



Government of India  
Ministry of Science and Technology

**DEPARTMENT OF BIOTECHNOLOGY**  
**Public Health, Food and Nutrition Division**

**Call for R &D Proposals on “Vitamin D deficiency in India: Public Health Significance and interventions”**

**Rationale:** Vitamin D deficiency [VDD] is prevalent globally and the data for last two decades suggests that it may be widespread in India as well. VDD is essential for bone health, and has a role in calcium homeostasis. Recent evidence suggests potential non- skeletal effects, which has led to increased interest in public health significance of VDD in the Indian context notwithstanding abundant sunshine. Worldwide naturally occurring dietary sources of VD are limited and most individuals obtain their VD from cutaneous sun exposure. In view of the recent reports of escalating burden of biochemical VDD and its known skeletal and potential extra-skeletal effects, the Department of Biotechnology proposes to support research on its public health significance and potential interventions to address this malady. **R & D Proposals** are invited in the following thrust areas:

1. Representative National prevalence data of vitamin D deficiency specifically correlated with functional outcomes (biological consequences), especially in vulnerable populations including pregnant and lactating women, infants and elderly and from rural and coastal areas.
2. Novel functional markers of Vitamin D deficiency and point of care assays.
3. Benefits (skeletal and extra-skeletal) and safety (potential adverse effects) of Vitamin D supplementation and fortification
4. Mechanistically understand the effects of vitamin D deficiency, in various cells/tissues
5. Potential vegetarian dietary sources and bioavailability of Vitamin D
6. Role of other nutrients, especially calcium, in determining requirements and biological functioning of Vitamin D
7. Non-dietary interventions including sunshine exposure and exercise in alleviating vitamin D deficiency
8. Genetic determinants of Vitamin D metabolism and their association with biological consequences

**Eligibility:** Applications may be submitted by public and private universities, colleges, Institutes, non-profit organizations (recognized by DSIR as a Scientific and Industrial Research Organization (SIRO)). It is expected that some of the projects will be collaborative efforts between Basic scientists, Clinicians, Biochemists etc.

**How to apply and Assessment criteria:** Applicants should submit soft copy of concept note in the format attached through email: [vk.addanki@nic.in](mailto:vk.addanki@nic.in) , Dr. A.Vamsi Krishna, Scientist-D, Department of Biotechnology, Block- 2, Room No.726, 7th floor, CGO Complex, Lodhi Road, New Delhi – 110003.

**The deadline for submission of concept note is 22<sup>nd</sup> March, 2018.**

Concept Note will be considered by a screening panel comprising external experts and officials from the DBT. Overall, the assessment will be based on the scientific merit, originality/novelty of the proposal, abilities and skills to execute the proposed project. Concept Notes selected by the screening panel will be asked to submit full proposal in DBT format online through *e-Promis* ([www.dbtpromis.nic.in](http://www.dbtpromis.nic.in))

**Click here for Application format (link)**

For any queries, contact: Dr. A.Vamsi Krishna, Scientist-D, E mail-[vk.addanki@ic.in](mailto:vk.addanki@ic.in), Ph. No-011-24363725

**Pre-proposals (Concept Notes) format:**

"The concept note with brief summary of project, aims/objectives, rationale of the project, work plan/methodology, expected results and their exploitation and how the proposal fits into the call should be confined to not more than 3 sides of A4 sheet" The font size should be 12 (Arial) with single spacing.

**Apart from the above, the following are to be submitted restricted to a maximum of five A4 sheets:**

- ✓ Brief CVs of the project leader, and CO-PIs including a list of up to ten recent publications in the area.
- ✓ Proposed budget restricted to one page which summarizes period of funding, staffing, equipment and other resources required for the project.