IFS 2010 Stage 3 datafile: Definitions of derived variables

Note that some of the derived variables were written in the data analysis software used to produce the SPSS file, while others were created at a later stage in SPSS. Definitions have been provided in each case, but they are only written in the form of SPSS syntax if they were created in SPSS.

Q4ALL Q4. Has your baby EVER been given any kind of milk other than breast milk, such as infant formula or cow's milk (even if this was only once)? (Q3/Q4 COMBINED)

1: Yes	Q3=2 or 3 or Q4=1
2: No	Q4=2

Q5ALL Q5. Has your baby EVER been given breast milk (via syringe, bottle or cup etc) or have you put your baby to the breast, even if this was only once? (Q3/Q5 COMBINED)

NB This was used as the definition of 'breastfed initially' for tables based on Stage 3 for Chapter 5 onwards of the IFS 2010 report.

1: Yes	Q3=1 or 3 or Q5=1
2: No	Q5=2

Q29All. Has your baby EVER had anything else to drink apart from milk, such as water, fruit juice, squash or herbal drink? (Q28/Q29 COMBINED)

1: Yes	Q28=1 or Q29=1
2: No	Q29=2
3: Not stated	Q28=3 or Q29=3

Q35Q36. Age introduced to solid food (Q35/Q36 COMBINED)

1: Not yet introduced	Q35=2
2: Up to 1 month	Q36=1-4
3: More than 1 month, up to 2 months	Q36=5-9
4: More than 2 months, up to 3 months	Q36=10-13
5: More than 3 months, up to 4 months	Q36= 14-17
6: More than 4 months, up to 5 months	Q36=18-22
7: More than 5 months, up to 6 months	Q36=23-26
8: More than 6 months, up to 7 months	Q36=27-30
9: More than 7 months, up to 8 months	Q36 =31-35
10: More than 8 months, up to 9 months	Q36 =36-39
11: More than 9 months, up to 10 months	Q36 =40-43
12: More than 10 months, up to 11 months	Q36 =44-48
13: More than 11 months, up to 12 months	Q36 =49-52
14: More than 12 months	Q36=53 or more
15: Not stated	Q35=3 or Q36=-3

Q53A Which ingredients do you avoid any why: Sugar

up to

Q53AB Which ingredients do you avoid any why: Not stated

At Q53, respondents were asked which ingredients they avoided giving their baby and the reason/s for avoiding it. Respondents could mention more than one ingredient (up to a maximum of 13 ingredients) and more than one reason for avoiding it in relation to each ingredient. The data were coded in such a way as to be able to identify what reason/s were given in relation to each ingredient.

Q53A up to Q53AB are summary variables showing any mention of a particular ingredient. They are derived from the original coded variables (Q53_1A up to Q53_13AB). So for 'sugar', Q53A shows any mention of sugar at Q53_1A or Q53_2A and so on up to Q53_13A – in each case code 1 means sugar was mentioned.

Q53BA Reasons for avoiding certain ingredients: Not beneficial

up to

Q53BAN Reasons for avoiding certain ingredients: Not stated

Q53BA up to Q53BAN are summary variables showing any mention of a reason for avoiding an ingredient. They are also derived from original coded variables (Q53B_1A up to Q53B_13AN). So for 'Not beneficial', Q53BA shows any mention of an ingredient being 'Not beneficial' at Q53B_1A or Q53B_2A and so on up to Q53B_13A – in each case code 1 means Not beneficial was mentioned.

Q53BCOM_1A Reasons for avoiding:Sugar: Not beneficial
up to
Q53BCOM_26AN Reasons for avoiding:Other general types of foods: Not stated

These derived variables identify both the ingredient and the reason for avoiding it. They are derived by combining data showing which ingredient is being referred to (from Q53_1A up to Q53_13AB) and what reason was given for it (Q53B_1A up to Q53B_13AN).

Prevalence syntax –to derive prevalence and duration of breastfeeding

The syntax below should be used to derive the 12 prevalence variables (prev_1d to prev_9m) to be appended to the Stage 3 SPSS. The syntax for the 2010 survey was based on what was used in the 2005 survey.

Once the syntax has been run the variables will give prevalence of breastfeeding when babies were at the following ages:

- 1 day /birth (prev_1d)
- 2 days (prev_2d)
- 3 days (prev_3d)
- 4 days (prev_4d)
- 5 days (prev_5d)
- 6 days (prev_6d)
- 1 week (prev_1w)
- 2 weeks (prev_2w)
- 6 weeks (prev_6w)
- 4 months (prev_4m)
- 6 months (prev_6m)
- 9 months (prev_9m)

There are notes below on what the various parts of the syntax are doing and also how it works in terms of prioritise which data should be used for respondents.

Prevalence syntax

*Prevalence is based on the time when mother LAST breastfed the baby. This information was asked at all 3 stages, so it is possible to obtain 3 prevalence measures for

*each respondent based on the answers to Q9 (S1), Q6 (S2), and Q6 (S3).

*Since there will inevitably be a degree of inconsistency between responses across stages we adopt the principle that the FIRST prevalence measure always takes priority

*i.e. S1 takes priority over S2 takes priority over S3. This is logical on the basis of the accuracy of respondents recall (i.e. if a mother has given up in the first week or so, their s1 answers are likely to be more accurate than their S3 answer).

*Prevalence is computed only for mothers who answered ALL 3 stages. In order to do this, we ran the syntax for Stage 1 and Stage 2 in the respective datafiles, then merged in the derived variables to the Stage 3 file.

***Stage 1: Compute prevalence at S1 based on Q9. Run in S1 file.**

```
recode Q9 (1=1)(2=2)(3=3)(4=4)(5=5)(6=6)(7=7)(8 thru 13=8)(14 thru 20=9)(21 thru 27=10)(28 thru
34=11)(35 thru 41=12)
(42 thru 48=13)(49 thru 55=14)(56 thru 62=15)(63 thru 69=16)(70 thru 120=17)(121 thru 151=18)(152 thru
181=19)
(182 thru 211=20)(212 thru 242=21)(243 thru 272=22)(273 thru 996=23)(-3=999) into S1prev.
if (BFEDSUM=2) S1prev=998.

variable labels S1prev "Breastfeeding status at Stage 1 (last breastfed)".
value labels S1prev
1"1 day"
2"2 days"
3"3 days"
4"4 days"
```

5"5 days"
6"6 days"
7"7days"
8"More than 1 week, less than 2 weeks"
9"2 weeks, less than 3 weeks"
10"3 weeks, less than 4 weeks"
11"4 weeks, less than 5 weeks"
12"5 weeks, less than 6 weeks"
13"6 weeks, less than 7 weeks"
14"7 weeks, less than 8 weeks"
15"8 weeks, less than 9 weeks"
16"9 weeks, less than 10 weeks"
17"10 weeks, less than 4 months"
18"4 months, less than 5 months"
19"5 months, less than 6 months"
20"6 months, less than 7 months"
21"7 months, less than 8 months"
22"8 months, less than 9 months"
23"9 months or more"
998"Never breastfed"
999"Feeding status not known".
execute.

***Stage 2: Compute prevalence for S2 based on Q6. Run in S2 file**

recode Q6 (1=1)(2=2)(3=3)(4=4)(5=5)(6=6)(7=7)(8 thru 13=8)(14 thru 20=9)(21 thru 27=10)(28 thru 34=11)(35 thru 41=12)
(42 thru 48=13)(49 thru 55=14)(56 thru 62=15)(63 thru 69=16)(70 thru 120=17)(121 thru 151=18)(152 thru 181=19)
(182 thru 211=20)(212 thru 242=21)(243 thru 272=22)(273 thru 996=23)(-3=999) into S2prev.
if Q5ALL=2 S2prev=998.

variable labels S2prev "Breastfeeding status at Stage 2 (last breastfed)".
value labels S2prev
1"1 day"
2"2 days"
3"3 days"
4"4 days"
5"5 days"
6"6 days"
7"7days"
8"More than 1 week, less than 2 weeks"
9"2 weeks, less than 3 weeks"
10"3 weeks, less than 4 weeks"
11"4 weeks, less than 5 weeks"
12"5 weeks, less than 6 weeks"
13"6 weeks, less than 7 weeks"
14"7 weeks, less than 8 weeks"
15"8 weeks, less than 9 weeks"
16"9 weeks, less than 10 weeks"
17"10 weeks, less than 4 months"
18"4 months, less than 5 months"
19"5 months, less than 6 months"
20"6 months, less than 7 months"

21"7 months, less than 8 months"
22"8 months, less than 9 months"
23"9 months or more"
998"Never breastfed"
999"Feeding status not known".
execute.

***Stage 3: Compute prevalence for S3 based on Q6. Run in S3 file**

recode Q6 (1=16)(2=17)(3=18)(4=19)(5=20)(6=21)(7=22)(8=23)(9=999) into S3prev.
if Q5ALL=2 S3prev=998.
variable labels S3prev "Breastfeeding status at Stage 3 (last breastfed)".
value labels S3prev
1"1 day"
2"2 days"
3"3 days"
4"4 days"
5"5 days"
6"6 days"
7"7days"
8"More than 1 week, less than 2 weeks"
9"2 weeks, less than 3 weeks"
10"3 weeks, less than 4 weeks"
11"4 weeks, less than 5 weeks"
12"5 weeks, less than 6 weeks"
13"6 weeks, less than 7 weeks"
14"7 weeks, less than 8 weeks"
15"8 weeks, less than 9 weeks"
16"9 weeks, less than 10 weeks"
17"10 weeks, less than 4 months"
18"4 months, less than 5 months"
19"5 months, less than 6 months"
20"6 months, less than 7 months"
21"7 months, less than 8 months"
22"8 months, less than 9 months"
23"9 months or more"
998"Never breastfed"
999"Feeding status not known".
execute.

*Stage 4: Apply prioritisation to create overall prevalence measure.

S1prev and S2prev were transferred into the S3 file, in order to create overall prevalence.

if (S1prev >=1) prevail=S1prev.

if (sysmis(prevail) and S2prev >=1) prevail=S2prev.

if (sysmis(prevail) and S3prev >=1) prevail=S3prev.

if sysmis(prevail) prevail=997.

```
variable labels prevail "Breastfeeding status all stages (last breastfed)".
value labels prevail
1"1 day"
2"2 days"
3"3 days"
4"4 days"
5"5 days"
6"6 days"
7"7days"
8"More than 1 week, less than 2 weeks"
9"2 weeks, less than 3 weeks"
10"3 weeks, less than 4 weeks"
11"4 weeks, less than 5 weeks"
12"5 weeks, less than 6 weeks"
13"6 weeks, less than 7 weeks"
14"7 weeks, less than 8 weeks"
15"8 weeks, less than 9 weeks"
16"9 weeks, less than 10 weeks"
17"10 weeks, less than 4 months"
18"4 months, less than 5 months"
19"5 months, less than 6 months"
20"6 months, less than 7 months"
21"7 months, less than 8 months"
22"8 months, less than 9 months"
23"9 months or more"
998"Never breastfed"
997"Still breastfeeding at S3"
999"Feeding status not known".
execute.
```

***Stage 5: Create individual variable for each time point.**

```
*Note that prevalence at day 1 should be the same as incidence.
*Incidence (BFEDSUM) used as a filter, just to be sure the two measures are 100% consistent.

if (BFEDSUM=1) prev_1d=1.
variable labels prev_1d "Prevalence of breastfeeding : Day 1 (Birth)".
value labels prev_1d
0"No Breastfeeding at Day 1 (Birth)"
1"Breastfeeding at Day 1(Birth)".

if (BFEDSUM=1) and (prevail>1) and (prevail<998) prev_2d=1.
variable labels prev_2d "Prevalence of breastfeeding : Day 2".
value labels prev_2d
0"no Breastfeeding at Day 2"
1"Breastfeeding at Day 2".

if (BFEDSUM=1) and (prevail>2) and (prevail<998) prev_3d=1.
variable labels prev_3d "Prevalence of breastfeeding : Day 3".
value labels prev_3d
0" No Breastfeeding at Day 3"
1"Breastfeeding at Day 3".
```

```
if (BFEDSUM=1) and (prevail>3) and (prevail<998) prev_4d=1.
variable labels prev_4d "Prevalence of breastfeeding : Day 4".
value labels prev_4d
0" No Breastfeeding at Day 4"
1"Breastfeeding at Day 4".

if (BFEDSUM=1) and (prevail>4) and (prevail<998) prev_5d=1.
variable labels prev_5d "Prevalence of breastfeeding : Day 5".
value labels prev_5d
0" No Breastfeeding at Day 5"
1"Breastfeeding at Day 5".


if (BFEDSUM=1) and (prevail>5) and (prevail<998) prev_6d=1.
variable labels prev_6d "Prevalence of breastfeeding : Day 6".
value labels prev_6d
0" No Breastfeeding at Day 6"
1"Breastfeeding at Day 6".

if (BFEDSUM=1) and (prevail>6) and (prevail<998) prev_1w=1.
variable labels prev_1w "Prevalence of breastfeeding : Week 1".
value labels prev_1w
0" No Breastfeeding at Week 1"
1"Breastfeeding at Week 1".

if (BFEDSUM=1) and (prevail>8) and (prevail<998) prev_2w=1.
variable labels prev_2w "Prevalence of breastfeeding : Week 2".
value labels prev_2w
0" No Breastfeeding at Week 2"
1"Breastfeeding at Week 2".

if (BFEDSUM=1) and (prevail>12) and (prevail<998) prev_6w=1.
variable labels prev_6w "Prevalence of breastfeeding : Week 6".
value labels prev_6w
0" No Breastfeeding at Week 6"
1"Breastfeeding at Week 6".

if (BFEDSUM=1) and (prevail>17) and (prevail<998) prev_4m=1.
variable labels prev_4m "Prevalence of breastfeeding : Month 4".
value labels prev_4m
0" No Breastfeeding at Month 4"
1"Breastfeeding at Month 4".

if (BFEDSUM=1) and (prevail>19) and (prevail<998) prev_6m=1.
variable labels prev_6m "Prevalence of breastfeeding : Month 6".
value labels prev_6m
0" No Breastfeeding at Month 6"
1"Breastfeeding at Month 6".
```

***NB. this last one when run, needs to exclude any babies who have not reached 9 months.**
See later variable agef_9m

```
if (BFEDSUM=1) and (prevail>22) and (prevail<998) prev_9m=1.
variable labels prev_9m "Prevalence of breastfeeding : Month 9".
```

value labels prev_9m
0" No Breastfeeding at Month 9"
1"Breastfeeding at Month 9".
Execute.

Other liquids exclusivity variables

A number of derived variables were created in order to create 'Liquid exclusivity' variables, which fed into the 'Combined exclusivity variables'. They were also used to create the 'Age introduced liquid' derived variables (see later). As with breastfeeding prevalence, syntax was run in each individual stage and then the derived variables from S1 and S2 were merged into S3, since exclusivity and age of introduction of liquids were based on mothers completing all three stages.

Similar measures for formula and food were derived. The syntax for the 2010 survey was based on what was used in the 2005 survey.

***Age first introduced other drinks.**

*The key questions are Stage 1 Q34, Stage 2 Q31_WEEKS and Stage 3 Q30. Since they are all a different time period (days, weeks, banded) they will need to be standardised first.
*Day 1 needs to be identified separately since if anything (milk, water) is introduced on day 1 we are counting them as no exclusivity.

*Key time points.

*Birth/day 1
*1 week
*2 weeks
*3 weeks
*4 weeks
*6 weeks
*8 weeks
*4 months (17 weeks)
*5 months (22 weeks)
*6 months (26 weeks)
*9 months (39 weeks)

***first step is to recode S1 data to weeks and months (ultimately needs to match the S3 bands).**
*check maximum value & for outliers.
*because exclusivity is lost at the time points, the boundary days (7, 14, 21, etc.) should be counted in the lower band.
*i.e. 14 days should be coded into 2 weeks, not 3 weeks, 21 days should be coded into 3 weeks not 4 weeks, and label the bands
*'Up to 1 week, Over 1 week, to 2 weeks, Over 2 weeks, to 3 weeks, etc.

recode Q34(0 thru 1 =998)(2 thru 7=1)(8 thru 14=2)(15 thru 21=3)(22 thru 28=4)(29 thru 35=5)(36 thru 42=6)(43 thru 49=7)(50 thru 56=8)
(57 thru 63=9)(64 thru 70=10)(71 thru 77=11)(78 thru 84=12)(85 thru 91=13)(92 thru 98=14)(99 thru 105=15)(106 thru 112=16)(113 thru 119=17)(120 thru 147=18)(-3=999)
into S1liquid.

variable labels S1liquid 'Age first introduced other liquid (from S1) in weeks'.
value labels S1liquid

1'Up to 1 week'
2'More than 1 week, up to 2 weeks'
3'More than 2 weeks, up to 3 weeks'
4'More than 3 weeks, up to 4 weeks'
5'More than 4 weeks, up to 5 weeks'
6'More than 5 weeks, up to 6 weeks'
7'More than 6 weeks, up to 7 weeks'
8'More than 7 weeks, up to 8 weeks'
9'More than 8 weeks, up to 9 weeks'
10'More than 9 weeks, up to 10 weeks'
11'More than 10 weeks, up to 11 weeks'
12'More than 11 weeks, up to 12 weeks'
13'More than 12 weeks, up to 13 weeks'
14'More than 13 weeks, up to 14 weeks'
15'More than 14 weeks, up to 15 weeks'
16'More than 15 weeks, up to 16 weeks'
17'More than 16 weeks, up to 17 weeks'
18'More than 4 months, up to 5 months'
19'More than 5 months, up to 6 months'
20'More than 6 months, up to 7 months'
21'More than 7 months, up to 8 months'
22'More than 8 months, up to 9 months'
23'More than 9 months or more'
998'Introduced on day 1 (exclude from exclusivity)'
999'Not stated'.
execute.

***next step is to recode S2 data to match S1.**
*S2 data is collected in whole weeks, so there is going to be a great degree of rounding at the borders, but we have to live with this.

recode Q31_WEEKS
(1=1)(2=2)(3=3)(4=4)(5=5)(6=6)(7=7)(8=8)(9=9)(10=10)(11=11)(12=12)(13=13)(14=14)(15=15)(16=16)(17=17)
(18 thru 22=18)(23 thru 26=19)(27 thru 30=20)
(31 thru 35=21)(36 thru 39=22)(40 thru 99=23)(-3=999)(0=999)
into S2liquid.

variable labels S2liquid 'Age first introduced other liquid (from S2) in weeks'.
value labels S2liquid
1'Up to 1 week'
2'More than 1 week, up to 2 weeks'
3'More than 2 weeks, up to 3 weeks'
4'More than 3 weeks, up to 4 weeks'
5'More than 4 weeks, up to 5 weeks'
6'More than 5 weeks, up to 6 weeks'
7'More than 6 weeks, up to 7 weeks'
8'More than 7 weeks, up to 8 weeks'
9'More than 8 weeks, up to 9 weeks'
10'More than 9 weeks, up to 10 weeks'
11'More than 10 weeks, up to 11 weeks'
12'More than 11 weeks, up to 12 weeks'
13'More than 12 weeks, up to 13 weeks'

14'More than 13 weeks, up to 14 weeks'
15'More than 14 weeks, up to 15 weeks'
16'More than 15 weeks, up to 16 weeks'
17'More than 16 weeks, up to 17 weeks'
18'More than 4 months, up to 5 months'
19'More than 5 months, up to 6 months'
20'More than 6 months, up to 7 months'
21'More than 7 months, up to 8 months'
22'More than 8 months, up to 9 months'
23'More than 9 months or more'
998'Introduced on day 1 (exclude from exclusivity)'
999'Not stated'.
execute.

***Create S3 derived variable**
*the question at S3 was banded, so have to go with this. This should be fine for most cases because we are only using this question for those who had not introduced liquid at S1 or S2, so most should be 6 months+.

*[NB. a frequency variable on this may look a bit strange because everything at S3 coded as up to 10 weeks, will have been coded and labelled as '9-10 weeks', and everything for 10 weeks-4 months will have been coded 16-17 weeks. But this is just an intermediary variable, so it is OK.]

recode Q30 (1=10)(2=17)(3=18)(4=19)(5=20)(6=21)(7=22)(8=23)(9=999)
into s3liquid.

variable labels S3liquid 'Age first introduced other liquid (from S3) in weeks'.
value labels S3liquid
1'Up to 1 week'
2'More than 1 week, up to 2 weeks'
3'More than 2 weeks, up to 3 weeks'
4'More than 3 weeks, up to 4 weeks'
5'More than 4 weeks, up to 5 weeks'
6'More than 5 weeks, up to 6 weeks'
7'More than 6 weeks, up to 7 weeks'
8'More than 7 weeks, up to 8 weeks'
9'More than 8 weeks, up to 9 weeks'
10'More than 9 weeks, up to 10 weeks'
11'More than 10 weeks, up to 11 weeks'
12'More than 11 weeks, up to 12 weeks'
13'More than 12 weeks, up to 13 weeks'
14'More than 13 weeks, up to 14 weeks'
15'More than 14 weeks, up to 15 weeks'
16'More than 15 weeks, up to 16 weeks'
17'More than 16 weeks, up to 17 weeks'
18'More than 4 months, up to 5 months'
19'More than 5 months, up to 6 months'
20'More than 6 months, up to 7 months'
21'More than 7 months, up to 8 months'
22'More than 8 months, up to 9 months'
23'More than 9 months or more'
998'Introduced on day 1 (exclude from exclusivity)'
999'Not stated'.
execute.

***now create the final composite variable.**

S1liquid and S2liquid were transferred into the S3 file, in order to create overall liquid variable.

```
if (S1liquid >=1) liquid=S1liquid.

if (sysmis(liquid) and S2liquid >=1) liquid=S2liquid.

if (sysmis(liquid) and S3liquid >=1) liquid=S3liquid.

variable labels liquid 'Age first introduced other liquid (all waves)'.
value labels liquid
1'Up to 1 week'
2'More than 1 week, up to 2 weeks'
3'More than 2 weeks, up to 3 weeks'
4'More than 3 weeks, up to 4 weeks'
5'More than 4 weeks, up to 5 weeks'
6'More than 5 weeks, up to 6 weeks'
7'More than 6 weeks, up to 7 weeks'
8'More than 7 weeks, up to 8 weeks'
9'More than 8 weeks, up to 9 weeks'
10'More than 9 weeks, up to 10 weeks'
11'More than 10 weeks, up to 11 weeks'
12'More than 11 weeks, up to 12 weeks'
13'More than 12 weeks, up to 13 weeks'
14'More than 13 weeks, up to 14 weeks'
15'More than 14 weeks, up to 15 weeks'
16'More than 15 weeks, up to 16 weeks'
17'More than 16 weeks, up to 17 weeks'
18'More than 4 months, up to 5 months'
19'More than 5 months, up to 6 months'
20'More than 6 months, up to 7 months'
21'More than 7 months, up to 8 months'
22'More than 8 months, up to 9 months'
23'More than 9 months or more'
998'Introduced on day 1 (exclude from exclusivity)'
999'Not stated'.

if sysmis(liquid) liquid=997.
add value labels liquid 997'Not introduced liquid by S3'.
```

***this correction keeps the rule of prioritising data from earlier waves over later waves.**

```
do if (liquid=999) and S2liquid<999.
compute liquid=S2liquid.
end if.

do if (liquid=999) and S3liquid<999.
compute liquid=S3liquid.
end if.
```

***Final stage is to create the key time point variables for liquid exclusivity.**

```
compute liqex_1d=0.
if liquid ne 998 liqex_1d=1.

variable labels liqex_1d "Liquid exclusivity at Birth (Day 1)".
value labels liqex_1d
0"no Liquid exclusivity at Birth (Day 1)"
1"Liquid exclusivity at Birth (Day 1)".

compute liqex_1w=0.
if (liquid > 1) and liquid <998 liqex_1w=1.

variable labels liqex_1w "Liquid exclusivity at 1 Week".
value labels liqex_1w
0"no Liquid exclusivity at 1 Week"
1"Liquid exclusivity at 1 Week".

compute liqex_2w=0.
if (liquid > 2) and liquid <998 liqex_2w=1.

variable labels liqex_2w "Liquid exclusivity at 2 Weeks".
value labels liqex_2w
0"no Liquid exclusivity at 2 Weeks"
1"Liquid exclusivity at 2 Weeks".

compute liqex_3w=0.
if (liquid > 3) and liquid <998 liqex_3w=1.

variable labels liqex_3w "Liquid exclusivity at 3 Weeks".
value labels liqex_3w
0"no Liquid exclusivity at 3 Weeks"
1"Liquid exclusivity at 3 Weeks".

compute liqex_4w=0.
if (liquid > 4) and liquid <998 liqex_4w=1.

variable labels liqex_4w "Liquid exclusivity at 4 Weeks".
value labels liqex_4w
0"no Liquid exclusivity at 4 weeks"
1"Liquid exclusivity at 4 weeks".

compute liqex_6w=0.
if (liquid > 6) and liquid <998 liqex_6w=1.

variable labels liqex_6w "Liquid exclusivity at 6 Weeks".
value labels liqex_6w
0"no Liquid exclusivity at 6 Weeks"
1"Liquid exclusivity at 6 Weeks".

compute liqex_2m=0.
if (liquid > 8) and liquid <998 liqex_2m=1.

variable labels liqex_2m "Liquid exclusivity at 2 Months".
```

```
value labels liqex_2m
0"no Liquid exclusivity at 2 Months"
1"Liquid exclusivity at 2 Months".

compute liqex_3m=0.
if (liquid > 13) and liquid <998 liqex_3m=1.
variable labels liqex_3m "Liquid exclusivity at 3 Months".
value labels liqex_3m
0"no Liquid exclusivity at 3 Months"
1"Liquid exclusivity at 3 Months".

compute liqex_4m=0.
if (liquid >17) and liquid <998 liqex_4m=1.
variable labels liqex_4m "Liquid exclusivity at 4 Months".
value labels liqex_4m
0"no Liquid exclusivity at 4 Months"
1"Liquid exclusivity at 4 Months".

compute liqex_5m=0.
if (liquid > 18) and liquid <998 liqex_5m=1.
variable labels liqex_5m "Liquid exclusivity at 5 Months".
value labels liqex_5m
0"no Liquid exclusivity at 5 Months"
1"Liquid exclusivity at 5 Months".


compute liqex_6m=0.
if (liquid >19) and liquid <998 liqex_6m=1.
variable labels liqex_6m "Liquid exclusivity at 6 Months".
value labels liqex_6m
0"no Liquid exclusivity at 6 Months"
1"Liquid exclusivity at 6 Months".

compute liqex_7m=0.
if (liquid > 20) and liquid <998 liqex_7m=1.
variable labels liqex_7m "Liquid exclusivity at 7 Months".
value labels liqex_7m
0"no Liquid exclusivity at 7 Months"
1"Liquid exclusivity at 7 Months".

compute liqex_8m=0.
if (liquid > 21) and liquid <998 liqex_8m=1.
variable labels liqex_8m "Liquid exclusivity at 8 Months".
value labels liqex_8m
0"no Liquid exclusivity at 8 Months"
1"Liquid exclusivity at 8 Months".
```

```
compute liqex_9m=0.
if (liquid >22) and liquid <998 liqex_9m=1.

variable labels liqex_9m "Liquid exclusivity at 9 Months".
value labels liqex_9m
0"no Liquid exclusivity at 9 Months"
1"Liquid exclusivity at 9 Months".
execute.
```

Formula exclusivity variable

A number of derived variables were created in order to create 'Formula exclusivity' variables, which fed into the 'Combined exclusivity variables'. They were also used to create the 'Age infant formula first introduced" derived variables (see later). As with breastfeeding prevalence, syntax was run in each individual stage and then the derived variables from S1 and S2 were merged into S3, since exclusivity and age of introduction of formula were based on mothers completing all three stages.

***Age first introduced formula.**

```
*The key questions are Stage 1 Q13, Stage 2 Q14_WEEKS, Stage 3 Q17. Since they are all a different time period (days, weeks, banded) they will need to be standardised first.
*Day 1 needs to be identified separately since if anything (milk, water) is introduced on day 1 we are counting them as no exclusivity.

*Key time points

*Birth/day 1
*1 week
*2 weeks
*3 weeks
*4 weeks
*6 weeks
*8 weeks
*4 months (17 weeks)
*5 months (22 weeks)
*6 months (26 weeks)
*9 months (39 weeks)
```

***first step is to recode S1 data to weeks and months (ultimately needs to match the S3 bands). Run in Stage 1 file**

```
*because exclusivity is lost at the time points, the boundary days (7, 14, 21, etc.) should be counted in the lower band. i.e. 14 days should be coded into 2 weeks, not 3 weeks, 21 days should be coded into 3 weeks not 4 weeks, and label the bands 'Up to 1 week, Over 1 week, to 2 weeks, Over 2 weeks, to 3 weeks, etc.

recode Q13 (1=998)(2 thru 7=1)(8 thru 14=2)(15 thru 21=3)(22 thru 28=4)(29 thru 35=5)(36 thru 42=6)(43 thru 49=7)(50 thru 56=8)
(57 thru 63=9)(64 thru 70=10)(71 thru 77=11)(78 thru 84=12)(85 thru 91=13)(92 thru 98=14)(99 thru 105=15)(106 thru 112=16)(113 thru 119=17)(120 thru 147=18)(-3=999)
into S1form.

variable labels S1form 'Age first introduced formula milk (from S1)'.
value labels S1form
1'Up to 1 week'
```

2'More than 1 week, up to 2 weeks'
3'More than 2 weeks, up to 3 weeks'
4'More than 3 weeks, up to 4 weeks'
5'More than 4 weeks, up to 5 weeks'
6'More than 5 weeks, up to 6 weeks'
7'More than 6 weeks, up to 7 weeks'
8'More than 7 weeks, up to 8 weeks'
9'More than 8 weeks, up to 9 weeks'
10'More than 9 weeks, up to 10 weeks'
11'More than 10 weeks, up to 11 weeks'
12'More than 11 weeks, up to 12 weeks'
13'More than 12 weeks, up to 13 weeks'
14'More than 13 weeks, up to 14 weeks'
15'More than 14 weeks, up to 15 weeks'
16'More than 15 weeks, up to 16 weeks'
17'More than 16 weeks, up to 17 weeks'
18'More than 4 months, up to 5 months'
19'More than 5 months, up to 6 months'
20'More than 6 months, up to 7 months'
21'More than 7 months, up to 8 months'
22'More than 8 months, up to 9 months'
23'More than 9 months or more'
998'Introduced on day 1 (exclude from exclusivity)'
999'Not stated'.
execute.

***next step is to recode S2 data to match S1. Run in Stage 2 file**
*S2 data is collected in whole weeks, so there is going to be a great degree of rounding at the borders, but we have to live with this.

recode Q14_WEEKS (0 thru
1=1)(2=2)(3=3)(4=4)(5=5)(6=6)(7=7)(8=8)(9=9)(10=10)(11=11)(12=12)(13=13)(14=14)(15=15)(16=16)(17=17)(
18 thru 22=18)(23 thru 26=19)(27 thru 30=20)
(31 thru 35=21)(36 thru 39=22)(40 thru 99=23)(-3=999)
into S2form.

variable labels S2form 'Age first introduced formula (from S2)'.
value labels S2form
1'Up to 1 week'
2'More than 1 week, up to 2 weeks'
3'More than 2 weeks, up to 3 weeks'
4'More than 3 weeks, up to 4 weeks'
5'More than 4 weeks, up to 5 weeks'
6'More than 5 weeks, up to 6 weeks'
7'More than 6 weeks, up to 7 weeks'
8'More than 7 weeks, up to 8 weeks'
9'More than 8 weeks, up to 9 weeks'
10'More than 9 weeks, up to 10 weeks'
11'More than 10 weeks, up to 11 weeks'
12'More than 11 weeks, up to 12 weeks'
13'More than 12 weeks, up to 13 weeks'
14'More than 13 weeks, up to 14 weeks'

15'More than 14 weeks, up to 15 weeks'
16'More than 15 weeks, up to 16 weeks'
17'More than 16 weeks, up to 17 weeks'
18'More than 4 months, up to 5 months'
19'More than 5 months, up to 6 months'
20'More than 6 months, up to 7 months'
21'More than 7 months, up to 8 months'
22'More than 8 months, up to 9 months'
23'More than 9 months or more'
998'Introduced on day 1 (exclude from exclusivity)'
999'Not stated'.
execute.

***Create S3 derived variable. Run in Stage 3 file**

*the question at S3 was banded, so have to go with this. This should be fine for most cases because we are only using this question for those
*who had not introduced formula at S1 or S2, so most should be 6 months+.

*[NB. this may look a bit strange because everything at S3 coded as up to 10 weeks, will have been coded and labelled as '9-10 weeks', and everything for 10 weeks-4 months will have been coded 16-17 weeks. But this is o.k.]

recode Q17 (1=10)(2=17)(3=18)(4=19)(5=20)(6=21)(7=22)(8=23)(9=999)
into S3form.

variable labels S3form 'Age first introduced formula (from S3)'.
value labels S3form
1'Up to 1 week'
2'More than 1 week, up to 2 weeks'
3'More than 2 weeks, up to 3 weeks'
4'More than 3 weeks, up to 4 weeks'
5'More than 4 weeks, up to 5 weeks'
6'More than 5 weeks, up to 6 weeks'
7'More than 6 weeks, up to 7 weeks'
8'More than 7 weeks, up to 8 weeks'
9'More than 8 weeks, up to 9 weeks'
10'More than 9 weeks, up to 10 weeks'
11'More than 10 weeks, up to 11 weeks'
12'More than 11 weeks, up to 12 weeks'
13'More than 12 weeks, up to 13 weeks'
14'More than 13 weeks, up to 14 weeks'
15'More than 14 weeks, up to 15 weeks'
16'More than 15 weeks, up to 16 weeks'
17'More than 16 weeks, up to 17 weeks'
18'More than 4 months, up to 5 months'
19'More than 5 months, up to 6 months'
20'More than 6 months, up to 7 months'
21'More than 7 months, up to 8 months'
22'More than 8 months, up to 9 months'
23'More than 9 months or more'
998'Introduced on day 1 (exclude from exclusivity)'
999'Not stated'.
execute.

***now create the final composite variable.**

S1form and S2form were transferred into the S3 file, in order to create the formula variable

**********FORMULA**********

```
if (S1form >=1) formula=S1form.

if (sysmis(formula) and S2form >=1) formula=S2form.

if (sysmis(formula) and S3form >=1) formula=S3form.


variable labels formula 'Age first introduced formula (all waves)'.
value labels formula
1'Up to 1 week'
2'More than 1 week, up to 2 weeks'
3'More than 2 weeks, up to 3 weeks'
4'More than 3 weeks, up to 4 weeks'
5'More than 4 weeks, up to 5 weeks'
6'More than 5 weeks, up to 6 weeks'
7'More than 6 weeks, up to 7 weeks'
8'More than 7 weeks, up to 8 weeks'
9'More than 8 weeks, up to 9 weeks'
10'More than 9 weeks, up to 10 weeks'
11'More than 10 weeks, up to 11 weeks'
12'More than 11 weeks, up to 12 weeks'
13'More than 12 weeks, up to 13 weeks'
14'More than 13 weeks, up to 14 weeks'
15'More than 14 weeks, up to 15 weeks'
16'More than 15 weeks, up to 16 weeks'
17'More than 16 weeks, up to 17 weeks'
18'More than 4 months, up to 5 months'
19'More than 5 months, up to 6 months'
20'More than 6 months, up to 7 months'
21'More than 7 months, up to 8 months'
22'More than 8 months, up to 9 months'
23'More than 9 months or more'
998'Introduced on day 1 (exclude from exclusivity)'
999'Not stated'.
```

***this correction keeps the rule of prioritising data from earlier waves over later waves.**

```
do if (formula=999) and S2form<999.
compute formula=S2form.
end if.

do if (formula=999) and S3form<999.
compute formula=S3form.
end if.
```

***Final stage is to create the key time point variables for liquid exclusivity.**

```
compute frmex_1d=0.
if formula ne 998 frmex_1d=1.

variable labels frmex_1d "Formula exclusivity at Birth (Day 1)".
value labels frmex_1d
0"no Formula exclusivity at Birth (Day 1)"
1"Formula exclusivity at Birth (Day 1)".

compute frmex_1w=0.
if (formula > 1) and formula <998 frmex_1w=1.

variable labels frmex_1w "Formula exclusivity at 1 Week".
value labels frmex_1w
0"no Formula exclusivity at 1 Week"
1"Formula exclusivity at 1 Week".

compute frmex_2w=0.
if (formula > 2) and formula <998 frmex_2w=1.

variable labels frmex_2w "Formula exclusivity at 2 Weeks".
value labels frmex_2w
0"no Formula exclusivity at 2 Weeks"
1"Formula exclusivity at 2 Weeks".

compute frmex_3w=0.
if (formula > 3) and formula <998 frmex_3w=1.

variable labels frmex_3w "Formula exclusivity at 3 Weeks".
value labels frmex_3w
0"no Formula exclusivity at 3 Weeks"
1"Formula exclusivity at 3 Weeks".

compute frmex_4w=0.
if (formula > 4) and formula <998 frmex_4w=1.

variable labels frmex_4w "Formula exclusivity at 4 Weeks".
value labels frmex_4w
0"no Formula exclusivity at 4 weeks"
1"Formula exclusivity at 4 weeks".

compute frmex_6w=0.
if (formula > 6) and formula <998 frmex_6w=1.

variable labels frmex_6w "Formula exclusivity at 6 Weeks".
value labels frmex_6w
0"no Formula exclusivity at 6 Weeks"
1"Formula exclusivity at 6 Weeks".

compute frmex_2m=0.
if (formula > 8) and formula <998 frmex_2m=1.

variable labels frmex_2m "Formula exclusivity at 2 Months".
```

```
value labels frmex_2m
0"no Formula exclusivity at 2 Months"
1"Formula exclusivity at 2 Months".

compute frmex_3m=0.
if (formula > 13) and formula <998 frmex_3m=1.
variable labels frmex_3m "Formula exclusivity at 3 Months".
value labels frmex_3m
0"no Formula exclusivity at 3 Months"
1"Formula exclusivity at 3 Months".

compute frmex_4m=0.
if (formula >17) and formula <998 frmex_4m=1.
variable labels frmex_4m "Formula exclusivity at 4 Months".
value labels frmex_4m
0"no Formula exclusivity at 4 Months"
1"Formula exclusivity at 4 Months".

compute frmex_5m=0.
if (formula > 18) and formula <998 frmex_5m=1.
variable labels frmex_5m "Formula exclusivity at 5 Months".
value labels frmex_5m
0"no Formula exclusivity at 5 Months"
1"Formula exclusivity at 5 Months".

compute frmex_6m=0.
if (formula >19) and formula <998 frmex_6m=1.
variable labels frmex_6m "Formula exclusivity at 6 Months".
value labels frmex_6m
0"no Formula exclusivity at 6 Months"
1"Formula exclusivity at 6 Months".

compute frmex_7m=0.
if (formula > 20) and formula <998 frmex_7m=1.
variable labels frmex_7m "Formula exclusivity at 7 Months".
value labels frmex_7m
0"no Formula exclusivity at 7 Months"
1"Formula exclusivity at 7 Months".

compute frmex_8m=0.
if (formula > 21) and formula <998 frmex_8m=1.
variable labels frmex_8m "Formula exclusivity at 8 Months".
value labels frmex_8m
0"no Formula exclusivity at 8 Months"
1"Formula exclusivity at 8 Months".

compute frmex_9m=0.
if (formula >22) and formula <998 frmex_9m=1.

variable labels frmex_9m "Formula exclusivity at 9 Months".
value labels frmex_9m
0"no Formula exclusivity at 9 Months"
1"Formula exclusivity at 9 Months".
execute.
```

Food exclusivity variable

***Age first introduced food.**

*The key questions are Stage 1 Q37, Stage 2 Q34_WEEKS, Stage 3 Q36. Since they are all a different time period (days, weeks) they will need to be standardised first.
*Key time points are.

*Birth/day 1
*1 week
*2 weeks
*3 weeks
*4 weeks
*6 weeks
*8 weeks
*4 months (17 weeks)
*5 months (22 weeks)
*6 months (26 weeks)
*9 months (39 weeks)

***first step is to recode S1 data to weeks and months (ultimately needs to match the S3 bands). Run in Stage 1 file**
*because exclusivity is lost at the time points, the boundary days (7, 14, 21, etc.) should be counted in the lower band *i.e. 14 days should be coded into 2 weeks, not 3 weeks, 21 days should be coded into 3 weeks not 4 weeks, and label the bands 'Up to 1 week, Over 1 week, to 2 weeks, Over 2 weeks, to 3 weeks, etc.

```
recode Q37
(1=1)(2=2)(3=3)(4=4)(5=5)(6=6)(7=7)(8=8)(9=9)(10=10)(11=11)(12=12)(13=13)(14=14)(15=15)(16=16)(17=17)
(18 thru 22=18)(23 thru 26=19)(27 thru 30=20)
(31 thru 35=21)(36 thru 39=22)(40 thru 99=23)(-3=999)
into S1food.

variable labels S1food 'Age first introduced food (from S1) in weeks'.
value labels S1food
1'Up to 1 week'
2'More than 1 week, up to 2 weeks'
3'More than 2 weeks, up to 3 weeks'
4'More than 3 weeks, up to 4 weeks'
5'More than 4 weeks, up to 5 weeks'
6'More than 5 weeks, up to 6 weeks'
7'More than 6 weeks, up to 7 weeks'
8'More than 7 weeks, up to 8 weeks'
9'More than 8 weeks, up to 9 weeks'
10'More than 9 weeks, up to 10 weeks'
11'More than 10 weeks, up to 11 weeks'
12'More than 11 weeks, up to 12 weeks'
13'More than 12 weeks, up to 13 weeks'
14'More than 13 weeks, up to 14 weeks'
15'More than 14 weeks, up to 15 weeks'
16'More than 15 weeks, up to 16 weeks'
17'More than 16 weeks, up to 17 weeks'
18'More than 4 months, up to 5 months'
19'More than 5 months, up to 6 months'
```

20'More than 6 months, up to 7 months'
21'More than 7 months, up to 8 months'
22'More than 8 months, up to 9 months'
23'More than 9 months or more'
998'Introduced on day 1 (exclude from exclusivity)'
999'Not stated'.
execute.

***next step is to recode S2 data to match S1. Run in Stage 2 file**
*S2 data is collected in whole weeks, so there is going to be a great degree of rounding at the borders, but we have to live with this.

recode Q34_WEEKS
(1=1)(2=2)(3=3)(4=4)(5=5)(6=6)(7=7)(8=8)(9=9)(10=10)(11=11)(12=12)(13=13)(14=14)(15=15)(16=16)(17=17)
(18 thru 22=18)(23 thru 26=19)(27 thru 30=20)
(31 thru 35=21)(36 thru 39=22)(40 thru 99=23)(-3=999)
into S2food.

variable labels S2food 'Age first introduced food (from S2) in weeks'.
value labels S2food
1'Up to 1 week'
2'More than 1 week, up to 2 weeks'
3'More than 2 weeks, up to 3 weeks'
4'More than 3 weeks, up to 4 weeks'
5'More than 4 weeks, up to 5 weeks'
6'More than 5 weeks, up to 6 weeks'
7'More than 6 weeks, up to 7 weeks'
8'More than 7 weeks, up to 8 weeks'
9'More than 8 weeks, up to 9 weeks'
10'More than 9 weeks, up to 10 weeks'
11'More than 10 weeks, up to 11 weeks'
12'More than 11 weeks, up to 12 weeks'
13'More than 12 weeks, up to 13 weeks'
14'More than 13 weeks, up to 14 weeks'
15'More than 14 weeks, up to 15 weeks'
16'More than 15 weeks, up to 16 weeks'
17'More than 16 weeks, up to 17 weeks'
18'More than 4 months, up to 5 months'
19'More than 5 months, up to 6 months'
20'More than 6 months, up to 7 months'
21'More than 7 months, up to 8 months'
22'More than 8 months, up to 9 months'
23'More than 9 months or more'
998'Introduced on day 1 (exclude from exclusivity)'
999'Not stated'.
execute.

***Create S3 derived variable. Run in Stage 3 file**

The question at s3 needs to be recoded to match the code frames for S1food/S2food. N.B. This was in weeks in 2010, so more accurate than in 2005, when it was in months. The syntax was adapted to account for this.

```
recode Q36
(1=1)(2=2)(3=3)(4=4)(5=5)(6=6)(7=7)(8=8)(9=9)(10=10)(11=11)(12=12)(13=13)(14=14)(15=15)(16=16)(17=17)
(18 thru 22=18)(23 thru 26=19)(27 thru 30=20)
(31 thru 35=21)(36 thru 39=22)(40 thru 99=23)(-3=999)
into S3food.

variable labels s3food 'Age first introduced food (from S3) in weeks'.
value labels S3food
1'Up to 1 week'
2'More than 1 week, up to 2 weeks'
3'More than 2 weeks, up to 3 weeks'
4'More than 3 weeks, up to 4 weeks'
5'More than 4 weeks, up to 5 weeks'
6'More than 5 weeks, up to 6 weeks'
7'More than 6 weeks, up to 7 weeks'
8'More than 7 weeks, up to 8 weeks'
9'More than 8 weeks, up to 9 weeks'
10'More than 9 weeks, up to 10 weeks'
11'More than 10 weeks, up to 11 weeks'
12'More than 11 weeks, up to 12 weeks'
13'More than 12 weeks, up to 13 weeks'
14'More than 13 weeks, up to 14 weeks'
15'More than 14 weeks, up to 15 weeks'
16'More than 15 weeks, up to 16 weeks'
17'More than 16 weeks, up to 17 weeks'
18'More than 4 months, up to 5 months'
19'More than 5 months, up to 6 months'
20'More than 6 months, up to 7 months'
21'More than 7 months, up to 8 months'
22'More than 8 months, up to 9 months'
23'More than 9 months or more'
998'Introduced on day 1 (exclude from exclusivity)'
999'Not stated'.
execute.
```

***now create the final composite variable.**

S1food and S2food were transferred into the S3 file, in order to create the food variable

```
if (S1food >=1) food=S1food.

if (sysmis(food) and S2food >=1) food=S2food.

if (sysmis(food) and S3food >=1) food=S3food.
```



```
variable labels food 'Age first introduced food (all waves)'.
value labels food
1'Up to 1 week'
2'More than 1 week, up to 2 weeks'
3'More than 2 weeks, up to 3 weeks'
4'More than 3 weeks, up to 4 weeks'
5'More than 4 weeks, up to 5 weeks'
6'More than 5 weeks, up to 6 weeks'
7'More than 6 weeks, up to 7 weeks'
8'More than 7 weeks, up to 8 weeks'
9'More than 8 weeks, up to 9 weeks'
10'More than 9 weeks, up to 10 weeks'
11'More than 10 weeks, up to 11 weeks'
12'More than 11 weeks, up to 12 weeks'
13'More than 12 weeks, up to 13 weeks'
14'More than 13 weeks, up to 14 weeks'
15'More than 14 weeks, up to 15 weeks'
16'More than 15 weeks, up to 16 weeks'
17'More than 16 weeks, up to 17 weeks'
18'More than 4 months, up to 5 months'
19'More than 5 months, up to 6 months'
20'More than 6 months, up to 7 months'
21'More than 7 months, up to 8 months'
22'More than 8 months, up to 9 months'
23'More than 9 months or more'
998'Introduced on day 1 (exclude from exclusivity)'
999'Not stated'.

*check N/S in the final variable.

if sysmis(food) food=997.
add value labels food 997'Not introduced food by S3'.
```

***this correction keeps the rule of prioritising data from earlier waves over later waves.**

```
do if (food=999) and S2food<999.
compute food=S2food.
end if.

do if (food=999) and S3food<999.
compute food=S3food.
end if.

*end result is only 5 cases with no valid value.
```

***Final stage is to create the key time point variables for food exclusivity.**

```
compute fodex_1d=0.
if food ne 998 fodex_1d=1.

variable labels fodex_1d "Food exclusivity at Birth (Day 1)".
value labels fodex_1d
0"no Food exclusivity at Birth (Day 1)"
1"Food exclusivity at Birth (Day 1)".
```

```
compute fodex_1w=0.
if (food > 1) and food <998 fodex_1w=1.

variable labels fodex_1w "Food exclusivity at 1 Week".
value labels fodex_1w
0"no Food exclusivity at 1 Week"
1"Food exclusivity at 1 Week".

compute fodex_2w=0.
if (food > 2) and food <998 fodex_2w=1.

variable labels fodex_2w "Food exclusivity at 2 Weeks".
value labels fodex_2w
0"no Food exclusivity at 2 Weeks"
1"Food exclusivity at 2 Weeks".

compute fodex_3w=0.
if (food > 3) and food <998 fodex_3w=1.

variable labels fodex_3w "Food exclusivity at 3 Weeks".
value labels fodex_3w
0"no Food exclusivity at 3 Weeks"
1"Food exclusivity at 3 Weeks".

compute fodex_4w=0.
if (food > 4) and food <998 fodex_4w=1.

variable labels fodex_4w "Food exclusivity at 4 Weeks".
value labels fodex_4w
0"no Food exclusivity at 4 weeks"
1"Food exclusivity at 4 weeks".

compute fodex_6w=0.
if (food > 6) and food <998 fodex_6w=1.

variable labels fodex_6w "Food exclusivity at 6 Weeks".
value labels fodex_6w
0"no Food exclusivity at 6 Weeks"
1"Food exclusivity at 6 Weeks".

compute fodex_2m=0.
if (food > 8) and food <998 fodex_2m=1.

variable labels fodex_2m "Food exclusivity at 2 Months".
value labels fodex_2m
0"no Food exclusivity at 2 Months"
1"Food exclusivity at 2 Months".

compute fodex_3m=0.
if (food > 13) and food <998 fodex_3m=1.
variable labels fodex_3m "Food exclusivity at 3 Months".
value labels fodex_3m
0"no Food exclusivity at 3 Months"
```

```
1"Food exclusivity at 3 Months".

compute fodex_4m=0.
if (food >17) and food <998 fodex_4m=1.
variable labels fodex_4m "Food exclusivity at 4 Months".
value labels fodex_4m
0"no Food exclusivity at 4 Months"
1"Food exclusivity at 4 Months".

compute fodex_5m=0.
if (food > 18) and food <998 fodex_5m=1.
variable labels fodex_5m "Food exclusivity at 5 Months".
value labels fodex_5m
0"no Food exclusivity at 5 Months"
1"Food exclusivity at 5 Months".


compute fodex_6m=0.
if (food >19) and food <998 fodex_6m=1.
variable labels fodex_6m "Food exclusivity at 6 Months".
value labels fodex_6m
0"no Food exclusivity at 6 Months"
1"Food exclusivity at 6 Months".

compute fodex_7m=0.
if (food > 20) and food <998 fodex_7m=1.
variable labels fodex_7m "Food exclusivity at 7 Months".
value labels fodex_7m
0"no Food exclusivity at 7 Months"
1"Food exclusivity at 7 Months".

compute fodex_8m=0.
if (food > 21) and food <998 fodex_8m=1.
variable labels fodex_8m "Food exclusivity at 8 Months".
value labels fodex_8m
0"no Food exclusivity at 8 Months"
1"Food exclusivity at 8 Months".

compute fodex_9m=0.
if (food >22) and food <998 fodex_9m=1.

variable labels fodex_9m "Food exclusivity at 9 Months".
value labels fodex_9m
0"no Food exclusivity at 9 Months"
1"Food exclusivity at 9 Months".

execute.
```

*****Combined exclusivity syntax*****

This syntax draws together the liquid, formula and food exclusivity variables to create the combined exclusivity measures.

Having created the individual measures for the introduction of formula, food, and other liquid now need to look at these together.

This syntax takes the 3 individual measures and combines them at each time point.

If at each time point all three (=1) then there is total exclusivity.

If any of the measures (=0) then there is no exclusivity.

```
compute excl_1d=0.
if  (liqex_1d=1 and frmex_1d=1 and fodex_1d=1) excl_1d=1.
variable labels excl_1d "Exclusivity at Birth (Day 1)".
value labels excl_1d
0"no Exclusive at Birth (Day 1)"
1"Exclusive at Birth (Day 1)".

compute excl_1w=0.
if  (liqex_1w=1 and frmex_1w=1 and fodex_1w=1) excl_1w=1.
variable labels excl_1w "Exclusivity at 1 Week".
value labels excl_1w
0"no Exclusive at 1 Week"
1"Exclusive at 1 Week".

compute excl_2w=0.
if  (liqex_2w=1 and frmex_2w=1 and fodex_2w=1) excl_2w=1.
variable labels excl_2w "Exclusivity at 2 Week".
value labels excl_2w
0"no Exclusive at 2 Weeks"
1"Exclusive at 2 Weeks".

compute excl_3w=0.
if  (liqex_3w=1 and frmex_3w=1 and fodex_3w=1) excl_3w=1.
variable labels excl_3w "Exclusivity at 3 Weeks".
value labels excl_3w
0"no Exclusive at 3 Weeks"
1"Exclusive at 3 Weeks".

compute excl_4w=0.
if  (liqex_4w=1 and frmex_4w=1 and fodex_4w=1) excl_4w=1.
variable labels excl_4w "Exclusivity at 4 Weeks".
value labels excl_4w
0"no Exclusive at 4 Weeks"
1"Exclusive at 4 Weeks".

compute excl_6w=0.
if  (liqex_6w=1 and frmex_6w=1 and fodex_6w=1) excl_6w=1.
variable labels excl_6w "Exclusivity at 6 Weeks".
value labels excl_6w
0"no Exclusive at 6 Weeks"
1"Exclusive at 6 Weeks".

compute excl_2m=0.
if  (liqex_2m=1 and frmex_2m=1 and fodex_2m=1) excl_2m=1.
variable labels excl_2m "Exclusivity at 2 Months".
```

```
value labels excl_2m
0"no Exclusive at 2 Months"
1"Exclusive at 2 Months".

compute excl_3m=0.
if  (liqex_3m=1 and frmex_3m=1 and fodex_3m=1) excl_3m=1.
variable labels excl_3m "Exclusivity at 3 Months".
value labels excl_3m
0"no Exclusive at 3 Months"
1"Exclusive at 3 Months".

compute excl_4m=0.
if  (liqex_4m=1 and frmex_4m=1 and fodex_4m=1) excl_4m=1.
variable labels excl_4m "Exclusivity at 4 Months".
value labels excl_4m
0"no Exclusive at 4 Months"
1"Exclusive at 4 Months".

compute excl_5m=0.
if  (liqex_5m=1 and frmex_5m=1 and fodex_5m=1) excl_5m=1.
variable labels excl_5m "Exclusivity at 5 Months".
value labels excl_5m
0"no Exclusive at 5 Months"
1"Exclusive at 5 Months".

compute excl_6m=0.
if  (liqex_6m=1 and frmex_6m=1 and fodex_6m=1) excl_6m=1.
variable labels excl_6m "Exclusivity at 6 Months".
value labels excl_6m
0"no Exclusive at 6 Months"
1"Exclusive at 6 Months".

compute excl_7m=0.
if  (liqex_7m=1 and frmex_7m=1 and fodex_7m=1) excl_7m=1.
variable labels excl_7m "Exclusivity at 7 Months".
value labels excl_7m
0"no Exclusive at 7 Months"
1"Exclusive at 7 Months".

compute excl_8m=0.
if  (liqex_8m=1 and frmex_8m=1 and fodex_8m=1) excl_8m=1.
variable labels excl_8m "Exclusivity at 8 Months".
value labels excl_8m
0"no Exclusive at 8 Months"
1"Exclusive at 8 Months".

compute excl_9m=0.
if  (liqex_9m=1 and frmex_9m=1 and fodex_9m=1) excl_9m=1.
variable labels excl_9m "Exclusivity at 9 Months".
value labels excl_9m
0"no Exclusive at 9 Months"
1"Exclusive at 9 Months".

execute.
```

Excstatus How exclusivity lost – Detailed version
Excstat2 How exclusivity lost – Summary version

```
compute excstatus=0.

if (formula<food) and (formula<liquid) excstatus=1.
if (food<formula) and (food<liquid) excstatus=2.
if (liquid<formula) and (liquid<food) excstatus=3.

if (formula<food) and (formula=liquid) excstatus=4.
if (formula=food) and (formula<liquid) excstatus=5.

if (food<formula) and (food=liquid) excstatus=6.
if (food=formula) and (food<liquid) excstatus=7.

if (liquid<formula) and (liquid=food) excstatus=8.
if (liquid=formula) and (liquid<food) excstatus=9.

if (liquid=formula) and (formula=food) excstatus=10.
if (liquid=999 or formula=999 or food=999) excstatus=999.

value labels excstatus
1'Exclusivity lost by introduction of FORMULA'
2'Exclusivity lost by introduction of FOOD'
3'Exclusivity lost by introduction of OTHER LIQUID'
4'Exclusivity lost by introduction of FORMULA/LIQUID'
5'Exclusivity lost by introduction of FORMULA/FOOD'
6'Exclusivity lost by introduction of FOOD/LIQUID'
7'Exclusivity lost by introduction of FOOD/FORMULA'
8'Exclusivity lost by introduction of LIQUID/FOOD'
9'Exclusivity lost by introduction of LIQUID/FORMULA'
10 'Exclusivity lost by introduction of FORMULA/LIQUID/FOOD'
999'Not stated'.

if (liquid=999 or formula=999 or food=999) excstatus=999.

recode excstatus
(1=1)(2=2)(3=3)(9=4)(4 thru 8=5)(10=5)(999=999)
INTO excstat2.

value labels excstat2
1'Exclusivity lost by introduction of FORMULA'
2'Exclusivity lost by introduction of FOOD'
3'Exclusivity lost by introduction of OTHER LIQUID'
4'Exclusivity lost by introduction of FORMULA/LIQUID'
5'Exclusivity lost by introduction of COMBINATION'
999'Not stated'.

execute.
```

Solid_6w up to Solid_6w When solids introduced

Use the 'food' variable created earlier to produce measures for introduction of solids at different time points (solid_6w up to solid_9m)

```
compute solid_6w=0.
if food<7 solid_6w=1.

variable label solid_6w "Introduced solids by 6 weeks".
value label solid_6w
0"No"
1"Yes".
```

```
compute solid_8w=0.
if food<9 solid_8w=1.

variable label solid_8w "Introduced solids by 8 weeks".
value label solid_8w
0"No"
1"Yes".

compute solid_3m=0.
if food<14 solid_3m=1.

variable label solid_3m "Introduced solids by 3 months".
value label solid_3m
0"No"
1"Yes".

compute solid_4m=0.
if food<18 solid_4m=1.

variable label solid_4m "Introduced solids by 4 months".
value label solid_4m
0"No"
1"Yes".

compute solid_5m=0.
if food<19 solid_5m=1.

variable label solid_5m "Introduced solids by 5 months".
value label solid_5m
0"No"
1"Yes".

compute solid_6m=0.
if food<20 solid_6m=1.

variable label solid_6m "Introduced solids by 6 months".
value label solid_6m
0"No"
1"Yes".

compute solid_9m=0.
if food<23 solid_9m=1.

variable label solid_9m "Introduced solids by 9 months".
value label solid_9m
0"No"
1"Yes".
```

Liquid _1w up to Liquid_9m Age of introduction of liquids

Use the 'liquid' variable created earlier to produce measures for introduction of liquids at different time points (liquid_1w up to liquid_9m

```
COMPUTE liquid2=liquid.
RECODE liquid2 (998=1)(ELSE=COPY).


compute liquid_1w=0.
if liquid2=1 liquid_1w=1.
```

```
variable label liquid_1w "Age introduced liquid : By 1 week".
value label liquid_1w
0"No"
1"Yes".

compute liquid_2w=0.
if (liquid2=1 or liquid2=2) liquid_2w=1.

variable label liquid_2w "Age introduced liquid : By 2 weeks".
value label liquid_2w
0"No"
1"Yes".

compute liquid_4w=0.
if (liquid2<5) liquid_4w=1.

variable label liquid_4w "Age introduced liquid : By 4 weeks".
value label liquid_4w
0"No"
1"Yes".

compute liquid_6w=0.
if (liquid2<7) liquid_6w=1.

variable label liquid_6w "Age introduced liquid : By 6 weeks".
value label liquid_6w
0"No"
1"Yes".

compute liquid_4m=0.
if (liquid2<18) liquid_4m=1.

variable label liquid_4m "Age introduced liquid : By 4 months".
value label liquid_4m
0"No"
1"Yes".

compute liquid_6m=0.
if (liquid2<20) liquid_6m=1.

variable label liquid_6m "Age introduced liquid : By 6 months".
value label liquid_6m
0"No"
1"Yes".

compute liquid_9m=0.
if (liquid2<23) liquid_9m=1.

variable label liquid_9m "Age introduced liquid : By 9 months".
value label liquid_9m
0"No"
1"Yes".
execute.
```

Form _1d up to Form_9m Age infant formula first introduced

Use the 'formula' variable created earlier to produce measures for introduction of formula at different time points.

```
compute form_1d=0.
if formula=998 form_1d=1.

variable labels form_1d "Age infant formula first introduced : Birth (1 day)".
value labels form_1d
0"no Infant formula introduced at Birth (1 day)"
1"Infant formula introduced at Birth (1 day)".

compute form_1w=0.
if formula=998 or formula <2 form_1w=1.

variable labels form_1w "Age infant formula first introduced : By 1 week".
value labels form_1w
0"no Infant formula introduced by 1 week"
1"Infant formula introduced by 1 week".


compute form_4w=0.
if formula=998 or formula <5 form_4w=1.

variable labels form_4w "Age infant formula first introduced : By 4 weeks".
value labels form_4w
0"no Infant formula introduced by 4 weeks"
1"Infant formula introduced by 4 weeks".

compute form_6w=0.
if formula=998 or formula <7 form_6w=1.

variable labels form_6w "Age infant formula first introduced : By 6 weeks".
value labels form_6w
0"no Infant formula introduced by 6 weeks"
1"Infant formula introduced by 6 weeks".

compute form_2m=0.
if formula=998 or formula <9 form_2m=1.

variable labels form_2m "Age infant formula first introduced : By 2 months".
value labels form_2m
0"no Infant formula introduced by 2 months"
1"Infant formula introduced by 2 months".

compute form_4m=0.
if formula=998 or formula <18 form_4m=1.

variable labels form_4m "Age infant formula first introduced : By 4 months".
value labels form_4m
0"no Infant formula introduced by 4 months"
1"Infant formula introduced by 4 months".

compute form_6m=0.
if formula=998 or formula <20 form_6m=1.

variable labels form_6m "Age infant formula first introduced : By 6 months".
value labels form_6m
0"no Infant formula introduced by 6 months"
1"Infant formula introduced by 6 months".
```

```
compute form_9m=0.
if formula=998 or formula <23 form_9m=1.

variable labels form_9m "Age infant formula first introduced : By 9 months".
value labels form_9m
0"no Infant formula introduced by 9 months"
1"Infant formula introduced by 9 months".

execute.
```

Age of introduction of follow on formula (follow_4w up to follow_9m)

Data from Stage 2 and Stage 3 were used to derive age of introduction of follow-on formula.

S2folage Age first introduced follow-on formula (fromS2) in weeks

Q19 from Stage 2 was transferred into the Stage 3 file before running this syntax.

```
recode S2_q19 (0 thru
1=1)(2=2)(3=3)(4=4)(5=5)(6=6)(7=7)(8=8)(9=9)(10=10)(11=11)(12=12)(13=13)(14=14)(15=15)(16=16)(17=17)(
18 thru 22=18)(23 thru 26=19)(27 thru 30=20)
(31 thru 35=21)(36 thru 39=22)(40 thru 99=23)(-3=999)
into S2folage.


variable labels S2folage 'Age first introduced follow-on formula (fromS2) in weeks'.
value labels S2folage
1'Up to 1 week'
2'More than 1 week, up to 2 weeks'
3'More than 2 weeks, up to 3 weeks'
4'More than 3 weeks, up to 4 weeks'
5'More than 4 weeks, up to 5 weeks'
6'More than 5 weeks, up to 6 weeks'
7'More than 6 weeks, up to 7 weeks'
8'More than 7 weeks, up to 8 weeks'
9'More than 8 weeks, up to 9 weeks'
10'More than 9 weeks, up to 10 weeks'
11'More than 10 weeks, up to 11 weeks'
12'More than 11 weeks, up to 12 weeks'
13'More than 12 weeks, up to 13 weeks'
14'More than 13 weeks, up to 14 weeks'
15'More than 14 weeks, up to 15 weeks'
16'More than 15 weeks, up to 16 weeks'
17'More than 16 weeks, up to 17 weeks'
18'More than 4 months, up to 5 months'
19'More than 5 months, up to 6 months'
20'More than 6 months, up to 7 months'
21'More than 7 months, up to 8 months'
22'More than 8 months, up to 9 months'
23'More than 9 months or more'
998'Introduced on day 1 (exclude from exclusivity)'
999'Not stated'.
```

S3folage Age first introduced follow-on formula (from S3) in weeks

```
recode q15 (1=4)(2=9)(3=13)(4=17)(5=18)(6=19)(7=20)(8=21)(9=22)(10 thru 12=23)(13=999)
into S3folage.

variable labels S3folage 'Age first introduced follow-on formula (from S3) in weeks'.
value labels S3folage
1'Up to 1 week'
2'More than 1 week, up to 2 weeks'
```

3'More than 2 weeks, up to 3 weeks'
4'More than 3 weeks, up to 4 weeks'
5'More than 4 weeks, up to 5 weeks'
6'More than 5 weeks, up to 6 weeks'
7'More than 6 weeks, up to 7 weeks'
8'More than 7 weeks, up to 8 weeks'
9'More than 8 weeks, up to 9 weeks'
10'More than 9 weeks, up to 10 weeks'
11'More than 10 weeks, up to 11 weeks'
12'More than 11 weeks, up to 12 weeks'
13'More than 12 weeks, up to 13 weeks'
14'More than 13 weeks, up to 14 weeks'
15'More than 14 weeks, up to 15 weeks'
16'More than 15 weeks, up to 16 weeks'
17'More than 16 weeks, up to 17 weeks'
18'More than 4 months, up to 5 months'
19'More than 5 months, up to 6 months'
20'More than 6 months, up to 7 months'
21'More than 7 months, up to 8 months'
22'More than 8 months, up to 9 months'
23'More than 9 months or more'
998'Introduced on day 1 (exclude from exclusivity)'
999'Not stated'.

Follow Age first introduced follow-on formula (combined) in weeks

if (S2folage >=1 and s2folage<999) follow=S2folage.

if ((sysmis(follow)) and (S3folage >=1 and s3folage<999))follow=S3folage.

variable labels follow 'Age first introduced follow-on formula (combined) in weeks'.
value labels follow
1'Up to 1 week'
2'More than 1 week, up to 2 weeks'
3'More than 2 weeks, up to 3 weeks'
4'More than 3 weeks, up to 4 weeks'
5'More than 4 weeks, up to 5 weeks'
6'More than 5 weeks, up to 6 weeks'
7'More than 6 weeks, up to 7 weeks'
8'More than 7 weeks, up to 8 weeks'
9'More than 8 weeks, up to 9 weeks'
10'More than 9 weeks, up to 10 weeks'
11'More than 10 weeks, up to 11 weeks'
12'More than 11 weeks, up to 12 weeks'
13'More than 12 weeks, up to 13 weeks'
14'More than 13 weeks, up to 14 weeks'
15'More than 14 weeks, up to 15 weeks'
16'More than 15 weeks, up to 16 weeks'
17'More than 16 weeks, up to 17 weeks'
18'More than 4 months, up to 5 months'
19'More than 5 months, up to 6 months'
20'More than 6 months, up to 7 months'
21'More than 7 months, up to 8 months'
22'More than 8 months, up to 9 months'
23'More than 9 months or more'
998'Introduced on day 1 (exclude from exclusivity)'
999'Not stated'.

Follow_4w up to follow_9m Age first introduced follow-on milk at various time points.

if (follow<5) follow_4w=1.
variable labels follow_4w "Age first introduced follow-on milk: Up to 4 weeks".


```
value labels follow_4w
0"no Up to 4 weeks"
1"Up to 4 weeks".


if (follow<7) follow_6w=1.
variable labels follow_6w "Age first introduced follow-on milk: Up to 6 weeks".
value labels follow_6w
0"no Up to 6 weeks"
1"Up to 6 weeks".

if (follow<9) follow_2m=1.
variable labels follow_2m "Age first introduced follow-on milk: Up to 2 months".
value labels follow_2m
0"no Up to 2 months"
1"Up to 2 months".

if (follow<14) follow_3m=1.
variable labels follow_3m "Age first introduced follow-on milk: Up to 3 months".
value labels follow_3m
0"no Up to 3 months"
1"Up to 3 months".


if (follow<18) follow_4m=1.
variable labels follow_4m "Age first introduced follow-on milk: Up to 4 months".
value labels follow_4m
0"no Up to 4 months"
1"Up to 4 months".

if (follow<19) follow_5m=1.
variable labels follow_5m "Age first introduced follow-on milk: Up to 5 months".
value labels follow_5m
0"no Up to 5 months"
1"Up to 5 months".

if (follow<20) follow_6m=1.
variable labels follow_6m "Age first introduced follow-on milk: Up to 6 months".
value labels follow_6m
0"no Up to 6 months"
1"Up to 6 months".

if (follow<23) follow_9m=1.
variable labels follow_9m "Age first introduced follow-on milk: Up to 9 months".
value labels follow_9m
0"no Up to 9 months"
1"Up to 9 months".

recode follow_4w to follow_9m (SYSMIS=0).
execute.
```

Age of introduction of a cup or beaker

N.B. not written in SPSS syntax

Cup_4m	Introduced cup or beaker: by 4 months	Stage 3 Q34 = 1, 2, 3 OR 4
Cup_5m	Introduced cup or beaker: By 5 months	Stage 3 Q34 = 1-5
Cup_6m	Introduced cup or beaker: By 6 months	Stage 3 Q34 = 1-6
Cup_7m	Introduced cup or beaker: By 7 months	Stage 3 Q34 = 1-7
Cup_8m	Introduced cup or beaker: By 8 months	Stage 3 Q34 = 1-8
Cup_9m	Introduced cup or beaker: By 9 months	Stage 3 Q34 = 1-9
Cup_10m	Introduced cup or beaker: By 10 months	Stage 3 Q34 = 1 10

***create filter for babies less than 8, 9 and 10 months.**

Agef_8m Less than 8 months old at S3
Agef_9m Less than 9 months old at S3

```
compute agef_8m=0.
compute agef_9m=0.

if Q2<242 agef_8m=1.
if Q2<273 agef_9m=1 .

variable labels agef_8m 'Less than 8 months old at S3'.
value labels agef_8m
0"no Less than 8 months old at S3"
1"Less than 8 months old at S3".

variable labels agef_9m 'Less than 9 months old at S3'.
value labels agef_9m
0"no Less than 9 months old at S3"
1"Less than 9 months old at S3".
execute.
```

Agef_10m Less than 10 months old at S3

```
Compute agef_10m=0.
If Q2<304 agef_10m=1.

variable labels agef_10m 'Less than 10 months old at S3'.
value labels agef_10m
0"no Less than 10 months old at S3"
1"Less than 10 months old at S3".
execute.
```

S3_Soc SOC from response at S3

Mother's occupation was coded using Standard Occupational Classifications 2010 (SOC2010). Note that Nssec3 below was derived based on the occupation mothers gave at Stage 1 and for consistency this was retained for analysis at Stage 3.

Fstatus Feeding status at S3 interview

1: Only breastmilk	Q3=1
2: Only infant formula / other milk	Q3=2
3: Breastmilk and infant formula / other milk	Q3=3

The following demographic variables were taken from the Stage 1 file (where relevant, the 'Definitions of derived variables' document for Stage 1 explains how they were defined.)

brthord	Birth order
prevfed	Feeding status of previous (most recent) child
prevfed2	Feeding status of previous (most recent) child (grouped)
nssec3	Mother's socio-economic classification - 3 classes
mage1	Mother's age - 4 bands
mage2	Mother's age - 5 bands
fteage	Age mother left full time education
ethnic	Ethnic group (GB only)
religion	Religion (Northern Ireland only))
IMD	Index of Multiple Deprivation quintiles
GOR	GOR