

Search Plan and Results

Question

What is the relationship between alcohol consumption and postnatal growth patterns, sleep patterns and/or psychomotor patterns of the offspring? (DGAC 2010)

Date Searched

12-03-2009

Inclusion Criteria

Subjects/Population: Human subjects.

Age: Children, men and women of all ages.

Setting: International.

Health Status: Healthy and those with elevated chronic disease risk (CHD/CVD, Type 2 diabetes, metabolic syndrome and obesity).

Nutrition Related Problem/Condition: None.

Search Criteria

Study Design Preferences: Randomized controlled trial (RCT) or clinical controlled studies, large non-randomized observational studies, cohort, case-control studies, systematic reviews and meta-analysis.

Size of Study Groups: The sample size must equal 10 adults for each study group. For example, this would include 10 patients in the intervention group and 10 patients in the control or comparison group.

Study Dropout Rate: Less than 20%; preference for smaller dropout rates.

Year Range: No date range.

Authorship: If an author is included on more than one review article or primary research article that is similar in content, the most recent review or article will be accepted and earlier versions will be rejected.

Languages: Limited to articles in English.

Other: Article must be published in peer-reviewed journal.

Exclusion Criteria

Subjects/Population

- Animal and in vitro studies
- Malnourished/third-world populations or disease incidence not relative to US

population (e.g., malaria).

Age: Not applicable.

Setting: Hospitalized patients.

Health Status: Medical treatment/therapy and diseased subjects.

Nutrition Related Problem/Condition: All conditions.

Search Criteria

Study Design Preferences: Not applicable.

Size of Study Groups: Sample sizes <10.

Study Dropout Rate: If the dropout rate in a study is 20% or greater, the study will be rejected.

Year Range: Not applicable.

Authorship: Studies by same author similar in content.

Languages: Articles not in English.

Other: Abstracts or presentations and articles not peer reviewed (websites, magazine articles, Federal reports, etc.).

Search Terms: Search Vocabulary

Electronic Databases

PubMed search date 12/3/09: No date range ("Ethanol"[Mesh] OR "Alcohol Drinking"[mesh] OR "Alcoholic Beverages"[Mesh]) AND ((breast milk) OR "Milk, Human"[Mesh]) ("Ethanol"[Mesh] OR "Alcohol Drinking"[mesh] OR "Alcoholic Beverages"[Mesh]) AND (postnatal OR "Postpartum Period"[Mesh] OR postpartum OR "Breast Feeding"[Mesh] OR lactation[mh])

Total hits from all electronic database searches: 160

Total articles identified to review from electronic databases: 44

Articles Identified Via Handsearch or Other Means

Summary of Articles Identified to Review

Number of Primary Articles Identified: 5

Number of Review Articles Identified: 0

Total Number of Articles Identified: 5

Number of Articles Reviewed but Excluded: 39

List of Articles Included for Evidence Analysis

[Backstrand JR, Goodman AH, Allen LH, Pelto GH.](#) Pulque intake during pregnancy and lactation in rural Mexico: Alcohol and child growth from one to 57 months. *Eur J Clin Nutr.* 2004 Dec; 58 (12): 1, 626-1, 634. PMID: 15280906.

Little RE, Anderson KW, Ervin CH, Worthington-Roberts B, Clarren SK. [Maternal alcohol use during breast-feeding and infant mental and motor development at one year.](#) *N Engl J Med.* 1989 Aug 17; 321 (7): 425-430. PMID: 2761576.

Little RE, Northstone K, Golding J; ALSPAC Study Team. [Alcohol, breastfeeding and development at 18 months.](#) *Pediatrics.* 2002 May; 109 (5): E72-2. PMID: 11986478.

Mennella JA, Garcia-Gomez PL. [Sleep disturbances after acute exposure to alcohol in mothers' milk.](#) *Alcohol.* 2001 Nov; 25 (3): 153-158. PMID: 11839458.

Mennella JA, Gerrish CJ. [Effects of exposure to alcohol in mother's milk on infant sleep.](#) *Pediatrics.* 1998 May; 101 (5):E2. PMID: 9565435.

List of Excluded Articles with Reason

Excluded Articles	Reason for Exclusion
Alvik A, Haldorsen T, Lindemann R. Alcohol consumption, smoking and breastfeeding in the first six months after delivery. <i>Acta Paediatr.</i> 2006 Jun; 95 (6): 686-693. PMID: 16754549.	Does not answer the question. About drinking levels during lactation.
Alvik A, Haldorsen T, Lindemann R. Alcohol consumption, smoking and breastfeeding in the first six months after delivery. <i>Acta Paediatr.</i> 2006 Jun; 95 (6): 686-693. PMID: 16754549.	Report about alcohol consumption.
Anderson PO. Alcohol and breastfeeding. <i>J Hum Lact.</i> 1995 Dec; 11 (4): 321-323. No abstract available. PMID: 8634110.	Comment.

<p>Binkiewicz A, Robinson MJ, Senior B. Pseudo-Cushing syndrome caused by alcohol in breast milk. <i>J Pediatr</i>. 1978 Dec; 93 (6): 965-967. No abstract available. PMID: 722441.</p>	<p>Does not answer the question. About Cushing syndrome.</p>
<p>Chaves RG, Lamounier JA, César CC. Factors associated with duration of breastfeeding. <i>J Pediatr (Rio J)</i>. 2007 May-Jun; 83 (3): 241-246. Epub 2007 Apr 20. PMID: 17486198.</p>	<p>Does not answer the question. About factors associated with breastfeeding.</p>
<p>Chien YC, Huang YJ, Hsu CS, Chao JC, Liu JF. Maternal lactation characteristics after consumption of an alcoholic soup during the postpartum 'doing-the-month' ritual. <i>Public Health Nutr</i>. 2009 Mar; 12 (3): 382-388. Epub 2008 Apr 22. PMID: 18426631.</p>	<p>Does not answer the question. About alcohol consumption and lactation performance.</p>
<p>Chien YC, Liu JF, Huang YJ, Hsu CS, Chao JC. Alcohol levels in Chinese lactating mothers after consumption of alcoholic diet during postpartum "doing-the-month" ritual. <i>Alcohol</i>. 2005 Nov; 37 (3): 143-150. PMID: 16713502.</p>	<p>Does not answer the question. About OH blood levels.</p>
<p>Cobo E. Effect of different doses of ethanol on the milk-ejecting reflex in lactating women. <i>Am J Obstet Gynecol</i>. 1973 Mar 15; 115 (6): 817-821. PMID: 4688584.</p>	<p>Does not answer the question. Consider in previous question.</p>
<p>Dewailly E, Ayotte P, Laliberté C, Weber JP, Gingras S, Nantel AJ. Polychlorinated biphenyl (PCB) and dichlorodiphenyl dichloroethylene (DDE) concentrations in the breast milk of women in Quebec. <i>Am J Public Health</i>. 1996 Sep; 86 (9): 1, 241-1, 246. PMID: 1380586.</p>	<p>Does not answer the question. About chemicals in breast-milk.</p>
<p>Flores-Huerta S, Hernández-Montes H, Argote RM, Villalpando S. Effects of ethanol consumption during pregnancy and lactation on the outcome and postnatal growth of the offspring. <i>Ann Nutr Metab</i>. 1992; 36 (3): 121-128. PMID: 1530279.</p>	<p>Does not answer the question.</p>
<p>Giglia RC, Binns CW. Alcohol and breastfeeding: What do Australian mothers know? <i>Asia Pac J Clin Nutr</i>. 2007; 16 Suppl 1:473-7. PMID: 17392153.</p>	<p>Does not answer the question. About levels of knowledge of the danger of drinking OH during breastfeeding by Australian mothers.</p>
<p>Giglia RC, Binns CW. Alcohol, pregnancy and breastfeeding: A comparison of the 1995 and 2001 National Health Survey data. <i>Breastfeed Rev</i>. 2008 Mar; 16 (1): 17-24. PMID: 18546573.</p>	<p>Does not answer the question. About patterns of alcohol intake.</p>

Giglia RC, Binns CW, Alfonso HS, Scott JA, Oddy WH. The effect of alcohol intake on breastfeeding duration in Australian women . <i>Acta Paediatr.</i> 2008 May; 97 (5): 624-629. PMID: 18394108.	Does not answer the question. About breastfeeding duration and OH intake.
Gottesfeld Z, Abel EL. Maternal and paternal alcohol use: effects on the immune system of the offspring . <i>Life Sci.</i> 1991; 48 (1): 1-8. Review. PMID: 1986181.	Does not answer the question. About immune system.
Ho E, Collantes A, Kapur BM, Moretti M, Koren G. Alcohol and breast feeding: Calculation of time to zero level in milk . <i>Biol Neonate.</i> 2001; 80 (3): 219-222. PMID: 11585986.	No intervention. Modeled time to alcohol clearance in breast milk.
Howard CR, Lawrence RA. Breast-feeding and drug exposure . <i>Obstet Gynecol Clin North Am.</i> 1998 Mar; 25 (1): 195-217. Review. PMID: 9547767.	Does not answer the question. About drug exposure.
Kacew S. Adverse effects of drugs and chemicals in breast milk on the nursing infant . <i>J Clin Pharmacol.</i> 1993 Mar; 33 (3): 213-221. Review. PMID: 8463434.	Does not answer the question. About drugs and chemicals in breast-milk.
Kochenour NK, Emery MG. Drugs in lactating women . <i>Obstet Gynecol Annu.</i> 1981; 10: 107-126. Review. No abstract available. PMID: 7024869.	Does not answer the question. About drugs.
Koletzko B, Lehner F. Beer and breastfeeding . <i>Adv Exp Med Biol.</i> 2000; 478: 23-28. Review. PMID: 11065057.	Publication.
Koren G. Drinking alcohol while breastfeeding. Will it harm my baby? <i>Can Fam Physician.</i> 2002 Jan; 48: 39-41. PMID: 11852608.	Commentary.
Lawton ME. Alcohol in breast milk . <i>Aust N Z J Obstet Gynaecol.</i> 1985 Feb; 25 (1): 71-73. PMID: 3862407.	Sample size (N=80), less than inclusion criterion.
Little RE, Lambert MD, Worthington-Roberts B. Drinking and smoking at three months postpartum by lactation history . <i>Paediatr Perinat Epidemiol.</i> 1990 Jul; 4 (3): 290-302. PMID: 2374748.	Does not answer the question. About behavior in postpartum drinking.
Liston J. Breastfeeding and the use of recreational drugs-alcohol, caffeine, nicotine and marijuana . <i>Breastfeed Rev.</i> 1998 Aug; 6 (2): 27-30. PMID: 9849117.	Does not answer the question. About drugs.

<p>Ludvigsson JF, Ludvigsson J. Socio-economic determinants, maternal smoking and coffee consumption and exclusive breastfeeding in 10205 children. <i>Acta Paediatr.</i> 2005 Sep; 94 (9): 1, 310-1, 319. PMID: 16278998.</p>	<p>Does not answer the question. About socio-economic determinants of breastfeeding.</p>
<p>Matheson I, Kristensen K, Lunde PK. Drug utilization in breast-feeding women. A survey in Oslo. <i>Eur J Clin Pharmacol.</i> 1990; 38 (5): 453-459. PMID: 1974205.</p>	<p>Does not answer the question. About drug utilization in breastfeeding women.</p>
<p>Mennella J. Alcohol's effect on lactation. <i>Alcohol Res Health.</i> 2001; 25 (3): 230-234. Review. PMID: 11810962.</p>	<p>NI AAA Publication</p>
<p>Mennella JA. Infants' suckling responses to the flavor of alcohol in mothers' milk. <i>Alcohol Clin Exp Res.</i> 1997 Jun; 21 (4): 581-585. PMID: 9194908.</p>	<p>Does not answer the question. About flavor of alcohol in mothers' milk.</p>
<p>Mennella JA. Regulation of milk intake after exposure to alcohol in mothers' milk. <i>Alcohol Clin Exp Res.</i> 2001 Apr; 25 (4): 590-593. PMID: 11329500.</p>	<p>Does not answer the question. About alcohol consumption and lactation performance.</p>
<p>Mennella JA. Short-term effects of maternal alcohol consumption on lactational performance. <i>Alcohol Clin Exp Res.</i> 1998 Oct; 22 (7): 1, 389-1, 392. PMID: 9802517.</p>	<p>Does not answer the question. About alcohol consumption and lactation performance.</p>
<p>Mennella JA, Beauchamp GK. Beer, breast feeding and folklore. <i>Dev Psychobiol.</i> 1993 Dec; 26 (8): 459-466. PMID: 8293892.</p>	<p>Does not answer the question. About alcohol consumption and lactation performance.</p>
<p>Mennella JA, Beauchamp GK. The transfer of alcohol to human milk. Effects on flavor and the infant's behavior. <i>N Engl J Med.</i> 1991 Oct 3; 325 (14): 981-985. PMID: 1886634.</p>	<p>Does not answer the question. About alcohol consumption and effects on flavor.</p>
<p>Na HR, Daniels LC, Seelig LL Jr. Preliminary study of how alcohol consumption during pregnancy affects immune components in breast milk and blood of postpartum women. <i>Alcohol Alcohol.</i> 1997 Sep-Oct; 32 (5): 581-589. PMID: 9373700.</p>	<p>Does not answer the question. About influence of pregnancy OH intake on breast-milk.</p>
<p>Pepino MY, Mennella JA. Effects of breast pumping on the pharmacokinetics and pharmacodynamics of ethanol during lactation. <i>Clin Pharmacol Ther.</i> 2008 Dec; 84 (6): 710-714. Epub 2008 Jul 2. PMID: 18596681.</p>	<p>Does not answer the question. About breast pumping and ethanol.</p>
<p>Rayburn WF. Adverse reproductive effects of beer drinking. <i>Reprod Toxicol.</i> 2007 Jul; 24 (1): 126-130. Epub 2007 May 3. PMID: 17544619.</p>	<p>Does not answer the question.</p>

<p>Schimmel MS, Eidelman AI, Wilschanski MA, Shaw D Jr, Ogilvie RJ, Koren G. Toxic effects of atenolol consumed during breast feeding. <i>J Pediatr</i>. 1989 Mar; 114 (3): 476-478. No abstract available. Erratum in: <i>J Pediatr</i> 1990 Jan; 116 (1): 158. Schimmelman, MS [corrected to Schimmel, MS]; Eidelman, AJ [corrected to Eidelman, AI]. PMID: 2921694.</p>	<p>Does not answer the question. About atenolol effects during breastfeeding.</p>
<p>Schulte P. Minimizing alcohol exposure of the breastfeeding infant. <i>J Hum Lact</i>. 1995 Dec; 11 (4): 317-319. PMID: 8634109.</p>	<p>Comment.</p>
<p>Somogyi A, Beck H. Nurturing and breast-feeding: exposure to chemicals in breast milk. <i>Environ Health Perspect</i>. 1993 Jul; 101 Suppl 2: 45-52. Review. PMID: 8243405.</p>	<p>Does not answer the question. Chemicals in breast-milk.</p>
<p>Villalpando S, Flores-Huerta S, Fajardo A, Hernandez-Beltran MJ. Ethanol consumption during pregnancy and lactation.Changes in the nutritional status of predominantly breastfeeding mothers. <i>Arch Med Res</i>. 1993 Winter; 24 (4): 333-338. PMID: 8118156.</p>	<p>Does not answer the question. About mothers' health and OH consumption.</p>
<p>Wolin MJ, Yerry S, Miller TL, Zhang Y, Bank S. Changes in production of ethanol, acids and H2 from glucose by the fecal flora of a 16- to 158-day-old breast-fed infant. <i>J Nutr</i>. 1998 Jan; 128 (1): 85-90. PMID: 9430607.</p>	<p>About ethanol changes in the breast-feeding infant.</p>