

Vitamin D and Chronic Musculoskeletal Pain

Chronic muscle pain can be a symptom of vitamin D deficiency. Vitamin D is found in oily fish, eggs, fortified milk and cereal, cod liver oil and exposure to sunlight.

Risk factors for vitamin D deficiency:

- Darker pigmented skin (e.g. Hispanic, African American, Asian) does not convert ultraviolet rays efficiently to vitamin D
- Digestive disorders, such as celiac disease (an allergy to gluten, which is found in wheat, barley, rye and possible oats)
- Use of glucocorticoid (steroid) medications for conditions such as lung diseases and allergies
- Minimal sun exposure (elderly, institutionalized, homebound, veiled or heavily-clothed individuals)
- Latitude and season—in Oregon, people don't produce vitamin D from sun exposure between November and February

In a study by the University of Minnesota, 150 people with chronic musculoskeletal pain were screened for vitamin D. *The researchers found that 93% of patients had vitamin D deficiency.* All people with darker pigmented skin (African American, East African, Hispanic, and Native American origin) had vitamin D deficiency.

Another interesting finding was that the majority of people with severe vitamin D deficiency were under 30 years of age. Season was not a significant factor.

People who are suffering from chronic musculoskeletal pain should consider being screened for vitamin D deficiency. (Check with your doctor's office or insurance company about whether this is covered; some insurance plans will not pay for it.)

Some Oily Fish

Salmon	Mackerel
Trout	Sardines
Tuna	Anchovies
Herring	Orange Roughy