**Biochemical assessment of the nutritional status of** **infants, children and adolescents in South Africa (1997-2022): A systematic review**

**Supplementary table 1: Joanna Briggs Institute (JBI) critical appraisal checklist for studies reporting prevalence data**

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| --- | --- | --- |
|  | **Article** | **Quality criteria\*****y=yes, n=no** |
|  |  | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** |
| 1 | Faber et al., 2015(18) | y | y | y | y | y | y | y | y | y |
| 2 | Labadarios et al., 2007(19) | y | y | y | y | y | y | y | y | y |
| 3 | Shisana et al., 2013(20) | y | y | y | y | y | y | y | y | y |
| 4 | NDoH, Stats SA, SAMRC, and ICF, 2019(25) | y | y | y | y | y | y | y | y | y |
| 5 | Poopedi et al., 2015(26) | y | y | y | y | y | y | y | y | y |
| 6 | Sibeko et al., 2004(27) | n | n | y | y | y | y | y | y | y |
| 7 | MAL-ED, 2017(28)  | n | n | y | y | y | y | y | y | y |
| 8 | Faber and Benade, 2000(29) | y | y | y | y | y | y | y | y | y |
| 9 | Faber et al., 2001(30) | y | y | y | y | y | y | y | y | y |
| 10 | Smuts et al., 2005(31) | n | n | y | y | y | y | y | y | y |
| 11 | Makanjana and Naicker, 2020(32) | n | n | y | y | y | y | y | y | y |
| 12 | Motadi et al., 2015(33)  | y | y | y | y | y | y | y | y | y |
| 13 | Carter et al., 2021(34) | n | n | y | y | y | y | y | y | y |
| 14 | Rikhotso et al., 2022(35) | n | n | y | y | y | y | y | y | y |
| 15 | Smuts et al., 2019(36) | n | n | y | y | y | y | y | y | y |
| 16 | Egal and Oldewage-Theron, 2017(37)  | n | n | y | y | y | y | y | y | y |
| 17 | Gwetu et al., 2015(38) | n | n | y | y | y | y | y | y | y |
| 18 | Beckmann et al., 2021(39) | n | n | y | y | y | y | y | y | y |
| 19 | Taljaard et al., 2013b(40) | n | n | y | y | y | y | y | y | y |
| 20 | Mamabolo and Alberts, 2014(42) | y | y | y | y | y | y | y | y | y |
| 21 | Muriuki et al., 2020(43) | n | n | y | y | y | y | y | y | y |
| 22 | Van der Hoeven et al., 2016(44) | n | n | y | y | y | y | y | y | y |
| 23 | Onabanjo et al., 2012(45) | n | n | y | y | y | y | y | y | y |
| 24 | Mabapa et al., 2014(47) | y | y | y | y | y | y | y | y | y |
| 25 | Mabasa et al., 2018(48) | y | y | y | y | y | y | y | y | y |
| 26 | Velaphi et al., 2019(51)  | n | n | y | y | y | y | y | y | y |
| 27 | Ncayiyana et al., 2021(52) | n | y | y | y | y | y | y | y | y |
| 28 | Poopedi et al., 2011(53) | y | y | y | y | y | y | y | y | y |
| 29 | van Stuijvenberg et al., 2019(61) | n | n | y | y | y | y | y | y | y |
| 30 | Ajayi et al., 2017(65) | y | n | y | y | y | y | y | y | y |
| 31 | Oldewage-Theron et al., 2017(68) | y | y | y | y | y | y | y | y | y |
| 32 | Osei et al., 2016(83) | n | n | y | y | y | y | y | y | y |
| 33 | Dannhauser et al., 2000(103) | y | y | y | y | y | y | y | y | y |
| 34 | van Stuijvenberg et al., 2012(104) | n | n | y | y | y | y | y | y | y |
| 35 | Oelofse et al., 2002(105) | n | y | y | y | y | y | y | y | y |
| 36 | Faber et al., 2007(106)  | n | n | y | y | y | y | y | y | y |
| 37 | Heckman et al., 2010(107) | n | n | y | y | y | y | y | y | y |
| 38 | Taljaard et al., 2013a(108) | n | n | y | y | y | y | y | y | y |
| 39 | Samuel et al., 2010(109) | n | n | y | y | y | y | y | y | y |

**\*Quality criteria**

1. Was the sample frame appropriate to address the target population?

2. Were study participants recruited in an appropriate way?

3. Was the sample size adequate?

4. Were the study subjects and setting described in detail?

5. Is the data analysis conducted with sufficient coverage of the identified sample?

6. Were valid methods used for the identification of the condition?

7. Was the condition measured in a standard, reliable way for all participants?

8. Was there appropriate statistical analysis?

9. Was the response rate adequate, and if not, was the low response rate managed appropriately?

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