typically energy dense and high in saturated fat with salt commonly added. Additionally, children's 'happy meals' were also available from a number of takeaway outlets. These meals would typically offer a carbonated soft drink (e.g. coca-cola) and chips as a side portion.

This study provides valuable baseline data of the food retail environment in Viewpark. At the time of the study there was a high availability of common fresh F&V and takeaway meals in outlets in Viewpark but due to the cross-sectional design, the information only provides a snapshot in time and thus availability, quality and pricing could change with season.

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