**Supplemental File 3: Quality Assessment of the studies included in the Systematic Literature Review**

|  |  |  |
| --- | --- | --- |
|  | **Criteria sufficiently described and appropriate\*** |  |
| **Reference** | **Objective** | **Study design** | **Method of subject selection** | **Subject character-istics?** | **Outcome measures** | **Sample size** | **Analytic methods** | **Estimate of variance** | **Confoun-der control** | **Results** | **Con-clusion** | **Sum Score** |
| **Chemosensory function** |
| Duffy et al. 199533 | Yes | Yes | Yes | Yes | Partial | Yes | Yes | Yes | No | Yes | Yes | 0.86 |
| **Oral function** |
| Apollonio et al. 199735 | Yes | Yes | Yes | Partial | Partial | Yes | Yes | Yes | Yes | Yes | Yes | 0.91 |
| Bailey et al. 200463 | Yes | Yes | Yes | No | Yes | Partial | Yes | Yes | Partial | Partial | Yes | 0.77 |
| Fontijn-Tekamp et al. 199641 | Yes | Yes | Yes | No | Yes | Yes | Yes | Yes | No | Partial | Yes | 0.77 |
| Han & Kim 201436 | Yes | Yes | Yes | Partial | Yes | Yes | Yes | Yes | Partial | Yes | Yes | 0.91 |
| Inomata et al. 201446 | Yes | Yes | Yes | Partial | Yes | Yes | Yes | Yes | Partial | Yes | Yes | 0.91 |
| Iwasaki et al. 201442 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | 1.00 |
| Iwasaki et al. 201640 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | 1.00 |

|  |  |  |
| --- | --- | --- |
|  | **Criteria sufficiently described and appropriate\*** |  |
| **Reference** | **Objective** | **Study design** | **Method of subject selection** | **Subject character-istics?** | **Outcome measures** | **Sample size** | **Analytic methods** | **Estimate of variance** | **Confoun-der control** | **Results** | **Con-clusion** | **Sum Score** |
| Kim et al. 200747 | Yes | Yes | Yes | Partial | No | Yes | Yes | Partial | Partial | Partial | Yes | 0.73 |
| Kimura et al. 201353 | Yes | Yes | Partial | Yes | Yes | Yes | Yes | Yes | No | Yes | Yes | 0.86 |

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Kwon et al. 201756 | Yes | Yes | Yes | Partial | Partial | Yes | Yes | Yes | Partial | Yes | Yes | 0.86 |

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Lee et al. 200437 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | 1.00 |

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Liedberg et al. 200451 | Yes | Yes | Yes | Partial | Yes | No | Partial | Yes | No | Yes | Yes | 0.73 |

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Liedberg et al. 200750 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Partial | Yes | 0.95 |
| Lin et al. 201054 | No | No | No | No | No | No | Partial | No | No | No | Yes | 0.14 |
| Marcenes et al. 200338 | Yes | Yes | Partial | No | Yes | Yes | Yes | Partial | Partial | Yes | Yes | 0.77 |
| Marshall et al. 200148 | Yes | Yes | Yes | Partial | Yes | Yes | Yes | Yes | Partial | Yes | Yes | 0.91 |
| Nordström et al. 199043 | Yes | Yes | Yes | Partial | Yes | Partial | Partial | Yes | Yes | Yes | Yes | 0.86 |
| Österberg et al. 198244 | Yes | Yes | Partial | Partial | Yes | Yes | Yes | Yes | Partial | Partial | Yes | 0.82 |
|  | **Criteria sufficiently described and appropriate\*** |  |
| **Reference** | **Objective** | **Study design** | **Method of subject selection** | **Subject character-istics?** | **Outcome measures** | **Sample size** | **Analytic methods** | **Estimate of variance** | **Confoun-der control** | **Results** | **Con-clusion** | **Sum Score** |
| Österberg et al. 200239 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Partial | Partial  | Yes | Yes | 0.91 |
| Sheiham et al. 200131,32 | Yes | Yes | Yes | No | Yes | Partial | Yes | Yes | Yes | Yes | Yes | 0.86 |
| Tsai & Chang 201152 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Partial | Yes | Partial | Yes | 0.91 |
| Woo et al. 199457 | Yes | Yes | Yes | Partial | Yes | Yes | Yes | Yes | No | Yes | Yes | 0.86 |
| Yoshida et al. 201155 | Yes | Yes | Yes | No | No | Yes | Partial | Yes | No | Partial | Yes | 0.64 |
| Yoshihara et al. 200549 | Yes | Yes | Yes | Yes | Yes | No | Yes | Yes | Yes | Yes | Yes | 0.91 |
| **Cognitive function** |
| De Rouvray et al. 201465 | Yes | Yes | Partial | Yes | Yes | Yes | Yes | Yes | Partial | Yes | Yes | 0.91 |
| Shaten-stein et al. 200764 | Partial | No | Yes | Yes | Partial | No | Yes | Yes | No | Yes | Yes | 0.64 |
| **Physical function** |
| Sarti et al. 201366 | Yes | Yes | Yes | Partial | Yes | Yes | Yes | Yes | Yes | Yes | Yes | 0.95 |
|  | **Criteria sufficiently described and appropriate\*** |  |
| **Reference** | **Objective** | **Study design** | **Method of subject selection** | **Subject character-istics?** | **Outcome measures** | **Sample size** | **Analytic methods** | **Estimate of variance** | **Confoun-der control** | **Results** | **Con-clusion** | **Sum Score** |
| Bianchetti et al. 199067 | Yes | Yes | Yes | No | Partial | Yes | Partial | No | No | Yes | Yes | 0.64 |
| **Multiple functional domains** |
| Dean et al. 200934 | Yes | Yes | Yes | Yes | Partial | Yes | Yes | Yes | Partial | Yes | Yes | 0.91 |
| Holmes et al. 201161 | Yes | Yes | Yes | Partial | Yes | Yes | Yes | Yes | Yes | Yes | Yes | 0.95 |
| Keller et al. 199745 | Yes | Yes | Yes | Partial | Yes | Yes | Yes | Yes | Partial | Partial | Yes | 0.86 |
| Kwon et al. 200659 | Yes | Yes | Yes | Yes | Partial | Yes | Yes | Yes | Yes | Yes | Yes | 0.95 |
| Posner et al. 199460 | Partial | Yes | Yes | Yes | Partial | Yes | Yes | Yes | Yes | Yes | Yes | 0.91 |
| Shaten-stein et al. 201358 | Yes | Yes | Yes | Partial | Yes | Yes | Yes | Yes | Yes | Yes | Yes | 0.95 |
| Shaten-stein et al. 201662 | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | 1.0 |

\*Each question can be answered with ‘yes’, ‘partial’, ‘no’ and ‘not applicable’. The summary score is the total sum ((number of ‘yes’ x 2) + (number of ‘partial’ x 1)) / total possible sum (22)