

## HEALTH ASSESSMENT WORKSPACE COLLABORATIVE (HAWC)

The Health Assessment Workspace Collaborative (HAWC) provides a web-based format for browsing study details and displaying results across studies. We also provide this information via Study Summaries in the Supplementary Materials, but hope that the HAWC interface provides a more interactive means of exploring the data. Study entries in HAWC can link users directly to public citation databases such as PubMed.

- Users can browse individual study details.
- Graphics display results across studies.
- Text in graphics can be clicked to display additional study details.
- Links to citation databases (e.g. Pubmed) are provided.

### Accessing Public Projects in HAWC

All publically available assessments can be accessed at: <https://hawcproject.org/assessment/public/>

Name	Year	Latest Version	Date Created	Date Updated
<a href="#">Folic Acid - Cancer Pooled and Meta-analyses (2015)</a>	2015	1	Sept. 18, 2014, 8:02 a.m.	April 1, 2015, 12:38 p.m.
<a href="#">Folic Acid - Thyroid and Diabetes-related Disorders (2015)</a>	2015	1	July 1, 2014, 9:31 a.m.	April 1, 2015, 12:37 p.m.
<a href="#">Folic Acid - Cognition and Vitamin B12 (2015)</a>	2015	1	July 1, 2014, 9:30 a.m.	April 1, 2015, 12:38 p.m.
<a href="#">Folic Acid - Hypersensitivity-related Outcomes (2015)</a>	2015	1	March 11, 2014, 9:23 a.m.	April 1, 2015, 12:38 p.m.
Nitrofen (demo) (2012)	2012	1	April 9, 2013, 8:15 p.m.	March 11, 2015, 4:28 a.m.

- Under “Available Assessments” click on the name of an assessment.
- This displays general project information.
- On the left side, under Available Modules, Choose “Study List”
  - All available studies are listed alphabetically with full citation information.
  - Studies listed as “Epidemiology” Study Type are primary human studies (not pooled or meta-analyses).
  - Studies listed as “Epidemiology meta-analysis/pooled analysis” Study Type are pooled or meta-analyses of human studies.

### Browsing Primary Epidemiology Studies

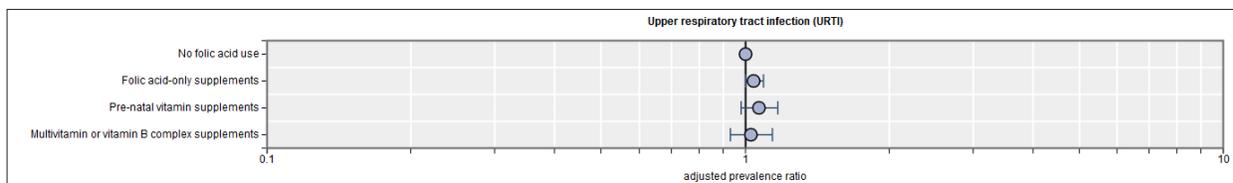
- Click on one of the short citations (which are in blue ) labeled as an “Epidemiology” Study Type
  - Publication details are displayed including the abstract, conflict of interest, and funding source
  - Summary text describes what results from the study were captured

- Under the “Available study populations” heading at the bottom, click on a population name (blue text, typically only one is listed per study)
  - Study details are summarized including where it was conducted, N, gender, and age
- Under the “Available exposures” heading at the bottom, click on an exposure name (blue text)
  - How the exposure was measured and analyzed is included in this page
  - The levels or groups of exposures as are listed with group ethnicity, gender, and N
- Under the “Assessed outcomes” heading at the bottom, click on an outcome name (blue text)
  - The outcome assessment method is described
  - Statistical methods are included, as described in the paper
  - Additional information may include prevalence or dose response trend, if applicable
- The Results by exposure-group may include a table and/or graph at the bottom of the page, if data were available in the original PDF containing information.

## Results by exposure-group

Exposure-group	N	Estimate	SE	(low, high)	p-value
No folic acid use	1302	1	-	(-, -)	n.s.
Folic acid-only supplements <sup>a</sup>	1998	1.04	-	(1, 1.09)	=0.05
Pre-natal vitamin supplements	287	1.07	-	(0.98, 1.17)	n.s.
Multivitamin or vitamin B complex supplements	199	1.03	-	(0.93, 1.14)	n.s.

<sup>a</sup> Main finding as selected by HAWC assessment authors.



- If results are not easily graphed, they may be included in the Summary text

- The bar at the top orients you to the study, population, exposure and outcome:

HAWC

Home / [Folic Acid - Hypersensitivity-related Outcomes \(2015\)](#) / [Bekkers, 2012](#) / [PIAMA birth cohort, 1996-1997](#) / [Folic acid containing supplements during pregnancy](#) / [Wheeze](#) /

- To navigate to another exposure or outcome, you can click on the text in this bar

## Browsing Pooled or Meta-analyses

- Click on one of the short citations (which are in blue) labeled as an “Epidemiology meta-analysis/pooled analysis” Study Type
  - Publication details are displayed including the abstract, conflict of interest, and funding source
  - Summary text describes what results from the study were captured
  - Attachments links to the full text pdf and other background pdfs, when appropriate
- Under the “Available epidemiological meta-analyses” heading at the bottom, click on a protocol name (blue text, typically only one is listed per study)
  - Protocol type indicates if the study is a pooled or meta-analysis
  - Details of how the search was conducted are summarized, including the inclusion/exclusion criteria and number of studies captured.
- Under the “Available results” heading at the bottom, click on an individual result (blue text)

- The health outcome and exposure details are captured as presented in the paper.
- The number of studies included in the result, any adjustment factors, and overall number of subjects are captured.
- Results include the estimate, confidence interval, statistical method, estimates of heterogeneity, and additional notes.



## Data Extraction Elements

### Individual Epidemiology Studies

#### *Citation*

- Full citation and abstract (if available)
- Hyperlink to PubMed, pdf (reviewers only)
- Report of Conflicts of Interest
- Funding Source
- Summary of results to be extracted

#### *Population*

- Study design (prospective, cross-sectional, etc.)
- Location (country, region)
- Population demographics (gender, ethnicity, age)
- Sample size: Overall N (primary one referenced, possibly in the abstract for entire group) and Starting N (a larger sample before narrowing to the main study N, if applicable)
- Inclusion, Exclusion, and Confounding Criteria (for the overall study, not specific analyses)

#### *Exposure*

- Route of exposure (for folic acid, primarily oral or in utero)
- Exposure measurement (type, units, description of method)
- Description of control, if applicable
- Levels of Exposure as presented in the study (including gender, ethnicity, N, and age if provided)

#### *Outcome*

- Short name for outcome and location of results in the text (e.g. Table 3)
- Diagnostic used and description
- Outcome N (number included in analysis, not number affected)
- Summary, can be used for details not captured in the exposure level results (P-trend, other information)
- Prevalence incidence, if provided or applicable
- Adjustment factors (in the final model, and any considered)
- Dose Response (shape of trend and details, if applicable)
- Statistical power (if reported)
- Statistical metric and method, as reported in the paper

#### *Results (levels set up in Exposure page, recorded on Outcome page)*

- For each exposure group, N, estimate, SE, confidence interval, and p-value (as reported)

### Pooled or Meta-analyses

#### *Citation*

- Full citation and abstract (if available)
- Hyperlink to PubMed (all) and full-text pdf (reviewers only)

- Report of Conflicts of Interest
- Funding Source
- Summary of results to be extracted

### ***Protocol Details***

- Type of analysis (meta-analysis or pooled-analysis)
- Literature search (strategy, dates, details)
- Total number of studies found, and total number included overall
- Inclusion/exclusion criteria

### ***Results***

- Health outcome (name and description)
- Exposure (name and description)
- Number of studies for this result
- Statistical method (metric and description)
- Number of subjects overall
- Result (estimate, confidence interval)
- Test of Heterogeneity result
- Adjustment factors, if included