Online Supporting Material

# Characteristics associated with feeding organic foods during complementary feeding: the nationwide ELFE birth cohort

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**Supplementary table 1**. Sensitivity analysis (weighted analysis and multiple imputations) for multivariate associations between family characteristics and feeding of organic foods during complementary feeding.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |   |   | Weighted analysis (n=9750) | Multiple imputation analysis (n=10,942) |  |
|  |   |   | Organic foods during complementary feeding (ref=Never) |   | Organic foods during complementary feeding (ref=Never) |  |
|  |   |   | Sometimes | Often | Almost always |  Global p-value | Sometimes | Often | Almost always | Global p-value |
| **Model 1** |   |   |   |   |   |   |   |  |
|  | Maternal age at delivery (years) |   |   |   | <0.0001 |   |   |   | <0.0001 |
|  |   | < 25  | 0.78 [0.58, 1.05] | 0.68 [0.46, 1.00] | 0.99 [0.60, 1.64] |   | 0.85 [0.68, 1.06] | **0.72 [0.54, 0.97]** | 0.73 [0.50, 1.07] |  |
|  |   | 25-29  | 1 [Ref] | 1 [Ref] | 1 [Ref] |   | 1 [Ref] | 1 [Ref] | 1 [Ref] |  |
|  |   | 30-34  | **1.31 [1.11, 1.54]** | **1.21 [1.01, 1.46]** | **1.60 [1.28, 2.01]** |   | **1.21 [1.08, 1.37]** | **1.40 [1.21, 1.61]** | **1.56 [1.31, 1.85]** |  |
|  |   | ≥ 35  | **1.24 [1.02, 1.52]** | **1.40 [1.12, 1.75]** | **2.37 [1.83, 3.07]** |   | **1.26 [1.09, 1.46]** | **1.68 [1.42, 1.99]** | **2.20 [1.81, 2.68]** |  |
|  | Maternal education level |   |   |   | <0.0001 |   |   |   | <0.0001 |
|  |   | Up to lower secondary | 0.83 [0.54, 1.26] | **0.40 [0.23, 0.70]** | **0.20 [0.09, 0.43]** |   | **0.69 [0.50, 0.96]** | **0.38 [0.24, 0.59]** | **0.23 [0.13, 0.40]** |  |
|  |   | Upper secondary | **0.65 [0.53, 0.80]** | **0.36 [0.29, 0.47]** | **0.22 [0.16, 0.29]** |   | **0.62 [0.53, 0.73]** | **0.43 [0.36, 0.51]** | **0.22 [0.17, 0.27]** |  |
|  |   | Intermediate | **0.68 [0.56, 0.82]** | **0.51 [0.41, 0.63]** | **0.43 [0.34, 0.54]** |   | **0.69 [0.59, 0.80]** | **0.57 [0.49, 0.68]** | **0.42 [0.34, 0.51]** |  |
|  |   | 3-year university degree | 0.94 [0.77, 1.15] | **0.71 [0.57, 0.89]** | 0.82 [0.65, 1.03] |   | 0.91 [0.78, 1.06] | **0.78 [0.66, 0.92]** | **0.77 [0.65, 0.92]** |  |
|  |   | At least 5-year university degree | 1 [Ref] | 1 [Ref] | 1 [Ref] |   | 1 [Ref] | 1 [Ref] | 1 [Ref] |  |
|  | Maternal migration status |   |   |   | 0.0005 |   |   |   | <0.0001 |
|  |   | Migrant | **1.44 [1.12, 1.86]** | **1.95 [1.47, 2.59]** | 1.20 [0.84, 1.71] |   | **1.37 [1.13, 1.67]** | **1.74 [1.41, 2.15]** | **1.31 [1.01, 1.71]** |  |
|  |   | Descendant of migrant | 1.10 [0.88, 1.37] | 1.24 [0.96, 1.59] | 1.06 [0.79, 1.42] |   | 1.05 [0.89, 1.25] | 1.14 [0.94, 1.38] | 1.04 [0.82, 1.31] |  |
|  |   | Majority population | 1 [Ref] | 1 [Ref] | 1 [Ref] |   | 1 [Ref] | 1 [Ref] | 1 [Ref] |  |
|  | Parents living with the child |   |   |   | 0.9 |   |   |   | 1.0 |
|  |   | Both parents | 1 [Ref] | 1 [Ref] | 1 [Ref] |   | 0.97 [0.69, 1.35] | 1.05 [0.71, 1.54] | 1 [0.63, 1.57] |  |
|  |   | Single parenthood | 0.84 [0.54, 1.29] | 0.91 [0.55, 1.52] | 0.98 [0.53, 1.80] |   | 1 [Ref] | 1 [Ref] | 1 [Ref] |  |
|  | Older children in household |   |   |   | 0.001 |   |   |   | <0.0001 |
|  |   | ELFE child is the first child | 1 [Ref] | 1 [Ref] | 1 [Ref] |   | 1 [Ref] | 1 [Ref] | 1 [Ref] |  |
|  |   | One older child | 0.94 [0.81, 1.10] | 0.85 [0.72, 1.01] | **0.67 [0.55, 0.81]** |   | 0.98 [0.88, 1.10] | **0.86 [0.75, 0.98]** | **0.73 [0.62, 0.84]** |  |
|  |   | At least 2 older children | 1.11 [0.90, 1.37] | 0.89 [0.70, 1.14] | **0.67 [0.50, 0.90]** |   | 1.05 [0.91, 1.23] | 0.83 [0.70, 1.00] | **0.64 [0.52, 0.80]** |  |
|  | Maternal employment during pregnancy |   |   |   | 0.9 |   |   |   | 0.11 |
|  |   | Employed | 1 [Ref] | 1 [Ref] | 1 [Ref] |   | 1 [Ref] | 1 [Ref] | 1 [Ref] |  |
|  |   | Unemployed | 1.03 [0.82, 1.28] | 1.09 [0.84, 1.43] | 1.25 [0.93, 1.70] |   | 1.01 [0.85, 1.20] | 1.07 [0.88, 1.31] | **1.31 [1.04, 1.64]** |  |
|  |   | Not in the labor force | 1.02 [0.82, 1.27] | 1.08 [0.83, 1.41] | 1.12 [0.82, 1.54] |   | 0.97 [0.82, 1.14] | 1.13 [0.93, 1.37] | **1.26 [1.01, 1.58]** |  |
|  | Household income (/month) |   |   |   | <0.0001 |   |   |   | <0.0001 |
|  |   | ≤ € 750 a | 0.90 [0.65, 1.24] | **0.59 [0.38, 0.90]** | 0.94 [0.55, 1.62] |   | 1.01 [0.77, 1.34] | 0.74 [0.54, 1.03] | 0.97 [0.65, 1.45] |  |
|  |   | € 751–1,111 b | 0.89 [0.70, 1.12] | 0.83 [0.61, 1.12] | 1.37 [0.99, 1.89] |   | 0.93 [0.78, 1.12] | 0.82 [0.65, 1.04] | 1.10 [0.84, 1.44] |  |
|  |   | € 1,112–1,500 c | 1 [Ref] | 1 [Ref] | 1 [Ref] |   | 1 [Ref] | 1 [Ref] | 1 [Ref] |  |
|  |   | € 1,501–1,944 d | 1.04 [0.88, 1.23] | 1.03 [0.84, 1.27] | 1.13 [0.88, 1.44] |   | 1.08 [0.94, 1.24] | 1.11 [0.94, 1.30] | 1 [0.82, 1.21] |  |
|  |   | € 1,945–2,500 e | **1.31 [1.07, 1.60]** | **1.41 [1.12, 1.76]** | **1.72 [1.32, 2.24]** |   | **1.21 [1.04, 1.42]** | **1.38 [1.15, 1.65]** | **1.35 [1.10, 1.66]** |  |
|  |   | > € 2,500 g | **1.30 [1.00, 1.69]** | **1.80 [1.37, 2.37]** | **1.73 [1.24, 2.40]** |   | **1.35 [1.10, 1.66]** | **1.73 [1.39, 2.16]** | **1.46 [1.13, 1.89]** |  |
|  | Maternal return to work at 2 months |   |   |   | 0.2 |   |   |   | 0.3 |
|  |   | Not working at 2 months | 1 [Ref] | 1 [Ref] | 1 [Ref] |   | 1 [Ref] | 1 [Ref] | 1 [Ref] |  |
|  |   | Working at 2 months | 0.78 [0.58, 1.04] | 0.86 [0.64, 1.16] | 1.18 [0.80, 1.76] |   | 0.83 [0.66, 1.05] | 0.98 [0.77, 1.25] | 0.88 [0.66, 1.19] |  |

Data are odds ratios (ORs) [95% confidence intervals (CIs)] from multinomial logistic regression including all variables indicated in the table simultaneously and also adjusted for variables related to study design (region, maternity size and wave of recruitment). a corresponding to (US$) ≤ $815/month; b corresponding to $816–1,207/month; c corresponding to $1,208–1,630/month; d corresponding to $1,631–2,113/month; e corresponding to $2,114–2,717/month; f corresponding to > $2,717/month.

**Supplementary table 2**. Sensitivity analysis (weighted analysis and multiple imputations) for multivariate associations between maternal health and health-related behaviors (model 2) or infant characteristics and feeding practices (model 3) and feeding with organic foods during complementary feeding

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |   |   | Weighted analysis (n=8974) | Multiple imputation analysis (n=10,942) |  |
|  |   |   | Organic foods during complementary feeding (ref=Never) |   | Organic foods during complementary feeding (ref=Never) |  |
|  |   |   | Sometimes | Often | Almost always |  Global p-value | Sometimes | Often | Almost always | Global p-value |
| **Model 2** |   |   |   |   |   |   |   |  |
|  | Smoking during pregnancy |   |   |   | 0.009 |   |   |   | 0.0005 |
|  |   | Never smoker | 1 [Ref] | 1 [Ref] | 1 [Ref] |   | 1 [Ref] | 1 [Ref] | 1 [Ref] |  |
|  |   | Smoker only before pregnancy | 1.04 [0.89, 1.21] | **1.32 [1.11, 1.57]** | **1.35 [1.10, 1.65]** |   | **1.18 [1.05, 1.33]** | **1.32 [1.16, 1.51]** | **1.37 [1.17, 1.60]** |  |
|  |   | Smoker only in early pregnancy | 1.37 [0.95, 1.97] | 1.43 [0.90, 2.29] | **1.90 [1.17, 3.11]** |   | 1.23 [0.95, 1.59] | 1.06 [0.77, 1.46] | 1.29 [0.90, 1.86] |  |
|  |   | Smoker throughout pregnancy | 0.99 [0.80, 1.24] | 1.25 [0.96, 1.62] | 1.24 [0.91, 1.70] |   | 1.07 [0.92, 1.25] | 1.16 [0.96, 1.41] | **1.27 [1.00, 1.60]** |  |
|  | Pre-pregnancy BMI (kg/m2) |   |   |   | 0.0001 |   |   |   | <0.0001 |
|  |   | <18.5 | 1.17 [0.88, 1.54] | 1.22 [0.90, 1.66] | 1.27 [0.89, 1.81] |   | 1.03 [0.85, 1.24] | 1.16 [0.93, 1.44] | 1.11 [0.87, 1.43] |  |
|  |   | 18.5-24.9  | 1 [Ref] | 1 [Ref] | 1 [Ref] |   | 1 [Ref] | 1 [Ref] | 1 [Ref] |  |
|  |   | 25-29.9  | **0.79 [0.66, 0.95]** | **0.75 [0.60, 0.93]** | **0.58 [0.44, 0.77]** |   | **0.79 [0.69, 0.90]** | **0.74 [0.63, 0.87]** | **0.66 [0.54, 0.81]** |  |
|  |   | ≥ 30  | 0.84 [0.66, 1.07] | **0.67 [0.50, 0.90]** | **0.61 [0.42, 0.89]** |   | 0.86 [0.73, 1.02] | **0.78 [0.63, 0.96]** | **0.58 [0.43, 0.78]** |  |
|  | Maternal diet quality | **1.13 [1.06, 1.20]** | **1.31 [1.22, 1.40]** | **1.46 [1.35, 1.58]** | <0.0001 | **1.15 [1.10, 1.20]** | **1.30 [1.23, 1.36]** | **1.52 [1.43, 1.61]** | <0.0001 |
|  | Initial feeding method choice |   |   |   | <0.0001 |   |   |   | <0.0001 |
|  |   | Health, well-being | 1 [Ref] | 1 [Ref] | 1 [Ref] |   | 1 [Ref] | 1 [Ref] | 1 [Ref] |  |
|  |   | Practical reasons | **0.65 [0.51, 0.82]** | **0.66 [0.50, 0.88]** | **0.36 [0.24, 0.54]** |   | **0.71 [0.60, 0.83]** | **0.68 [0.56, 0.83]** | **0.39 [0.30, 0.52]** |  |
|  |   | Other | **0.76 [0.61, 0.94]** | **0.65 [0.49, 0.85]** | **0.41 [0.29, 0.57]** |   | **0.71 [0.61, 0.84]** | **0.63 [0.52, 0.76]** | **0.41 [0.31, 0.53]** |  |
|  |   | Interaction with infant | 1.21 [0.93, 1.57] | 1.28 [0.94, 1.75] | 0.89 [0.63, 1.25] |   | 1.09 [0.89, 1.32] | 1.08 [0.86, 1.35] | 1.06 [0.82, 1.38] |  |
|  |   | Usual feeding method | 0.89 [0.72, 1.09] | 1.03 [0.81, 1.31] | 1.09 [0.83, 1.43] |   | 0.96 [0.83, 1.11] | 0.97 [0.82, 1.15] | 0.99 [0.82, 1.20] |  |
| **Model 3** |   |   |   |   |   |   |   |  |
|  | Child sex |   |   |   | 0.01 |   |   |  | 0.02 |
|  |   | Boy | 1 [Ref] | 1 [Ref] | 1 [Ref] |   | 1 [Ref] | 1 [Ref] | 1 [Ref] |  |
|  |   | Girl | **0.84 [0.73 ; 0.97]** | **0.80 [0.68 ; 0.94]** | **0.82 [0.68 ; 0.99]** |   | 0.93 [0.84 ; 1.02] | **0.84 [0.75 ; 0.94]** | 0.89 [0.78 ; 1.02] |  |
|  | Child birthweight |   |   |   |  0.4 |   |   |   | 0.05 |
|  |   | Small weight for GA | 0.83 [0.65 ; 1.06] | 0.77 [0.57 ; 1.04] | 1.03 [0.73 ; 1.45] |   | **0.79 [0.66 ; 0.94]** | **0.77 [0.62 ; 0.95]** | 0.98 [0.77 ; 1.24] |  |
|  |   | Adequate weight for GA | 1 [Ref] | 1 [Ref] | 1 [Ref] |   | 1 [Ref] | 1 [Ref] | 1 [Ref] |  |
|  |   | Large weight for GA | 0.87 [0.68 ; 1.10] | 0.97 [0.74 ; 1.26] | 0.86 [0.64 ; 1.14] |   | 0.96 [0.81 ; 1.14] | 1.09 [0.90 ; 1.31] | 1.03 [0.81 ; 1.30] |  |
|  | Any breastfeeding duration (months) |   |   |   |  <0.0001 |   |   |   | <0.0001 |
|  |   | Never | 1 [Ref] | 1 [Ref] | 1 [Ref] |   | 1 [Ref] | 1 [Ref] | 1 [Ref] |  |
|  |   | <1  | 1.21 [0.94 ; 1.56] | 1.20 [0.89 ; 1.61] | **1.75 [1.16 ; 2.63]** |   | **1.28 [1.08 ; 1.52]** | 1.18 [0.96 ; 1.47] | **1.68 [1.25 ; 2.27]** |  |
|  |   | 1 to <3  | **1.46 [1.12 ; 1.89]** | **1.41 [1.03 ; 1.92]** | **2.94 [1.92 ; 4.50]** |   | **1.53 [1.28 ; 1.84]** | **1.37 [1.10 ; 1.71]** | **2.06 [1.53 ; 2.79]** |  |
|  |   | 3 to <6  | **1.35 [1.05 ; 1.74]** | **1.93 [1.43 ; 2.59]** | **3.74 [2.48 ; 5.62]** |   | **1.45 [1.21 ; 1.73]** | **1.73 [1.40 ; 2.14]** | **2.77 [2.08 ; 3.70]** |  |
|  |   | ≥ 6  | **2.05 [1.59 ; 2.64]** | **2.88 [2.14 ; 3.87]** | **8.07 [5.52 ; 11.81]** |   | **2.01 [1.68 ; 2.41]** | **2.72 [2.21 ; 3.35]** | **6.49 [4.92 ; 8.58]** |  |
|  | Age at complementary foods introduction |   |   |   |  0.002 |   |   |   | <0.0001 |
|  |   | <4 months | 0.92 [0.71 ; 1.20] | 0.92 [0.67 ; 1.27] | **0.59 [0.36 ; 0.94]** |   | 0.94 [0.79 ; 1.12] | 1.00 [0.80 ; 1.23] | **0.66 [0.48 ; 0.90]** |  |
|  |   | 4-6 months | 1 [Ref] | 1 [Ref] | 1 [Ref] |   | 1 [Ref] | 1 [Ref] | 1 [Ref] |  |
|  |   | >6 months | 1.25 [0.98 ; 1.60] | 1.22 [0.96 ; 1.56] | **1.69 [1.29 ; 2.20]** |   | 1.13 [0.97 ; 1.31] | **1.28 [1.08 ; 1.51]** | **1.55 [1.29 ; 1.85]** |  |
|  | Feeding with commercial complementary foods |   |   |   |  <0.0001 |   |   |   | <0.0001 |
|  |   | Never | 1 [Ref] | 1 [Ref] | 1 [Ref] |   | 1 [Ref] | 1 [Ref] | 1 [Ref] |  |
|  |   | Sometimes | **2.01 [1.65 ; 2.46]** | **1.94 [1.54 ; 2.43]** | **1.57 [1.23 ; 2.02]** |   | **2.15 [1.86 ; 2.48]** | **1.97 [1.68 ; 2.32]** | **1.42 [1.19 ; 1.70]** |  |
|  |   | Often | **2.03 [1.65 ; 2.51]** | **2.34 [1.84 ; 2.97]** | 1.26 [0.96 ; 1.67] |   | **2.15 [1.85 ; 2.51]** | **2.39 [2.03 ; 2.82]** | **1.31 [1.07 ; 1.59]** |  |
|  |   | Almost always | **1.66 [1.32 ; 2.10]** | **1.55 [1.15 ; 2.08]** | **1.48 [1.06 ; 2.06]** |   | **1.83 [1.54 ; 2.17]** | **1.42 [1.17 ; 1.72]** | 1.18 [0.93 ; 1.49] |  |

Data are odds ratios (ORs) [95% confidence intervals (CIs)] from multinomial logistic regressions including all variables indicated in the table simultaneously and also adjusted in model 2 and 3 for familial characteristics (maternal age, education level, migration status, employment during pregnancy, return to work at 2 months, single parenthood, number of children in the household, household income) and variables related to study design (region, maternity size and wave of recruitment)., and in model 3 for maternal health and health-related behaviors (smoking during pregnancy, pre-pregnancy BMI, diet quality during pregnancy, motives for feeding method.