



A Consortium of Scientists, Institutions, and Individuals
Committed to Solving the Worldwide Vitamin D Deficiency Epidemic

Case Studies from the D*action Project: Pregnancies, Children

Carole A. Baggerly, Director,
GrassrootsHealth

Cedric F. Garland, Dr. P.H.
University of California San Diego

D*action Project

A worldwide population level
public health intervention

1. Solve the deficiency epidemic--now!
 - Get serum levels to 100-150 nmol/L
2. Create Evidence-Based Public Health Policy Recommendations
 - Large scale intervention: Education
 - Testing
 - Voluntary/individual intake adjustment
 - Results

Sponsors Supporting the Call to Action: 100-150 nmol/L

- Individuals: Over 8000 sponsors in the D*action project
 - US, Canada, United Kingdom, Japan, India, New Zealand, Australia

Sponsors Supporting the Call to Action: 100-150 nmol/L

- Associations/Organizations
 - Ontario Society of Physicians for Complementary Medicine
 - Section of Complementary and Integrative Medicine of the Ontario Medical Association
 - DIRECT-MS.org, multiple sclerosis organization

Sponsors Supporting the Call to Action: 100-150 nmol/L

- Clinics/Medical Groups
 - All About Children Pediatric Partners
 - Courtyard Chiropractic Health Centre
 - Homefirst Health Services
 - Mattapan Community Center
 - Reading Hospital Cancer Center
 - Roswell Park Cancer Institute
 - Skardis Pain Management Clinic
 - Steiner Medical and Therapeutic Center

Sponsors Supporting the Call to Action: 100-150 nmol/L

- Pharmacies (all in the US to date)
 - Apotheca Compounding Pharmacy
 - Bella Vista Pharmacy
 - Collier Drug
 - Debbie's Pharmacy
 - Glenn Ellen Pharmacy
 - + + + + many more

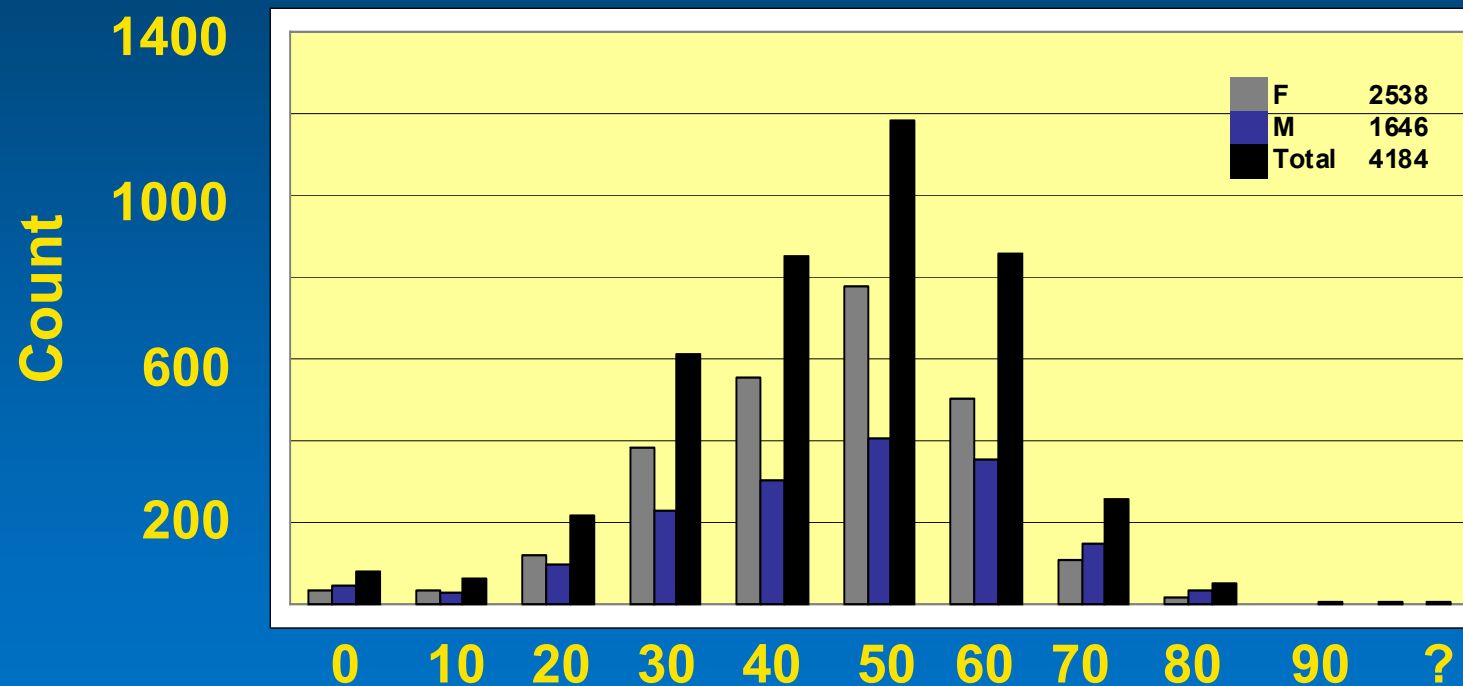
Sponsors Supporting the Call to Action: 100-150 nmol/L

- Community & Research Projects
 - Northwest Arkansas Breast Cancer Prevention
 - MS group in Vermont
 - State of Alaska
 - Minority Group in Georgia
 - University partnership/NIH grant
 - MORE Coming!

Project Results to Date

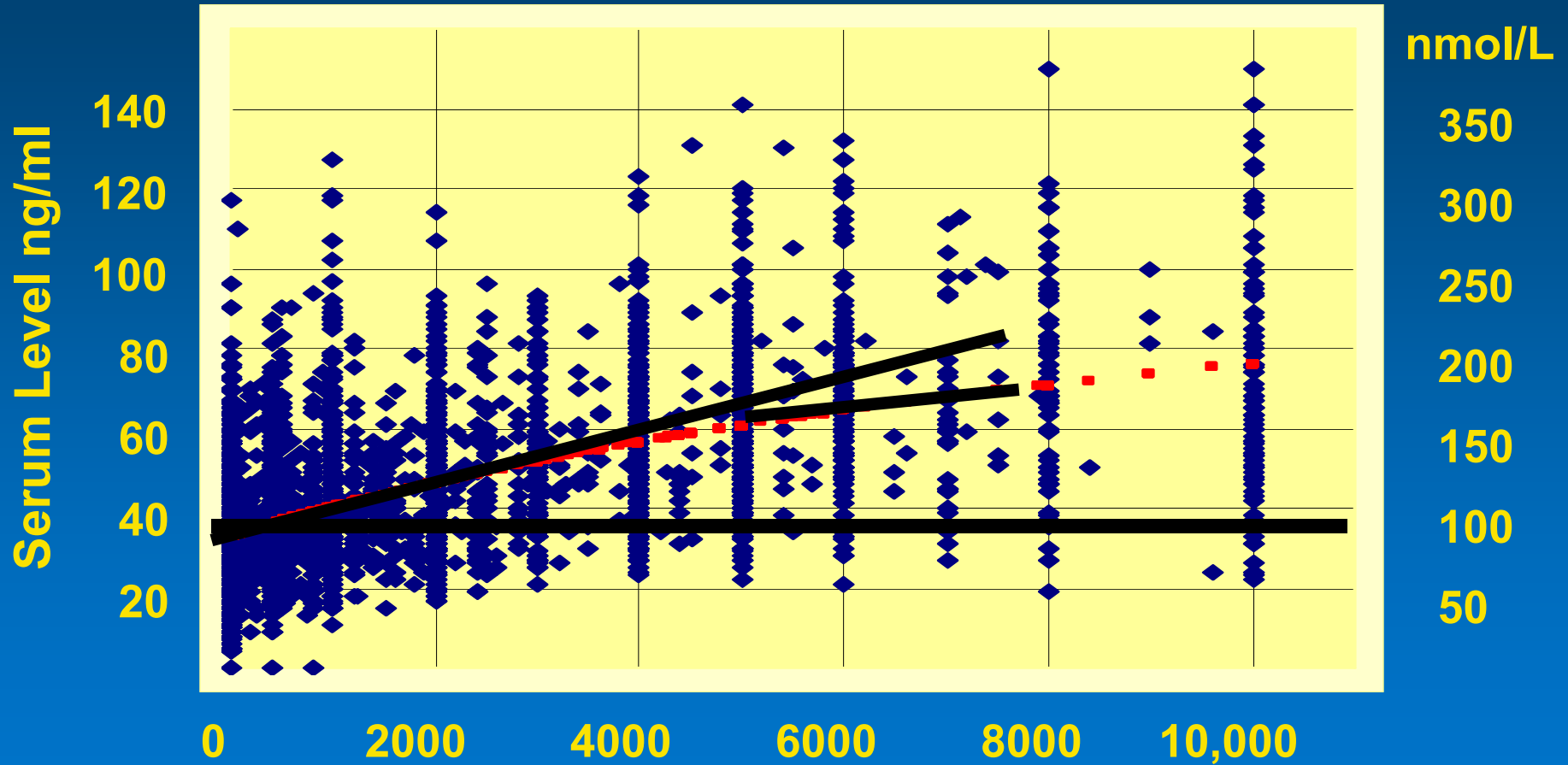
- Who's listening?
- How are they interpreting the message?
- What's next?

D*action Age Distribution



10 Year Age Groups (N=4184, 11/10)

D*action Project: Serum Level vs Intake



Vitamin D Intake IU/day (N=3667)

Pregnancy

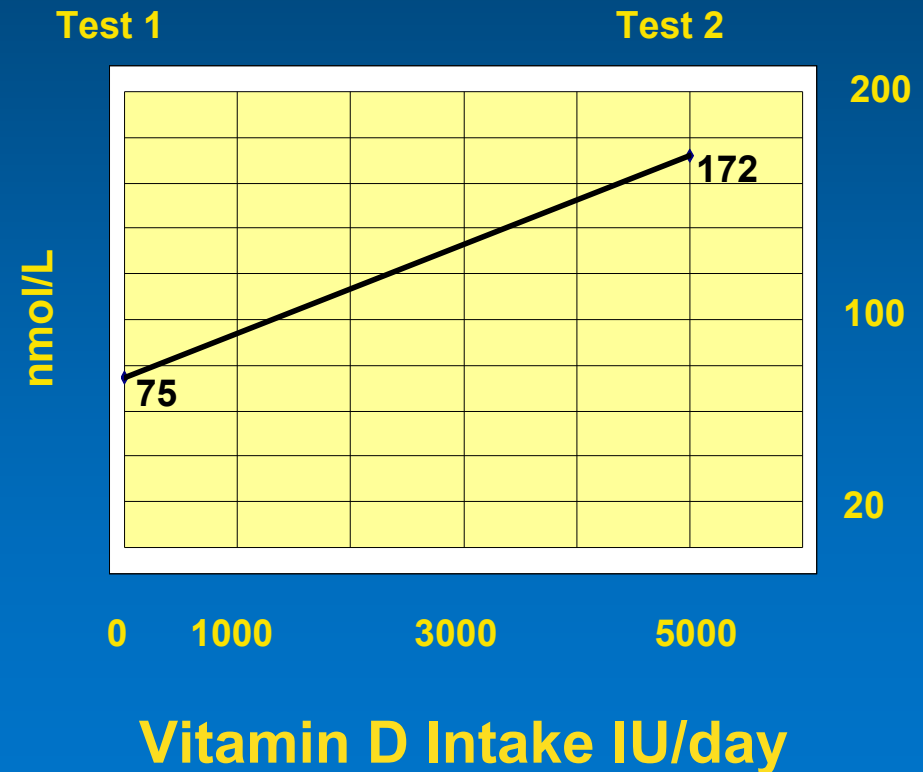
- 39 pregnant women at 1st test, ages 26-44
 - 13 delivered after 1st test:
0 complications
- 17 pregnant between test 1 & 2, ages 28-40
(1 in group 1) more details presented
- 4 pregnant at 3rd test, ages 35-41 (1 in group 2)

Case #1 (pre-pregnancy, during)

Asian
28 yrs old
52 kg
152 cm

Start intake: 0 IU/d
Serum: 30/75 nmol/L

Pregnant: 5000 IU/d
Serum: 69/172 nmol/L

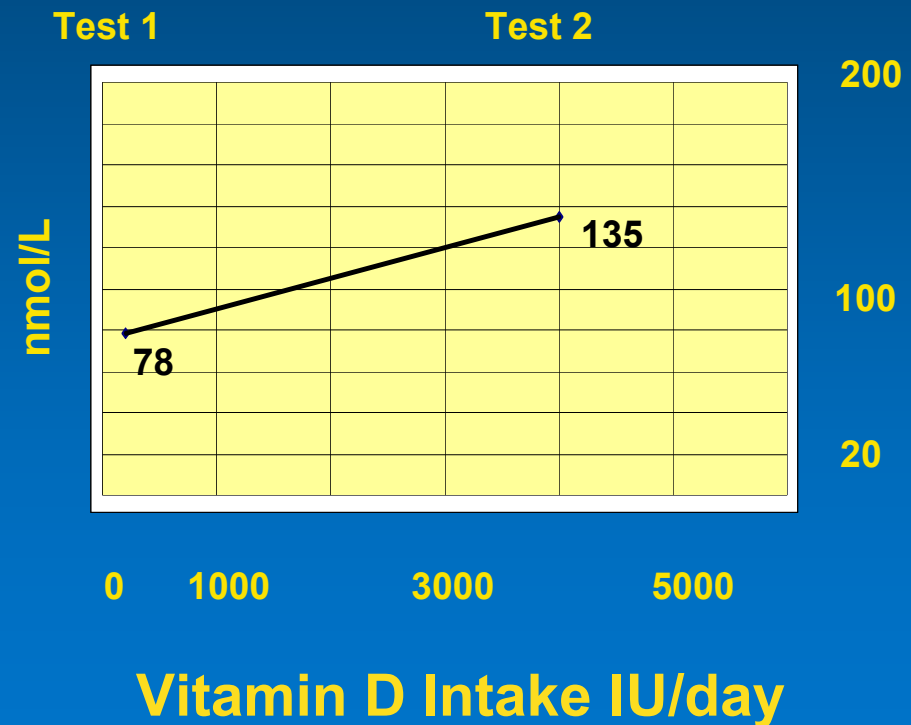


Case #2 (pre-pregnancy, during)

Caucasian
29 yrs old
62 kg
162 cm

Start intake: 200 IU/d
Serum: 31/78 nmol/L

Pregnant: 4000 IU/d
Serum: 54/135 nmol/L

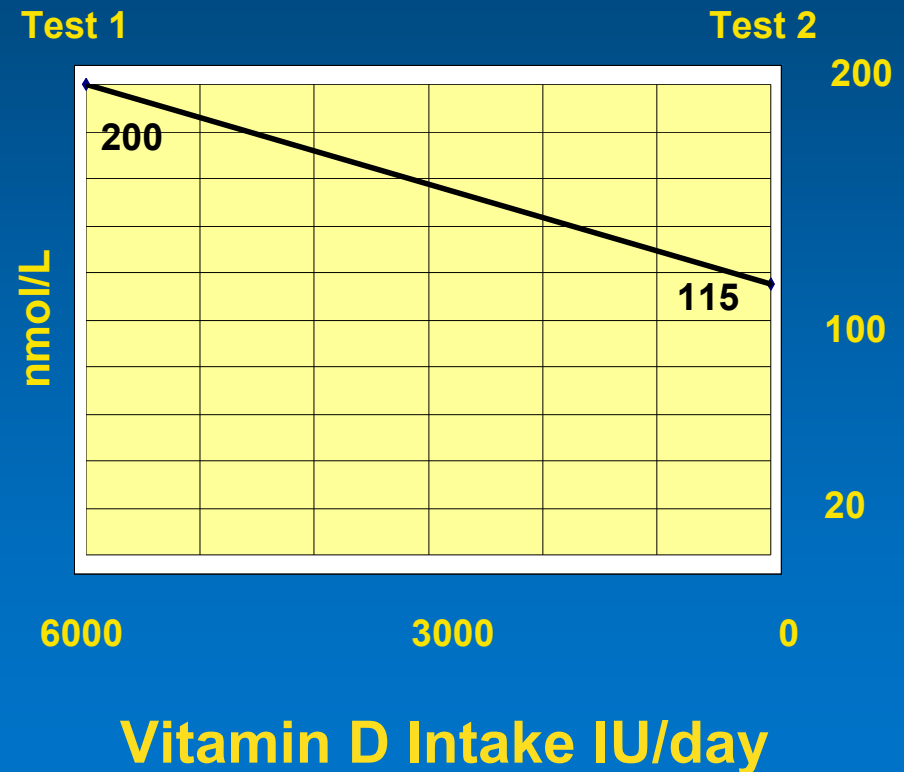


Case #3 (pre-pregnancy, during)

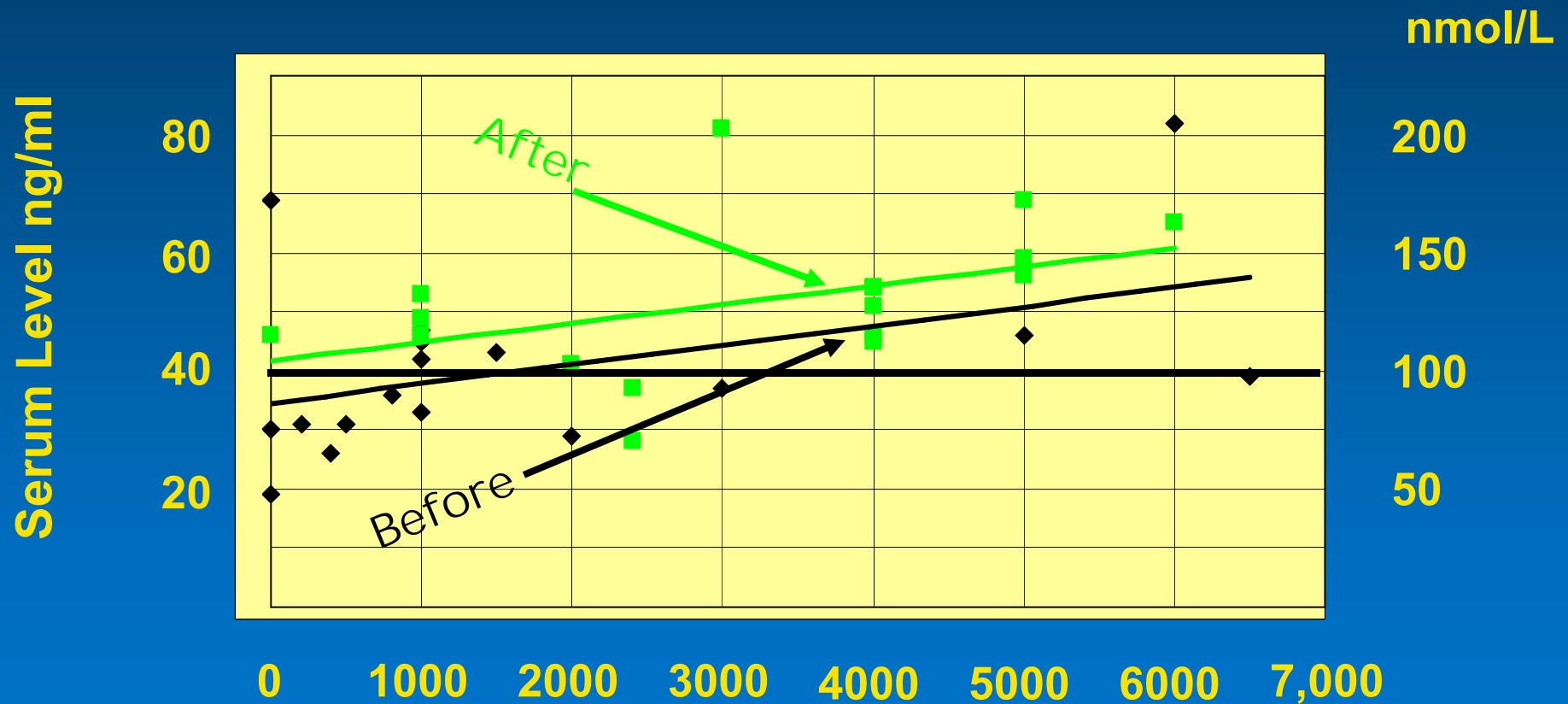
Caucasian
33 yrs old
52 kg
152 cm

Start intake: 6000 IU/d
Serum: 80/200 nmol/L

Pregnant: 0 IU/d
Serum: 46/115 nmol/L

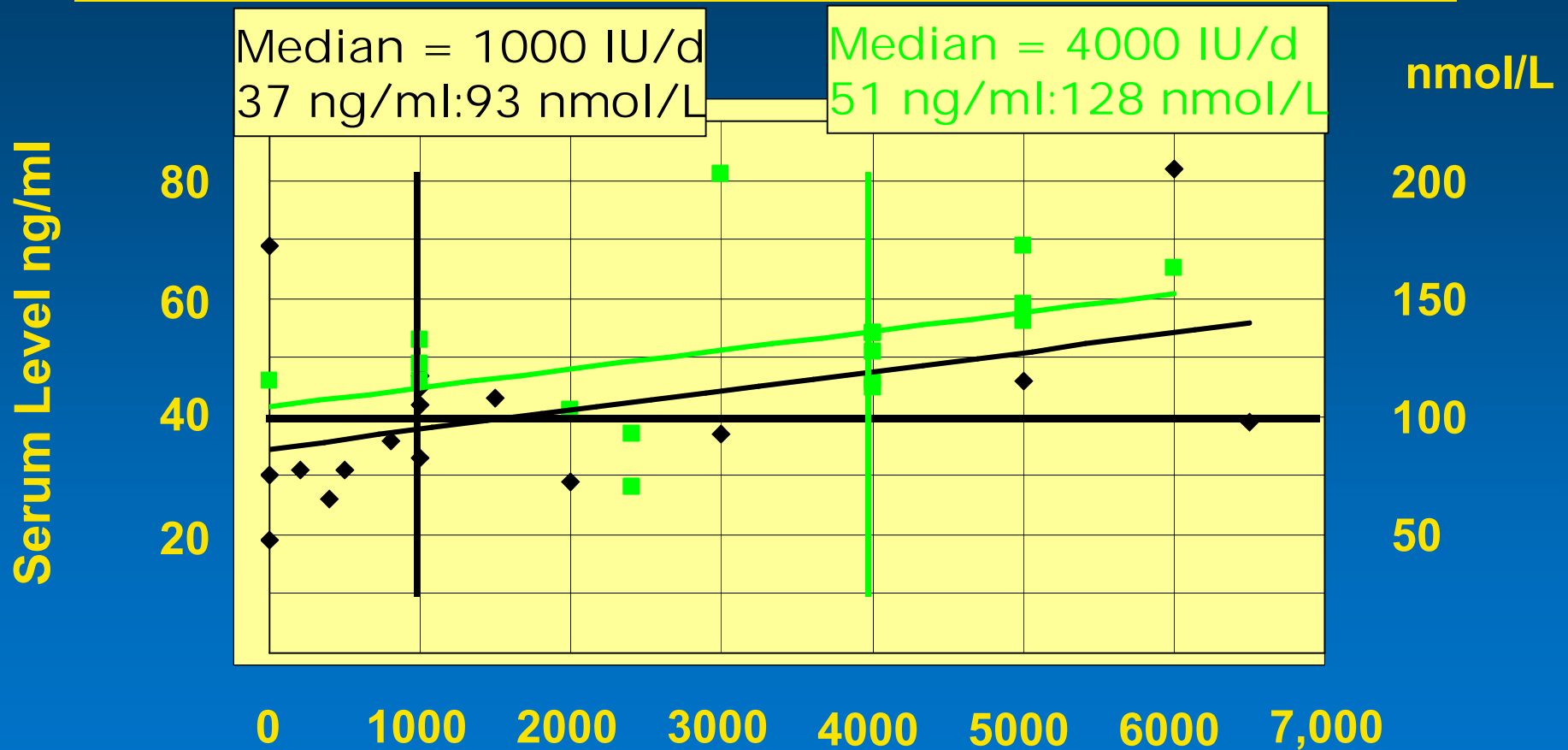


Intake Before & During Pregnancy



Vitamin D Intake IU/day (N=17)

Increase in Pregnant Women's Medians 93 nmol/L to 128 nmol/L



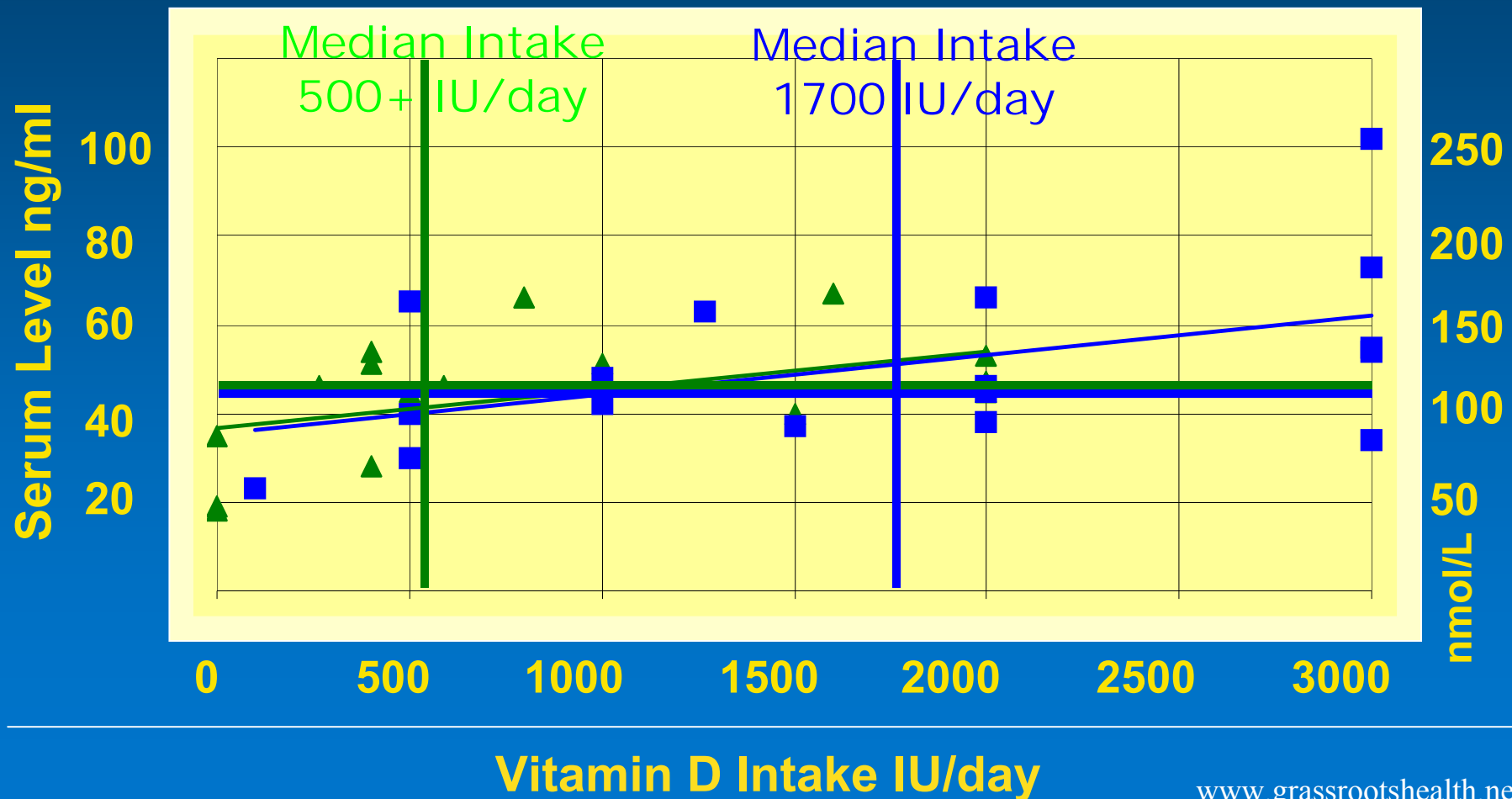
Vitamin D Intake IU/day (N=17)

Data from Children

	IU/kg	Intake	Serum
8 oz milk/day →	0	0	35
0 oz milk/day →	0	0	18
	17	267	46
	20	400	28
	20	400	54
	32	500	45
	44	400	51
	55	1000	51
	126	2000	47
	192	2000	47

D*action Project: Serum Level vs Intake

Children, ages 1-11 at time of 1st test (n=22)



What's Happening?

- Pregnant women are listening!
 - Getting median serum level to 128 nmol/L, intake from 1000 IU/day to 4000 IU/day!

Special THANKS to Bruce Hollis
And Carol Wagner!



- Parents are listening! Children's median serum level at 110 nmol/L, intake was raised from 500 IU/day to 1700 IU/day
 - It's SAFE, no complications
-

What next?

- Based on readiness and SUCCESS of the women, move faster into pregnancy clinics.
- Move faster with pediatricians, children's areas. Explore more with children's serum levels, intake for clearer recommendations.
- More education of pediatricians, obstetricians.
- More sponsors in these areas.

Congratulations to ALL!

Success!

Special Thanks

- Cedric F. Garland, Dr. P.H.
- Christine B. French, MS
- Robert P. Heaney, MD
- Leo L. Baggerly, Ph.D.
- ALL 8000 sponsors!

Thank you!

Get your serum level to 100-150 nmol/L
(40-60 ng/ml)