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Food consumption in the Diet and Nutrition Survey of Infants and Young Children 2011 (DNSIYC)

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The National Diet and Nutrition Survey assesses the dietary intakes and nutritional status of a representative sample of the population of the UK, aged ≥ 18 months⁽¹⁾. Recognising the need for similar information about those younger than 18 months, the Department of Health commissioned a survey of infants and young children aged 4–18 months, which was carried out in 2011. Consumption of milk and solid foods is reported here.

The sample was drawn using a multi-stage random probability design from Child Benefit records, at the time a universal credit with a take up rate of around 98%, in two waves to ensure sufficient numbers at each end of the age range. Background information was collected using home interviews for details of family dietary habits, socio-demographic status and health information, feeding practices, and eating patterns. Dietary data were collected using an estimated food diary of four consecutive days. Diaries were coded using DINO (Diet In Nutrients Out), HNR's dietary recording and analysis system, also used in NDNS. Food composition was from the Department of Health's Nutrient Databank (Year 3 of NDNS 2010/11). Completion of at least three diary days was considered fully productive. Results were subdivided into 4 age groups, 4–6 months, 7–9 months, 10–11 months, and 12–18 months. Weighting factors were applied to ensure representativeness⁽²⁾.

There were 2,683 fully productive children in DNSIYC, a response rate of 62%, with the achieved sample close to the UK population in terms of age, sex, ethnicity and region. 29% of children 4–6 months consumed breast milk in the diary period, decreasing to 8% of at 12–18 months. Only 2 children, both 4–6 months, were exclusively breastfed at the time of the survey. Cow's milk consumption increased with age, 15% of 4–6 months having whole milk, 5% semi-skimmed, rising to 79% of 12–18 months having whole milk, 13% semi-skimmed. Fruit and vegetable consumption (not including potatoes) was high, mean intake (including from composite dishes) being 100 g/d for 4–6 months and over 150 g/d for all other age groups. Consumption of savoury snacks increased with age, from 7% of 4–6 months to 43% of 12–18 months; similarly sugar, preserves and confectionery, from 11% of 4–6 months to 62% of 12–18 months, although both contributed little to energy. Milk or formula provided most energy: formula 51% for 4–6 months decreasing to 10% for 12–18 months, cow's milk 1% for 4–6 months, increasing to 18% for 12–18 months. Cereals and products contributed substantially to energy: 3% for 4–6 months, rising to 24% for 12–18 months. Commercial infant foods provided 16% energy for 4–6 months, decreasing to 6% for 12–18 months.

Results indicate that UK infants and young children are eating a mixture of foods with increasing incorporation of non-infant specific foods with age, as expected. Formula and cow's milk are the major sources of energy in this age group, followed by cereal products.

1. Department of Health. National Diet and Nutrition Survey <http://transparency.dh.gov.uk/2012/07/25/ndns-3-years-report/>.

2. Department of Health. Diet and Nutrition Survey of Infants and Young Children. <http://transparency.dh.gov.uk/2013/03/13/dnsiyc-2011/>.