Table 7. Vitamin D and growth outcomes: Results of cohort studies (updated from original report)

| **Author Year Study Name** **PMID** | **Life Stage** | **Outcome****(n/N; Incidence)** | **Followup Duration** | **Maternal 25(OH)D concentration, nmol/L** | **No. in Category** | **Final value** | **Final SD** | **P value** | **Study Quality** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Radioimmunoassay** |  |  |  |  |  |  |  |  |  |
| Morley 2006[56](#_ENREF_56)Australia[16352684]  | Pregnant women; infant 0–6 mo | Birth weight(N=374)  | Delivery  | <28 at 28-32 wk | 27 | 3397 g | 57 | NS | B |
| ≥28 at 28–32 wk | 347 | 3555 | 52 |   |
| Birth length(N=374)  | Delivery  | <28 at 28–32 wk | 27 | 49.8 cm | 2.7 | NS |
| ≥28 at 28–32 wk | 347 | 50.4 | 2.4 |   |
| Gale 2008[55](#_ENREF_55)PAHSG, UK[17311057]  | Pregnant women; infant 0–6 mo | Birth weight (N=466) | Delivery  | <30 (Quartile) | nd | 3.38 kg | 0.46 | 0.25A | C |
| 30–50 | nd | 3.4 | 0.56 |
| 50–75 | nd | 3.49 | 1.57 |
| >75 | nd | 3.43 | 0.51 |
| Weight at 9 mo (N=440) | 9 mo | <30 | nd | 15.9 | 1.14 | 0.58 |
| 30–150 | nd | 15.8 | 1.26 |
| 50–175 | nd | 16.1 | 1.34 |
| >75 | nd | 15.9 | 1.09 |
| Weight at 9 y (N=178) | 9 y | <30 | nd | 27.4 kg | 1.19 | 0.1 |
| 30–150 | nd | 29.4 | 1.21 |
| 50–175 | nd | 30 | 1.2 |
| >75 | nd | 29.3 | 1.19 |
| Pregnant women; infant 0–16 mo | Birth length (N=466) | Delivery | <30 | nd | 50 cm | 1.83 | 0.15 |
| 30–150 | nd | 50 | 2.29 |
| 50–175 | nd | 50.5 | 2.25 |
| >75 | nd | 50.1 | 2.09 |
| Length at 9 mo(N=440) | 9 mo | <30 | nd | 71.2 cm | 2.85 | 0.86 |
| 30–150 | nd | 71.4 | 2.6 |
| 50–175 | nd | 71.7 | 2.89 |
| >75 | nd | 71.1 | 2.67 |
| Height at 9 y (N=178)  | 9 y | <30 | nd | 129.6 cm | 5.88 | 0.19 |
| 30–150 | nd | 131.5 | 6.66 |
| 50–175 | nd | 131.8 | 5.09 |
| >75 | nd | 130.6 | 6.45 |
| **Radioimmunoassay and chemiluminescence assay averaged together** |  |  |  |  |  |
| Burris 2012[45](#_ENREF_45) and Burris averaged together  | Pregnant or lactating women | Birth weight | Delivery | <25  | 47 | 3.46kg | SD=0.68 | ND | A  |
| 25–150 | 314 | 3.55kg | SD=0.52 |
| 50–175 | 543 | 3.53kg | SD=0.51 |
| ≥75 | 229 | 3.51kg | SD=0.52 |
| **HPLC and tandem mass spectrometry** |  |  |  |  |  |  |  |  |
| Gernand 2013[46](#_ENREF_46)  | singleton gestation | Birth weight | Delivery | <37.5 | 747 | 3127g | SD=15 | 0.014  |  B |
| ≥37.5 | 1399 | 3215g | SD=11 |