Vitamin D Scientists' Call to Action Statement

We are aware of substantial scientific evidence supporting the role of vitamin D in prevention of cancer. It has been reasonably established that adequate serum vitamin D metabolite levels are associated with substantially lower incidence rates of several types of cancer, including those of the breast, colon, and ovary, and other sites.

We have concluded that the vitamin D status of most individuals in North America will need to be greatly improved for substantial reduction in incidence of cancer. Epidemiological studies have shown that higher vitamin D levels are also associated with lower risk of Type I diabetes in children and of multiple sclerosis. Several studies have found that markers of higher vitamin D levels are associated with lower incidence and severity of influenza and several other infectious diseases.

Higher vitamin D status can be achieved in part by increased oral intake of vitamin D3. The appropriate intake of vitamin D3 for cancer risk reduction depends on the individual's age, race, lifestyle, and latitude of residence. New evidence indicates that the intake should be 2000 IU per day. Intake of 2000 IU/day is the current upper limit of the National Academy of Sciences, Institute of Medicine, Food and Nutrition Board. New evidence also indicates that the upper limit should be raised substantially. The levels that are needed to prevent a substantial proportion of cancer would also be effective in substantially reducing risk of fractures, Type I childhood diabetes and multiple sclerosis.

Greater oral intakes of vitamin D3 may be needed in the aged and in individuals who spend little time outdoors, because of reduced cutaneous synthesis. Choice of a larger dose may be based on the individual's wintertime serum 25(OH)D level.

For those choosing to have serum 25-hydroxyvitamin D tested, a target serum level should be chosen in consultation with a health care provider, based on the characteristics of the individual. An approximate guideline for health care providers who choose to measure serum 25-hydroxyvitamin D in their patients would to aim for 40-60 ng/ml, unless there are specific contraindications. Contraindications are extremely rare, and are well known to physicians. No intervention is free of all risk, including this one. Patients should be advised of this, and advised in detail of risks that may be specific to the individual.

Any risks of vitamin D inadequacy considerably exceed any risks of taking 2000 IU/day of vitamin D3, which the NAS-IOM regards as having no adverse health effect.

A substantially higher level of support for research on the role of vitamin D for the prevention of cancer is urgently needed. However, delays in taking reasonable preventive action on cancer by ensuring nearly universal oral intake of vitamin D3 of 2000 IU/day is costing thousands of lives unnecessarily each year that are lost due to fractures, cancer, diabetes, multiple sclerosis, and other diseases for which vitamin D deficiency plays a major role.

Updated April 30, 2008

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Sunlight & Vitamin D

"There is substantial scientific evidence supporting the role of vitamin D in the prevention of cancer."

This bold statement is made by 16 eminent doctors and scientists in a Call-To-Action at:
www.grassrootshealth.org/documentation/scientistscall.php

Thousands of lives are lost each year due to fractures, diabetes, heart disease, multiple sclerosis, osteoporosis and other auto-immune diseases in which vitamin D deficiency plays a major role.

If you do not expose yourself to enough sunlight, because you live too far from the equator, or because you have dark skin, or because you use too much sun-screen, or because you cover most of your body, you are unlikely to receive enough vitamin D from natural sources.

You would probably benefit from taking 2,000 IU per day of Vitamin D3

(Holick & Vieth report no adverse reaction to 10,000 IU per day, subject to blood tests)

If you are concerned about your levels of Vitamin D you should ask your doctor for a blood test that checks the level of serum **25 hydroxy-vitamin D**.
Target levels are 40-60 ng/mL (100-150 nmol/L outside USA)

The first signs of osteoporosis can be seen in teenagers, so take action when you are young !

For more information see:

www.grassrootshealth.org
See the **Documentation** & **D*facts** sections for many articles, reports & videos.

Download the presentation: **Is it true ?**

Check the chart for **Disease Incidence Prevention.**
This shows target levels of 25 hydroxy-vitamin D required to prevent many illnesses

Download: Symposium in Print -**Vitamin D for Cancer Prevention: Global Perspective**
Shows how supplementation with Vitamin D & Calcium could reduce cancer by 77%

www.ucsd.tv
Watch the videos of a scientific conference held at University of California at San Diego
Search by the name of the presenter or "Vitamin D"

There is an excellent 30-minute introduction by Carole Baggerly
There are overview presentations by Frank Garland, Robert Heaney & Michael Holick
Other presentations are by Cedric Garland, Edward Gorham, David Sane & Donald L Trump
Anyone suffering from Cancer should watch the presentations from Garland & Trump

www.uvadvantage.org & www.vitamindhealth.org
Reports, factsheets, books and videos from Dr Michael Holick, Professor of medicine, dermatology, physiology, and biophysics at Boston University, USA.

www.direct-ms.org/presentations.html
There is an excellent 60 minute presentation on **Prospects for Vitamin D Nutrition** by Professor Reinhold Vieth about Vitamin D and how it relates to Cancer, Osteoporosis and Multiple Sclerosis.

www.vitamindcouncil.org / www.vitamind3world.com / www.thevitamindcure.com
Excellent overview information, with links to many other sources & websites worldwide
Read the book by Dr James Dowd: *The Vitamin D Cure*

www.vitamindandcholesterol.com & www.healthresearchforum.org.uk
Excellent source of UK-based information, including 3 online books by Dr Oliver Gillie
Read the book by Dr David Grimes: *Vitamin D & Cholesterol, The importance of the sun*

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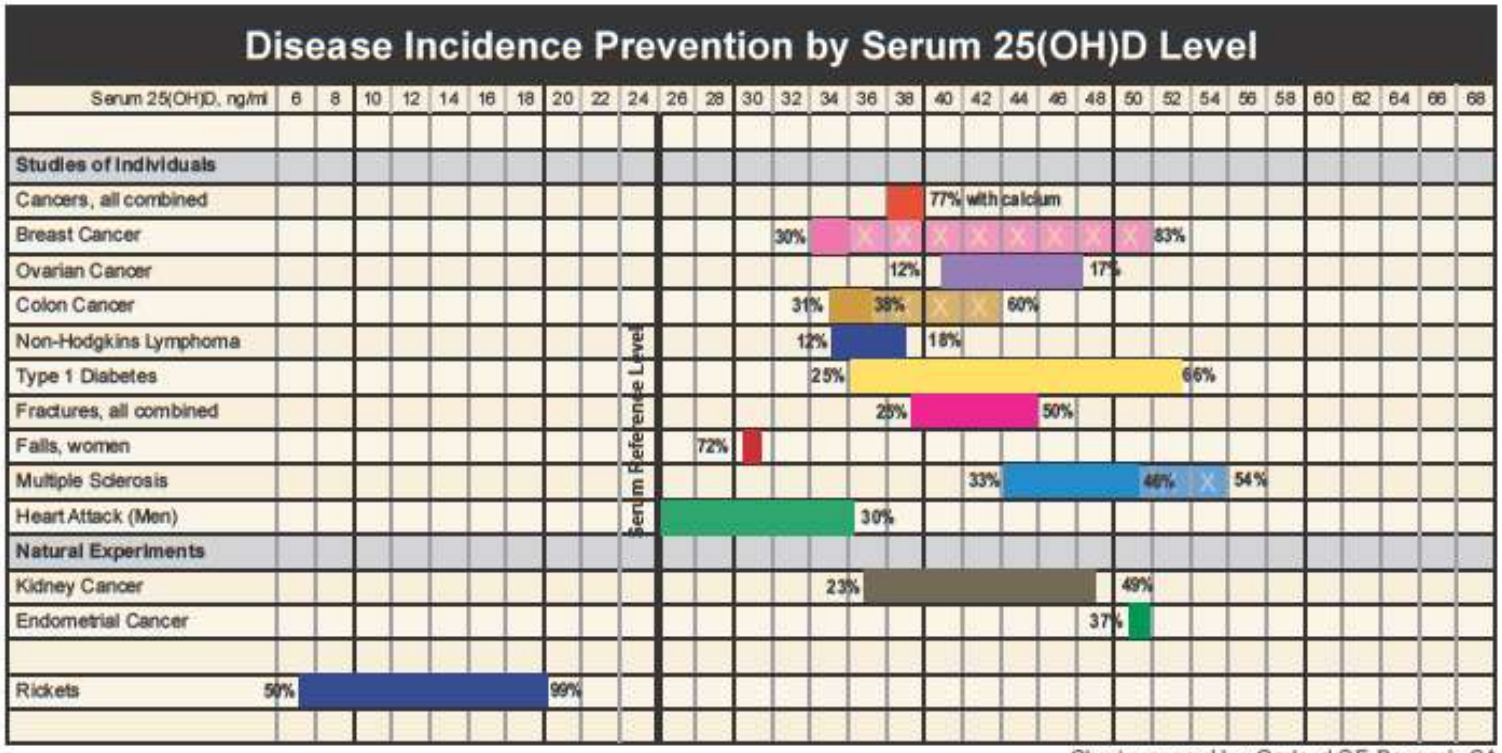

Chart prepared by: Garland CF, Baggerly CA

Legend:
All percentages reference a common baseline of 25 ng/ml as shown on the chart.
%'s reflect the disease prevention % at the beginning and ending of available data. Example: Breast cancer incidence is reduced by 30% when the serum level is 34 ng/ml vs the baseline of 25 ng/ml. There is an 83% reduction in incidence when the serum level is 50 ng/ml vs the baseline of 25 ng/ml.
The x's in the bars indicate 'reasonable extrapolations' from the data but are beyond existing data.

References:
All Cancers: Lappe JM, et al. Am J Clin Nutr. 2007;85:1586-91. Breast: Garland CF, Gorham ED, Mohr SB, Grant WB, Garland FC. Breast cancer risk according to serum 25-Hydroxyvitamin D: Meta-analysis of Dose-Response (abstract).American Association for Cancer Research Annual Meeting, 2008. Reference serum 25(OH)D was 5 ng/ml. Garland, CF, et al. Amer Assoc Cancer Research Annual Mtg, April 2008,. Colon: Gorham ED, et al. Am J Prev Med. 2007;32:210-6. Diabetes: Hyppönen E, et al. Lancet 2001;358:1500-3. Endometrium: Mohr SB, et al. Prev Med. 2007;45:323-4. Falls: Broe KE, et al. J Am Geriatr Soc. 2007;55:234-9. Fractures: Bischoff-Ferrari HA, et al. JAMA. 2005;293:2257-64. Heart Attack: Giovannucci et al. Arch Intern Med/Vol 168 (No 11) June 9, 2008. Multiple Sclerosis: Munger KL, et al. JAMA. 2006;296:2832-8. Non-Hodgkin's Lymphoma: Purdue MP, et al. Cancer Causes Control. 2007;18:989-99. Ovary: Tworoger SS, et al. Cancer Epidemiol Biomarkers Prev. 2007;16:783-8. Renal: Mohr SB, et al. Int J Cancer. 2006;119:2705-9. Rickets: Arnaud SB,

Personal Action Plan – Sunlight & Vitamin D

Lack of sunlight is implicated in many diseases & illnesses:

Cancer:	Breast, Bladder, Colon, Endometrial, Gallbladder, Gastric, Hodgkin's Lymphoma, non-Hodgkin's Lymphoma, Oesophageal, Ovarian, Pancreatic, Prostate, Rectal, Skin, Testicular
Bones:	Bone development in puberty, Osteomalacia, Osteoarthritis, Osteoporosis, Osteopenia, Rickets
Auto-immune:	Alzheimer's, Asthma, Autism, Chronic Obstructive Pulmonary Disease, Motor neurone, Parkinson's Crohn's, Cystic Fibrosis, HIV, Inflammation, Lupus, Multiple Sclerosis, Rheumatoid Arthritis
Diabetes:	Type-1 in children, Type-2, Retinopathy, Insulin Deficiency, Insulin Resistance
Cardio-vascular:	Cardiomyopathy, Congestive Heart Failure, Hypertension, Left Ventricle Hypertrophy, Myocardial Infarction (Heart Attack), Peripheral Arterial Disease, Stroke
Pain:	Chronic Low Back Pain, Fibromyalgia, Growing Pain, Hurting Hair, Tired Legs, Chronic Fatigue
Pregnancy:	Pre-conception health, Low Birth Weight, Pre-eclampsia, Post-natal depression
Depression:	Anxiety, Depression, Seasonal Affective Disorder
Psychiatric:	Bipolar Disorder, Schizophrenia
Sight:	Macular Degeneration, Retinitis Pigmentosa, Cataracts, Myopia
Skin:	Alopecia, Dermatitis, Psoriasis, Rosacea
Teeth:	Periodontal disease, Gingivitis, Sensitive teeth, Caries
Gynaecological:	Infertility, Polycystic Ovary syndrome, Pre-menstrual Syndrome
Infection:	Influenza
Muscle:	Muscle weakness & pain, Muscle degeneration, Sarcopenia
Aging:	Falls, poor physical performance
Sources:	*Online:* www.grassrootshealth.org , *Vitamin D Council, BMJ (Dr Peter Lewis)*
	Books: The Vitamin D Cure (Dr James Dowd) Vitamin D & Cholesterol (Dr David Grimes)

If you are pregnant, or would like to conceive, you should have your Vitamin D tested
Search for reports of trials (RCT) by Dr Bruce Hollis & Dr Carol Wagner, advising 4,000IU per day
Your birth will be easier and your baby will be bigger & healthier if you have high Vitamin D

Go to: www.grassrootshealth.net/is-it-true & download the chart: **Disease Incidence Prevention**
The chart shows the level of Vitamin D [Serum 25(OH)D] required to reduce the incidence of the illnesses shown in the chart, *compared to a baseline reference level of 25 ng/mL*

Ask your Doctor for a Blood Test for Vitamin D (25-hydroxyvitamin D)
(NHS or privately via: www.biolab.co.uk or www.vitamind3world.com)
Always ask your Doctor for a copy of the results and note the units (see conversion below)

A rough guide is that you need 1,000IU of Vitamin D3 per day to add 10 ng/mL
If you are overweight or of African or Asian origin you may need significantly larger amounts.
Check all your other sources of Vitamin D, such as food, summer sunlight without sunscreen and other multi-vitamin supplements, and do not take more than 1,200 mg of Calcium per day.

Assuming you have the average UK value of 20 ng/mL (50 nmol/L) you will probably need to take 4,000IU-5,0000IU of Vitamin D3 per day. Capsules with 20,000IU or 50,000IU are also available on prescription and can be taken weekly. The half-life of Vitamin D3 in the body is about 30 days, so don't worry if you miss a day. Useful sources are: www.sunvitd3.co.uk (Vegetarian 1,000IU), www.solgar.co.uk (Kosher, 1,000IU & 2,200IU), www.bigvits.co.uk (1,000IU - 5,000IU), www.hollandandbarrett.com (1,000IU), www.boots.com High-Strength capsules (500IU)
Vitamin D tablets are made in different strengths, so take note of the amount (10 µg = 400IU)

Note that the current UK Recommended Daily Amount (RDA) of Vitamin D3 is 400IU per day
If you follow this Action Plan you may be taking more than 10 times the RDA, so take advice from a qualified medical person, such as a Doctor, Pharmacist, Nurse or registered Dietician.

Have a Blood Test repeated after 1-3 months and modify the amount you take according to the new results.

The first signs of osteoporosis can be seen in teenagers, so take action when you are young !

Educate yourself by reading information written by experts, such as Doctors and Scientists.
Set up a daily Google Alert for Vitamin D

ng/mL	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54	56	58	60	62	64	66	68
nmol/L	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170

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