**Appendix. Search strategy review form**

***PRESS Guideline* — Search Submission & Peer Review Assessment**

**SEARCH SUBMISSION: THIS SECTION TO BE FILLED IN BY THE SEARCHER**

|  |  |  |
| --- | --- | --- |
| Searcher: Tais F Galvao, Marcus T Silva | Email: taisgalvao@gmail.com |  |
| Date submitted: May 22, 2020 | Date requested by: 25/05/2020 | *[Maximum = 5 working days]* |

**Systematic Review Title:**

Prevalência de deficiência de micronutrientes em mulheres em idade fértil no Brasil: revisão sistemática e meta-análise

This search strategy is …

|  |  |
| --- | --- |
| X | My PRIMARY (core) database strategy — First time submitting a strategy for search question and database |
|  | My PRIMARY (core) strategy — Follow-up review NOT the first time submitting a strategy for search question and database. If this is a response to peer review, itemize the changes made to the review suggestions |
|  | SECONDARY search strategy— First time submitting a strategy for search question and database |
|  | SECONDARY search strategy — NOT the first time submitting a strategy for search question and database. If  this is a response to peer review, itemize the changes made to the review suggestions |

**Database**

(i.e., MEDLINE,CINAHL…): *[mandatory]*

MEDLINE

**Interface**

(i.e., Ovid, EBSCO…): *[mandatory]*

Pubmed

**Research Question**

(Describe the purpose of the search) *[mandatory]*

What is the prevalence of vitamin A deficiency in Brazilian women in childbearing age?

**PICO Format**

(Outline the PICOs for your question — i.e., Patient, Index test, Reference standard, Outcome, and Study Design — as applicable)

|  |  |
| --- | --- |
| **P** | Women in childbearing age (15-49 years old) |
| **I** | - |
| **C** | - |
| **O** | Vitamin A deficiency |
| **S** | Observational or experimental epidemiologic studies conducted in Brazil |

**Inclusion Criteria**

(List criteria such as age groups, study designs, etc., to be included) *[optional]*

Women in childbearing age (15-49 years old)

Observational or experimental studies irrespective of representativeness

Assessment of vitamin A deficiency based on serum retinol (< 0.70 µmol/L) or other sensitive technique

**Exclusion Criteria**

(List criteria such as study designs, date limits, etc., to be excluded) *[optional]*

None

**Was a search filter applied?**

Yes No X

**If YES, which one(s) (e.g., Cochrane RCT filter, PubMed Clinical Queries filter)? Provide the source if this is a published filter.** *[mandatory if YES to previous question* — *textbox]*

Other notes or comments you feel would be useful for the peer reviewer? ***[optional]***

Sentinel studies: (20113385 OR 22099335 OR 29436245 OR 31602713 OR 29963989 OR 23670471 OR 30307300)

1: Bezerra DS, Ribeiro KDS, Lima MSR, Pires Medeiros JF, da Silva AGCL, Dimenstein R, Osório MM. Retinol status and associated factors in mother-newborn pairs. J Hum Nutr Diet. 2020 Apr;33(2):222-231. doi: 10.1111/jhn.12707. Epub 2019 Oct 11. PMID: 31602713.

2: Paes-Silva RP, Gadelha PCFP, Lemos MDCC, Castro CMMB, Arruda IKG, Diniz ADS. Adiposity, inflammation and fat-soluble vitamins in adolescents. J Pediatr (Rio J). 2019 Sep-Oct;95(5):575-583. doi: 10.1016/j.jped.2018.05.008. Epub 2018 Jun 29. PMID: 29963989.

3: Deminice TMM, Ferraz IS, Monteiro JP, Jordão AA, Ambrósio LMCS, Nogueira-de-Almeida CA. Vitamin A intake of Brazilian mothers and retinol concentrations in maternal blood, human milk, and the umbilical cord. J Int Med Res. 2018 Apr;46(4):1555-1569. doi: 10.1177/0300060518757155. Epub 2018 Feb 13. PMID: 29436245; PMCID: PMC6091812.

4: de Lira LQ, Lima MS, de Medeiros JM, da Silva IF, Dimenstein R. Correlation of vitamin A nutritional status on alpha-tocopherol in the colostrum of lactating women. Matern Child Nutr. 2013 Jan;9(1):31-40. doi: 10.1111/j.1740-8709.2011.00376.x. Epub 2011 Nov 20. PMID: 22099335; PMCID: PMC6860850.

5: da Silva Ribeiro KD, de Araújo KF, de Souza HH, Soares FB, da Costa Pereira M, Dimenstein R. Nutritional vitamin A status in northeast Brazilian lactating mothers. J Hum Nutr Diet. 2010 Apr;23(2):154-61. doi: 10.1111/j.1365-277X.2009.01026.x. Epub 2010 Jan 22. PMID: 20113385.

6: Paes-Silva RP, Tomiya MTO, Maio R, De Castro CMMB, Arruda IKG, Diniz ADS. Prevalence and factors associated with fat-soluble vitamin deficiency in adolescents. Nutr Hosp. 2018 Oct 5;35(5):1153-1162. doi: 10.20960/nh.1785. PMID:

30307300.

7: Miglioli TC, Fonseca VM, Gomes Junior SC, de Lira PI, Batista Filho M. Deficiência de Vitamina A em mães e filhos no Estado de Pernambuco [Vitamin A deficiency in mothers and children in the state of Pernambuco]. Cien Saúde Colet. 2013 May;18(5):1427-40. Portuguese. PMID: 23670471.

Please copy and paste your search strategy here, exactly as run, including the number of hits per line. ***[mandatory]***

**Strategy 1**

|  |  |  |
| --- | --- | --- |
| Search | Query | Items found |
| #1 | ((Vitamin A) OR Retinol OR (Vitamina A) OR (Aquasol A) OR Retinol OR All-Trans-Retinol OR (All Trans Retinol) OR (Vitamin A1) OR 11-cis-Retinol) | 63,942 |
| #2 | (Brazil\* OR Brasil) | 409,549 |
| #3 | #1 AND # 2 | 1,003 |

**Strategy 2**

|  |  |  |
| --- | --- | --- |
| Search | Query | Items found |
| #1 | ((Vitamin A) OR Retinol OR (Vitamina A) OR (Aquasol A) OR Retinol OR All-Trans-Retinol OR (All Trans Retinol) OR (Vitamin A1) OR 11-cis-Retinol) | 63,942 |
| #2 | (woman OR women OR (adult\* female\*) OR adolescen\* OR teen\* OR girl\* OR fertil\* OR "childbearing age" OR gravidity OR pregnan\* OR gestation\* OR parturition\* OR birth\* OR childbirth\* OR postpartum OR puerperium OR reproductive OR childbear\*) | 7,013,573 |
| #3 | (Brazil\* OR Brasil) | 409,549 |
| #4 | #1 AND # 2 AND #3 | 434 |

**PEER REVIEW ASSESSMENT: THIS SECTION TO BE FILLED IN BY THE REVIEWER**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Reviewer: | Email: | Date completed: | | |
|  | Julicristie M Oliveira | julicr@unicamp.br | 25/05/2020 | | |
|  | **1. TRANSLATION** |  |  | | |
| A -­‐ No revisions | | X |
| B -­‐ Revision(s) suggested | |  |
| C -­‐ Revision(s) required | |  |

If “B” or “C,” please provide an explanation or example:

**2. BOOLEAN AND PROXIMITY OPERATORS**

|  |  |
| --- | --- |
| A -­‐ No revisions |  |
| B -­‐ Revision(s) suggested | X |
| C -­‐ Revision(s) required |  |

If “B” or “C,” please provide an explanation or example:

Add an asteristic after Brasil.

**3. SUBJECT HEADINGS**

|  |  |
| --- | --- |
| A -­ ‐No revisions |  |
| B -­‐ Revision(s) suggested | x |
| C -­‐ Revision(s) required |  |

If “B” or “C,” please provide an explanation or example:

I suggest to use the first strategy.

**4. TEXT WORD SEARCHING**

|  |  |
| --- | --- |
| A -­‐No revisions | X |
| B -­‐ Revision(s)suggested |  |
| C -­‐ Revision(s) required |  |

If “B” or “C,” please provide an explanation or example:

**5. SPELLING, SYNTAX, AND LINE NUMBERS**

|  |  |
| --- | --- |
| A -­‐No revisions | X |
| B -­‐ Revision(s)suggested |  |
| C -­‐ Revision(s) required |  |

If “B” or “C,” please provide an explanation or example:

**6. LIMITS AND FILTERS**

|  |  |
| --- | --- |
| A -­‐No revisions | X |
| B -­‐ Revision(s) suggested |  |
| C -­‐ Revision(s) required |  |

If “B” or “C,” please provide an explanation or example:

OVERALL EVALUATION (Note: If one or more “revision required” is noted above, the response below must be “revisions required”.)

|  |  |
| --- | --- |
| A -­‐No revisions |  |
| B -­‐ Revision(s) suggested | X |
| C -­‐ Revision(s) required |  |

Please see the suggestion bellow:

| Search | Query | Results |
| --- | --- | --- |
| #3 | Search: **(Brazil\* OR Brasil\*) AND ((Vitamin A) OR Retinol OR (Vitamina A) OR (Aquasol A) OR Retinol OR All-Trans-Retinol OR (All Trans Retinol) OR (Vitamin A1) OR 11-cis-Retinol)** | [1,026](https://pubmed.ncbi.nlm.nih.gov/?term=%28Brazil%2A+OR+Brasil%2A%29+AND+%28%28Vitamin+A%29+OR+Retinol+OR+%28Vitamina+A%29+OR+%28Aquasol+A%29+OR+Retinol+OR+All-Trans-Retinol+OR+%28All+Trans+Retinol%29+OR+%28Vitamin+A1%29+OR+11-cis-Retinol%29&sort=) |
| #2 | Search: **(Brazil\* OR Brasil\*)**  "brazil\*"[All Fields] OR "brasil\*"[All Fields] | [416,994](https://pubmed.ncbi.nlm.nih.gov/?term=%28Brazil%2A+OR+Brasil%2A%29&sort=relevance) |
| #1 | Search: **((Vitamin A) OR Retinol OR (Vitamina A) OR (Aquasol A) OR Retinol OR All-Trans-Retinol OR (All Trans Retinol) OR (Vitamin A1) OR 11-cis-Retinol)**  (((((((("vitamin a"[MeSH Terms] OR "vitamin a"[All Fields]) OR ((("vitamin a"[MeSH Terms] OR "vitamin a"[All Fields]) OR "retinol"[All Fields]) OR "retinols"[All Fields])) OR ("vitamina"[All Fields] OR "vitaminas"[All Fields])) OR (("vitamin a"[MeSH Terms] OR "vitamin a"[All Fields]) OR "aquasol a"[All Fields])) OR ((("vitamin a"[MeSH Terms] OR "vitamin a"[All Fields]) OR "retinol"[All Fields]) OR "retinols"[All Fields])) OR ((("vitamin a"[MeSH Terms] OR "vitamin a"[All Fields]) OR ("trans"[All Fields] AND "retinol"[All Fields])) OR "all trans retinol"[All Fields])) OR ((("vitamin a"[MeSH Terms] OR "vitamin a"[All Fields]) OR ("trans"[All Fields] AND "retinol"[All Fields])) OR "all trans retinol"[All Fields])) OR ((("vitamin a"[MeSH Terms] OR "vitamin a"[All Fields]) OR ("vitamin"[All Fields] AND "a1"[All Fields])) OR "vitamin a1"[All Fields])) OR (("vitamin a"[MeSH Terms] OR "vitamin a"[All Fields]) OR "11 cis retinol"[All Fields])  **Translations**  **Vitamin A:** "vitamin a"[MeSH Terms] OR "vitamin a"[All Fields]  **Retinol:** "vitamin a"[MeSH Terms] OR "vitamin a"[All Fields] OR "retinol"[All Fields] OR "retinols"[All Fields]  **Vitamina:** "vitamina"[All Fields] OR "vitaminas"[All Fields]  **Aquasol A:** "vitamin a"[MeSH Terms] OR "vitamin a"[All Fields] OR "aquasol a"[All Fields]  **Retinol:** "vitamin a"[MeSH Terms] OR "vitamin a"[All Fields] OR "retinol"[All Fields] OR "retinols"[All Fields]  **All-Trans-Retinol:** "vitamin a"[MeSH Terms] OR "vitamin a"[All Fields] OR ("trans"[All Fields] AND "retinol"[All Fields]) OR "all trans retinol"[All Fields]  **All Trans Retinol:** "vitamin a"[MeSH Terms] OR "vitamin a"[All Fields] OR ("trans"[All Fields] AND "retinol"[All Fields]) OR "all trans retinol"[All Fields]  **Vitamin A1:** "vitamin a"[MeSH Terms] OR "vitamin a"[All Fields] OR ("vitamin"[All Fields] AND "a1"[All Fields]) OR "vitamin a1"[All Fields]  **11-cis-Retinol:** "vitamin a"[MeSH Terms] OR "vitamin a"[All Fields] OR "11 cis retinol"[All Fields] | [64,964](https://pubmed.ncbi.nlm.nih.gov/?term=%28%28Vitamin+A%29+OR+Retinol+OR+%28Vitamina+A%29+OR+%28Aquasol+A%29+OR+Retinol+OR+All-Trans-Retinol+OR+%28All+Trans+Retinol%29+OR+%28Vitamin+A1%29+OR+11-cis-Retinol%29&sort=relevance) |

Additional comments:

The sentinel studies were identified.