

## Vitamin D Replacement

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### Objective

Monitor for and manage Vitamin D deficiency.

### Patient Population

Adults (>18 years) with a known diagnosis of IBD and low serum 25-hydroxyvitamin D.

### Highlight Box

Vitamin D deficiency is common among IBD patients. Restoring and maintaining appropriate levels of Vitamin D may help maintain remission.

### Introduction

This care protocol provides a general guideline for monitoring and managing vitamin D deficiency in adults with inflammatory bowel disease. The availability of the listed options for vitamin D replacement may vary across organizations.

#### IBD Provider:

1. Check serum Vitamin D annually
  - a. If 75-125nmol/l - recommend 1000 - 2000 IU daily
  - b. 50-75 nmol/L - recommend 5000-10000 IU daily, or replace
  - c. Replace if <50 nmol/L
2. Re-assess vitamin D levels at 4 months, if vitamin D deficiency identified
3. Generate a vitamin D replacement Rx as per options for replacement below and give it to support staff

#### Support Staff:

1. Use letter templates for low vitamin D and send them to the patient and one to the patient's GP.
2. Print a bloodwork requisition to test vitamin D and calcium levels for the patient to complete in 4 months

**Table 1: Options for replacement**

Type of Vitamin D	Availability	Dosage	Form	Route
Vitamin D3	OTC	400 IU, 1000 IU	Tablet	Oral
Vitamin D3 (D-VI-SOL)	OTC	400 IU/ml,	Liquid	Oral
Vitamin D3 (DROPS)	OTC	600 or 1000 units/drop (5ml=180drops)	Liquid	Oral
Vitamin D3 (Euro-D)	Rx	10,000 IU	Capsule	Oral
Vitamin D3	Rx	2000-75,000 IU	Capsule/Tab	Oral
Vitamin D2 (OSTO-D2, D-FORTE)	Rx	50,000 IU	Capsule	Oral
Calcitriol (ROCALTROL)	Rx	0.25ug, 0.5ug	Capsule	Oral
Cholecalciferol (in sesame oil)	Rx	250,000 - 500,000 IU	Injection	Intramuscular

**Table 2: Recommended dose**

Vitamin D level	Intramuscular**
50-75 nmol/L	250,000 IU x 1
<50 nmol/L	500,000 IU x 1

\*\* not applicable to pediatrics

Note: Vitamin D3 may have a longer half-life than vitamin D2 and may be more potent, causing two- to threefold greater storage of vitamin D.

## Other resources

Vitamin D supplementation evidence <https://www.rxfiles.ca/rxfiles/uploads/documents/Vitamin-D-Overview-QandA.pdf>

Patient education: Vitamin D deficiency (Beyond the Basics) (freely accessible)  
<https://www.uptodate.com/contents/vitamin-d-deficiency-beyond-the-basics#H13>

Easy to read list of common foods reach in vitamin D <https://osteoporosis.ca/bone-health-osteoporosis/calcium-and-vitamin-d/vitamin-d/>