2. Incidence, prevalence and duration of breastfeeding

Key Findings

- Mothers in the UK are breastfeeding their babies for longer with one in three mothers still breastfeeding at six months in 2010 compared with one in four mothers in 2005. However, the proportion of mothers following current UK government guidelines on exclusive breastfeeding remained unchanged between 2005 and 2010 – with only one in every hundred breastfeeding exclusively for the first six months of their baby’s life.

- The initial breastfeeding rate increased from 76% in 2005 to 81% in 2010. This includes all babies who were put to the breast at all, even if this was on one occasion only, and also includes giving expressed breastmilk. Initial breastfeeding rates in 2010 were 83% in England, 74% in Scotland, 71% in Wales, and 64% in Northern Ireland. The incidence of breastfeeding increased between 2005 and 2010 in England, Scotland and Wales (from 78%, 70% and 67% respectively) but there was no statistically significant increase in Northern Ireland.

- In terms of longer term trends, initiation rates have risen in the UK since 1990, when the UK series began. The UK initiation rate was 62% in 1990 and increases have been seen across all countries in the UK since then. Each country started from a different baseline, with the rates in Northern Ireland being lowest of all (36% in 1990).

- The highest incidences of breastfeeding were found among mothers aged 30 or over (87%), those from minority ethnic groups (97% for Chinese or other ethnic group, 96% for Black and 95% for Asian ethnic group), those who left education aged over 18 (91%), those in managerial and professional occupations (90%) and those living in the least deprived areas (89%).

- Whilst mothers of first babies were more likely to start breastfeeding than mothers of second or later babies (84% compared with 78%), mothers who had previously breastfed a baby for at least six weeks were more likely to start breastfeeding their latest baby than those who had breastfed a previous child for less than six weeks or not at all (97% compared with 79% and 35%). These variations were evident in all countries and were consistent with the patterns found in previous surveys.

- Across the UK, the prevalence of breastfeeding fell from 81% at birth to 69% at one week, and to 55% at six weeks. At six months, just over a third of mothers (34%) were still breastfeeding.

- Mothers continued to breastfeed for longer in 2010 than was the case in 2005. The gap in breastfeeding levels at birth between 2005 and 2010 was five percentage points (76% in 2005 compared with 81% in 2010) and by six months the gap became nine percentage points (25% in 2005 compared to 34% in 2010). This suggests that policy developments to improve support and information provided to mothers to encourage them to continue breastfeeding may have had an impact.

- Increases in the prevalence of breastfeeding were observed in England (from 26% when the baby was aged six months in 2005 to 36% in 2010) and Scotland (from 24% to 32% at six months respectively) and to a lesser extent in Wales (18% to 23% at six months respectively) whilst there was no significant difference in Northern Ireland (14% to 16% at six months respectively).

- In terms of longer term trends, while breastfeeding initiation has been steadily increasing over time, the prevalence of breastfeeding at later ages did not increase between 1995 and 2000. Improvements in the prevalence of breastfeeding at later ages have however been seen from 2005 onwards. At six weeks, the respective prevalence levels were 42% in 1995 and 2000, 48% in 2005 and 55% in 2010, while at six months they were 21% in 1995 and 2000, 25% in 2005 and 34% in 2010.
• Prevalence of breastfeeding at all ages of baby up to nine months was highest among certain demographic groups. For example, when babies were aged six months, this was highest for mothers from managerial and professional occupations (44%), those who left education aged over 18 (46%), those aged 30 or over (45%), those living in the least deprived areas (40%) and those from minority ethnic groups (66% for Chinese or other ethnic group, 61% for Black and 49% for both Asian and Mixed ethnic groups).

• Most mothers who had breastfed their previous child for six weeks or longer were also likely to feed their current baby for six weeks or more. Thus, at six weeks 82% of mothers who breastfed initially and who breastfed their previous child for six weeks or longer were still breastfeeding, while over half (55%) of these mothers were still breastfeeding at six months.

• Across the UK, 69% of mothers were exclusively breastfeeding at birth in 2010. At one week, less than half of all mothers (46%) were exclusively breastfeeding, while this had fallen to around a quarter (23%) by six weeks. By six months, levels of exclusive breastfeeding had decreased to one per cent, indicating that very few mothers were following the UK health departments' recommendation that babies should be exclusively breastfed until around the age of six months.

• Prevalence of exclusive breastfeeding was higher in England and Scotland and lower in Northern Ireland and Wales. For example at six weeks, it was 24% and 22% in England and Scotland respectively, compared to 17% in Wales and 13% in Northern Ireland.

• There has been an increase in the prevalence of exclusive breastfeeding at birth (from 65% in 2005 to 69% in 2010), but there has been little change thereafter up until six weeks. However, the fall-out in later months was lower in 2010 than 2005, for example, at three months, 17% of mothers were still breastfeeding exclusively (up from 13% in 2005) and at four months, 12% were still breastfeeding exclusively (up from 7% in 2005).

• Among mothers who breastfed exclusively at birth, 62% lost their exclusive breastfeeding status by the introduction of formula (or other milk), while a further seven per cent lost it by introducing both formula and other liquids at around the same age. One in ten mothers (10%) lost their exclusive feeding status by first giving their baby some other liquid, while the same proportion (10%) lost exclusivity through the introduction of solids.

• Mothers who lost their exclusive breastfeeding status due to solids breastfed exclusively for much longer than mothers who first introduced formula (for example, among those who breastfed exclusively at birth, 79% of those who first introduced solids and one per cent of those who first introduced formula were still breastfeeding exclusively at four months).
This chapter presents the key statistics about initiation of breastfeeding, the proportion of babies who received any breastmilk at specific ages up to nine months, and the length of time mothers continued to breastfeed. The survey also measured levels of exclusive breastfeeding at specific ages up to six months. For all these key measures comparisons are made with previous surveys where possible and variations by different demographic subgroups are explored. The feeding practices of twins and triplets are discussed in Appendix D.

Breastfeeding initiation and prevalence is also considered later in the report. Chapter 4 discusses how the gestational age of the baby at birth and events during and immediately after the birth may affect feeding, and more specifically breastfeeding, in the first few weeks. The findings of logistic regression to understand the impact of various demographic characteristics and other factors on breastfeeding initiation and prevalence at two and six weeks (based on full term babies) can be found in Appendix C.

### 2.1 Incidence of breastfeeding

Incidence of breastfeeding is defined as the proportion of babies who were breastfed initially. This includes all babies who were put to the breast at all, even if this was on one occasion only. It also includes giving expressed breastmilk to the baby.

#### 2.1.1 Trends in incidence of breastfeeding

The initial breastfeeding rate increased from 76% in 2005 to 81% in 2010 in the UK.

Incidence of breastfeeding by country follows the same pattern as in 2005, with initial breastfeeding rates highest in England (83%).

Incidence of breastfeeding has continued to increase across Great Britain. Breastfeeding rates rose from 78% to 83% between 2005 and 2010 in England, from 67% to 71% in Wales and from 70% to 74% in Scotland. In Northern Ireland, the rate changed from 63% to 64%, which was not a large enough increase to be statistically significant at a 5% significance level.

In terms of longer term trends, initiation rates have risen in the UK since 1990, when the UK series began. The UK initiation rate was 62% in 1990 and increases have been seen across all countries in the UK since then. Each country started from a different baseline, with the rates in Northern Ireland being lowest of all (36% in 1990).

*Table 2.1 and Figure 2.1*
2.1.2 Variations in the incidence of breastfeeding

Previous surveys have shown a consistent pattern of variation in the incidence of breastfeeding according to socio-demographic characteristics of the mother such as socio-economic classification, age and age at time of leaving full-time education. Socio-demographic trends in the incidence of breastfeeding in 2010 were comparable to previous surveys and broadly consistent across countries.

**Birth order**

As was the case in 2005, breastfeeding rates among mothers of first babies were higher in 2010 than among mothers of second or later babies, with 84% of first time mothers in the UK initiating breastfeeding, compared to 78% of those having a second or later baby. This pattern was consistent across all countries: 85% of mothers of first babies in England had breastfed compared to 80% of mothers of second or later babies. In Wales the figures were 74% of first time mothers compared to 67% of mothers of second or later babies, and in Scotland 77% and 72% respectively. The discrepancy was most pronounced in Northern Ireland, where seven out of ten (70%) first time mothers had breastfed, compared to six out of ten mothers of second or later babies (60%).
In 2010, UK breastfeeding rates among both mothers of first babies and mothers of second or later babies increased by a similar degree since 2005 (by five percentage points each, from 79% to 84% and from 73% to 78% respectively). This is in contrast to the 2005 survey where mothers of second or later babies had increased their breastfeeding rates since 2000 by a greater degree (by eight percentage points from 65% to 73% compared to five percentage points from 74% to 79% respectively among mothers of first babies).

Table 2.2 and Figure 2.2

Figure 2.2

Incidence of breastfeeding by birth order and country (2010)

<table>
<thead>
<tr>
<th>Country</th>
<th>First birth</th>
<th>Second or later birth</th>
</tr>
</thead>
<tbody>
<tr>
<td>England</td>
<td>80%</td>
<td>70%</td>
</tr>
<tr>
<td>Wales</td>
<td>75%</td>
<td>65%</td>
</tr>
<tr>
<td>Scotland</td>
<td>80%</td>
<td>70%</td>
</tr>
<tr>
<td>Northern Ireland</td>
<td>75%</td>
<td>65%</td>
</tr>
<tr>
<td>UK</td>
<td>80%</td>
<td>70%</td>
</tr>
</tbody>
</table>

Base: All Stage 1 mothers (15724)
Previous breastfeeding behaviour

Previous surveys have shown that the likelihood of a mother breastfeeding her second or subsequent baby is strongly associated with her experiences of feeding her previous children. In 2010 this association between current breastfeeding behaviour and previous behaviour was still in evidence. In the UK, while 78% of all mothers of second or later babies initially breastfed there was a large difference in feeding rates according to how they had fed their previous child. Almost all mothers (97%) who had breastfed their previous child for six weeks or more also breastfed initially this time round, while 79% of those who had breastfed their previous child for less than six weeks also initially breastfed their current child. This suggests that any previous experience of breastfeeding, even if only for a relatively short period, has a positive impact on future breastfeeding behaviour. Among mothers of second or later babies who had not breastfed their previous child, just over a third (35%) changed their behaviour and breastfed this time round, at least initially.

The pattern of previous breastfeeding behaviour influencing how likely mothers were to initiate breastfeeding with their current child was broadly consistent across all countries. However, whilst there was little difference between countries in how likely mothers who had previously breastfed for six weeks or more were to initiate breastfeeding (from 98% in England to 95% in Northern Ireland), the difference in incidence between countries among mothers who had not previously breastfed was much greater (from 38% in England to 20% in Northern Ireland).

Table 2.3

Age of mother

As in previous surveys, there was a strong association across all countries between breastfeeding and the age of the mother. Previous surveys have shown that older mothers are more likely to breastfeed, a pattern that was repeated in 2010. Across the UK as a whole, breastfeeding rates were lowest among mothers under the age of 20 (58%) and highest among mothers aged 30 and over (87%).

Mothers under the age of 20 were least likely to breastfeed in all countries but the percentage of mothers in this group who had breastfed varied between countries. Breastfeeding rates among mothers under the age of 20 were highest in England (61%), followed by Wales (50%), Scotland (39%) and Northern Ireland (34%).

At a UK level, increases in breastfeeding rates since 2005 were seen in all age groups, except for mothers aged 20-24. Increases since 2005 were seen among mothers aged 30 or over in all countries and among mothers aged 25-29 in England and Scotland (from 78% to 85% and from 70% to 76% respectively between 2005 and 2010).

Table 2.4 and Figure 2.3


**Ethnicity of mother**

Information on ethnicity was collected in England, Wales and Scotland, but was not asked in Northern Ireland. As in 2005, mothers from all minority ethnic groups were more likely to breastfeed compared with White mothers. Thus more than nine in ten mothers who classified themselves as Asian (95%), Black (96%), or Chinese or other ethnic origin (97%) initially breastfed compared with just under nine in ten (89%) mothers of mixed race and around four in five White mothers (79%). The increase in the incidence of breastfeeding since 2005 has come primarily from White mothers (74% to 79%): the increases in the Mixed and Chinese or other ethnic groups were not statistically significant. In any case, initiation rates in non-White communities were already at a high level.

**Socio-economic classification (NS-SEC) of mother**

Mothers were classified into socio-economic groups based on either their current or previous job. As with previous surveys, there was a clear association between breastfeeding and socio-economic status. Further details of the NS-SEC classification can be found in section 1.6 and section 1.9.3 of Chapter 1.
Incidence of breastfeeding remains highest amongst mothers in managerial and professional occupations, a pattern which was consistent across all countries. Across the UK, 90% of mothers in managerial and professional occupations breastfed, compared with 80% in intermediate occupations, 74% in routine and manual occupations and 71% among those who had never worked.

Across the UK as a whole, breastfeeding rates increased in all socio-economic groups. The largest increase occurred among mothers in routine and manual occupations, with rates increasing from 65% in 2005 to 74% in 2010. This has narrowed the gap, compared to 2005, between occupational groups.

Compared with England, breastfeeding rates were lower in Scotland, Wales and Northern Ireland for mothers in every socio-economic group, reflecting the overall pattern of breastfeeding rates by country.

In England, there was also a significant increase in the incidence of breastfeeding among mothers in routine and manual occupations, from 67% in 2005 to 76% in 2010 and among mothers who had never worked, from 68% in 2005 to 74% in 2010. In the other countries, significant increases were seen since 2005 among mothers in routine and manual occupations.

Table 2.6 and Figure 2.4

Figure 2.4
**Age at which mother completed full-time education**

Previous surveys have highlighted a correlation between incidence of breastfeeding and the age that the mother completed full-time education. As with previous surveys, incidence of breastfeeding was consistently higher among mothers who left full-time education when they were over 18 years of age. Across the UK as a whole, incidence of breastfeeding was 91% among mothers who left full-time education when they were over 18, compared to 75% who left education aged 17 or 18 and 63% who were 16 or under when they left full-time education.

Breastfeeding rates among UK mothers who left education aged 16 or under increased from 59% in 2005 to 63% in 2010, and rates among mothers who left education aged 17 or 18 also increased slightly overall from 73% to 75%.

In England, incidence of breastfeeding among those who left education aged 16 or under increased from 62% in 2005 to 66% in 2010. Other than this, variations by country were not large enough to be statistically significant.5

The 2010 breastfeeding rates among mothers who left full-time education when they were over 18 years of age remained similar to 2005.

**Table 2.7 and Figure 2.5**

**Figure 2.5**

![Bar chart showing incidence of breastfeeding by age at which mother completed full-time education and country (2010)](chart.png)

*Base: All Stage 1 mothers (15724)*
**Deprivation**

Although, as discussed in Chapter 1, the level of deprivation is linked with socio-economic group (for example, mothers from managerial and professional occupations are more likely to live in more affluent areas), it is also useful to consider initiation rates by level of deprivation in the area in which mothers live. The incidence of breastfeeding decreased as deprivation levels increased, so that fewer than three-quarters (73%) of mothers in the most deprived quintile initiated breastfeeding compared with almost nine in ten (89%) of the least deprived mothers.

The effect of deprivation on incidence of breastfeeding can be seen across all countries, although the difference between mothers living in the most and least deprived areas is smallest in England, where 76% of the mothers living in the most deprived areas initiated breastfeeding compared with 89% in the least deprived areas – a difference of 13 percentage points. Elsewhere in the UK, the differences between mothers living in the most and least deprived areas were between 25 and 30 percentage points: in Wales 60% of the most deprived mothers initiated breastfeeding compared with 85% of the least deprived, whilst in Scotland these figures were 60% and 88% respectively, and in Northern Ireland 49% and 79% respectively. This could be explained by the ethnic profile of each country. As discussed in Chapter 1, mothers from minority ethnic backgrounds are more likely to live in England than the devolved nations and only a very small minority live in Northern Ireland. Black and Asian mothers are more likely to live in the most deprived areas than other ethnic groups. As mothers from ethnic minorities were more likely to initiate breastfeeding, this may be why there was less of a gap in initiation rates between the most and least deprived areas in England, where the non-White population is greater.

**Table 2.8**

**Region**

Regional analysis is presented by Government Office Region rather than Strategic Health Authority as in 2005. In England, breastfeeding rates were lower than the 83% average in the North East (65%), the North West (76%), Yorkshire and the Humber (77%) and the West Midlands (78%) regions. Breastfeeding rates were in line with average for England in the East of England (85%), the South West (85%) and East Midlands (83%) and were higher than average in London (94%) and the South East (86%). This is likely to reflect the socio-economic and/or ethnic profile of different regions across England (and also applies to the devolved nations). For example, regions with a higher level of deprivation and a higher proportion of White mothers such as in the North East of England had lower initiation rates. In London where initiation rates were highest, there are more mothers from minority ethnic backgrounds who are more likely to breastfeed. The socio-economic and ethnic profile of mothers in different English regions and the devolved nations is discussed in more detail in Chapter 1.

**Table 2.9**
2.2 Standardisation of breastfeeding rates

To assess whether increases in the incidence of breastfeeding are solely due to changes in the demographic composition of the sample over time (e.g. mothers are now generally older and more educated, and older and more educated mothers are more likely to breastfeed) a statistical technique known as standardisation can be used.

Previous Infant Feeding Surveys have shown increasing percentages of mothers aged 30 or over and mothers who have continued in full-time education beyond the age of 18. Standardisation to the age of mother and what age the mother left full-time education in 1985 (or 1990 for Northern Ireland) allows us to see whether there is an element of ‘real’ change in the incidence of breastfeeding, which cannot be attributed to changes in the sample.

Table 2.10 shows the standardised incidence of breastfeeding by country. It is only possible to show this for England and Wales combined as standalone data for Wales does not exist before 2005.

Between 2005 and 2010, the survey estimates showed that incidence of breastfeeding had increased in England and Wales combined and in Scotland, but had not increased significantly in Northern Ireland. The standardised rates show the same pattern for all countries, suggesting that increases in England and Wales as well as in Scotland’ are ‘real’ changes over time rather than changes largely attributable to changes in the sample composition by age and length of time in education.

2.3 Prevalence of breastfeeding

Prevalence of breastfeeding is defined as the proportion of all babies who are being breastfed at specific ages, even if they are also receiving infant formula or solid food.

2.3.1 Trends in prevalence by country

As already seen in Table 2.1, across all countries initial breastfeeding rates were higher in 2010 compared with previous surveys. However, although more than four-fifths (81%) of mothers started breastfeeding at birth, there was a noticeable fall-out during the early weeks. Thus, across the UK the prevalence of breastfeeding fell from 81% at birth to 69% at one week, and to 55% at six weeks. At six months, over a third of mothers (34%) were still breastfeeding.

The level of fall-out by six weeks was lower in Scotland and England than in the other countries (there was a decrease of 24 percentage points to 50% in Scotland and 26 percentage points to 57% in England compared with 31 percentage point decreases in Wales and Northern Ireland). A similar pattern was evident at six months for Scotland only: there had been a decrease of 42 percentage points in Scotland, compared with decreases of 47 percentage points in England and 48 percentage points in Wales and Northern Ireland. Thus, while initiation rates were nine percentage points lower in Scotland than England (where the rates were the highest), by six months, the gap had narrowed (prevalence in England was 36% compared with 32% in Scotland).
Stage 1 of the survey, when babies were around four to ten weeks old, asked mothers the exact day they gave up breastfeeding meaning that it was possible to look at fall-out rates on a daily basis within the first week. Table 2.11 shows that fall-out was fairly evenly spread across the first week, with some mothers breastfeeding (or trying to breastfeed) for only a day or two. Across the UK, the proportion of mothers who were breastfeeding fell from 81% at birth to 76% at two days, to 72% at four days, and to 69% at one week.

**Table 2.11 and Figure 2.6**

**Figure 2.6**

Table 2.11 also shows the changes in prevalence of breastfeeding by country compared with the last survey. The pattern of fall-out was broadly similar in 2005 and 2010, but there is evidence that mothers continued to breastfeed for longer in 2010 than was the case in 2005, as the differences between 2005 and 2010 increased over time. In the UK, 81% of mothers initiated breastfeeding in 2010 compared with 76% in 2005. The prevalence of breastfeeding at one week was 69% in 2010 compared with 63% in 2005. At six weeks the respective prevalence levels were 55% compared to 48%, while at six months the levels were 34% in 2010 compared to 25% in 2005. Thus, while initiation rates were five percentage points higher in 2010 than 2005, by 6 months, the gap had increased to nine percentage points. This suggests that policy developments to improve support and information provided to mothers to encourage them to continue breastfeeding may have had an impact.

Higher prevalence of breastfeeding between 2005 and 2010 was evident in England and Scotland and to a lesser extent in Wales, but there has been no statistically significant increase in prevalence in Northern Ireland. In England, prevalence at six weeks was 57% in 2010 compared with 50% in
2005; the corresponding figures for Scotland were 50% and 44% respectively. It did not increase significantly in Wales or Northern Ireland. At six months, the largest increases were again evident in England and Scotland (26% in 2005 to 36% in 2010 in England; 24% to 32% in Scotland). In Wales, prevalence at six months increased from 18% in 2005 to 23% in 2010, whilst there was again no significant difference in Northern Ireland.

In terms of longer term trends, Table 2.11 and Figure 2.7 also show that while breastfeeding initiation has been steadily increasing over time, the prevalence of breastfeeding at later ages did not increase between 1995 and 2000. Increases in the prevalence of breastfeeding at later ages have however been seen from 2005 onwards. At six weeks, the respective prevalence levels were 42% in 1995 and 2000, 48% in 2005 and 55% in 2010, while at six months they were 21% in 1995 and 2000, 25% in 2005 and 34% in 2010.

Table 2.11 and Figure 2.7

Figure 2.7

Prevalence of breastfeeding at ages up to 6 months by year
(UK, 1995 to 2010)

Age of baby

Base: All Stage 3 mothers 2010 (10768), 2005 (9416), 2000 (7267), 1995 (7198)
2.3.2 Variations in the prevalence of breastfeeding

Birth order

As already seen in section 2.1.2, first-time mothers were more likely to initiate breastfeeding at birth. However, Table 2.12 shows that first-time mothers had a higher fall-out rate compared with mothers of second or later babies (from birth to six weeks the fall-out rate was 29 percentage points for first-time mothers and 23 percentage points for mothers of second or later babies). This meant that there was no difference in the prevalence of breastfeeding by birth order from six weeks onwards (when prevalence was 55% for both first-time mothers and mothers of second or later babies). In 2005 and earlier surveys, prevalence was higher among second-time mothers from four months onwards, so this suggests that while the fall-out rate was still higher for first-time mothers in 2010, it was not as marked as was the case previously. This may be as a result of improved information and support for first-time mothers, to manage their expectations of what breastfeeding will be like and enable them to resolve any problems they may experience when establishing breastfeeding.

Table 2.12

Age of mother

Table 2.12 shows breastfeeding prevalence by the age of the mother. This shows that not only were initial breastfeeding rates lower among younger mothers but also that the fall-out rate was higher among this group. At six months, mothers aged 35 or over were more than four times as likely to be breastfeeding compared with mothers aged under 20 (45% and 11% respectively).

Of particular note was the fall-out rate among mothers under 25. While over half (56%) of mothers aged under 20 and over two-thirds (68%) of mothers aged 20-24 breastfed or tried to breastfeed initially, this had fallen to 42% and 52% by one week.

Table 2.12

Socio-economic classification (NS-SEC) of mother

Table 2.12 shows that the differences in the levels of breastfeeding seen at birth between mothers from different socio-economic groups continued through until nine months, with mothers from managerial and professional occupations having higher rates of breastfeeding at all ages compared with mothers from intermediate occupations, who in turn had higher rates compared with mothers from routine and manual occupations. For example, prevalence of breastfeeding at six weeks was 70% among mothers from managerial and professional occupations compared with 52% among mothers from intermediate occupations and 42% among mothers from routine and manual occupations. Mothers who had never worked had similar levels of breastfeeding to mothers from routine and manual occupations (45% and 42% respectively, which is not a statistically significant difference).

Table 2.12
Age at which mother completed full-time education

Table 2.12 shows that the different rates of breastfeeding seen at birth by the length of time the mother was in education continued at all ages of the baby. Mothers who had left full time education at the age of 16 or younger were more likely to stop breastfeeding within the first two weeks than mothers who had left full time education when they were over 18 years of age (44% of mothers who left education at 16 or younger were still breastfeeding at two weeks, compared with 79% of mothers who left education when they were over 18 years of age). The pattern of higher fall-out among those who had left education at a younger age continued at later ages of the baby as well. Thus, at six weeks, mothers who left full-time education at over the age of 18 were nearly twice as likely to be breastfeeding compared with mothers who left aged 16 or under (70% and 32% respectively). At six months, they were more than 2.5 times as likely to be breastfeeding (46% and 17% respectively).

Deprivation

Level of deprivation continued to be related to prevalence of breastfeeding at all ages of the baby, although the disparity between the most and least deprived areas was more marked up to six weeks, reflecting higher fall-out rates in more deprived areas when babies were younger; thereafter the gap narrowed. For example, at two weeks, 56% of mothers in the most deprived areas were breastfeeding, compared with 75% of mothers in the least deprived areas. However, by six months, 31% of mothers in the most deprived areas were still breastfeeding, compared with 40% of mothers in the least deprived areas. This may be due to the higher proportion of mothers from minority ethnic backgrounds living in the most deprived areas, particularly in England, who tended to breastfeed for longer (see also the earlier analysis of breastfeeding initiation by deprivation and ethnicity in section 2.1.2 as well as the analysis of prevalence by ethnicity in the next section).

Ethnicity of mother

Mothers from Asian, Black and Chinese or other ethnic groups were the most likely to breastfeed initially, while White mothers were the least likely (mothers of Mixed ethnic origin fell in between the two). This difference was maintained through until later ages, although to a lesser extent among Asian mothers: At six months, 66% of mothers of Chinese or other ethnic origin and 61% of Black mothers were still breastfeeding. Prevalence at six months among Asian mothers was the same as for mothers of Mixed ethnic origin (49%), but all these groups had higher prevalence than White mothers (32%).

Particularly noticeable was the high level of breastfeeding among Black and Chinese or other mothers and the relatively low fall-out rate. While 95% of Black mothers breastfed initially, this had fallen to 85% at six weeks, and to 73% at four months. For mothers of Chinese or other ethnic origin, the figures were 96%, 82% and 76% respectively.
Government Office Region

Table 2.14 shows that the regional differences seen in England in initial rates of breastfeeding were maintained at later ages. At six months the highest breastfeeding rates were in London (51%) and the South East (40%), while the lowest rates were in the North East (19%), North West (29%) and Yorkshire and The Humber (29%). The level of fall-out until six months was broadly consistent across the regions, although it was lowest in London (at 43 percentage points), which also had the highest initiation rate (94%).

Table 2.14

2.4 Duration of breastfeeding

The duration of breastfeeding refers to the length of time that mothers who breastfeed initially continue to breastfeed even if they are also giving their baby other milk and solid foods.

The results presented in this section relate only to mothers who ever breastfed and shows the proportion who were still breastfeeding at different ages of the baby. Duration of breastfeeding is probably an easier measure to interpret than prevalence when comparing the different fall-out rates among various sub-groups, simply because all groups begin from the same starting point (i.e. 100% of mothers are breastfeeding).

2.4.1 Trends in duration by country

In 2010, across the UK, 94% of mothers who breastfed initially were still doing so after two days (so 6% had stopped) and 86% were still breastfeeding at one week (so 14% had stopped by this stage). By six weeks, 68% of mothers who initiated breastfeeding were still doing so and this fell to 42% by six months.

Between countries the fall-out rate was higher at all ages in Wales and Northern Ireland compared with England and Scotland. For example, at one week 23% of mothers in Wales and 26% of mothers in Northern Ireland who breastfed initially had stopped compared with only 13% in England and 17% in Scotland. A similar difference was also apparent at six weeks and six months, although there was no distinction between England and Scotland at these later ages. Thus, at six months around three-quarters of mothers in Northern Ireland (75%) and two-thirds of mothers in Wales (67%) who breastfed initially had stopped compared with nearly three in five mothers in England and Scotland (57% in each).

Table 2.15 and Figure 2.8
Table 2.15 also compares the duration of breastfeeding at different ages between 2005 and 2010. This shows that across the UK, mothers continued breastfeeding for longer in 2010 than was the case in 2005. For example, 81% of mothers who breastfed initially were still doing so at two weeks in 2010, compared with 78% in 2005. The difference was highest when the babies were aged six months, where 42% of mothers who breastfed initially were still breastfeeding in 2010, compared with 33% in 2005.

The increase in duration of breastfeeding since 2005 was most evident in England and Scotland, and to a lesser extent in Wales. For example, 43% of breastfeeding mothers in England and Scotland were still doing so at six months, compared with 34% in each country in 2005. In Wales, 33% were breastfeeding at six months compared with 27% in 2005. In Northern Ireland, there was little difference between 2005 and 2010 in the proportion of mothers still breastfeeding at different ages (25% at six months in 2010 and 22% in 2005).
2.4.2 Variations in duration of breastfeeding

**Birth order**

Table 2.16 confirms what has been found in previous surveys, namely that mothers of second or later babies tended to breastfeed for longer than first-time mothers, although the difference was not as great as in 2005. There was no difference when the babies were aged one week, but by six weeks 70% of mothers of second or later babies who initially breastfed were still breastfeeding compared with 66% of first-time mothers. This gap was also evident at six months with 45% of mothers of second or later babies still breastfeeding compared with 40% of first-time mothers.

*Table 2.16*

**Previous breastfeeding experience**

It has already been shown in Table 2.3 that over a third (35%) of mothers who did not breastfeed their previous child switched to breastfeeding at least initially for their current baby. It is interesting to look at the duration of breastfeeding among mothers of second or later babies by how they fed their previous child to see whether their experiences this time round reflected the previous time.

As Table 2.16 and Figure 2.9 show, levels of fall-out were substantial among those who did not breastfeed their previous child but they were quite similar to those who had previously breastfed for less than six weeks (37% and 39% stopping after one week respectively). Interestingly, at six months, breastfeeding rates among mothers who had not breastfed their previous child were slightly higher compared with mothers who had breastfed their previous child for less than six weeks (19% compared with 12%).

Most mothers who had breastfed their previous child for six weeks or longer were also likely to feed their current baby for six weeks or more. Thus, at six weeks 82% of these mothers were still breastfeeding, while over half (55%) were still breastfeeding at six months.

*Table 2.16 and Figure 2.9*
Table 2.16 and Figure 2.10 show that older mothers were more likely than younger mothers to breastfeed for longer. Although fall-out rates were higher among mothers under 20 at all ages, the difference relative to mothers aged 35 or over was higher from six weeks onwards. For example, at one week 76% of mothers aged under 20 were still breastfeeding, compared with 90% of mothers aged 35 or over (a difference of 14%). By six weeks, the figures were 43% and 76% and by six months they were 20% and 52% (representing differences of 33 percentage points and 32 percentage points respectively between the youngest and oldest age groups).
**Figure 2.10**

![Graph showing duration of breastfeeding at ages up to 6 months by age of mother (UK, 2010)]

- Base: All Stage 3 mothers who breastfed initially (8695)

**Socio-economic classification (NS-SEC) of mother**

Table 2.16 and Figure 2.11 show that among mothers who breastfed initially, those from higher socio-economic groups tended to breastfeed for longer, with mothers from routine and manual occupation groups and those who had never worked being more likely to stop feeding after one week. Thus, after one week 92% of mothers from managerial and professional occupations were still breastfeeding compared with 80% of mothers from routine and manual occupation groups and the same proportion of mothers who had never worked. This difference in fall-out rate continued at later ages so that by six weeks 77% of mothers from managerial and professional occupations were still breastfeeding compared with 65% of mothers from intermediate occupations, and 57% of mothers from routine and manual occupations. This pattern of difference by socio-economic group persisted at six months.

Mothers who had never worked had a lower fall-out rate at six months compared with mothers from routine and manual occupation groups (44% compared with 34%). This might be explained by the fact that they did not work, meaning that they had more opportunity to continue breastfeeding for longer compared with mothers who returned to work when their baby was relatively young (see next section). It may also be linked to ethnicity. As discussed in Chapter 1, mothers from minority ethnic groups were more likely to have never worked and they also had higher breastfeeding rates at six months (as discussed in the ethnicity section below and shown in Table 2.17).

**Table 2.16 and Figure 2.11**
When mother returned to work

As discussed in Chapter 10, mothers returned to work later in 2010 than they did in 2005: for example, 29% of mothers had returned to work by Stage 3 of the survey in 2010, considerably fewer than the 45% who were back at work by Stage 3 in 2005. In 2005, there was little difference in fall-out rates by working status of the mother in the early stages after birth up to six weeks, but at both four and six months, mothers who returned to work when their baby was younger than six months were more likely to have stopped breastfeeding than mothers who had not yet returned to work (for example, at four months, 35% of mothers who returned to work when their baby was less than four months and 33% of those who returned when their baby was between four and six months were still breastfeeding compared with 44% of all mothers who initiated breastfeeding). This pattern was no longer evident in 2010. There was no clear relationship between the age of the baby when the mother returned to work and duration of breastfeeding, which suggests that returning to work per se did not have much bearing on mothers’ decision to stop breastfeeding in 2010. For example, the duration of breastfeeding for mothers who returned to work when their baby was less than four months was in line with the average (51% were breastfeeding at four months compared with 52% of all mothers who breastfed initially).
Age at which mother completed full-time education

Table 2.16 shows that mothers who were older when they left full-time education breastfed for longer than mothers who left when they were younger. For example, at six weeks 77% of mothers who left education aged over 18 were still breastfeeding compared with 51% of those who left at age 16 or earlier. At six months the equivalent rates were 51% and 27% respectively.

Table 2.16

Ethnicity of mother

White mothers who breastfed initially did so for a shorter time compared with mothers from other ethnic groups. Mothers from Black, Mixed and Chinese or other backgrounds had a particularly low fall-out rate, with 89%, 86% and 85% of those who breastfed initially still doing so at six weeks compared with 65% of White mothers. At six months breastfeeding rates among mothers of all minority ethnic groups were higher compared with White mothers (Chinese or other 68%, Black 64%, Mixed 56%, Asian 51% compared with 40% White).

Table 2.17 and Figure 2.12

Figure 2.12

Duration of breastfeeding at ages up to 6 months by ethnicity of mother (UK, 2010)

Base: All Stage 3 mothers in Great Britain who breastfed initially (7374)
Region

Table 2.18 shows that duration of breastfeeding among mothers who breastfed initially varied by region in England, with mothers in the south feeding for longer than mothers in the north. For example, at six months 29% of mothers in the North East and 37% in Yorkshire and Humberside were still breastfeeding compared with 54% of mothers in London and 46% in the South East. The proportion of mothers still breastfeeding at six months in the other regions were similar, ranging from 39% in the North West to 43% in the East of England.

Table 2.18

2.5 Exclusive breastfeeding

The definition of exclusive breastfeeding adopted by the World Health Organisation in 1991 is that an infant receives only breastmilk, and no other liquids or solids, with the exception of medicine, vitamins, or mineral supplements.

In 2000, the World Health Organisation commissioned a systematic review of the published scientific literature on the optimal duration of exclusive breastfeeding (updated 2009). As a result of this, the WHO recommended exclusive breastfeeding for the first six months. On the advice of the Scientific Advisory Committee on Nutrition, this revised guidance was adopted by the UK health departments from 2003 onwards.

The 2005 Infant Feeding Survey was the first time that an attempt was made to measure the proportion of all babies and infants who are exclusively breastfed at specific ages and the duration of exclusive feeding. Thus, for the first time, it is possible to compare prevalence and duration of exclusive breastfeeding against this benchmark.

2.5.1 Defining and measuring exclusive breastfeeding

In considering how to define and measure exclusive breastfeeding it is important to distinguish between two concepts. The first concept, and the one that is more commonly measured, is the proportion of babies or infants who are currently being exclusively breastfed. This is usually measured by asking mothers what they have fed their babies over a specific period, such as the last 24 or 48 hours. The strength of this measure is that it is unlikely to be affected by significant recall error since the period being asked about is both easily defined and in the recent past. However, the weakness of the measure is that it represents only a ‘snapshot’ and so is not a good measure of irregular feeding patterns. Thus, infants who are given formula, other liquids, or solids, on an irregular basis, would be categorised as ‘exclusive’ if they had not received them in the 24 or 48 hours before the survey.

The second way of thinking about exclusivity is to measure the proportion of babies or infants who have been exclusively breastfed since birth. This measure is better at capturing irregular feeding patterns since it seeks to measure babies and infants who have only ever been given breastmilk since birth. With this measure exclusive feeding status is ‘lost’ the first time that formula, other liquids, or solids are given to a baby. The weakness of this measure, however, is that in the absence of continuous monitoring, it relies upon mothers being able to accurately recall when they first introduced formula, other liquids, and solids. Because of this a degree of recall error is likely to be incorporated into the measure.
The aim of the 2010 Infant Feeding Survey was to try and measure the proportion of infants at different ages who had been exclusively breastfed since birth.

The way in which the definition of exclusive breastfeeding used in this report was measured is outlined below:

- At each stage of the survey mothers were asked whether they had ever given their babies formula, other liquids, or solids since birth. If the mother said that they had given any of these they were then asked at what age they had first introduced each one;

- At each stage of the survey the way in which the age data was collected was tailored to what was considered to be the most realistic way of collecting the data given the likely recall period. Thus, at Stage 1, mothers were asked when they had first introduced formula or other liquids in terms of days or weeks; at Stage 2, when their babies were around four to six months old, they were asked about it in terms of weeks; and at Stage 3, when their babies were around eight to ten months old, they were asked about it in terms of months. While it was accepted that asking respondents to provide information to the nearest week or the nearest month created a degree of imprecision in the data collected, it was felt that this had to be balanced against the ability of mothers to accurately recall these events;

- Using this information three intermediate measures were then derived for each mother using a common timescale:
  - Age at which formula (or other milk) was first introduced;
  - Age at which any other liquids were first introduced; and
  - Age at which solids were first introduced

- Finally, a composite measure of exclusivity was derived by using the three intermediate measures to determine at what age exclusivity was lost by the introduction of formula, or other liquids, or solids. In deriving this measure careful attention was given to how the ‘boundary points’ were defined. For example, if a mother reported that they first introduced formula at six weeks, should they be counted as being exclusive or not exclusive at six weeks? It was decided that in such a situation the baby would be counted as being exclusively breastfed up to six weeks, but not at the six week point itself. This same principle was applied for all different ages.

It should be noted that in this chapter, formula, solids and other liquids are discussed only in relation to measuring exclusive breastfeeding. Specific information about formula, solids, and other liquids is contained in the rest of the report (Chapters 5, 8 and 9).

2.5.2 Trends in prevalence of exclusive breastfeeding by country

Prevalence of exclusive breastfeeding is defined as the proportion of all babies who are being exclusively breastfed at specific ages, meaning that they have only ever been given breastmilk up to that specific age.

Table 2.19 shows the proportion of all mothers who were exclusively breastfeeding at different ages up to six months in each country. Mothers who introduced something other than breastmilk on day 1 were defined as not feeding exclusively at birth.
Across the UK, 69% of mothers were exclusively breastfeeding at birth in 2010. At one week less than half of all mothers (46%) were exclusively breastfeeding, while this had fallen to around a quarter (23%) by six weeks. By six months levels of exclusive breastfeeding had decreased to one per cent.

There has been an increase in the prevalence of exclusive breastfeeding at birth (from 65% in 2005 to 69% in 2010), but there has been little change thereafter up until six weeks. However, the fall-out in later months was lower in 2010 than 2005, for example, at three months, 17% of mothers were still breastfeeding exclusively (up from 13% in 2005) and at four months, 12% were still breastfeeding exclusively (up from 7% in 2005).

The prevalence of exclusive breastfeeding at birth was 71% in England, 63% in Scotland, 57% in Wales and 52% in Northern Ireland, reflecting the incidence of breastfeeding in each country. However, while the pattern of fall-out was broadly similar across all countries, the gap between England and Scotland narrowed over time, so that by six weeks the prevalence of exclusive breastfeeding in Scotland was on a par with England (22% and 24% respectively), while it was 17% in Wales and 13% in Northern Ireland. By six months rates were negligible in all countries.

There were distinctions by country in terms of changes since 2005. The increase in exclusive breastfeeding at birth was evident in England only (66% to 71%). However, increases in exclusive breastfeeding prevalence were apparent between two and four months in England, Scotland and Wales and were most noticeable at three and four months, in line with the national picture. In Northern Ireland, there was no change in the prevalence of exclusive breastfeeding.

Table 2.19 and Figures 2.13 and 2.14
**Figure 2.13**

Prevalence of exclusive breastfeeding at ages up to 6 months by year (UK, 2005 and 2010)

Proportion of mothers breastfeeding

- **2010**
- **2005**

Base: All Stage 3 mothers 2010 (10768), All Stage 3 mothers 2005 (9416)
2.5.3 Variations in the prevalence of exclusive breastfeeding

It is worth noting that because prevalence of exclusive breastfeeding is obviously linked to the overall incidence and prevalence rates the same patterns that have already been seen in relation to incidence, prevalence, and duration of breastfeeding among different socio-demographic groups will be largely repeated for exclusive breastfeeding.

**Birth order**

At birth, first-time mothers were more likely than mothers of second or later babies to be exclusively breastfeeding (71% and 67% respectively). However, first-time mothers were more likely than mothers of second or later babies to introduce something other than breastmilk at an early stage, meaning that at three weeks onwards the prevalence of exclusive breastfeeding was higher among mothers of second or later babies. For example, at three weeks 38% of mothers of second or later babies were breastfeeding exclusively compared with 33% of first-time mothers, at six weeks the figures were 26% and 21% respectively, and at 4 months 15% and 10% respectively.

*Table 2.20*
Age of mother

Older mothers were more likely than younger mothers to be breastfeeding exclusively at birth. Around three-quarters of mothers aged 35 or over (76%) and aged 30-34 (75%) were feeding exclusively at birth compared with just over half (55%) of mothers aged 20-24 and under half (46%) of mothers aged under 20. Differences in rates of exclusivity by the mother’s age were still evident at later ages of the baby but the gap narrowed over time, with 30% of mothers aged 35 or over and 12% of mothers aged under 20 breastfeeding exclusively at 6 weeks and 16% of mothers aged 35 or over and five per cent of mothers aged under 20 and aged 20-24 breastfeeding exclusively at 4 months.

Table 2.20

Socio-economic classification (NS-SEC) of mother

As with levels of overall prevalence, mothers from managerial and professional occupation groups were the most likely to be breastfeeding exclusively at birth (79%), while mothers from routine and manual occupation groups (61%) and mothers who had never worked (53%) were the least likely.

Again, these differences in levels of exclusive breastfeeding among different social groups were maintained at later ages of the baby. At four months, mothers from managerial and professional groups were over twice as likely to be breastfeeding exclusively (18%) than both mothers from routine and manual occupations (7%) and those who had never worked (8%). However, by six months the prevalence of exclusive breastfeeding was one per cent among mothers from all social groups.

Table 2.20

Deprivation

Mothers living in the most deprived areas were least likely to breastfeed exclusively at birth (60%), while mothers living in the least deprived areas were most likely to do so (77%). The gap between the mothers in the most and least deprived areas declined over time however. For example, at four weeks, 23% of mothers in the most deprived areas were breastfeeding exclusively, compared with 37% of mothers in the most affluent areas. However, by four months, 10% of mothers in the most deprived areas were breastfeeding exclusively, compared with 16% of mothers in the least deprived areas.

Table 2.20

Ethnicity of mother

As shown in Table 2.21 levels of exclusive breastfeeding at birth were higher among mothers of all minority ethnic groups compared with White mothers: for example, 68% of White mothers breastfed exclusively at birth compared with 78% of Black mothers and 75% of Asian mothers. However, at one week, levels of exclusive feeding were fairly similar with 46% of White mothers feeding exclusively compared with 48% of Asian and 49% of Black and Chinese or other ethnic groups.
Levels of exclusivity were highest among mothers of Mixed ethnic origin at one to four weeks, although they were similar for other ethnic groups, but thereafter there was no distinction by ethnicity.

It is interesting to note that while prevalence levels of breastfeeding generally were higher for Asian, Black and Chinese or other communities, this was not the case for exclusive prevalence after one week.

**Table 2.21**

**Region**

In England, levels of exclusivity by region broadly reflected the differences already seen in overall prevalence levels. The lowest levels of exclusive prevalence at birth were in the North East (54%) and the North West (63%) and the highest levels were in London (79%) followed by the South East (74%) and the South West, East Midlands and East of England (all at 73%). This same regional trend was evident throughout the six month period when prevalence was measured, although the gap between the highest and lowest narrowed considerably over time. For example, at four months, 15% of mothers in London and the South East who exclusively breastfed at birth were still doing so, compared with eight per cent in the North East.

**Table 2.22**

2.5.4 Duration of exclusive breastfeeding by country

Duration of exclusive breastfeeding refers to the length of time that mothers who breastfeed exclusively at birth continue to feed their baby only breastmilk.

Table 2.23 shows that in 2010 across the UK there was a sharp fall-out in exclusivity in the early weeks among mothers who were exclusively breastfeeding at birth. Thus, at one week 66% of mothers who fed exclusively at birth were still doing so, while by six weeks this had fallen to 34% of mothers who had fed exclusively at birth. At four months, 18% of mothers who were feeding exclusively at birth had still only ever given their baby breastmilk, but this had fallen to one per cent at six months.

Compared with 2005, the fall-out in the first week was more pronounced in 2010 (66% at one week in 2010 were still exclusively breastfeeding compared with 69% in 2005), but thereafter the duration of exclusive breastfeeding up to six weeks was similar to 2005. At later ages of the baby, exclusive breastfeeding was higher in 2010 than in 2005. This was particularly the case at three and four months (21% in 2005 were still breastfeeding at three months compared with 25% in 2010; at four months there was an even greater increase from 12% in 2005 to 18% in 2010).

The fall-out in exclusive feeding was broadly similar across all countries, although it occurred at a faster rate in Wales and Northern Ireland compared with Scotland and England. For example, 45% of mothers in Scotland and 44% of mothers in England who were breastfeeding exclusively at birth were still doing so at four weeks compared with 41% of mothers in Wales and 35% in Northern Ireland. This difference was still evident, although to a lesser extent, at four months with 19% of mothers in Scotland and 18% of mothers in England still feeding exclusively compared with 15% per cent in Wales and 12% in Northern Ireland.
The same pattern of duration figures being higher in England and Scotland than in Wales and Northern Ireland was also evident in 2005, though as with the overall duration of exclusive breastfeeding, the fall-out rate in each of the countries was more pronounced in 2005 than in 2010. While there was little change in the duration of exclusive breastfeeding between 2005 and 2010 in each country for the earlier time points, increases were evident later on, although when this started varied by country. The greatest increase since 2005 in the duration of exclusive breastfeeding occurred in Scotland and Wales; there were significant increases from four weeks in Scotland and Wales. The increase was most pronounced at three and four months, for example, in Wales 15% of mothers who exclusively breastfed at birth were still doing so at four months, up from seven per cent in 2005; in Scotland 19% were doing so in 2010, up from 10% in 2005. In England, duration of exclusive breastfeeding had also increased at three and four months (25% at three months, up from 21% in 2005 and 18% at four months, up from 12% in 2005) and in Northern Ireland, this was the case at four months (12%, up from eight per cent in 2005).

2.5.5 Variation in the duration of exclusive breastfeeding

Detailed analysis by subgroup is not repeated for subgroups where the findings have been discussed in the section on prevalence of exclusive breastfeeding as the patterns observed are broadly the same.

**Birth order**

Table 2.24 shows that among mothers who breastfed exclusively at birth the fall-out rate was higher among first-time mothers compared with mothers of second or later babies. At one week 36% of first-time mothers who were feeding exclusively at birth were no longer doing so compared with 30% of second-time or later mothers. This difference was evident at both six weeks with 38% of second-time mothers still feeding exclusively compared with 30% of first-time mothers and also at four months (22% and 14% respectively).

**Previous feeding experience**

Although no information on exclusive breastfeeding of previous children was available it is interesting to look at the duration of exclusive breastfeeding by how mothers of second or later babies fed their previous child. Table 2.24 shows that mothers who breastfed their previous child for six weeks or more (not necessarily exclusively) breastfed exclusively for longer this time round compared with both mothers who had fed their previous child for less than six weeks and mothers who had not breastfed their previous child at all. Mothers who had not breastfed their previous child continued to breastfeed their baby exclusively for longer than those who had only breastfed for a short period previously, although from two months on there was no significant difference between the two groups.

At one week, 79% of mothers who had breastfed their previous child for six weeks or more were still exclusively feeding their current baby at one week compared with 52% of mothers who had not breastfed their previous child and 38% of those who had breastfed their previous child for less than six weeks.
At six weeks nearly half (45%) of all mothers who had breastfed their previous child for six weeks or more were still feeding exclusively compared with 20% of mothers who did not breastfeed their previous child and 12% of mothers who breastfed their previous child for less than six weeks.

Table 2.24

2.5.6 How exclusive breastfeeding status was lost

To try to better understand the nature of exclusive breastfeeding, it is interesting to look at how mothers who breastfed exclusively at birth lost their exclusive status. Exclusivity is considered to be lost the first time that formula or other milk, solids, or any other liquid is given to a baby. From the data it was possible to work out for each mother who breastfed exclusively at birth exactly what, apart from breastfeeding, they first gave their baby. Some mothers may have given their baby both formula and liquid, for example, or some other combination around the same time. Since much of the data was collected in banded periods (e.g. weeks) it was not always possible to know which component was actually introduced first.

All mothers who were feeding exclusively at birth were divided into five categories;

- Exclusive feeding status lost by the introduction of formula (or other milk);
- Exclusive feeding status lost by the introduction of any other liquids, such as water or juice;
- Exclusive feeding status lost by the introduction of formula and other liquids at around the same time;
- Exclusive feeding status lost by the introduction of solids; and
- Exclusive feeding status lost by the introduction of solids and something else (formula and/or other liquids) at around the same time

Table 2.25 and Figure 2.15 show that just over three in five mothers (62%) who breastfed exclusively at birth lost their exclusive feeding status by giving their baby formula, while a further seven per cent lost it by introducing formula and other liquids at around the same age. One in ten mothers (10%) lost their exclusive feeding status by first giving their baby some other liquid such as water or juice, while the same proportion (10%) lost their exclusive status by giving their baby solids. A further nine per cent did so by introducing both solids and either formula or some other liquid at around the same time. These findings are very similar to the 2005 survey results.

Table 2.25 and Figure 2.15
Table 2.26 shows that there were some clear differences in the characteristics of mothers according to how they lost their exclusive feeding status. Compared with all mothers who fed exclusively at birth, mothers who lost their feeding status by first giving their baby solids tended to be disproportionately older, have been in education for longer, and from professional and managerial social groups. Thus, 50% of mothers who lost their exclusive feeding status by introducing solids were from managerial and professional occupations (compared with 40% of all mothers who fed exclusively at birth); 68% left full time education when aged over 18 (compared with 58% of all mothers); and 38% were aged 30 to 34 and 25% were 35 or over (compared with 31% and 21% of all mothers respectively).

Mothers who lost their exclusive feeding status by giving their baby formula and some other liquid such as water or juice tended to be disproportionately younger and from routine and manual occupations. Thus, 30% of mothers who lost their exclusive feeding status by first introducing formula and other liquids were aged under 24 (compared with 19% of all mothers who fed exclusively at birth); and 42% were from routine and manual occupations or had never worked (compared with 32% of all mothers).

Table 2.26 and Figure 2.16 show the duration of exclusive breastfeeding according to how mothers lost their exclusive feeding status. Mothers who lost their exclusive feeding status by the introduction of formula had a much shorter duration of exclusive breastfeeding compared with mothers who lost
their exclusive status by the introduction of solids. Duration of exclusive feeding among mothers who first introduced any other liquids was in between these two groups.

Only 55% of mothers who fed exclusively at birth and who lost their exclusive feeding status by introducing formula were still feeding exclusively at one week. At six weeks this had fallen to 17%, and to one per cent by four months. By contrast, 95% of mothers who lost their exclusive feeding status through the introduction of solids were still feeding exclusively at six weeks and nearly four in five (79%) were still exclusively breastfeeding at four months. However, at five months this has fallen sharply to 37% and to three per cent at six months. While most mothers introduced solids before the recommended age of six months it is worth noting that in 2010 mothers were doing so at a later age compared with 2005 (see Chapter 8).

These findings illustrate the fact that the main reason why so few mothers follow the recommendation of feeding exclusively until six months is due to the introduction of formula, either to replace or supplement breastmilk. Given that this is also associated with breastfeeding exclusively for a relatively short period, information and support for mothers in the early weeks to help them to breastfeed exclusively for longer is likely to have an impact.

Table 2.27 and Figure 2.16

Figure 2.16

**Duration of exclusive breastfeeding at ages up to 6 months by how exclusive breastfeeding status was lost (UK, 2010)**

- Formula
- Other liquids
- Formula / Other liquids
- Solids
- Solids and other combination

Base: All Stage 3 mothers who breastfed exclusively at birth (7397)
Notes and references

1 England and Wales were reported together prior to 2005.
2 Mothers who had more than two children were classified according to how they had fed their last child.
3 In the 2010 IFS Early Results report, published in June 2011, it was reported that incidence of breastfeeding increased since 2005 in all age groups, but the difference for mothers in the 20-24 age group was not significant. The report can be found at: www.ic.nhs.uk/pubs/infantfeeding10
4 As discussed in Chapter 1, it can be assumed that the majority of the sample in Northern Ireland was White, based on the 2001 Census which showed that 99% of the population in Northern Ireland were from a White background.
5 In the 2010 IFS Early Results report (see link above at endnote 3), published in June 2011, it was reported that incidence of breastfeeding among mothers in this group increased in all countries, however these differences were not statistically significant in Wales, Scotland and Northern Ireland.
6 From 1st July 2006, the ten SHAs were the same as Government Office regions (GORs), other than that the South East England GOR was split into two: South Central and South East coast. As the abolition of SHAs was anticipated at the time of the 2010 IFS (as well as because the organisation of SHAs had changed between the 2005 IFS and 2010), regional analysis is presented by GOR.
7 In the 2010 IFS Early Results report, (link above at endnote 3) a rounding error meant that the standardised figure for Scotland (60%) was reported incorrectly in the text and table so it appeared (wrongly) that the increase in incidence in Scotland was largely due to changes in sample composition.
8 See Infant Feeding Survey 2005 report at http://www.ic.nhs.uk/pubs/ifs2005, Table 2.21