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| Country  | Type of nutrients  | Affected genes  | Sample size | Effect  | Reference |
| India  | Vitamin B12+milk | LINE 1 | 30 pregnant women for control and 30 pregnant for treatment | Higher methylation  | [27] |
| Gambia | Multiple micronutrients | Global DNA methylation  |  | Higher methylation  | [25] |
| Gambia | Biomarkers differences according to season | BOLA3, LOC654433, EXD3 and ZFYVE28 | 83 women pregnant in rainy season, 84 women pregnant in dry season | Higher BMI is associated with lower methylation of MEs | [29] |
| India  | Vegetarian diet | Global DNA methylation | 26 pregnant women taking veg diet and 23pregnant women taking non-veg diet  | Level of folate and significantly higher, vitamin B12 was high but not significantly, level of homocysteing was lower but not significantly in non-veg group | [31] |

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| Country  | Affected gene | Type of pollutant  | Key finding | References |
| Beijing, China | Global DNA methylation  | Air pollution  | PM is directly associated with decreased SATa methylation  | [39] |
| China, Wuhan | VEGFA | PM | 1.12 decreases in ACE average methylation (%5mC), 13.27% increase in ACE protein | [40] |
| Thiland, Nakhon, Sri –Thammarat | LINE-1, P53 promoter  | As  | Global hypomethylation, Increased methylation of P53 promoter | [43] |
| Toronto  | Alu, TLR4 | Coarse PMs | Decrease methylation  | [36] |
| KwaZulu-Natal, South Africa | Global DNA methylation  | Air pollution of highly polluted area  | Not significant changes  | [44] |

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| Country  | Key finding | Study model  | References |
| Afghanistan  | hypo methylation of LINE 1 in cases versus control | Case-control  | [70] |
| Pakistan  | Strong association of child mental health with maternal depression  | Case-control  | [54] |
| Pakistan  | Infant of depressed mothers have lower birth weight as compare to mothers without depression | 290 mother infant pair depressed 147 non depressed  | [55] |
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