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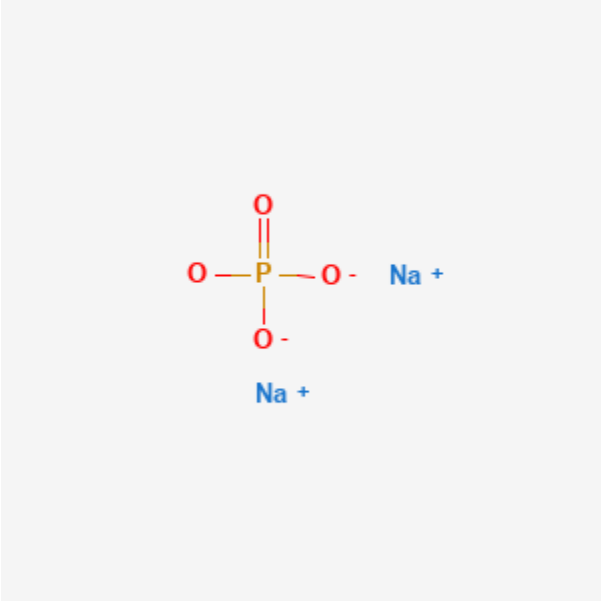
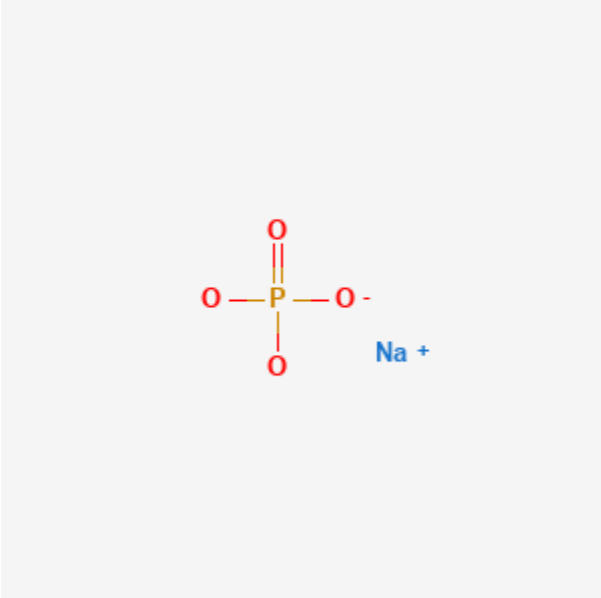
NLM Citation: Drugs and Lactation Database (LactMed) [Internet]. Bethesda (MD): National Library of Medicine (US); 2006-. Sodium Phosphate. [Updated 2018 Dec 3].
Bookshelf URL: https://www.ncbi.nlm.nih.gov/books/

Sodium Phosphate

Revised: December 3, 2018.

CASRN: 7558-79-4; 7558-80-7





Drug Levels and Effects

Summary of Use during Lactation

Phosphate is a normal constituent of breastmilk. Phosphate concentrations have not been measured in breastmilk after large maternal doses of sodium phosphate, such a 30 gram oral dose for pre-procedural bowel evacuation. However, the added phosphate in breastmilk is likely to be only about 130 mg over 24 hours in this situation. The increase from a typical dose of a rectal enema would be considerably less than this amount. Breastmilk sodium concentration is tightly regulated, and will not be affected. It is probably not necessary to suspend breastfeeding after the use of oral sodium phosphate solutions given once or twice for bowel evacuation before a procedure, but if there is concern, suspension of nursing for 24 hours after a dose should result in negligible increase in phosphate ingestion by the infant. Use of a phosphate rectal enema by a nursing mother would require no special precautions.

Drug Levels

Phosphate is a normal constituent of breastmilk.[1][2] Infants normally receive about 130 mg of inorganic phosphate daily from breastmilk.[2]

Maternal Levels. Administration of a 30 gram dose of oral sodium phosphate solution (e.g., Visicol) approximately doubles the maternal serum phosphate concentration, with serum concentrations returning to baseline about 24 hours after the dose.[3][4] Assuming breastmilk phosphate concentration also doubles, the increased phosphate dose to the infant would be only 130 mg for one day.

Administration of a phosphate enema (2 Fleet Enemas, containing a total of 14 grams of sodium phosphate dibasic and 38 grams of sodium phosphate monobasic) to 33 subjects increased serum phosphate by an average of about 25% (range 0.1 to 2.5 mg/dL).[5] In one other patient, a phosphate enema (Practo Clyss 120, containing a total of 7.2 grams of sodium phosphate dibasic and 19.2 grams of sodium phosphate monobasic) increased serum phosphate by 35% (by 0.8 mmol/L) after a single dose.[6]

Infant Levels. Relevant published information was not found as of the revision date.

Effects in Breastfed Infants

Relevant published information was not found as of the revision date.

Effects on Lactation and Breastmilk

Relevant published information was not found as of the revision date.

References

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2. Allen JC, Keller RP, Archer P, Neville MC. Studies in human lactation: milk composition and daily secretion rates of macronutrients in the first year of lactation. Am J Clin Nutr. 1991;54:69-80. PubMed PMID: 2058590.
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4. Visicol package insert. Salix Pharmaceuticals, Inc. December 2010.
5. Schuchmann GD, Barcia PJ. Phosphate absorption from fleet enemas in adults. Curr Surg. 1989;46:120-2. PubMed PMID: 2736963.
6. Rimensberger P, Schubiger G, Willi U. Connatal rickets following repeated administration of phosphate enemas in pregnancy: a case report. Eur J Pediatr. 1992;151:54-6. PubMed PMID: 1728548.

Substance Identification

Substance Name

Sodium Phosphate

CAS Registry Number

7558-79-4; 7558-80-7

Drug Class

Breast Feeding

Lactation

Cathartics

Electrolyte

Gastrointestinal Agents

Minerals