

SWEET AND SOUR

Richard Gallo
Scott Byrne

Vitamin D and Inflammation



Two protagonists debate a hot topic in the **ESDR KITCHEN**

28.10.2020
13:30 CET

Q & A

RG = Rich Gallo

SB = Scott Byrne

Question for Scott Byrne: Could the route of administration of Vit D play a role in its biological efficacy ?

SB: Yes it could, particularly if it is applied to the skin where it is likely to target the immune cells that respond to Vit D by becoming tolerogenic (e.g. dendritic cells). This may partly explain why some topical Vit D analogues are effective in the treatment of inflammatory skin diseases like psoriasis and polymorphic light eruption

Q. To reduce sun damage and get the benefit could we give phototherapy to skin areas that are usually sun protected such as buttock while protecting the face and arms?

SB: The phototherapy that has been trialled in systemic autoimmune diseases like MS has involved whole-body irradiation. Also, the NB-UVB dosing regimen deployed was one that is used to treat psoriasis. We still don't know if this is the most effective wavelength or dose to effect systemic (non-skin) responses.

Q. Does ingested D3 has any effect on skin inflammation?

RG: Under normal conditions of adequate serum levels of 25OH Vitamin D the evidence suggests oral D3 will not influence skin inflammation. However, prolonged intake of high levels of D3 that reach toxicity will lead to skin barrier disruption and severe deficiency can similarly result in defects in host defense that could be improved by appropriate oral D3 supplementation.