Vitamin D & Thyroid

90-day Action Plan

Copies available from:
Rufus Greenbaum
rufus@greenbaum.com
www.rufusgreenbaum.com

Rufus Greenbaum

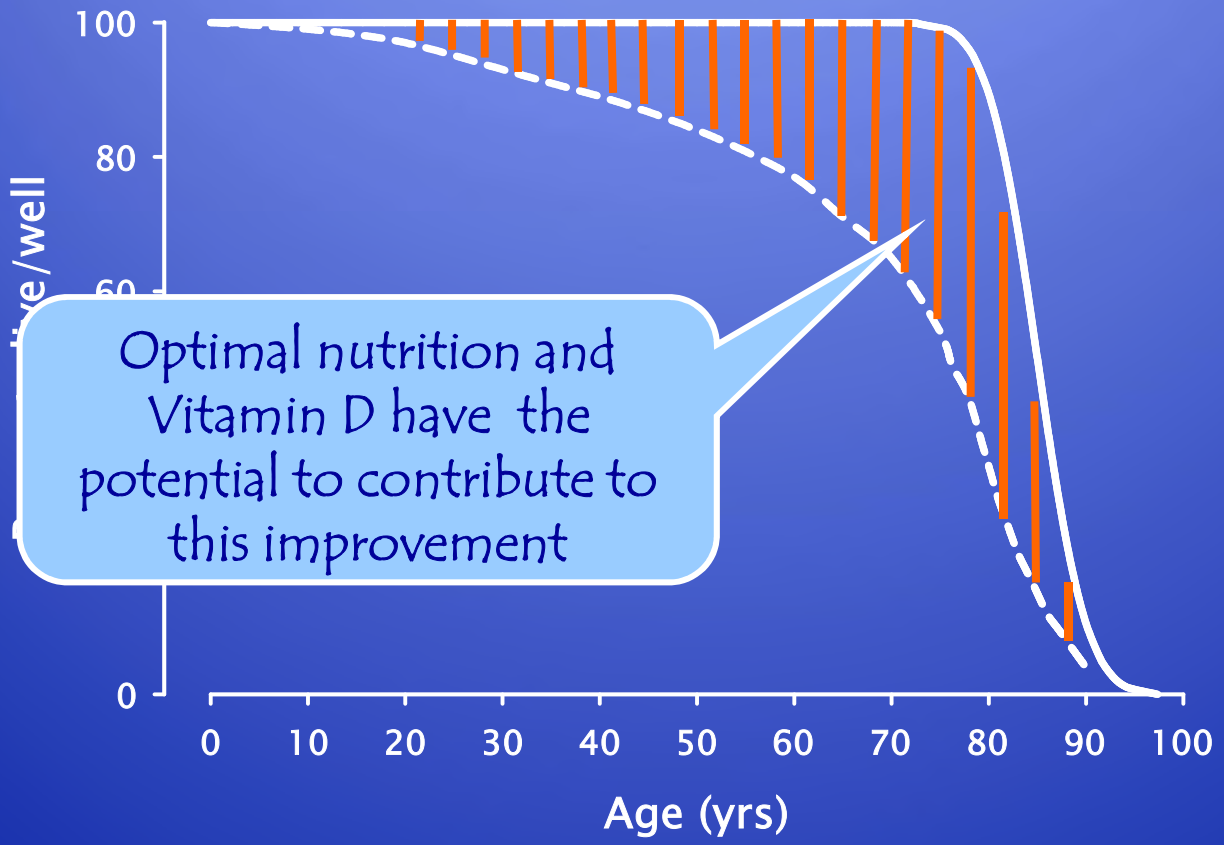
- A private individual - interested in preventative health
- I understand the difference between *Hypothesis* & *RCT Evidence*
- Correspondence with UK government about Vitamin D
  - DoH, SACN, NICE, BNF & others
  - since December 2009
- Involved with 5 hospitals in NW London, since July 2010
- Organised 4 conferences about Vitamin D, since December 2010
- Contact:

rufus@greenbaum.com
www.rufusgreenbaum.com

- Now commercially involved:
  - *BioTech Pharmacal* *USA* *www.biotechpharmacal.com*
  - *GreenVits* *UK* *www.greenvits.eu*

My primary interest – healthy ageing

I want to live longer in good health



My primary interest – healthy ageing

My initial source of information:

TRANSCEND – Nine Steps to Living Well Forever

Book by: Ray Kurzweil & Dr Terry Grossman

T	*Talk with your doctor*
R	*Relaxation*
A	*Assessment*
N	*Nutrition*
S	*Supplements*
C	*Calorie Reduction*
E	*Exercise*
N	*New Technologies*
D	*Detoxification*

My primary interest – healthy ageing

I am interested in ***complementary*** *medicine where it may offer* ***prevention*** *or* ***treatment*** *for long-term & age-related illnesses:*

• Alzheimer's	www.foodforthebrain.org
	www.coconutketones.com
• Cancer	www.grassrootshealth.net
	www.vitamindassociation.org
• Depression	www.vitamindwiki.com & www.drkalish.com
• Diabetes	www.vitamindwiki.com
• Osteporosis	www.vitamindwiki.com
• Multiple Sclerosis	www.vitamindwiki.com
• Parkinson's	www.vitamindwiki.com & www.drkalish.com
• Pernicious Anaemia	www.pernicious-anaemia-society.org
• Thyroid	www.tpauk.com & www.thyroiduk.org.uk

DANGER – *Be careful with Vitamin D*

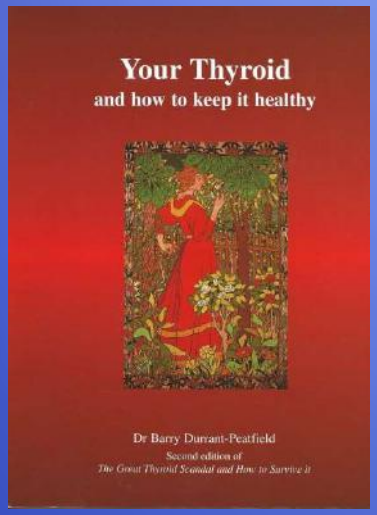
If you have any Thyroid problems

do not take Vitamin D

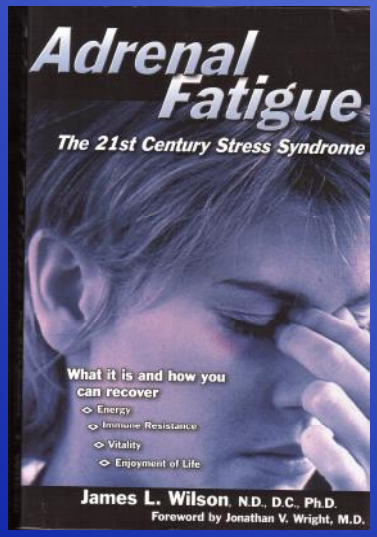
until you have corrected other problems like Adrenal Deficiency

However,
Vitamin D is one of many nutrients required for creation of T3 from T4

Following is partly based on 2 books:



Your Thyroid
and how to keep it healthy
Dr Barry Durrant-Peatfield

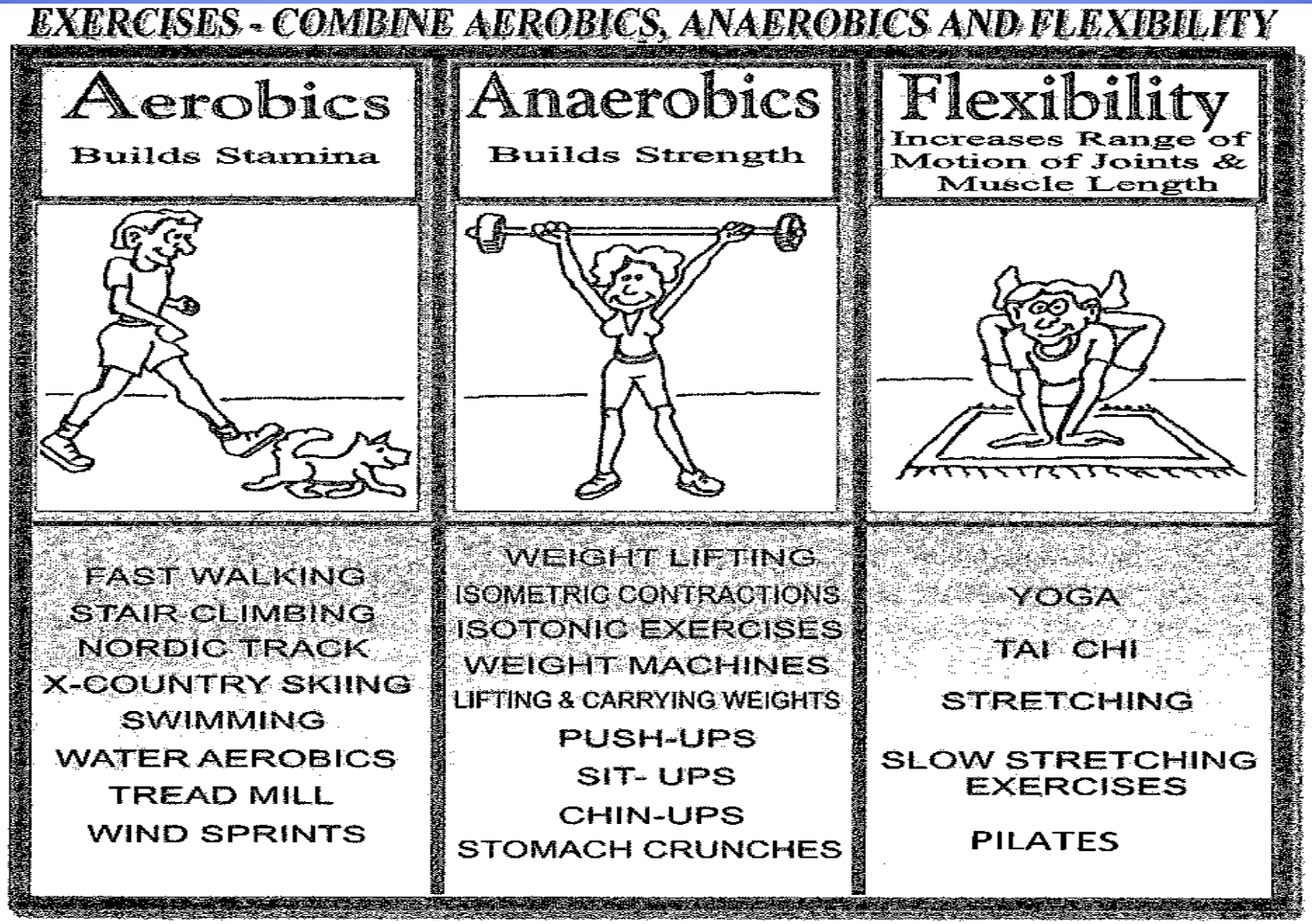


Adrenal Fatigue
Dr James Wilson
www.adrenalfatigue.org
Online questionnaire

Suggested 90-day Action Plan

1.	Exercise briefly - 3 different types	90 days +
2.	Sleep better & longer	90 days
3.	Do passive detoxification	90 days
4.	Do food detoxification	90 days
5.	Eliminate Candida & leaky gut	90 days
6.	*Replenish Adrenal glands*	*90 days*
7.	*Increase Vitamin D*	*after 30 days*
8.	*Try Thyroxine T4*	*after 60 days*
9.	*Do active detoxification*	*after 90 days*
10.	*Try T3*	*after 90 days*
11.	*Check hormones*	*after 90 days*

1. Modest exercise – 3 types



1. Modest exercise – 3 types

Aerobic exercise

- *10-30 minutes - at least every 3 days*
- *do enough exercise to increase breathing rate*
- *just brisk walking may be enough*

Anaerobic exercise

- *muscle strength training - at least every 3 days*
- *elastic bands on door frame work well*
  (Everlast Pilates Door Gym or Reebok Resistance Tube)

Flexibility

- *Yoga, Tai Chi or Pilates – at least once a week*

2. Sleep better

- *Sleep helps the body to repair itself*
- *Try and sleep from 10:00pm until 7:00am or later*
- *If disturbed by partner, try a separate bed for 30-90 days*
- *Try and replace other sleeping drugs with Melatonin or natural sleeping aids like Valerian or Natrasleep*
- *Melatonin is freely available in USA (0.3 to 10 mg)*
- *Melatonin is only available in UK under prescription*
- *Ask your UK doctor for Circadin (www.circadin.com)*
- *Try 2mg and then increase or decrease the dose*
- *I take 0.125mg (quarter of a 0.5mg tablet)*

3. Passive de-toxification

Eliminate all smoking – active & passive
Eliminate Barbiturates, Lithium & Amiodarone

Eliminate all Fluoride in toothpaste etc

Drink only spring water from glass bottles - for 90 days

Check all household chemicals for toxic contents

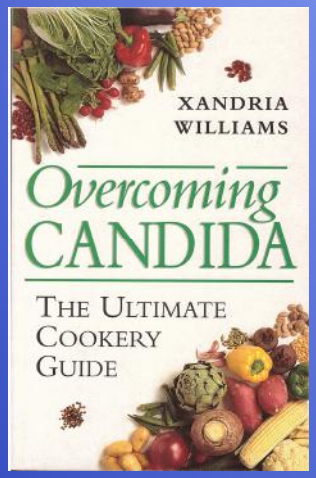
- *Aerosols*
- *Air Fresheners*
- *Cleaners*
- *Liquid soaps*
- *Shampoos*
- *Washing up liquid*

4. Food de-toxification

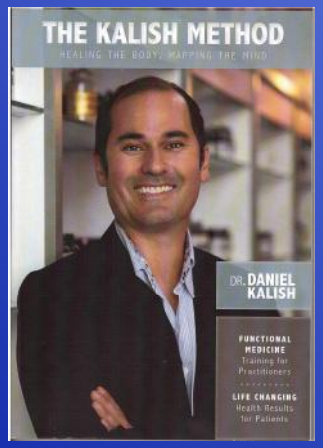
1. *Eat organic foods for 90 days*
2. *Keep a food diary for 90 days*
3. *Eliminate Soy (A goitrogen that blocks Iodine)*
4. *Eliminate the most common food allergens*
   - try each one for 14 days & then re-introduce them

- *Cow's Milk*
- *Wheat – try Gluten Free*
- *Corn & corn-fed meat*
- *Chocolate*
- *Peanuts*
- *Tomatoes*
- *Beef (try grass-fed meat)*

5. Eliminate Candida & Leaky Gut



Overcoming Candida
By Xandria Williams
www.xandriawilliams.co.uk



The Kalish Method
Dr Dan Kalish
www.drkalish.com

5. Eliminate Candida & Leaky Gut

Starve it out

- *eliminate refined sugars & starches*
- *replace with high fibre fruit & vegetables*
- *try going Gluten-Free*

Kill the Candida

- *Fungicides: Nystatin, Sporonox or Fluconazole*
- *Combine with Caprylic acid, grapefruit seed extract or garlic*
- *Cook with Olive Oil*
- *Drink Aloe Vera juice*

Add beneficial bacteria & enzymes

- *Pre & pro-biotics & enzymes*
- *Lactobacillus, bacteroides, bifidobacteria*
- *Live Sauerkraut, Kefir or similar*

6. Adrenal Glands - Foods

Vitamin B	*Whole grains, brewers yeast, liver, Marmite, broccoli, salmon, sweet potatoes*
Vitamin C	*Peppers, tomatoes, alfalfa, sprouts, oranges*
Calcium	*Milk, goats milk, humus, kale, beans, nuts, kelp*
Magnesium	*Kelp, brown rice, green beans, nuts & seeds*
Potassium	*Avocados, bananas, potatoes*
Fibre	*Vegetables, fruits, seeds, whole grains, psyllium seed*
Various	*Watercress, Parsley, Yucca, Slippery Elm* *Coconut Oil / Milk, Butter, Royal Jelly*
Salt	*Iodised salt*
Herbs	*Licorice Root (tea with honey)* *Ashwagandha (take at night)* *Korean Ginseng (mostly for men – women be careful)* *Siberian Ginseng (OK for women)* *Ginger root* *Gingko Biloba*

6. Adrenal Glands - Vitamins

You probably can't absorb enough of the required nutrients from food, so consider taking some key vitamins

6. Adrenal Glands - Vitamins

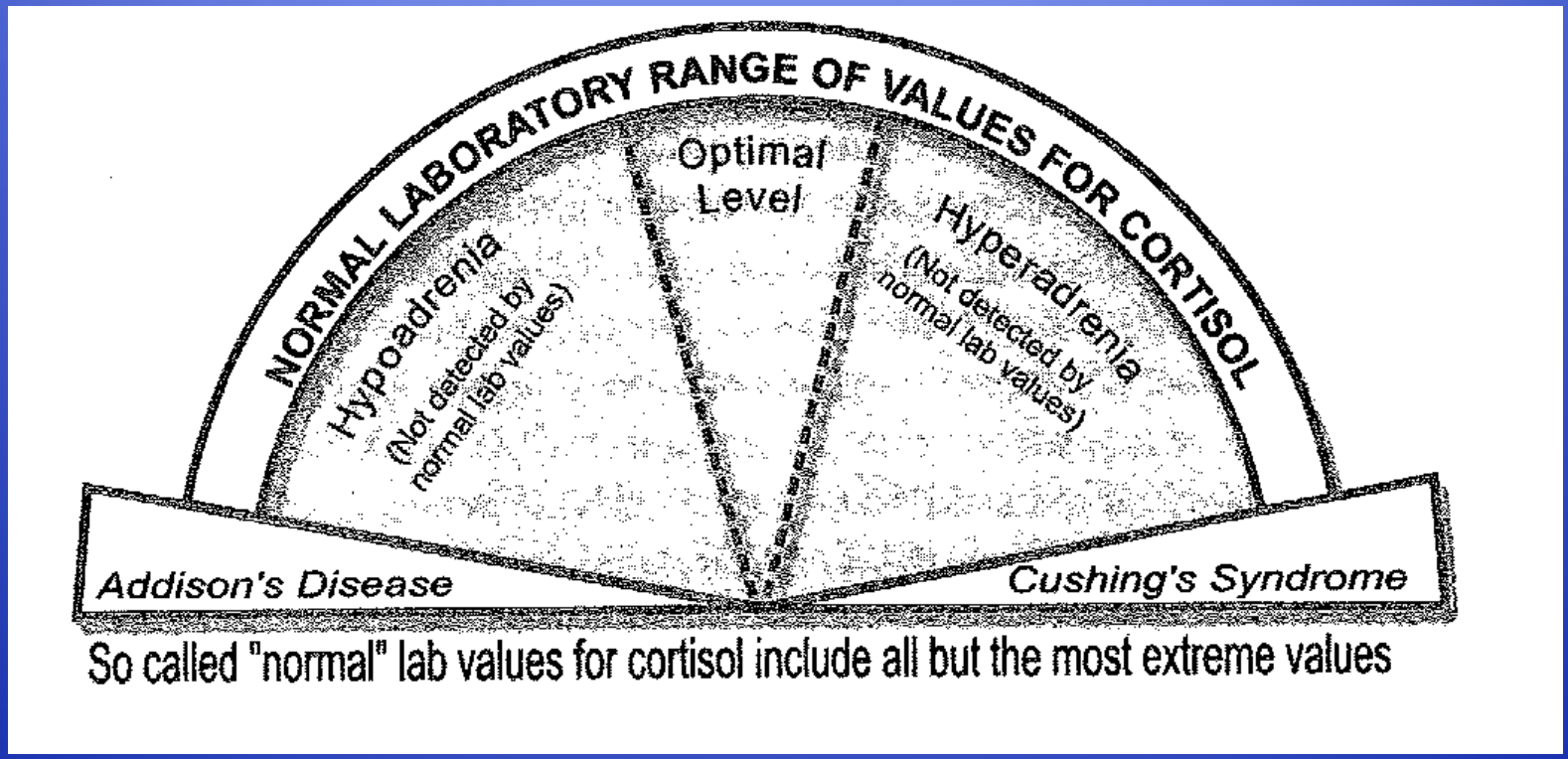
	Doc BDP (P117)	Doc JLW (P193)	# GreenVits
* Vitamin C	2-10 grams	2-20 grams	Vitamin C
* Bioflavinoids	500mg	50% of Vitamin C	Vitamin C
* Magnesium	250-500mg	400mg	Magnesium
* Vitamin B5	100-500mg	1,500mg	Vitamin B
Vitamin B3 (Niacin)	-	25-50mg	Vitamin B
Vitamin B6	50-100mg	50-100mg	Vitamin B
Vitamin B12	-	200-400ug	Vitamin B
Vitamin E	-	800IU	Vitamin E
Zinc	20-30mg	-	Zinc
Coenzyme Q10	TBA	-	Ubiquinol
Vitamin A	800 IU	-	Vitamin A
Vitamin D	15 ug (600 IU)	-	Vitamin D
Omega 3	TBA	-	Omega 3
Multivitamin	TBA	TBA	VITA-MIN

* Doc JLW suggests increase amounts during times of stress

GreenVits = www.greenvits.eu

6. Adrenal Glands - balance

Need to balance your Cortisol level



7. Vitamin D deficiency

Short (weeks)	Muscle strength & "bone pain"
Medium (months)	Rickets, Psoriasis, Hypertension, Depression, Insulin resistance, Influenza, Falls in elderly, Infertility, Diabetes, Pre-Eclampsia Crohn's, Asthma +++ ??? Thyroid ???
Long (years)	Cancers, Multiple Sclerosis, Osteoporosis Alzheimer's, Parkinson's, Thyroid

Proof for 30+ illnesses (RCT)

www.vitamindwiki.com

rufus@greenbaum.com

7. UK Data – England (50-55°N)

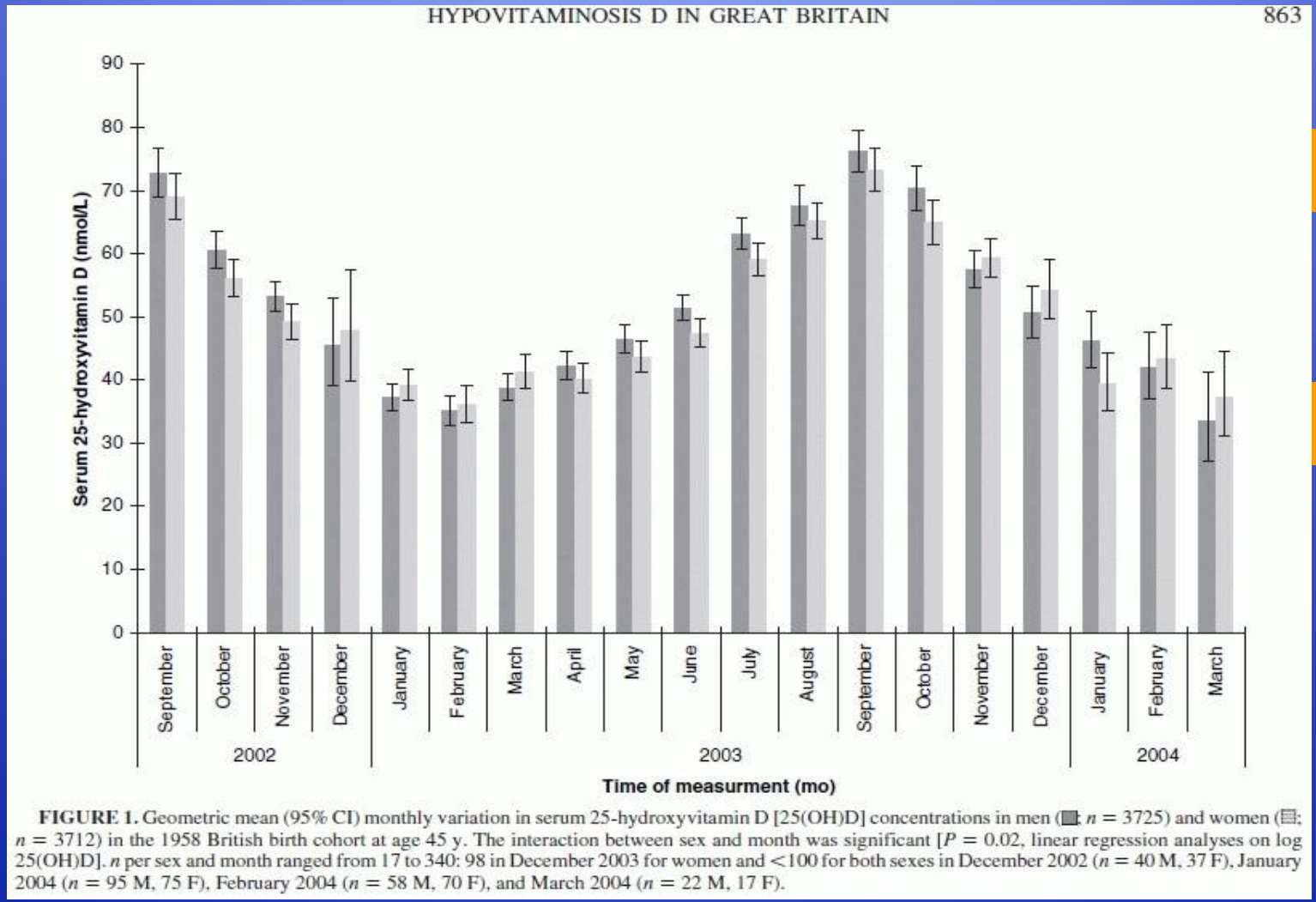


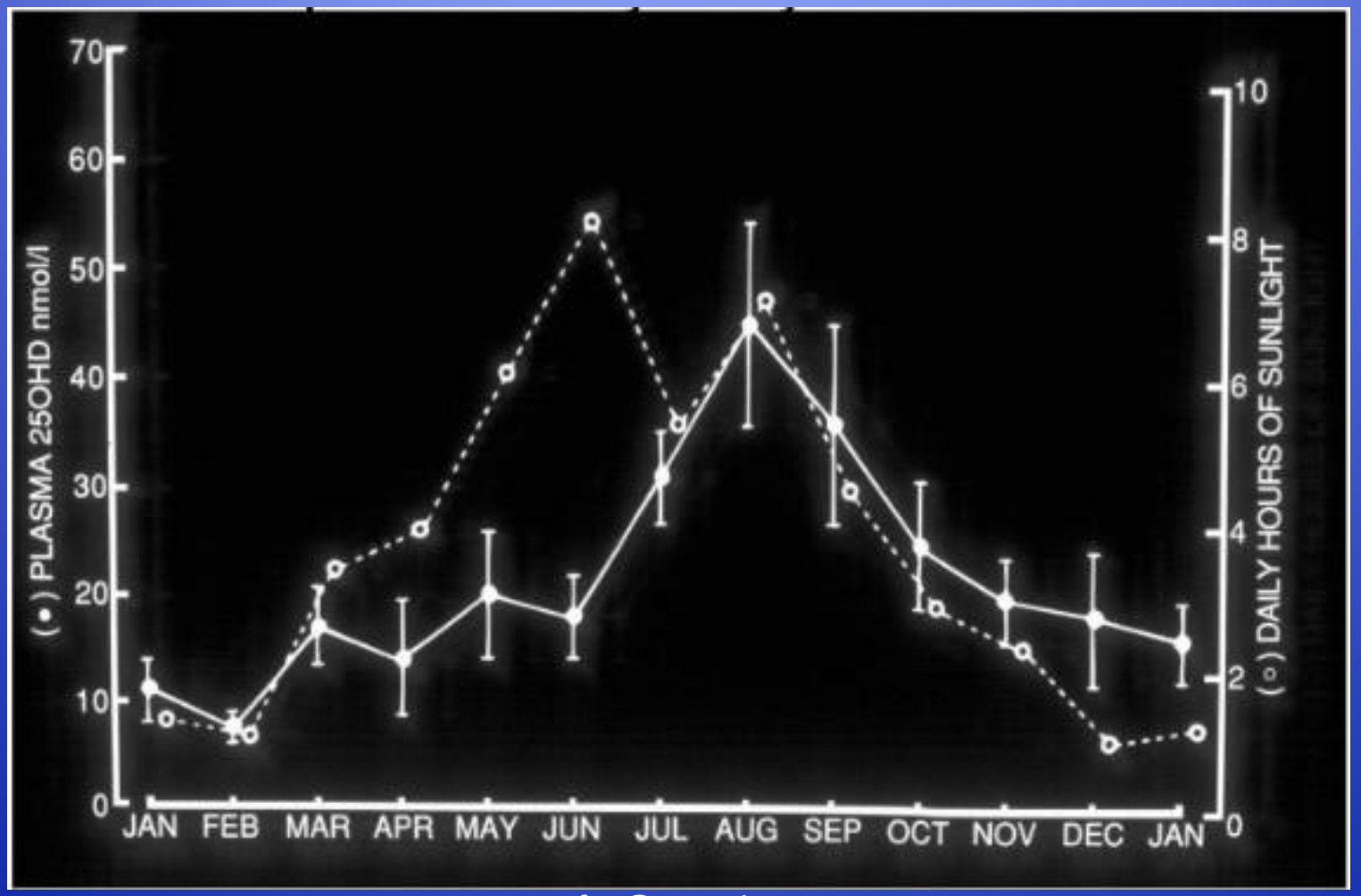
FIGURE 1. Geometric mean (95% CI) monthly variation in serum 25-hydroxyvitamin D [25(OH)D] concentrations in men (■; $n = 3725$) and women (▤; $n = 3712$) in the 1958 British birth cohort at age 45 y. The interaction between sex and month was significant [$P = 0.02$, linear regression analyses on log 25(OH)D]. n per sex and month ranged from 17 to 340: 98 in December 2003 for women and <100 for both sexes in December 2002 ($n = 40$ M, 37 F), January 2004 ($n = 95$ M, 75 F), February 2004 ($n = 58$ M, 70 F), and March 2004 ($n = 22$ M, 17 F).

<- 75nmol/L Summer

<- 35 nmol/L Winter

Source: Hypponen & Powers, Hypovitaminosis D in British adults at age 45 yrs: Nationwide cohort study, 2006

7. UK Data – Scotland (56-57°N)



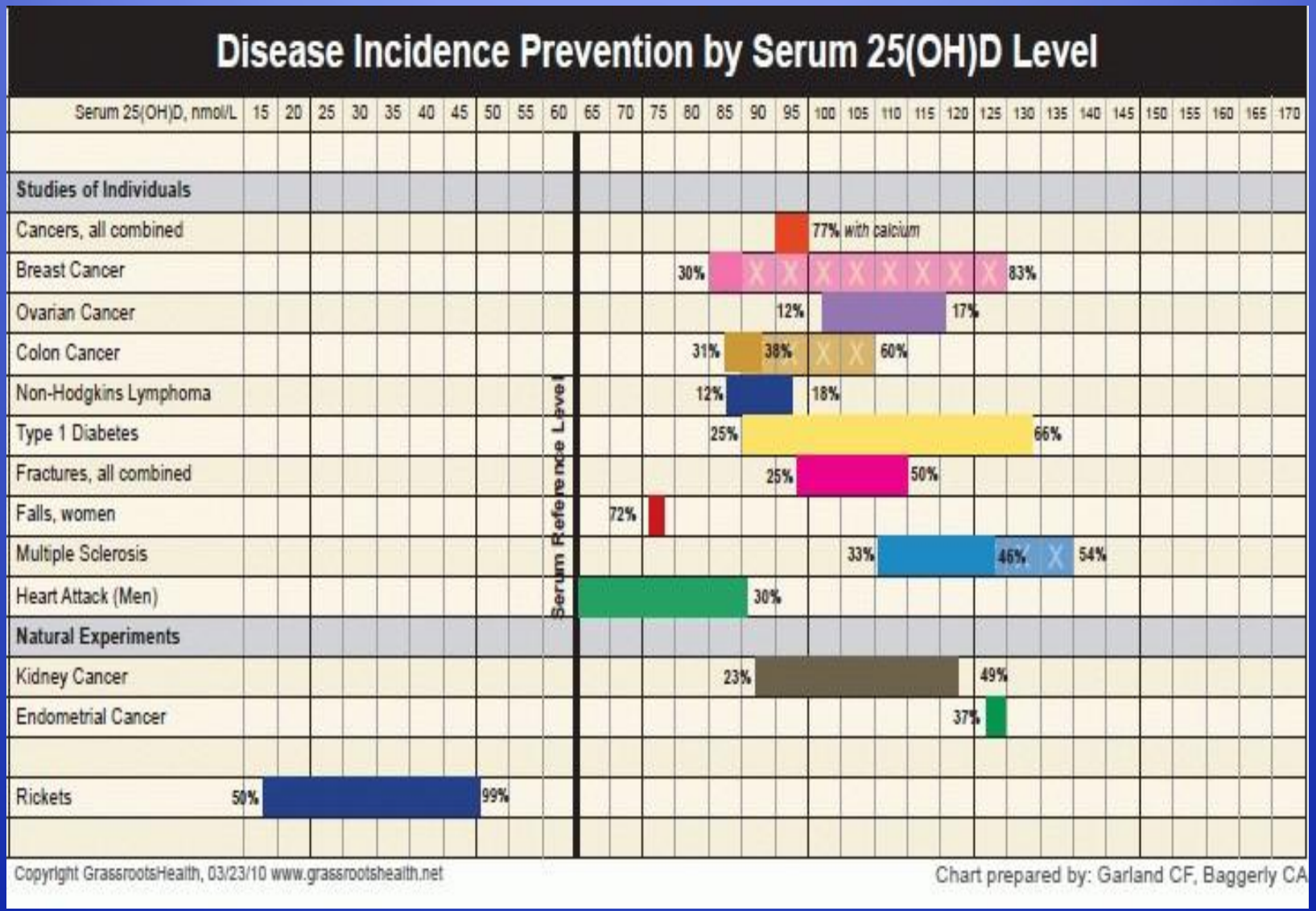
7. Effect of sunlight & food

If illness varies with the season
- suspect sunlight / Vitamin D may be a factor

Difficult to obtain enough Vitamin D from food

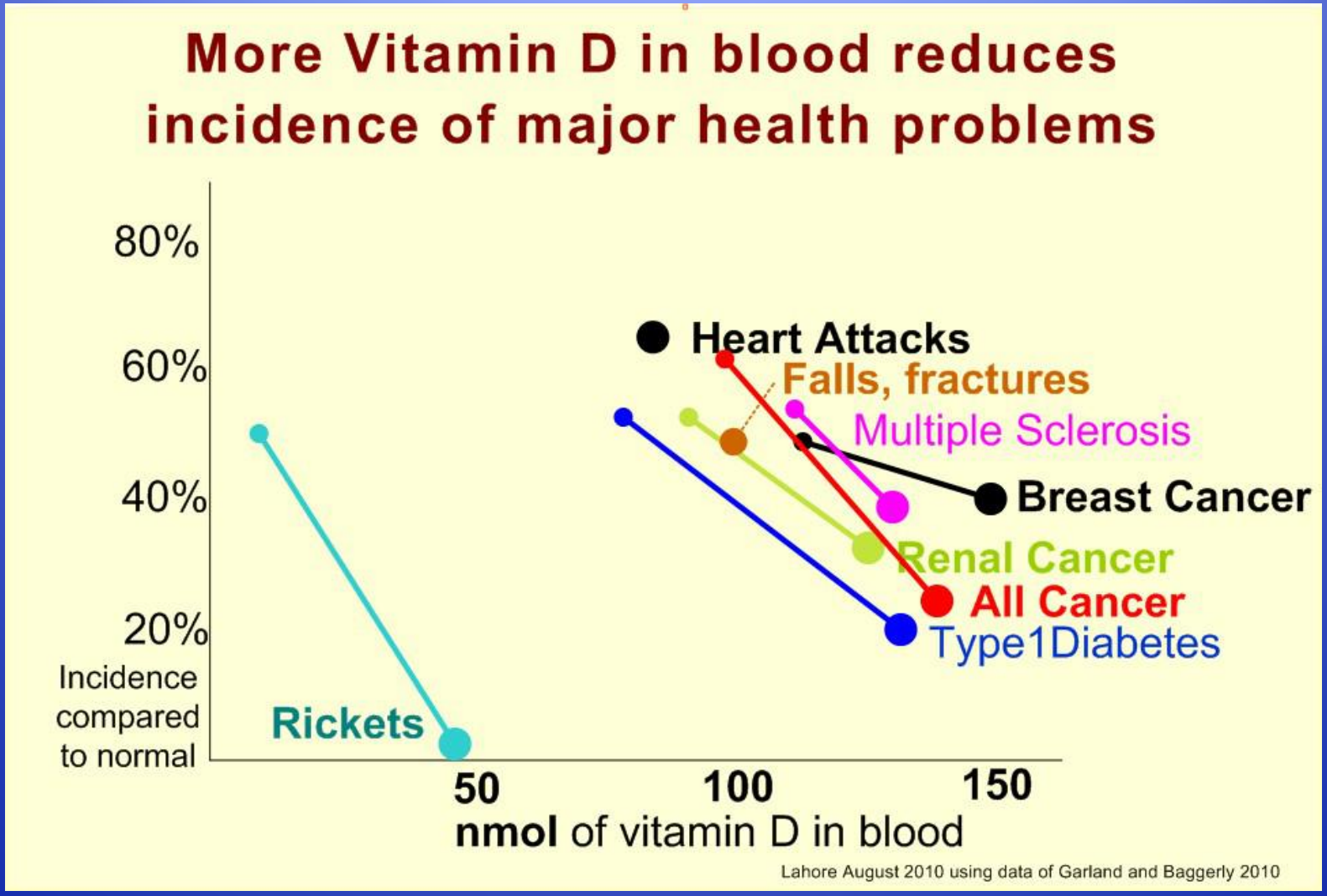
- *Sunlight 20,000 IU*
- *Oily fish 300 IU*
- *1 egg 50 IU*

7. Disease Prevention with Vitamin D



Source: Vitamin D for Cancer Prevention (Professor Cedric Garland et.al www.ucsd.edu 2009)

7. Vitamin D – Health outcomes



7. Vitamin D – Hypothesis

Hypothesis: Reduced sun exposure over past 40 years has resulted in more disease

Less sun => Less Vitamin D => More disease

Less time outdoors
- Air Conditioning
- TV & internet & video games
- Live in smoggy cities
  or in suburbs with little walking
- Less work outdoors
- Fear skin cancer and wrinkles

Less sun when outdoors
- Sunscreen
- Protective clothing

Additional reasons at:
http://is.gd/lowvitamind

Henry Lahore 5/12 VitaminDWiki
details at is.gd/sundisease

More disease

Breast Cancer, Diabetes*, Rickets, Pregnancy problems, MS*, Influenza, Falls/fractures*, Osteopenia*, Osteoporosis*, Cognitive Decline

Strong Proof
that increase in Vit D decreases incidence

* = TREAT too

Allergy, ALS, Anemia, Asthma, Autism, Bone, Cancers, Celiac, Chronic Fatigue, Chronic Pain, COPD, Dental, Depression, Headache, Heart Disease, Hypertension, HIV, IBD, Kidney, Metabolic Syndrome, MRSA, Myopathy, Overweight, Psorasis, RA, Sepsis, Thyroid, TB

Associated
with low Vit D for most people with the disease

Cystic Fibrosis, Liver, Lupus, Osteoarthritis, Rosecea, Vision

Suspected
relationship with low Vitamin D

7. Vitamin D – Call to Action - 1

Vitamin D*action

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

University of California Scientists Panel

University of California Davis
Bruce D. Hammock, Ph.D.
Hari A. Reddy, Ph.D.
Ray Rodriguez, Ph.D.
University of California Los Angeles
John Adams, M.D.
Martin Hewison, Ph.D.
H. Phillip Koeffler, M.D.
Keith C. Norris, M.D.
University of California Riverside
Mathew Mizwicki, Ph.D.
Anthony W. Norman, Ph.D.
Laura P. Zanello, Ph.D.
University of California San Diego
Richard L. Gallo, M.D., Ph.D.
Cedric F. Garland, Dr. P.H.
Frank C. Garland, Ph.D. †
Edward D. Gorham, Ph.D.
Tissa Hata, M.D.
University of California San Francisco
David Gardner, M.S., M.D.
Bernard P. Halloran, Ph.D.

International Scientists Panel

Scientists' Call to D*action

The Vitamin D Deficiency Epidemic

40-75% of the world's population is vitamin D deficient.

The causal link between severe vitamin D deficiency and rickets or the bone disease of osteomalacia is overwhelming, while the link between vitamin D insuffiency and osteoporosis with associated decreased muscle strength and increased risk of falls in osteoporotic humans is well documented by evidence-based intervention studies.

There are newly appreciated associations between vitamin D insufficiency and many other diseases, including tuberculosis, psoriasis, multiple sclerosis, inflammatory bowel disease, type-1 diabetes, high blood pressure, increased heart failure, myopathy, breast and other cancers which are believed to be linked to the non-calcemic actions of the parent vitamin D and its daughter steroid hormone. Based on the evidence we now have at hand, action is urgent.

7. Vitamin D – Call to Action - 2

Atascadero State Hospital
John J. Cannell, M.D.
Boston University School of Medicine
Michael F. Holick, Ph.D., M.D.
Creighton University
Robert P. Heaney, M.D.
Joan M. Lappe, Ph.D., R.N.
Emory University
Vin Tangpricha, M.D., Ph.D.
Harvard School of Public Health
Edward Giovannucci, M.D., ScD.
Walter C. Willett, Dr. P.H., M.D.
International Medical Center of Japan
Tetsuya Mizoue, M.D., Ph.D.
Linus Pauling Institute
Adrian F. Gombart, Ph.D.
Massachusetts General Hospital
Carlos A. Camargo, Jr., M.D., Dr. P.H.
McGill University
John H. White, Ph.D.
Medical University of Graz, Austria
Stefan Pilz, M.D.
Medical University of South Carolina
Bruce W. Hollis, Ph.D.
Carol L. Wagner, M.D.
Roswell Park Cancer Institute
Candace Johnson, Ph.D.
Donald L. Trump, M.D.
Society For Medical Information and Prevention
Joerg Spitz, M.D.
Sunlight, Nutrition and Health Research Center
William B. Grant, Ph.D.
University of Albany - SUNY
JoEllen Welsh, Ph.D.
University of Alberta
Gerry Schwalfenberg, M.D., CCFP
University of Saskatchewan
Susan J. Whiting, Ph.D.
University of Toronto, Mt Sinai Hospital
Reinhold Vieth, Ph.D.

It is projected that the incidence of many of these diseases could be reduced by 20%-50% or more, if the occurrence of vitamin D deficiency and insufficiency were eradicated by increasing vitamin D intakes through increased UVB exposure, fortified foods or supplements. The appropriate intake of vitamin D required to effect a significant disease reduction depends on the individual's age, race, lifestyle, and latitude of residence. The latest Institute of Medicine (IOM) report, 2010, indicates 10,000 IU/day is considered the NOAEL (no observed adverse effect level). 4000 IU/day can be considered a safe upper intake level for adults aged 19 and older.

It is well documented that the darker the skin, the greater the probability of a vitamin D deficiency. Even in southern climates, 55% of African Americans and 22% of Caucasians are deficient.

More than 1 billion people worldwide are affected at a tremendous cost to society.

A Scientists' Call to Action has been issued to alert the public to the importance to have **vitamin D serum levels between 40 and 60 nanograms/milliliter (100-150 nanomoles/liter)** to prevent these diseases. Implementing this level is safe and inexpensive.

The benefit of an adequate vitamin D level to each individual will be better overall health and a reduction in illnesses and, ultimately, a significant reduction in health care costs. The benefit of adequate vitamin D levels to society/businesses is a more productive workforce and, lower health care costs.

The D*action project has as its purpose to serve as a model for public health action on vitamin D. It is a test bed for techniques, and for providing outcome evaluation at a community level.

Revised 1/12/11

GrassrootsHealth, A Public Health Promotion Organization
119 N. El Camino Real, Suite E-127, Encinitas, CA 92024 www.grassrootshealth.net

7. Actions depend on the definition !

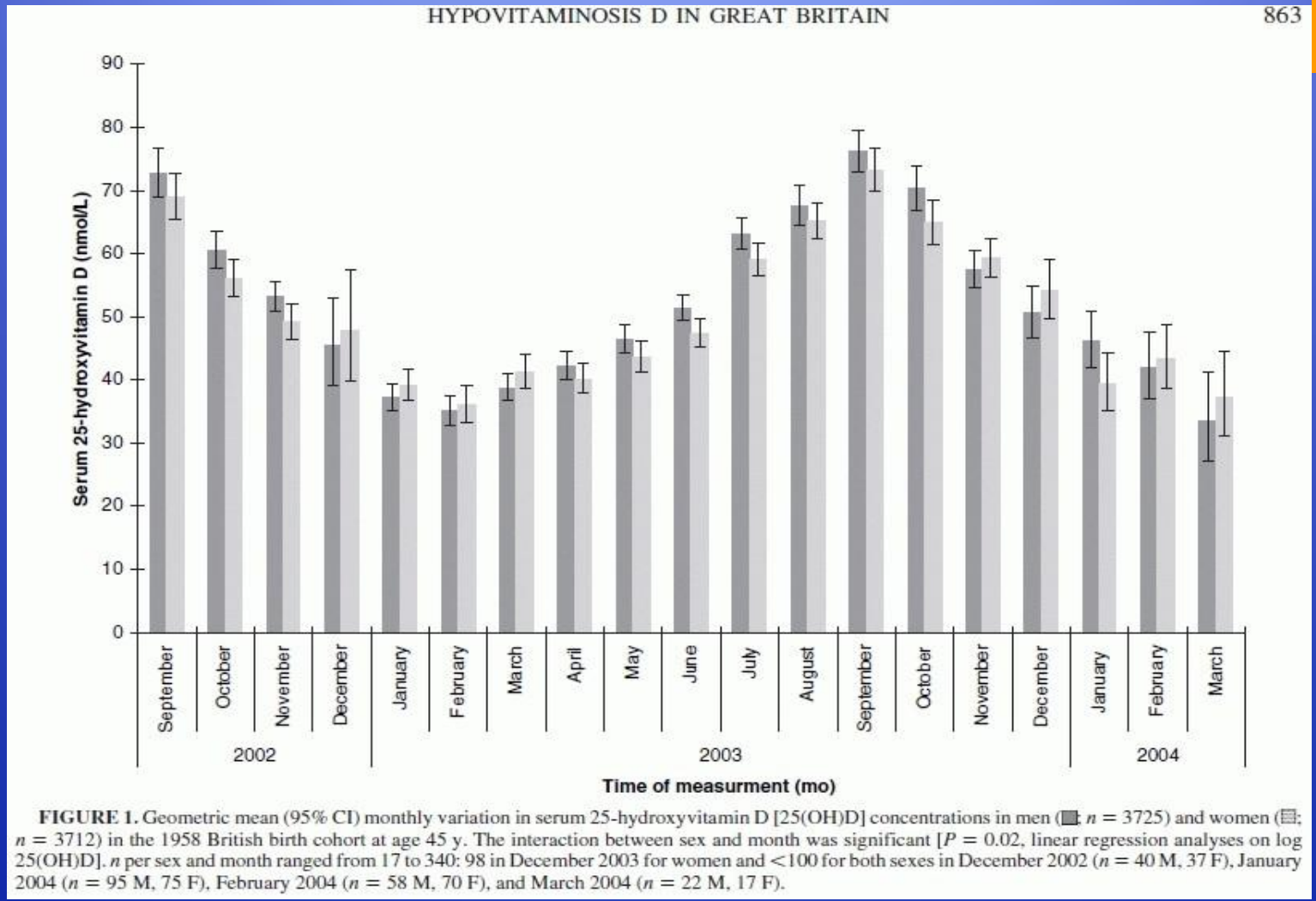
If Target is:	Action required:
25 nmol/L *	(Current UK definition of *Deficient*) *No perceived national problem !* No preventive action required
50 nmol/L	(Current UK definition of *Adequate*) Minor Deficiency for a few months No preventive action required
75 nmol/L	Everyone is deficient all year round - now what action is required ?
100-150 nmol/L	Everyone is *very* deficient all year round - now what action is required ?

* 25-hydroxyvitamin-D in blood test = 25(OH)D

rufus@greenbaum.com

7. UK Data – England (50-55°N)

>100 nmol/L Target



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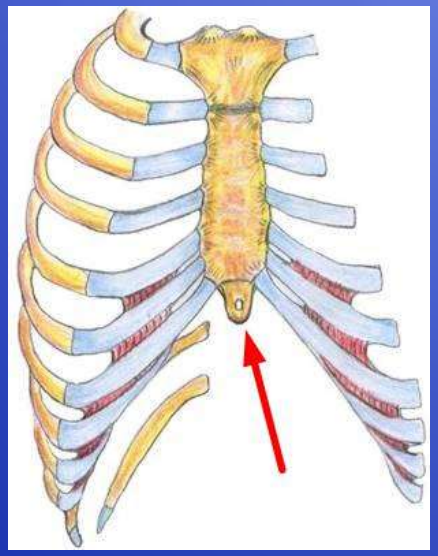
Source: Hypponen & Powers, Hypovitaminosis D in British adults at age 45 yrs: Nationwide cohort study, 2006

7. Vitamin D – self-test

- *Quick, free, self test of vitamin D deficiency*
- *Not a quantitative test, but FREE*
- *Press as hard as you can on your sternum and your tibia*
- *Are your bones painful when you press them ?*
- *Read more about this at: www.vitamindwiki.com*



If you feel pain:
Mayo Clinic says
93% chance
that you are
Vitamin D deficient
(<25 nmol/L)

7. Vitamin D – public testing for £25

Phone: 0121 507 4278 (Sandwell & West Birmingham Hospitals - NHS)

7. My Vitamin D test results:

I take 5,000 IU of Vitamin D3 each day:

Your Results:

Total vitamin D: 143.5 nmol/L

Status: Adequate 🟢

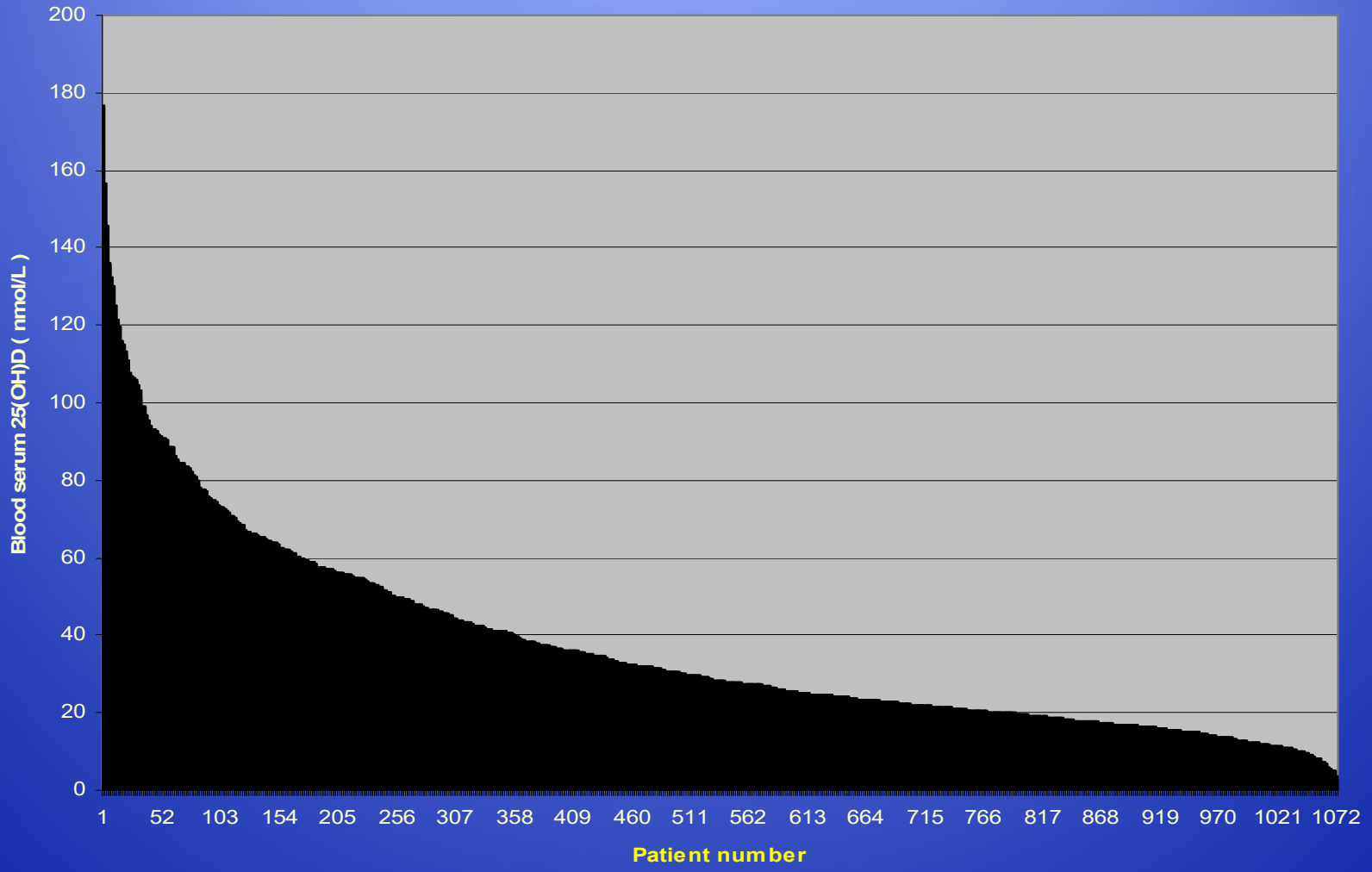
25-hydroxyvitamin D_3: 140.7 nmol/L
25-hydroxyvitamin D_2: less than 2.8 nmol/L

Interpretive Guide:

Reference Interval (nmol/L)	Vitamin D status
Less than 15	Severe Deficiency 🟣
15 – 30	Deficiency 🔴
30.1 – 50	Insufficiency 🟡
Greater than 50	Adequate 🟢

<- ???

7. UK Hospitals – Blackburn



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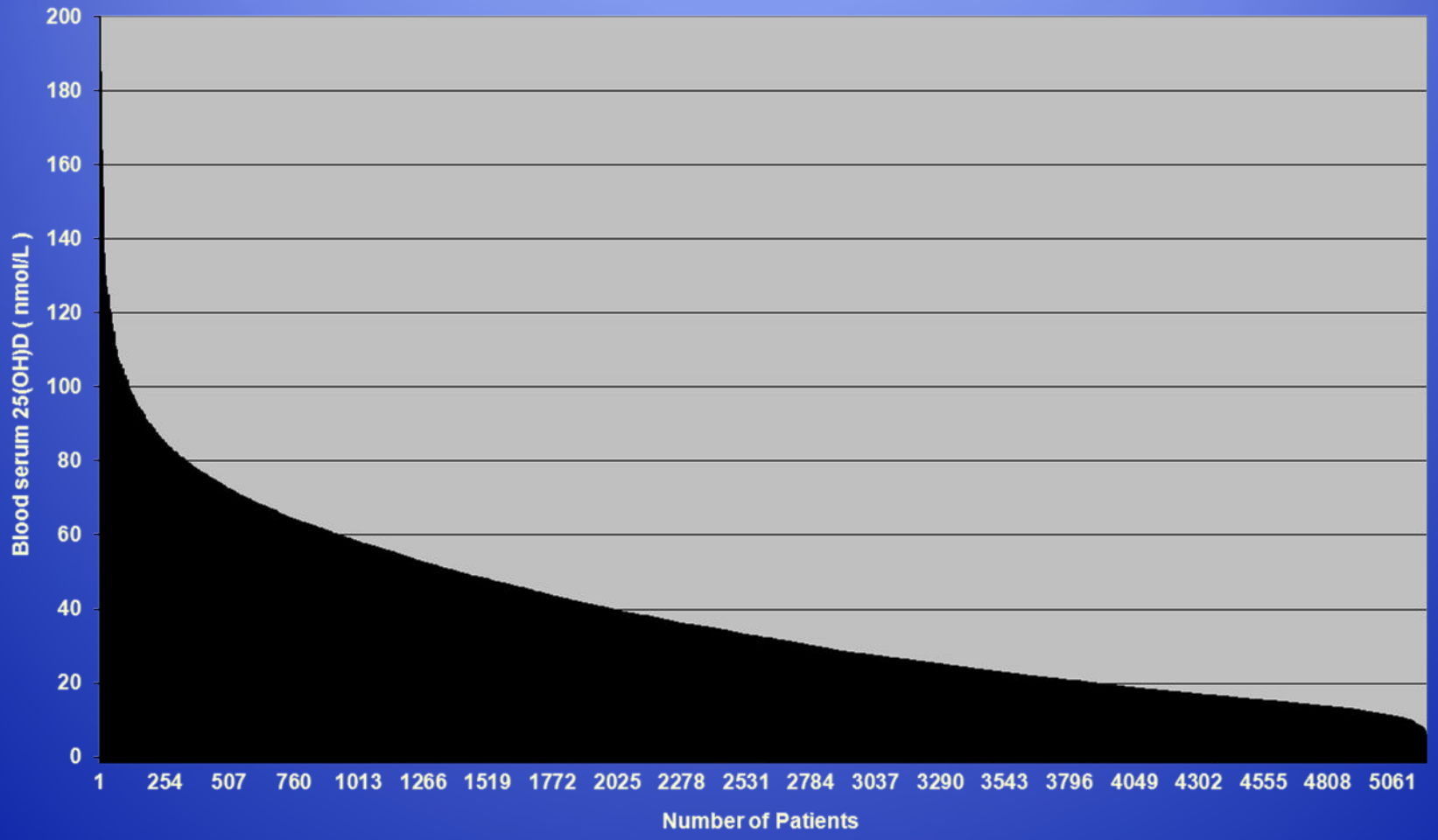
7. UK Hospitals – Ealing



rufus@greenbaum.com

7. How much Vitamin D do I need ?

Rough Guide:

25 micrograms per day raises your blood level by 25 nmol/L
- in about 3 months

Examples:

Start	Target	Dose required – per day
25 nmol/L	50 nmol/L	25 micrograms (1,000 IU)
25	75	50 micrograms (2,000 IU)
25	100	75 micrograms (3,000 IU)
25	125	100 micrograms (4,000 IU)
25	150	125 micrograms (5,000 IU)

7. Vitamin D in UK: 25ug = 1,000 IU

7. Vitamin D - potential problems

If you have Hyperthyroidism or a granulomous disease like Sarcoidosis you might be too sensitive to Vitamin D

If you have a condition like Coeliac or Crohn's disease or Irritable Bowel Syndrome then you might have a genetic condition where you are insensitive to Vitamin D

There is also an interaction between gut health and sensitivity, so eliminate Candida & leaky gut first

Take medical advice or be very careful !

7. If you have Thyroid problems:

Do a Vitamin D blood test before you start - 25(OH)D

Buy 25 micrograms (1,000IU) Vitamin D3 (Tablets, drops or spray)

- *Take 1 x 25ug each day for 1 week - note any reaction*
- *Then 2 x 25ug per day for next week*
- *Then 3 x 25ug per day for next week*
- *Then 4 x 25ug per day - until all used up*

If no adverse reaction:

Buy 1 bottle of 100 micrograms (4,000 IU) Vitamin D3

- *Take 5 capsules per day for 5 days - MAXIMUM*
- *This is a LOADING DOSE of 2,500 micrograms (100,000 IU)*
- *Then take 1 capsule per day - for ever*
- *Consider taking co-factors (see www.vitamindwiki.com)*

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7. Vitamin D Co-factors

If you take more than 2,000 IU of Vitamin D each day consider taking co-factors such as:

- *Vitamin K*
- *Magnesium*
- *Zinc*
- *Boron*

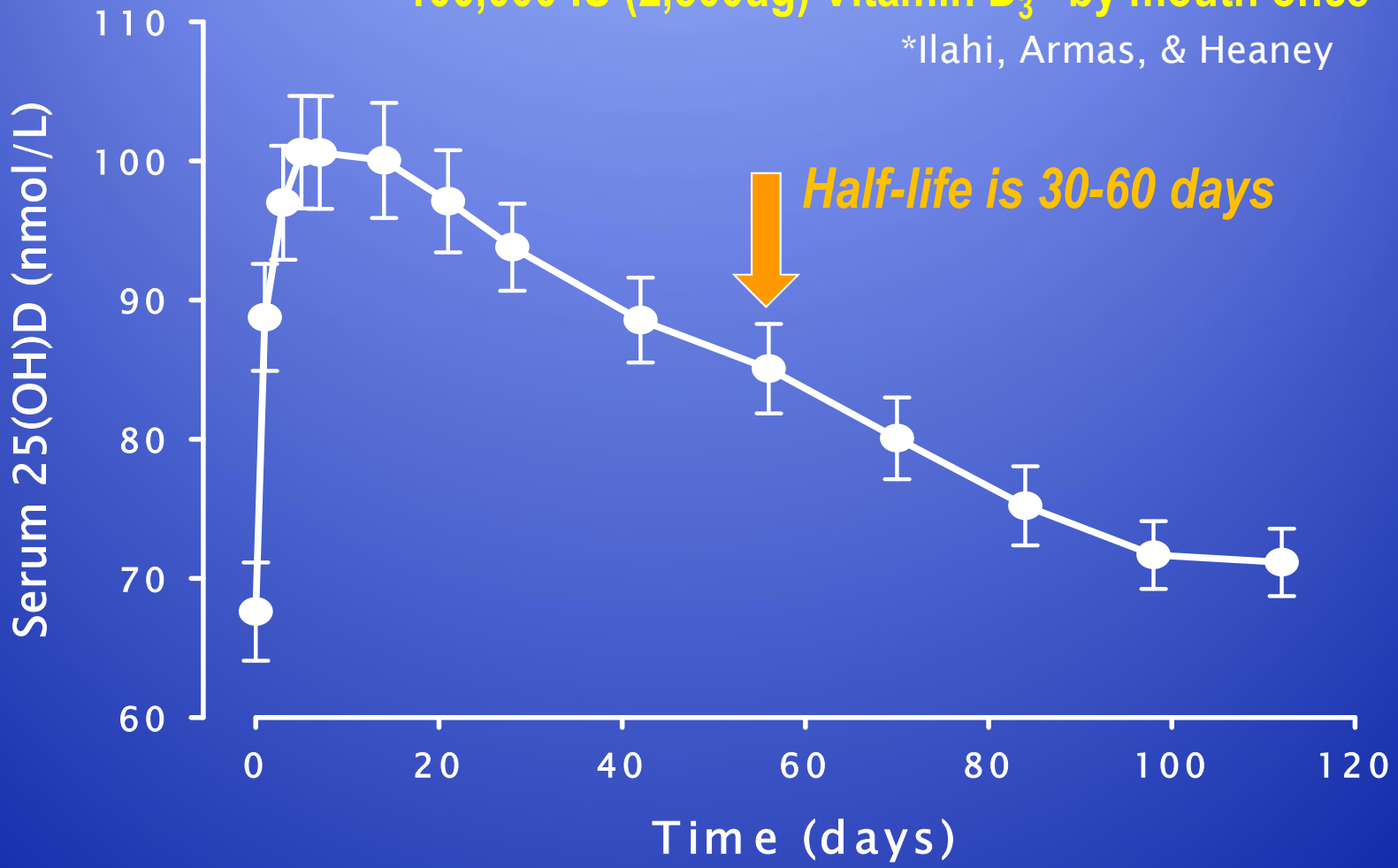
Directs more calcium into the bones
Reduces calcium in the arteries

Example: *D3Plus from www.biotechpharmacal.com*
In UK from: www.greenvits.eu
Read more at: www.vitamindwiki.com

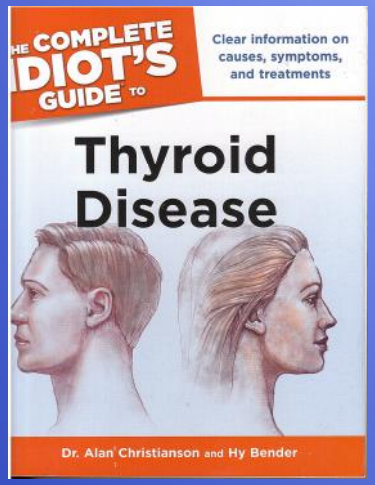
7. Vitamin D - Response to Large Doses

100,000 IU (2,500ug) Vitamin D_3 - by mouth once

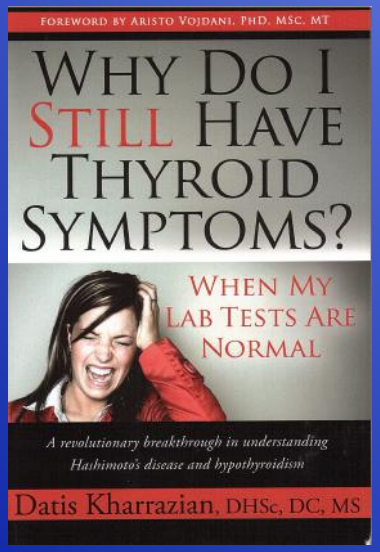
*Ilahi, Armas, & Heaney



8-11. Next steps



The Complete Idiot's Guide to Thyroid Disease
Dr Alan Christianson & Hy Bender



Why Do I Still Have Thyroid Symptoms ?
Dr Datis Kharrazian
www.thyroidbook.com

8. Thyoxine T4

"There are six patterns of functional hypothyroidism, only one of which would respond to medication"
Dr Datis Kharrazian

Do not start Thyroxine T4 until

- *Adrenal Deficiency has been corrected*
- *Vitamin D level is increased safely*

"Persuade your doctor to accept upper TSH limit of 2.5"
Vice-President of Royal College of Physicians – Private discussion

9. Active detox

Foods that help promote healthy liver function:

High sulphur foods	*Garlic, legumes, onions , eggs*
Water soluble fibre	*Pears, oatbran, apples, legumes*
Cabbage family	*Cabbages (cook them well)*
Other	*Artichokes, beets, turmeric, cinnamon*

Herb Milk Thistle (Silymarin) is good at cleansing the liver

Juicing – 2 or 3 days a week for 90 days

- *Fresh fruit & vegetables, 3 or 4 times a day*
- *Add Vitamin C, fibre supplements & 70-200mg Silymarin*
- *Add plenty of pure water (spring water from glass bottles)*
- *Take light exercise, like brisk walking*
- *Rest as much as possible, so best done at a weekend*

Reduce refined sugars & alcohol during the detox

10. T4 to T3 synthesis

T3 can be manufactured more naturally from T4

- *if Adrenal Glands are replenished*
- *if Vitamin D is high*

Dr Datis Kharrazian:
"These nutrients support healthy peripheral thyroid metabolism and glutathione synthesis"

- *Commiphora Muke (Guggulu)*
- *Selenium*
- *Zinc*
- *Antiperoxidative Compounds*

11. Check Hormones

Understand the role of Iodine

- *Need to balance iodine, vitamin D, magnesium, calcium, potassium, sodium, vitamin B, vitamin C, and vitamin A*
- *Use Iodised salt ?*

After the 90-day Action Plan

- *Oestrogen, Progesterone & Testosterone*
  - *Only allow Bio-Identical Hormone Replacement Therapy*
  - *It Must be My Hormones by Dr Marion Gluck*
  - *Ageless by Suzanne Somers*
- *Pregnenolone & DHEA*
  - *Your Thyroid by Dr Barry Durrant-Peatfield*
- *Seratonin & Dopamine*
  - *The Kalish Method by Dr Dan Kalish*

More information

www.vitaminduk.com	UK specific
www.healthresearchforum.org.uk	UK specific
www.vitamindwiki.com	Searchable in 50 languages
www.vitamindcouncil.org	Data on 100+ illnesses
www.vitamindassociation.org	Videos from 4 conferences
www.grassrootshealth.net	Public intervention project
www.ucsd.tv	Videos of scientific lectures (Search for “Vitamin D”)
www.biotechpharmacal.com	Manufacturer of Vitamins, Minerals & Supplements
www.greenvits.eu	UK supplier of Biotech products
rufus@greenbaum.com	Copies of presentation