**Table** S**1.** Comparison of carotenoids among strictly longitudinal breast milk samples (µg/L)

|  |  |  |  |
| --- | --- | --- | --- |
| **Carotenoid** | **Colostrum**  **(0–5 day)**  **n=30** | **Transitional milk**  **(10–15 day)**  **n=30** | **Early-term mature milk**  **(40–45 day)**  **n=30** |
| Lutein | 71.96  (65.36, 106.42) | 92.71  (63.20, 126.24) | 55.50  (43.51, 91.45) |
| Zeaxanthin | 13.29  (9.17, 20.67) | 21.00  (15.30, 28.23) | 13.42  (9.50, 20.06) |
| β-Cryptoxanthin | 51.9  (36.33, 84.58) | 28.63  (19.11, 44.97) | 15.22  (7.88, 22.06) |
| β-Carotene | 174.95  (83.51, 289.02) | 42.11  (26.80, 58.91) | 31.22  (14.34, 51.29) |
| Lycopene | 78.58  (43.45, 139.47) | 12.70  (6.08, 20.72) | 6.23  (0, 14.08) |
| Total | 390.19  (235.69, 564.08) | 219.10  (151.79, 283.83) | 151.58  (80.36, 210.24) |

**Table S2.** Comparison of carotenoids across cross-sectional breast milk samples (µg/L)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Carotenoid** | **Early-term mature milk**  **(40–45 day)**  **n=71** | **Mid-term mature milk**  **(200–240 day)**  **n=101** | **Late-term mature milk**  **(300–400 day)**  **n=99** | |
| Lutein | 69.34  (45.12, 108.99) | 56.11  (32.33, 78.54) | 50.68  (32.62, 73.84) |
| Zeaxanthin | 15.81  (12.57, 24.05) | 32.53  (17.22, 44.47) | 34.41  (22.15, 53.19) |
| β-Cryptoxanthin | 17.35b  (10.70, 30.77) | 12.37  (1.54, 20.17) | 3.46  (0, 11.70) |
| β-Carotene | 35.63  (18.22, 51.58) | 14.53  (10.33, 22.56) | 12.49  (9.52, 17.42) |
| Lycopene | 7.55  (0, 13.29) | 13.83  (9.04, 22.64) | 10.29  (7.29, 15.01) |
| Total | 152.63  (105.24, 234.71) | 125.87  (84.73, 200.20) | 118.75  (80.28, 168.00) |