



UpToDate® Evidence-Based Nursing

UpToDate is an evidence-based clinical decision support resource which nurses trust to make the right point-of-care decisions.

More than 7,400 world-renowned physician authors, editors, and peer reviewers use a rigorous editorial process to synthesize the most recent medical information into trusted, evidence-based recommendations. More than 100 research studies confirm widespread usage of UpToDate and its association with improved patient care and hospital performance.

Nurses report that using UpToDate:

Increases clinical knowledge

- Broadens understanding of treatments and conditions
- Fosters more effective patient monitoring

Improves patient safety

- Advances understanding of prescribed medications and side effects
- Minimizes errors
- Enhances patient and family communication

Promotes continuity of care

- Augments care coordination across the entire treatment team
- Enriches understanding of care plans

Saves time

- Facilitates rapid identification of clinical answers with quick links to treatment recommendations, drugs, graphics, original evidence, and more

Minimizes drug risks

- 7,300 in-depth drug monographs
- Separate drug interactions tool (powered by Lexicomp®)
- Dosage information for adult, pediatric, neonatal, and geriatric patients
- Patient monitoring parameters
- Calculators

Promotes shared decision-making with patients

- 1,500 evidence-based patient education topics concordant with professional content
- 1,000 topics also available in Spanish
- Full-color pictures, graphics, and charts
- Sharable via email or printout for further reading at home

**Trusted resource
for nursing**

96%

of nurses surveyed agree
UpToDate helps them
improve patient care

UpToDate Clinician Surveys, August 2011 to July 2012,
N=2,895

"I use UpToDate almost every day. It has decreased the time required to research a topic from days to sometimes minutes!"

Molly Larkin, MS, RN
Nurse, Technology Assessment
Optima Health Care,
Virginia Beach, Virginia

With UpToDate, nurses can:

- Access current, evidence-based recommendations for care anytime, anywhere*
- UpToDate is accessible online from computers, tablets, and mobile devices
- UpToDate collaborates with most leading EHRs to bring evidence-based, clinical decision support into the workflow
- Earn CE credits while answering clinical questions**
- Save time and money with onsite continuing education
- Redeem credits at no additional cost
- No additional testing is required
- In the US, many States accept the use of UpToDate to fulfill nursing licensing requirements

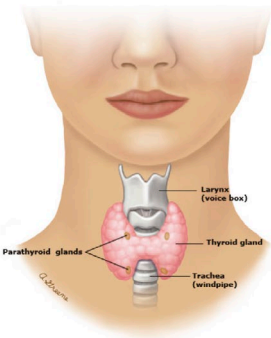
* EHR and mobile access require appropriate license.
** Where available. Read more: www.uptodate.com/home/cpd
Nurses are responsible for confirming with their State nursing board that UpToDate may be accepted to fulfill their CE requirements.

“For our 4,400 nurses, taking advantage of technology like UpToDate is essential for excellent care and outcomes.”

Beverly Jordan, MSN, RN, CENP
VP of Clinical Transformation
Baptist Memorial Health Care, Memphis, Tennessee

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Thyroid and parathyroid glands



The thyroid is a butterfly-shaped gland in the middle of the neck. It sits just below the larynx (voice box). The thyroid makes 2 hormones, called T3 and T4, which control how the body uses and stores energy. The parathyroid glands are 4 small glands behind the thyroid. They make a hormone called parathyroid hormone, which helps control the amount of calcium in the blood.

T3: triiodothyronine; T4: thyroxine.

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Patient education: Osteoporosis prevention and treatment (Beyond the Basics)

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All topics are updated as new evidence becomes available and our peer review process is complete.
Literature review current through: Jan 2022. | This topic last updated: Feb 01, 2021.
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OSTEOPOROSIS OVERVIEW

Osteoporosis is a common problem that causes your bones to become abnormally thin, weakened, and easily broken (fractured). Women are at a higher risk for osteoporosis after menopause due to lower levels of estrogen, a female hormone that helps to maintain bone mass.

Fortunately, preventive treatments are available that can help to maintain or increase your bone density. If you have already been diagnosed with osteoporosis, therapies are available that can slow further loss of bone or increase bone density.

This topic review discusses the therapies available for the prevention and treatment of osteoporosis. A separate topic discusses bone density testing. (See "Patient education: Bone density testing (Beyond the Basics)".)

OSTEOPOROSIS PREVENTION

Some of the most important aspects of preventing osteoporosis include eating a healthy diet, getting regular exercise, and avoiding smoking. These recommendations apply to men and women.

Diet — An optimal diet for bone health involves making sure you get enough protein and calories as well as plenty of calcium and vitamin D, which are essential in helping to maintain proper bone formation and density.

Calcium intake — Experts recommend that premenopausal women and men consume at least 1000 mg of calcium per day; this includes calcium in foods and beverages plus supplements (eg, pills), which you might need if you don't get enough calcium from your diet. Postmenopausal women should consume 1200 mg of calcium per day (total of diet plus supplements). However, you should not take more than 2000 mg calcium per day, due to the possibility of side effects. (See "Patient education: Calcium and vitamin D for bone health (Beyond the Basics)".)

The main dietary sources of calcium include milk and other dairy products, such as cottage cheese, yogurt, and hard cheese, and green vegetables, such as kale and broccoli ([table 1](#)). A rough method of estimating your dietary calcium intake is to multiply the number of dairy servings you consume each day by 300 mg. Examples of a serving include 8 oz of milk (236 mL) or yogurt (224 g), 1 oz (28 g) of hard cheese, or 16 oz (448 g) of cottage cheese.

If you don't get enough calcium through your diet, your health care provider might suggest supplements. Supplements come in the form of calcium carbonate or calcium citrate. Calcium carbonate works best when taken with food, while calcium citrate can be taken on an empty stomach. Your provider can help you decide which supplement to take if you're not sure ([table 2](#)). Supplements are often recommended for women since they are at higher risk of developing osteoporosis and they often don't consume enough through foods and beverages. If you need to take more than 500 to 600 mg/day of calcium in supplement form, you should take it in separate doses (eg, once in the morning and again in the evening).

Vitamin D intake — Experts recommend that men over 70 years and postmenopausal women (ie, women who no longer have monthly periods) consume 800 international units (20 micrograms) of vitamin D each day. This dose appears to reduce bone loss and fracture rate in older women and men who have adequate calcium intake (see "Calcium intake" above). Although the optimal intake has not been clearly established in premenopausal women or in younger men with osteoporosis, 600 international units (15 micrograms) of vitamin D daily is generally suggested.

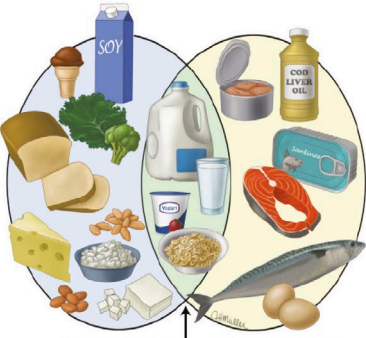
Milk supplemented with vitamin D is a primary dietary source of vitamin D. It contains approximately 100 international units (2.5 micrograms) per 8 oz (236 mL). Another good source is salmon, with approximately 800 international units (20 micrograms) per 3 oz (86 g) serving. Other foods, such as orange juice, yogurt, and cereal, are also available with added vitamin D ([table 3](#)). Many people do not get enough vitamin D from their diet; your health care provider might suggest a supplement to help reduce your risk of osteoporosis.

Alcohol — Drinking a lot of alcohol (more than two drinks a day) can increase your risk of fracture.

Exercise — Exercise may decrease fracture risk by improving bone mass in premenopausal women and helping to maintain bone density

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Alimentos y bebidas con calcio y vitamina D



Entre los alimentos ricos en calcio se incluyen el helado, la leche de soja, los panes, la col rizada, el brócoli, la leche, el queso, el requesón, las almendras, el yogur, los cereales listos para comer, los frijoles y el tofu. Entre los alimentos ricos en vitamina D se incluyen la leche, las "leches" vegetales fortificadas (soya, almendras), el atún en lata, el aceite de hígado de bacalao, el yogur, los cereales listos para comer, el salmón cocido, las sardinillas en lata, la caballa y los huevos. Algunos de estos alimentos son ricos en ambas cosas.

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