

OC100: Dietary patterns in 4–18 month old infants: Diet and Nutrition Survey of Infants and Young Children 2011 (DNSIYC)

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Adequate nutrition and infant feeding practices during infancy and early years of childhood are essential for ensuring growth, health and development of children⁽¹⁾. Dietary patterns provide insights into the types of foods being consumed together in the diet. The Diet and Nutrition Survey of Infants and Young Children (DNSIYC) survey is a representative sample (n 2,683) of UK infants and young children aged 4–18 months⁽²⁾. Principal component analysis (PCA) was applied to the mean intake of a 4-day-dietary diary to derive dietary patterns in 4–8, 9–12 and 13–18 months age groups. Foods with factor loadings above 0.3 were used to characterize the patterns.

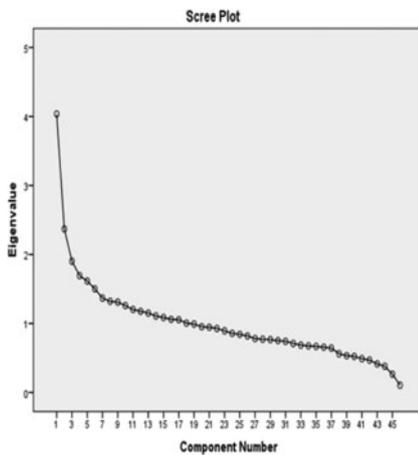


Fig. 1. Scree plot for infants 4–8 months.

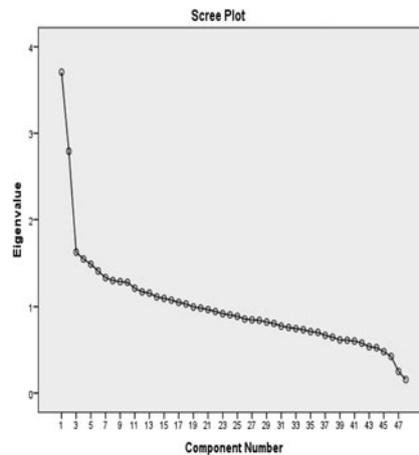


Fig. 2. Scree plot for infants 9–12 months.

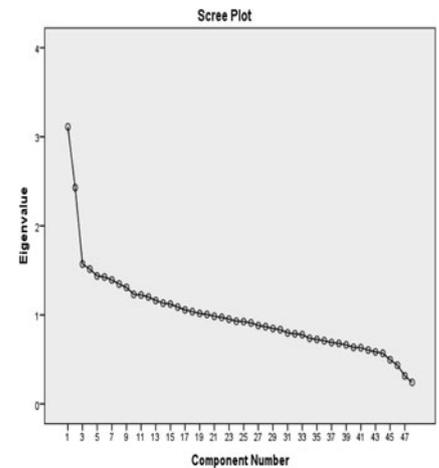


Fig. 3. Scree plot for infants 13–18 months.

The first dietary pattern in infants aged 4–8 months (Fig. 1) was the *High energy/Processed Foods* pattern, explaining 8.7% of the variance and included fat spreads, white bread, sugar confectionery, crisps and others. The second, *Healthy pattern* explained 5.1% of variance and included oily fish, cheese, white meat, fruits, vegetables and others. The third dietary pattern which explained 4.1% of the variance was the *Commercial Toddler Foods and Beverages* pattern which included many commercial toddler foods. In the 9–12 months age group two distinct dietary patterns were observed (Fig. 2). The first dietary pattern was the *Healthy* pattern and explained 7.7% of the variance, followed by the *High Energy/Processed Foods* pattern that explained 5.8% of the variance. Lastly, two dietary patterns were observed in young children aged 13–18 months (Fig. 3). The *High Energy/Processed Foods* pattern explained 6.4% of the variance and the *Healthy* pattern that explained 5% of the variance.

Dietary patterns emerge from infancy. The effects of these patterns on growth, development and on long-term outcomes need to be investigated.

1. WHO. Infant and Young Child Feeding. Geneva: WHO Press; 2009. <http://www.who.int/nutrition/publications/infantfeeding/9789241597494/en/> (accessed 25 Mar 2014).
2. Department of Health. Diet and Nutrition Survey of Infants and Young Children. <http://transparency.dh.gov.uk/2013/03/13/dnsiyc-2011/> (accessed 25 Mar 2014).