

NxPCM Final Report Cover Page

Study Title: Polar Vitamin D

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Research Gaps

- Gap(s) associated with this study:
 - What is the optimal dose of vitamin D supplementation?

- Study outcomes relate to gap(s):
 - The Antarctic analog was used to evaluate vitamin D supplementation in an environment similar to spaceflight in terms of confinement and lack of ultraviolet light exposure. The Antarctic has proven a valuable analogue for this type of work.

 - This study does not close the gap, but instead points to the need for further studies to identify optimal supplementation protocols, the safety of these protocols, and the interrelationship of vitamin D with other systems (e.g., immune function).

- Recommended future studies or gap(s):
 - Follow-on studies are already underway: the Polar II study will evaluate daily vs. weekly supplementation of vitamin D, along with the interrelationships with immune system function. The Vitamin D Dosing Study is evaluating daily, weekly, or weekly/monthly dosing of vitamin D for safety and efficacy.

Study Summary: See attached.

Publication(s) (attach copy of publication): See attached.