**Supplementary Table 1.** Participant characteristics by quintiles of exam date among a random subset of participants with similar distributions of age across days after Mother’s Day harvest. N=244

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Days after Mother’s Day harvest (quintiles)** | | | | |  |
| **1st** | **2nd** | **3rd** | **4th** | **5th** | **P-Trend** |
| **N** | **48** | **51** | **56** | **50** | **49** |  |
| **Range (days)** | **63.4-75.5** | **75.5-82.7** | **83.4-90.5** | **90.5-96.5** | **96.5- 99.6** |  |
| **Demographic and socio-economic status** | | |  |  |  |  |
| Age, years | 6.4 (1.5) | 6.5 (1.6) | 6.6 (1.6) | 6.9 (1.7) | 6.5 (1.6) | 0.59 |
| Sex, male | 48 | 37 | 50 | 54 | 41 | 0.96 |
| Race, mestizo | 89 | 65 | 50 | 72 | 98 | 0.93 |
| Race, indigenous | 9 | 33 | 48 | 26 | 2 | 0.97 |
| Monthly household incomea | 3.0 (0.8) | 3.6 (0.7) | 3.3 (0.6) | 2.8 (0.7) | 2.8 (0.9) | 0.03 |
| Maternal education, years | 7.2 (4.3) | 8.6 (4.4) | 5.7 (2.9) | 6.6 (3.1) | 7.8 (3.7) | 0.68 |
| Flower worker cohabitation | 54 | 61 | 73 | 16 | 53 | 0.02 |
| Home distance to nearest flower plantation, m | 682 (476) | 209 (122) | 347 (257) | 450 (339) | 564 (276) | 0.53 |
| **Anthropometry** |  |  |  |  |  |  |
| Height-for-age z-score, SD | -1.13 (0.80) | -1.10 (0.99) | -1.78 (0.97) | -1.21 (0.95) | -1.05 (1.03) | 0.98 |
| Acetylcholinesterase, U/mL | 2.93 (0.52) | 3.11 (0.48) | 3.13 (0.51) | 3.12 (0.48) | 3.33 (0.43) | <0.01 |
| Hemoglobin, g/L | 11.98 (1.21) | 12.8 (0.87) | 12.75 (1.35) | 12.64 (0.96) | 13.08 (0.97) | <0.01 |
| Table entries are percentage or mean (SD)  a Monthly income categories (USD): 1= 0-50, 2= 51-150, 3=151-300, 4=301-500, 5= 501-1000, 6=>1000 | | | | | | |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Supplementary Figure 1.** Children’s neurobehavioral scores in relation to days after Mother’s Day harvesta among a subset of participants with similar distributions of age across days after Mother’s Day harvest. N=244 | | | | | | | | | |
| **Total**  **Neurobehavior** | | |  | **Attention and Inhibitory Control Domainb** | | |  | **Visuospatial Processing**  **Domain** | |
|  | | | |  | | |  | | |
| **Neurobehavioral score difference (95% CI) per SDc of time after Mother’s Day harvest** | | | | | | | | | |
| **Minimald** | **Fulle** |  | | **Minimald** | **Fulle** |  | | **Minimald** | **Fulle** |
| 0.20 (0.00, 0.40) | 0.29 (0.09, 0.49) |  | | All: 0.27 (-0.02, 0.57) | 0.35 (0.05, 0.65) |  | | 0.52 (0.14, 0.89) | 0.63 (0.25, 1.02) |
|  |  |  | | Girls: 0.60 (0.23, 0.97)  Boys: -0.09 (-0.57, 0.38) | 0.67 (0.28, 1.06)f  0.17 (-0.33, 0.68) |  | |  |  |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  | | | | | | | | | | | **Sensorimotor**  **Domain** | | |  | **Memory and Learning**  **Domain** | | |  | **Language**  **Domain** | | |  | | | |  | | |  | | | | **Neurobehavioral score difference (95% CI) per SDc of time after Mother’s Day harvest** | | | | | | | | | | | **Minimald** | **Fulle** |  | | **Minimald** | **Fulle** |  | | **Minimald** | **Fulle** | | 0.49 (0.14, 0.85) | 0.53 (0.16, 0.90)g |  | | 0.03 (-0.23, 0.29) | 0.07 (-0.19, 0.34) |  | | -0.20 (-0.50, 0.10) | -0.13 (-0.43, 0.17)h | | a Figures depict fully adjusted results  b P-sex interaction for each model: 0.03 (minimal), 0.10 (full)  c SD: 10.8 days  d Minimal adjustment model: age, sex, race and examiner  e Full adjustment model: age, sex, race, examiner, height-for-age z-score, income, maternal education, distance to the nearest plantation edge and flower worker cohabitation.  f Quadratic model: β= 10.07, β-quadratic= -0.62 (95% CI: -1.17, -0.06)  g Quadratic model: β= 9.04, β-quadratic= -0.56 (95% CI: -1.06, -0.06)  h Quadratic model: β= -6.68, β-quadratic= 0.43 (95% CI: 0.02, 0.84) | | | | | | | | | | |