**Supplemental Table 1** PubMED search strategy (10 March 2018)

|  |  |  |
| --- | --- | --- |
| **Search** | **Queries** | **Results** |
| Search for diet-biomarker-related index |
| #14 | Search #4 OR #9 OR #13 | 2,659 |
| #13 | Search #12 Filters: Journal Article; English | 135 |
| #12 | Search #10 AND #11 | 139 |
| #11 | Search "reduced rank regression" OR "RRR" OR "partial least squares" OR "pls" | 14,803 |
| #10 | Search dietary pattern\*[tiab] OR food pattern\*[tiab] OR eating pattern\*[tiab] | 8,735 |
| #9 | Search #8 Filters: Journal Article; English; Humans | 2,498 |
| #8 | Search #5 and #6 and #7 | 3,898 |
| #7 | Search score[tiab] OR model[tiab] OR models[tiab] | 2,633,254 |
| #6 | Search predicted[tiab] OR predictor[tiab] OR prediction[tiab] | 654,709 |
| #5 | Search dietary[tiab] OR intake[tiab] | 377,502 |
| #4 | Search #3 Filters: Journal Article; English | 38 |
| #3 | Search #1 and #2 | 40 |
| #2 | Search develop[tiab] OR development[tiab] | 2,186,339 |
| #1 | Search "dietary index"[tiab] OR "dietary inflammatory index"[tiab] | 239 |

**Supplemental Table 2** EMBASE search strategy (10 March 2018)

|  |  |  |
| --- | --- | --- |
| **Search** | **Queries** | **Results** |
| Search for diet-biomarker-related index |
| #14 | Search #4 OR #9 OR #13 | 2,610 |
| #13 | Search #12 Filters: Journal Article; English | 114 |
| #12 | Search #10 AND #11 | 181 |
| #11 | Search 'reduced rank regression' OR 'rrr' OR 'partial least square' OR 'pls' | 20,565 |
| #10 | Search 'dietary pattern\*':ti,ab OR 'food pattern\*':ti,ab OR 'eating pattern\*':ti,ab | 11,311 |
| #9 | Search #8 Filters: Journal Article; English; Humans | 2,483 |
| #8 | Search #5 and #6 and #7 | 5,147 |
| #7 | Search 'score':ti,ab OR 'model':ti,ab OR 'models':ti,ab | 3,379,486 |
| #6 | Search 'predicted':ti,ab OR 'predictor':ti,ab OR 'prediction':ti,ab | 839,673 |
| #5 | Search 'dietary':ti,ab OR 'intake':ti,ab | 475,122 |
| #4 | Search #3 Filters: Journal Article; English | 26 |
| #3 | Search #1 and #2 | 49 |
| #2 | Search 'develop':ti,ab OR 'development':ti,ab | 2,747,429 |
| #1 | Search 'dietary index':ti,ab OR 'dietary inflammatory index':ti,ab | 289 |