# The DIGITAL HEALTH REVOLUTION is HERE!

'Your Patient will See you NOW'!

Presented by **Carole Baggerly**
*Founder and Director of GrassrootsHealth Nutrient Research Institute*

## CLAIM THE *Joy* OF *Your* HEALTH TODAY!

*WHY? HOW?*

SPREAD the WORD to ALL

**ENJOY** the **SUCCESS** for YOU!

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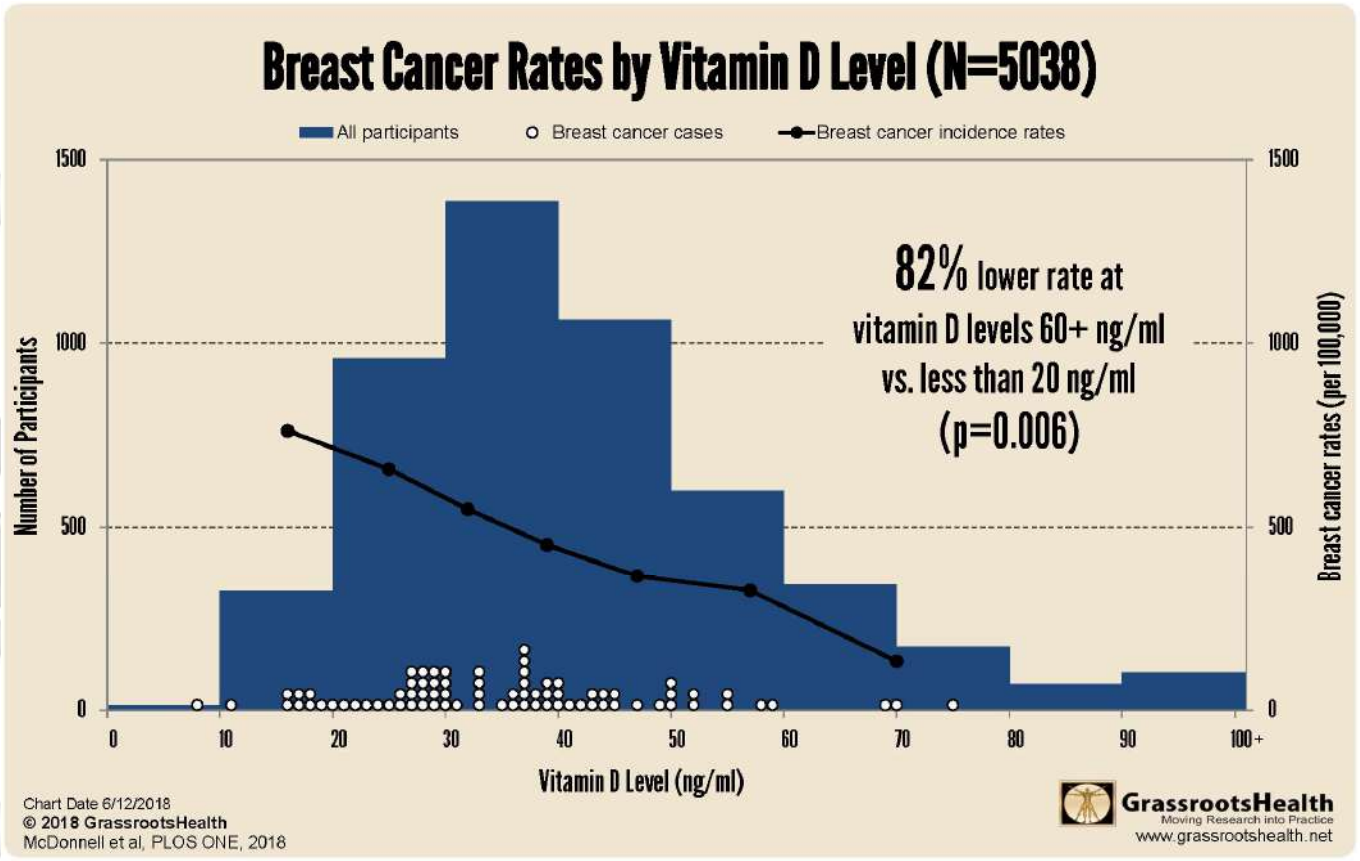
# BREAST CANCER RISK REDUCTION




Results

Cox regression showed that women with 25(OH)D concentrations ≥60 ng/ml had an 82% lower risk of breast cancer than women with concentrations <20 ng/ml, adjusted for age, BMI, smoking status and calcium supplement intake (HR=0.20, P=0.02).

# 40-60% REDUCTION PRETERM

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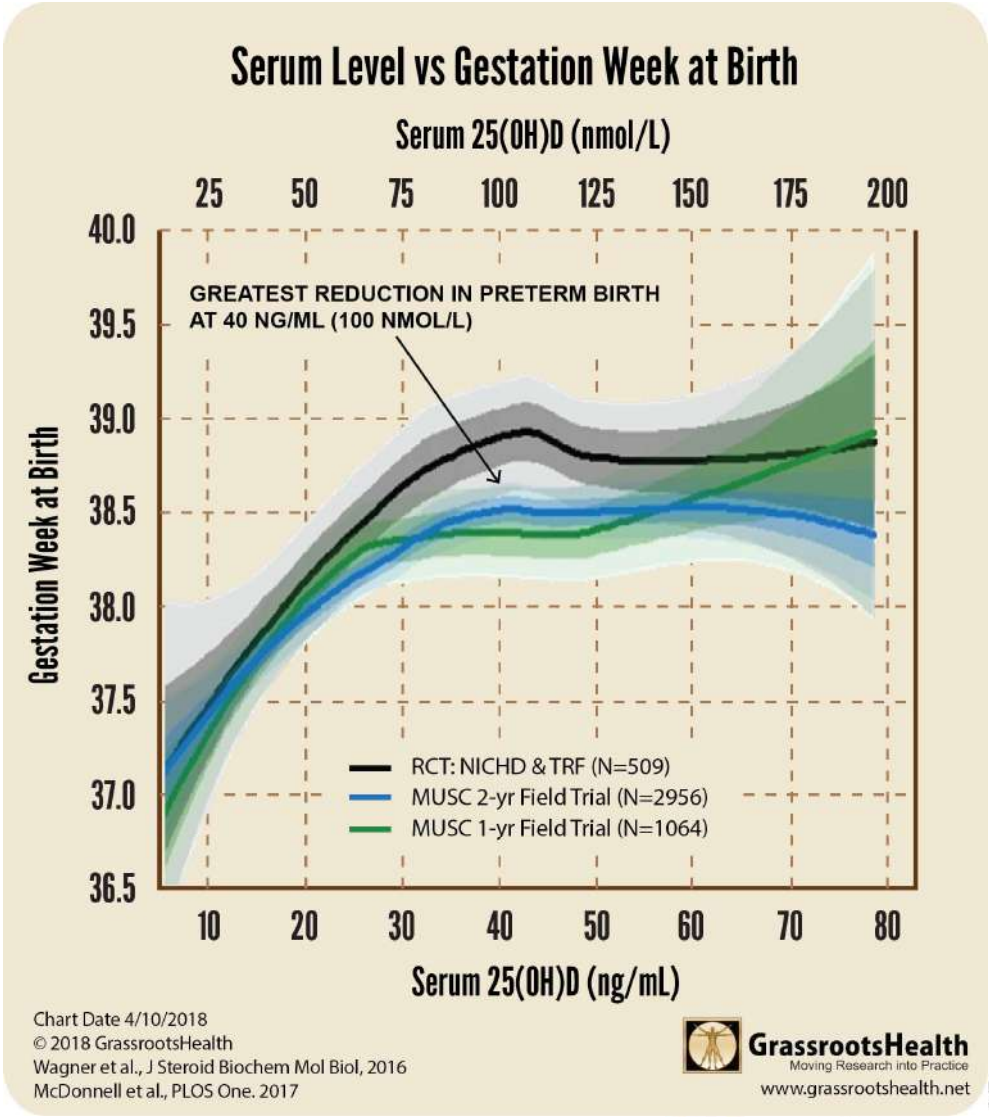
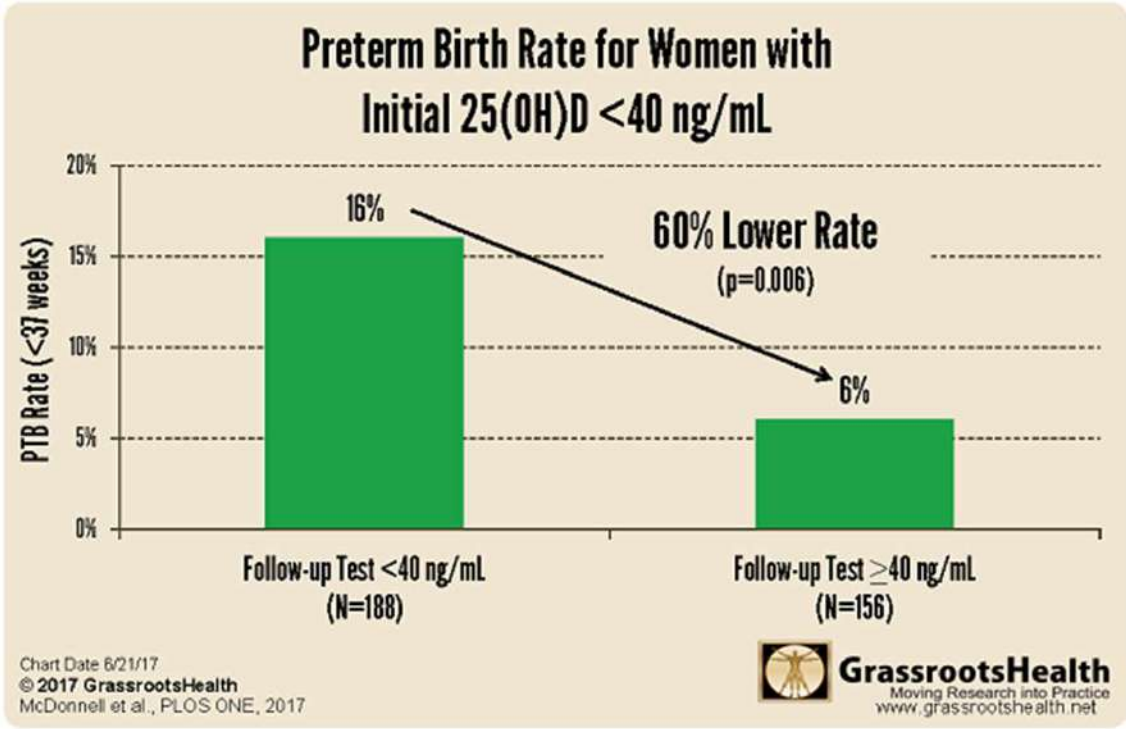


# 60% REDUCTION PRETERMS

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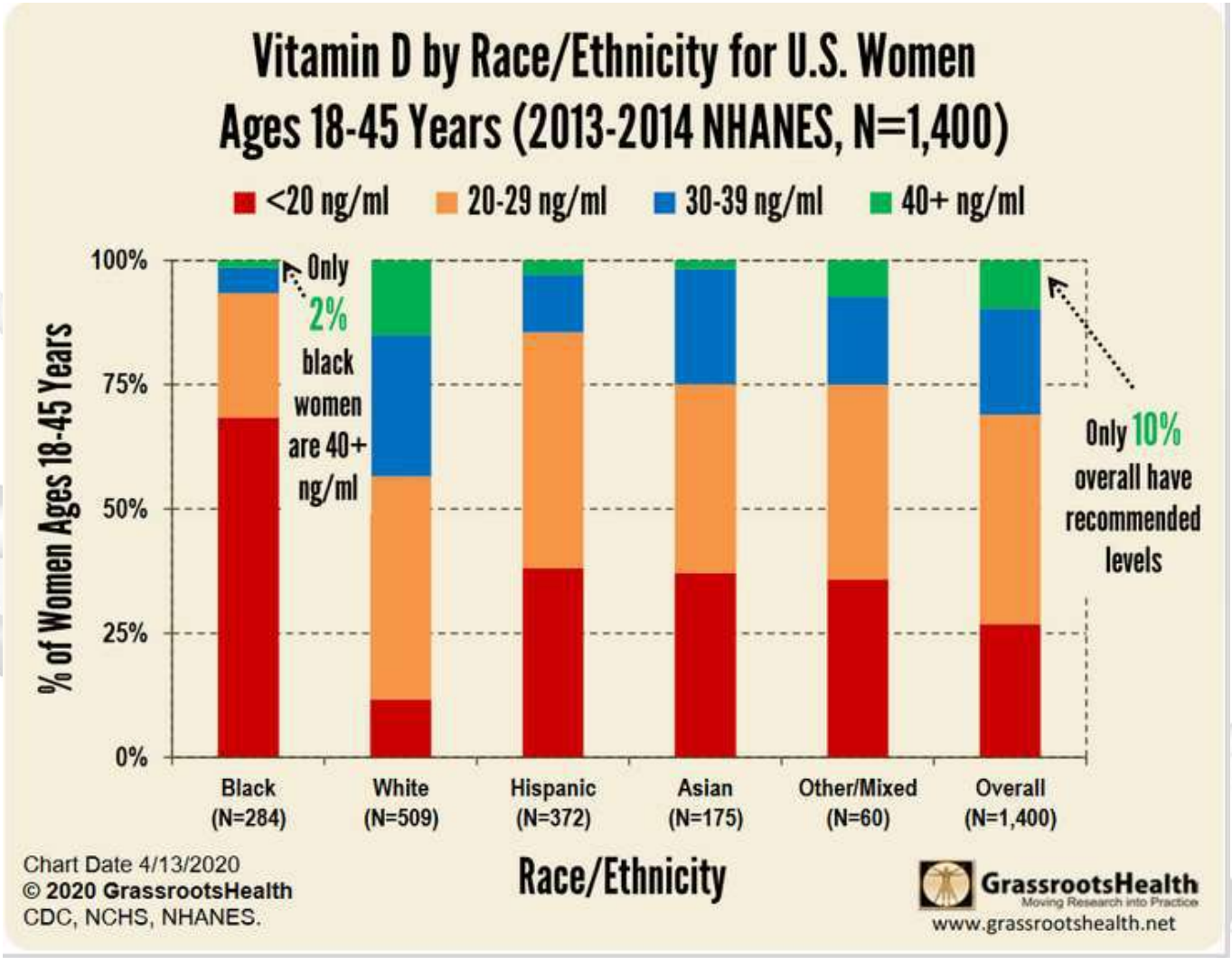
Vitamin D by Race/Ethnicity for U.S. Women
Ages 18-45 Years (2013-2014 NHANES, N=1,400)
<20 ng/ml
20-29 ng/ml
30-39 ng/ml
40+ ng/ml
% of Women Ages 18-45 Years
100%
75%
50%
25%
0%
Only 2% black women are 40+ ng/ml
Only 10% overall have recommended levels
Black (N=284)
White (N=509)
Hispanic (N=372)
Asian (N=175)
Other/Mixed (N=60)
Overall (N=1,400)
Race/Ethnicity
Chart Date 4/13/2020
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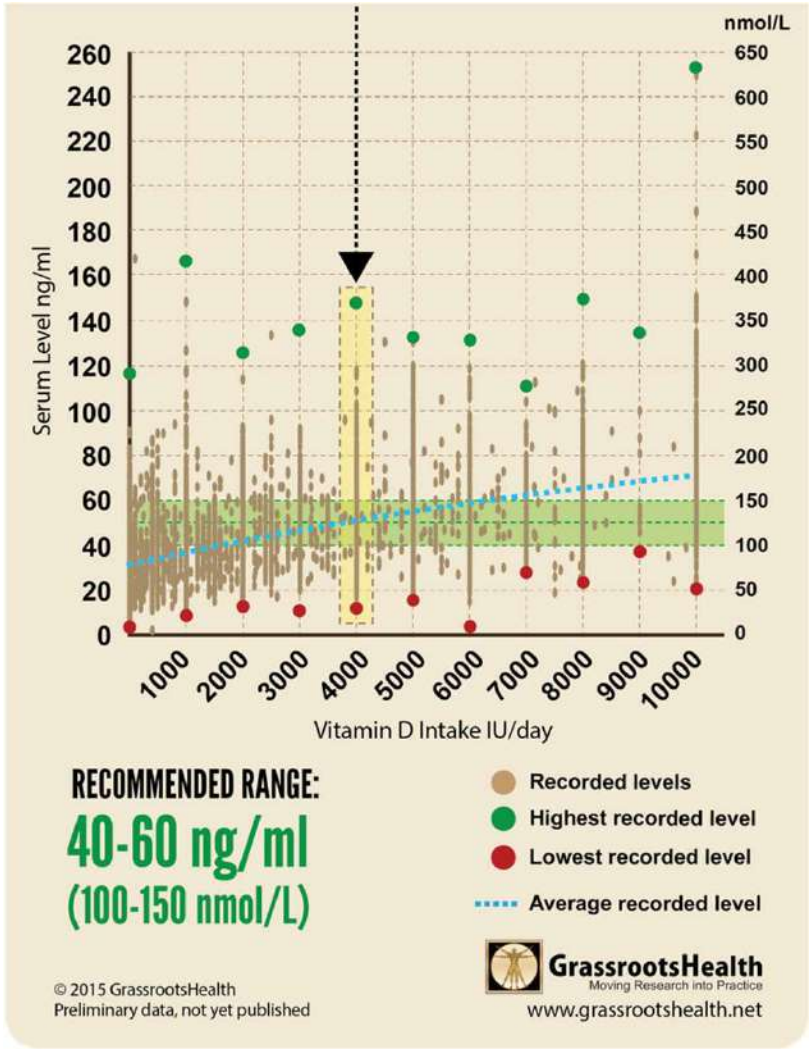
# Costs & Benefits with Vitamin D, Omega-3, Magnesium

| Condition | Cases/Year | Cost | Benefit |
|---|---|---|---|
| Breast Cancer | 266,120 | $80,000 ea<br>$21 Billion | $15B (71%) -D<br>180k women |
| | | | |
| Type 1 Diabetes | 40,000 | $360,000 ea<br>$14.4 Billion | 7.2 B (50%)-D<br>20,000 people |
| | | | |
| Preterms | 380,000 | $51,000 ea | 9.65B (50%)-D |
| | | $19.3 Billion | 190k infants |
| Atrial Fibrillation | 750,000 | $8,000 ea<br>$6 Billion | $3B (50%)-All<br>325K people |

# SERUM LEVEL BY INTAKE (N= 7324)



# DOSAGE CHART 90%

**Vitamin D intake observed to produce noted 25(OH)D serum levels in 90% of adults (age 18 years and older), weighing 150 lbs. (N=7324)**

**RECOMMENDED RANGE: 40-60 ng/ml**

**WHAT TO DO**

1. **Test**
2. **Establish recommended intake level**
3. **Test again in 3-6 months**

(For supplements, vitamin D3, cholecalciferol may be used.)

Individuals should consult with a health care practitioner to develop a custom plan.

**Change in Serum Level Based on Intake (IU/day) for 90% of Adults* (N=7324)**

| Current Level (ng/ml) \ Expected Level (ng/ml) | 20 | 30 | 40 | 50 | 60 |
|---|---|---|---|---|---|
| 10 | 2000 | 4000 | 6000 | 10,000 | 10,000 |
| 15 | 1000 | 3000 | 6000 | 9000 | 10,000 |
| 20 | | 2000 | 5000 | 8000 | 10,000 |
| 25 | | 1000 | 4000 | 7000 | 10,000 |
| 30 | | | 3000 | 6000 | 10,000 |
| 35 | | | 1000 | 5000 | 9000 |
| 40 | | | | 3000 | 8000 |
| 45 | | | | 2000 | 6000 |
| 50 | | | | | 4000 |

** values rounded to the nearest 1000 IU; highest recommended intake is 10,000 IU/day*

**Example: With a starting serum level of 20 ng/ml, an additional intake of approximately 5000 IU/day would be sufficient for 90% of adults (age 18 years and older, weighing 150 lbs) to achieve a serum level of at least 40 ng/ml.**

# COSTS & BENEFITS WITH VITAMIN D

## SARS-CoV-2 Positivity

Vitamin D levels at or above **55** vs. less than 20 ng/ml (Kaufman et al.)

53% LOWER RISK

## Hospitalization Due to COVID-19

Vitamin D levels at or above **30** vs. less than 30 ng/ml (Merzon et al.)

52% LOWER RISK

## Death Due to COVID-19

Vitamin D levels at or above **10** vs. less than 10 ng/ml (Carpagnano et al.)

90% LOWER RISK

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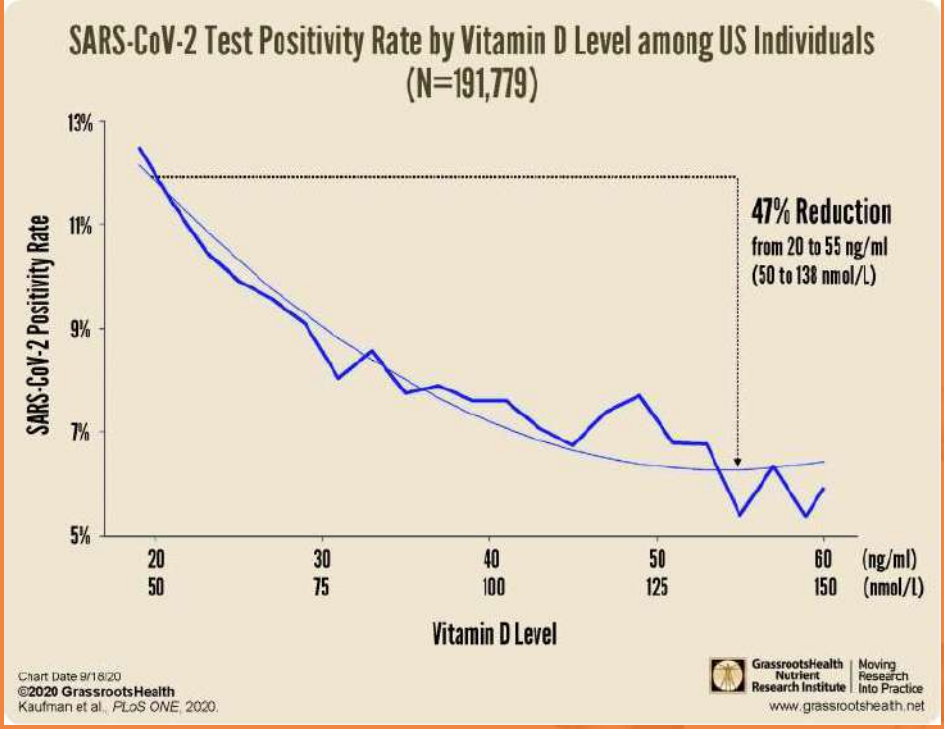
# Vitamin D & COVID-19

Kaufman et al.: An analysis of over 190,000 US SARS-CoV-2 test results shows positivity rate halved with vitamin D levels of 55 ng/ml or higher vs. less than 20 ng/ml




**Radujkovic et al.:** <12 ng/ml had a 6-fold higher risk of severe disease resulting in the need for invasive mechanical ventilation and/or death, and approximately 15 fold higher risk of death.

**Carpagnano et al.:** 81% of patients with acute respiratory failure due to COVID-19 had vitamin D levels <30 ng/ml; 24% had ≤10 ng/ml. When looking at mortality rates after 10 days of hospitalization, it was found that those with severe vitamin D deficiency had a 50% probability of death, compared to 5% among those >10 ng/ml.

**Merzon et al.:** 60% increased risk in COVID-19 infection for vitamin D <30 ng/ml compared to 30 ng/ml or higher, and almost doubled risk of hospitalization for <30 ng/ml.

# KEY RESEARCHERS ON PANEL

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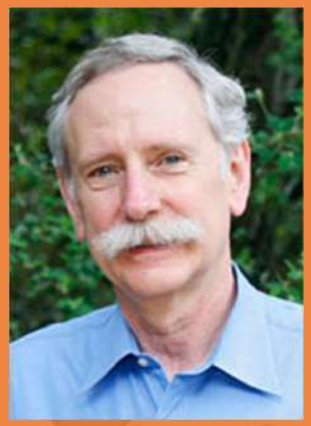

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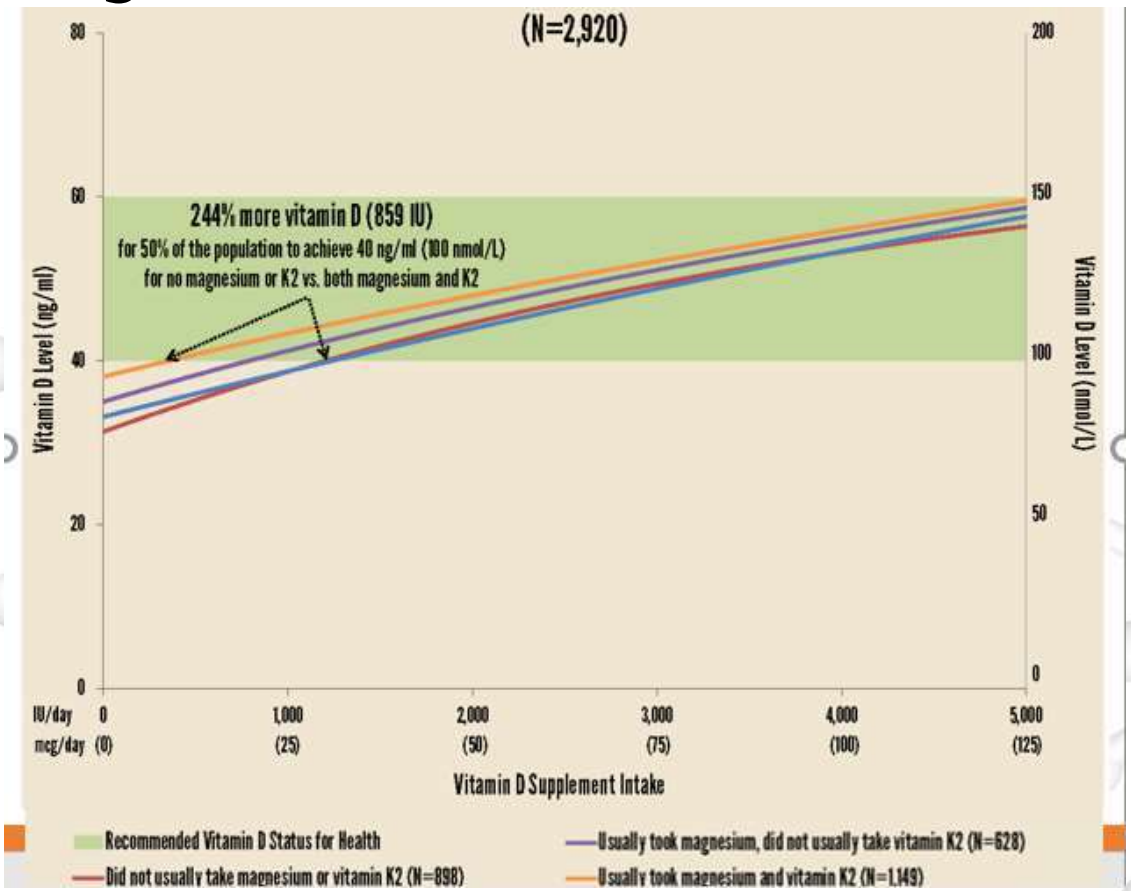
Medical University SC

Roger Newman, MD
Medical University SC

# Vitamin D Dose-Response by Supplemental Magnesium and Vitamin K2 Intake



# WHAT DOES IT TAKE?


***Moving Research into Practice NOW!***

***myData-myAnswers***

*Personalized digital health system + research base*



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# Action Steps


#1 Measure—the 'right' things; Develop Standards
#2 Create NEW Technologies—to measure, to educate
#3 Create new educational methods to match audiences
#4 Create new structures/benefits for professionals
#5 Analyze/Demonstrate Results

# More Information?

## Please contact

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