Summary of a Preliminary Study

on the use of intra-oral vitamin D3 spray

Conducted at the High Desert Heart Institute;
(HDHI) Victorville, CA. from January – August, 2012

The purpose of this preliminary study was to determine the efficacy of the intra-oral delivery system for vitamin D3. Patients exhibited a wide range of health conditions and were selected at random for inclusion in the study. All participants in the study were provided with a Vitamin D3 intra-oral spray and were instructed on the use of the spray. Patients were advised to use the spray for a total of 8 sprays per day, therefore providing a total of 5000 IU vitamin D3 per day, per patient. All patients included in this analysis verbally indicated their compliance with instructions.

Starting point blood levels of 25 (OH)-vitamin D3 were analyzed for each patient. After a suitable period of use of the spray (variable across the patient sample) blood levels of 25 (OH)-vitamin D3 were re-analyzed. In all 25 cases, the data support the efficacy of the intra-oral vitamin D3 spray in raising serum 25(OH)-vitamin D3 levels.

It is now generally accepted (Vitamin D Research Council figures) that 25(OH) -vitamin D3 levels below 30 ng/ml indicate a severe deficiency, with the recommended range being 50 – 80 ng/ml.

A summary of the results obtained from the HDHI Preliminary Study follows:

No. of Participants: 25
Male: . . . . . .9 . . . . . 36%
Female: . . . . . .16 . . . . 64%
Average Age: 77.2
Average Age Men: 75.9
Average Age Women: . .77.9

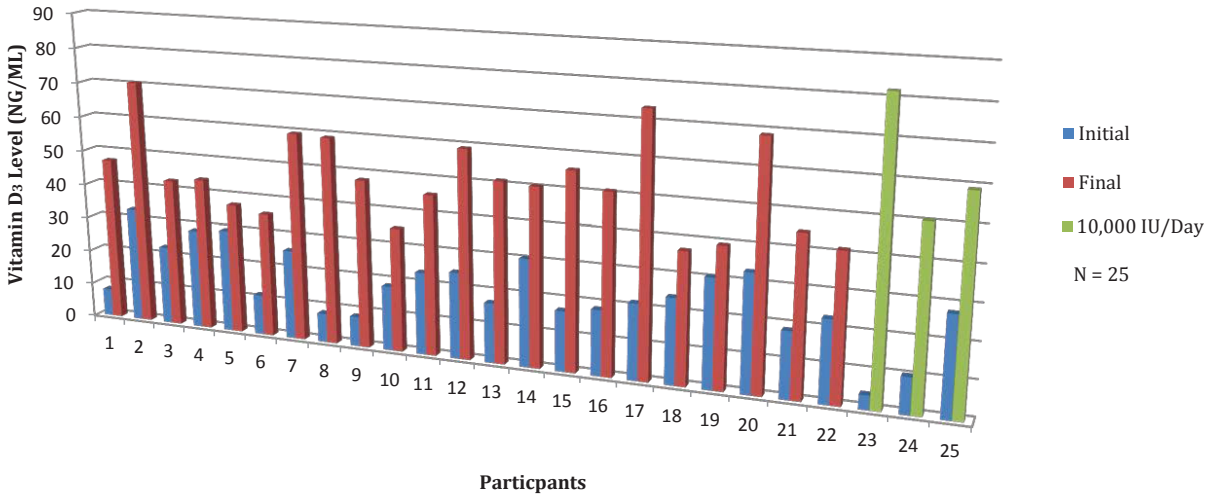
25(OH)-Vitamin D3 levels (units: ng/ml):
Baseline Range: . . . . . .4.0 – 33.2
Average Baseline Reading: 20.776

Endpoint Range: . . . . . .35.3 – 81.9
Average Endpoint Reading: 51.584

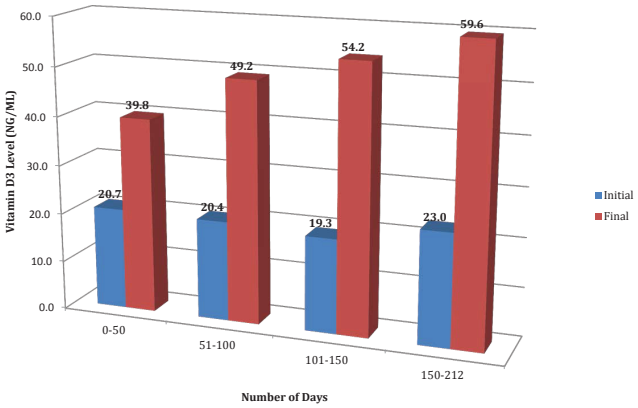
Range of increase in 25(OH)-vitamin D3 reading: . . . . . 7.8 – 77.9
Average increase: 30.808

Number of Days using intra-oral spray between readings - range: . . . 35 - 212
Average number of days using intra-oral spray: 108.84

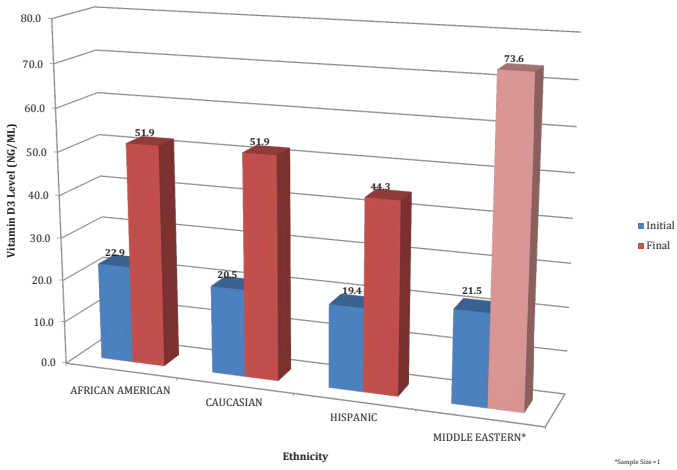
Elevation of Participant Vitamin D3 Levels Following Use of Vitamin D3 Spray



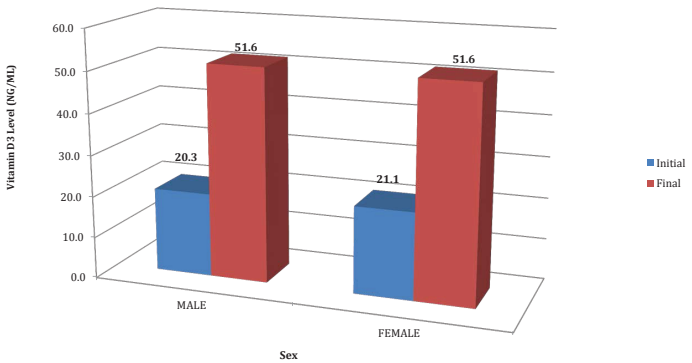
Average Vitamin D3 Levels After Vitamin D3 Spray By Number of Days Passed



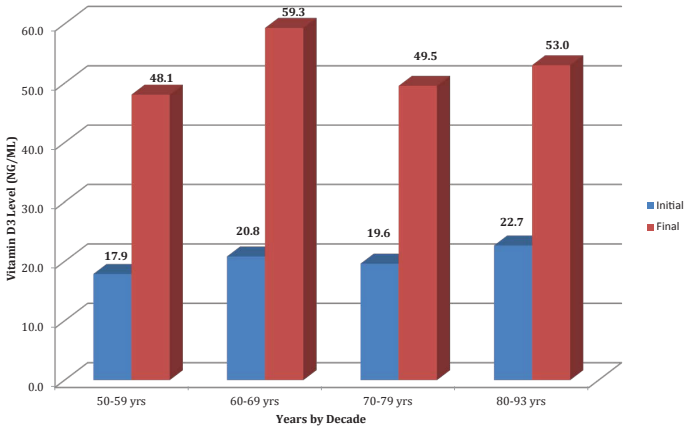
Average Vitamin D3 Levels After Vitamin D3 Spray By Ethnicity



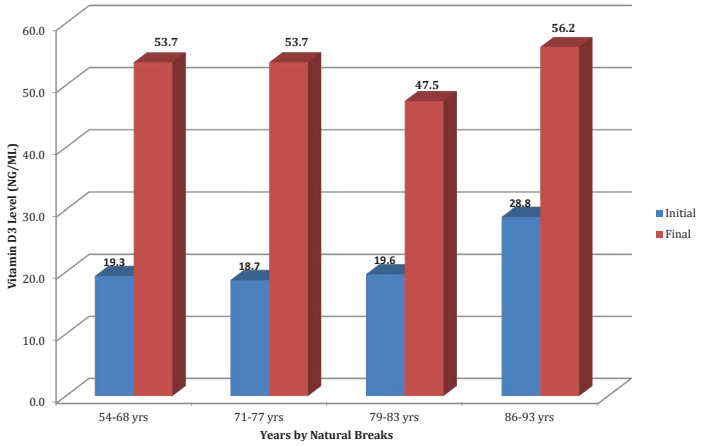
Average Vitamin D3 Levels After Vitamin D3 Spray By Sex



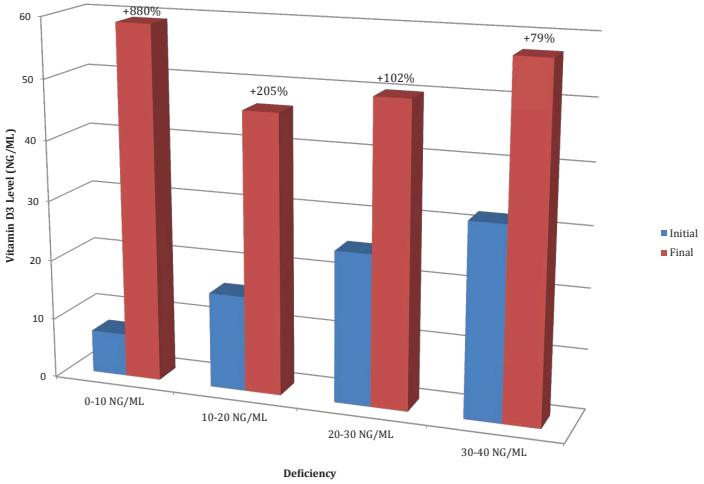
Average Vitamin D3 Levels After Vitamin D3 Spray By Age



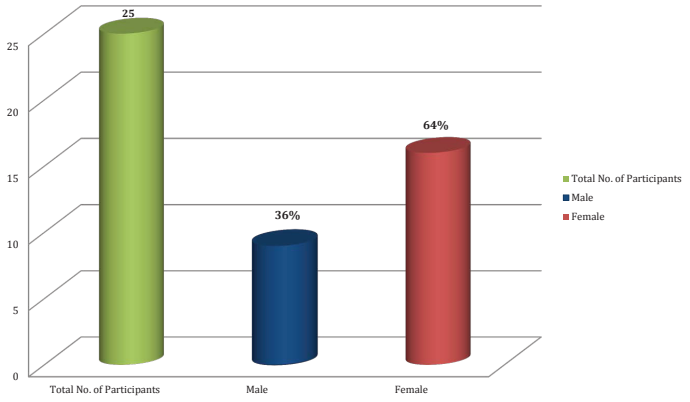
Average Vitamin D_3 Levels After Vitamin D_3 Spray By Age



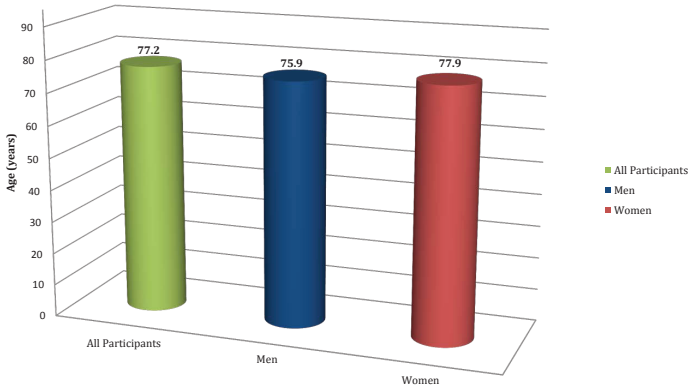
Average Vitamin D_3 Levels After Vitamin D_3 Spray By Deficiency



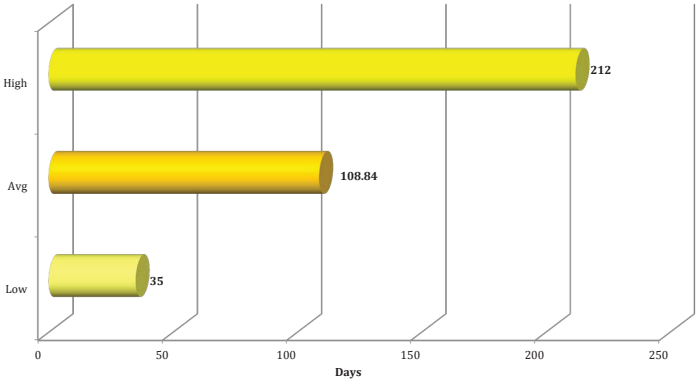
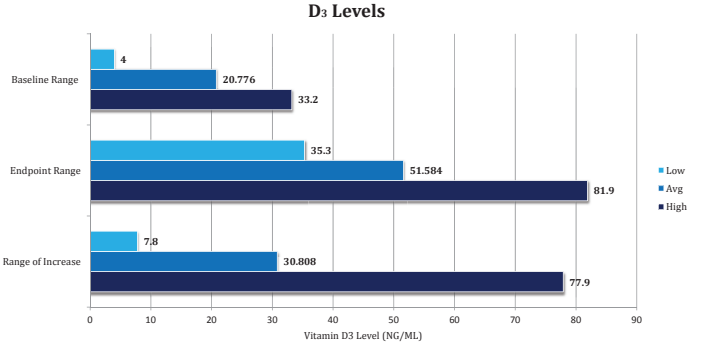
Number of Participants in Vitamin D_3 Study



Average Age of Participants in Vitamin D_3 Study



Number of Days Between Readings Using Intra-Oral Spray



Partcipant Baseline, Endpoint, and Range of Increase of Vitamin D_3 Levels