

**SPECIAL PAPER**

## Vitamin D Deficiency in Critically Ill Children

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### Abstract

**Background:** Vitamin D has essential and important roles in the human body, some studies assumed its role as Skeletal and Extraskelatal functions. Also some studies connected the deviancy to the different body illness. It's important to keep vitamin D level within normal range in the body, exposure to sun light, food containing vitamin D, and supplements are the sources for vitamin D.

**Aim:** The aim of this review is to understand the associations between vitamin D deficiency and pediatric critical illness.

**Design:** Literature review of different articles and books related to vitamin D.

**Method:** Reviewing articles from different journals that were published since 2005, reports and books that concern about the topic with the following categories: Vitamin D Deficiency, Critical Illness and Pediatric.

**Results:** The results highlight that Vitamin D or 25-hydroxyvitamin D is important for growth and good health, also the lack of vitamin D is common between adult and children. It has a vital role in the body including skeletal in which it maintains calcium homeostasis for optimal skeletal health, and Extraskelatal roles like immune function, and other metabolic functions, thus the deficiency can affect the child health. Finally, vitamin D levels are lower in critically ill children.

**Conclusion:** Vitamin D is important for the body and its deficiency can affect different functions in the body, associated with pediatric critical illness.

**Key words:** vitamin D, deficiency, child, critical illness