



## Complete Summary

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### GUIDELINE TITLE

Prevention of rickets and vitamin D deficiency: new guidelines for vitamin D intake.

### BIBLIOGRAPHIC SOURCE(S)

Gartner LM, Greer FR, American Academy of Pediatrics, Section on Breastfeeding and Committee on Nutrition. Prevention of rickets and vitamin D deficiency: new guidelines for vitamin D intake. Pediatrics 2003 Apr;111(4 Pt 1):908-10. [20 references] [PubMed](#)

### GUIDELINE STATUS

This is the current release of the guideline.

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## SCOPE

### DISEASE/CONDITION(S)

Rickets and vitamin D deficiency

### GUIDELINE CATEGORY

Prevention

**CLINICAL SPECIALTY**

Family Practice  
Nutrition  
Pediatrics

**INTENDED USERS**

Physicians

**GUIDELINE OBJECTIVE(S)**

To provide recommendations for the prevention of rickets and vitamin D deficiency in infants and children

**TARGET POPULATION**

Infants and children

**INTERVENTIONS AND PRACTICES CONSIDERED**

Vitamin D supplements

**MAJOR OUTCOMES CONSIDERED**

Rates of rickets and vitamin D deficiency

**METHODOLOGY****METHODS USED TO COLLECT/SELECT EVIDENCE**

Searches of Electronic Databases

**DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE**

Not stated

**NUMBER OF SOURCE DOCUMENTS**

Not stated

**METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE**

Not stated

**RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE**

Not applicable

## **METHODS USED TO ANALYZE THE EVIDENCE**

Review

## **DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE**

Not stated

## **METHODS USED TO FORMULATE THE RECOMMENDATIONS**

Expert Consensus

## **DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS**

Not stated

## **RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS**

Not applicable

## **COST ANALYSIS**

A formal cost analysis was not performed and published cost analyses were not reviewed.

## **METHOD OF GUIDELINE VALIDATION**

Peer Review

## **DESCRIPTION OF METHOD OF GUIDELINE VALIDATION**

Not stated

# **RECOMMENDATIONS**

## **MAJOR RECOMMENDATIONS**

To prevent rickets and vitamin D deficiency in healthy infants and children and acknowledging that adequate sunlight exposure is difficult to determine, we reaffirm the adequate intake of 200 IU per day of vitamin D by the National Academy of Sciences and recommend a supplement of 200 IU per day for the following:

1. All breastfed infants unless they are weaned to at least 500 mL per day of vitamin D-fortified formula or milk.
2. All nonbreastfed infants who are ingesting less than 500 mL per day of vitamin D-fortified formula or milk.

3. Children and adolescents who do not get regular sunlight exposure, do not ingest at least 500 mL per day of vitamin D-fortified milk, or do not take a daily multivitamin supplement containing at least 200 IU of vitamin D.

### **CLINICAL ALGORITHM(S)**

None provided

## **EVIDENCE SUPPORTING THE RECOMMENDATIONS**

### **TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS**

The type of supporting evidence is not specifically stated for each recommendation.

These new vitamin D intake guidelines for healthy infants and children are based on the recommendations of the National Academy of Sciences: Institute of Medicine, Food and Nutrition Board, Standing Committee on the Scientific Evaluation of Dietary Reference Intakes. Vitamin D. In: Dietary Reference Intakes for Calcium, Phosphorus, Magnesium, Vitamin D, and Fluoride. Washington, DC: National Academy Press; 1997:250-287.

## **BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS**

### **POTENTIAL BENEFITS**

The new National Academy of Sciences (NAS) guidelines for infants are based on data primarily from the United States, Norway, and China, which show that an intake of at least 200 IU per day of vitamin D will prevent physical signs of vitamin D deficiency and maintain serum 25-hydroxyvitamin D at or above 27.5 nmol/L (11 ng/mL).

Populations at increased risk of developing rickets and vitamin D deficiency include those with increased skin pigmentation and decreased sunlight exposure.

### **POTENTIAL HARMS**

Not stated

## **QUALIFYING STATEMENTS**

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The guidance in this report does not indicate an exclusive course of treatment or serve as a standard of medical care. Variations, taking into account individual circumstance, may be appropriate.

## IMPLEMENTATION OF THE GUIDELINE

### DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

## INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

### IOM CARE NEED

Staying Healthy

### IOM DOMAIN

Effectiveness

## IDENTIFYING INFORMATION AND AVAILABILITY

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### DATE RELEASED

2003 Apr

### GUIDELINE DEVELOPER(S)

American Academy of Pediatrics - Medical Specialty Society

### SOURCE(S) OF FUNDING

American Academy of Pediatrics

### GUIDELINE COMMITTEE

Committee on Nutrition, Section on Breastfeeding

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## **FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST**

Not stated

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## **GUIDELINE AVAILABILITY**

Electronic copies: Available from the [American Academy of Pediatrics \(AAP\) Policy Web site](#).

Print copies: Available from AAP, 141 Northwest Point Blvd., P.O. Box 927, Elk Grove Village, IL 60009-0927.

## **AVAILABILITY OF COMPANION DOCUMENTS**

None available

## **PATIENT RESOURCES**

None available

## **NGC STATUS**

This NGC summary was completed by ECRI on August 18, 2003. The information was verified by the guideline developer on September 8, 2003.

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