

The Measurable Difference



Prepared for U.S. Aim High Conferences, 2004



 PHARMANEX®
the measurable difference

What is LifePak®?

A comprehensive **nutritional wellness program** delivering the **optimum** amounts of all essential and generally beneficial nutrients for long-term health and well-being.*



*These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease.



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Comprehensive & Convenient

Better than these 7 popular supplements together.



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LifePak[®] Health Benefits

Optimum supplementation for general well-being*

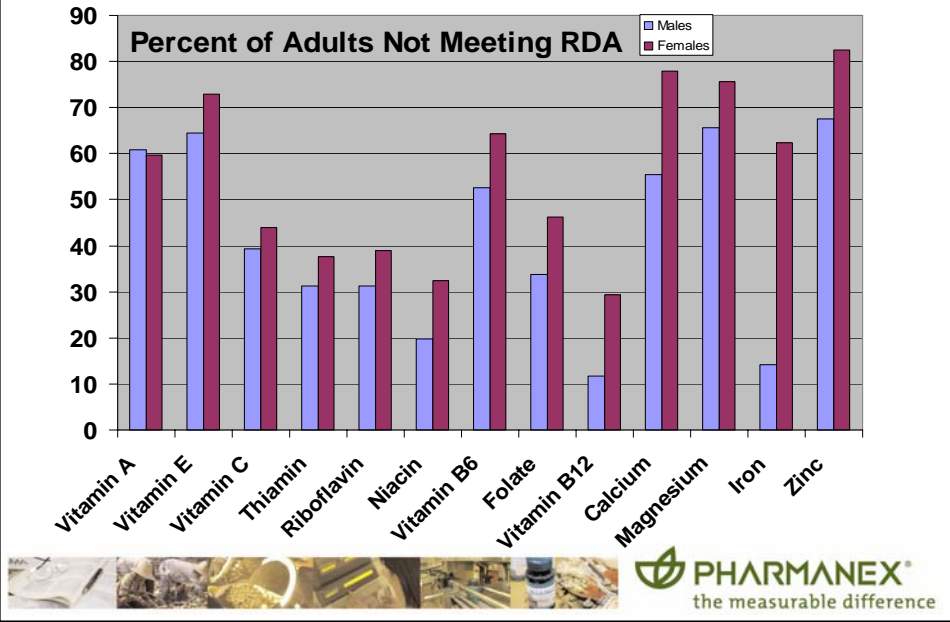
1. Addresses nutrient deficiencies*
2. Cardiovascular benefits*
3. Complete bone nutrition*
4. Promotes healthy immune function*
5. Supports normal blood sugar metabolism*
6. Protects against the symptoms of aging*
7. Raises your antioxidant defense*

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The Need to Supplement



A Landmark Endorsement

Journal of the American Medical Association
June 2002

"... low levels of the antioxidant vitamins (vitamins A, E, and C) may increase risk for several chronic diseases. Most people do not consume an optimal amount of all vitamins by diet alone."

"It appears prudent for all adults to take vitamin supplements."

*Robert H. Fletcher, MD, MSc; Kathleen M. Fairfield, MD, DrPH, Harvard University
Journal of the American Medical Association 2002; 287: 3127-3129*



Free Radicals & Antioxidants

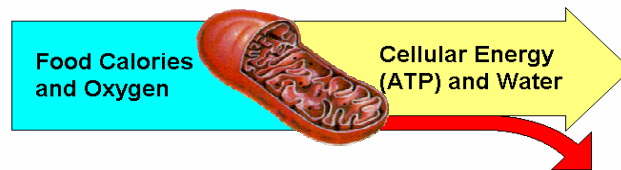
Free Radicals

- Highly reactive, short-lived molecules
- Damage cells and genetic material (DNA)
 - 70,000 free radical attacks on DNA every day in a cell
- Aging process
- Implicated in most health conditions
- Many different types of free radicals



Sources of Free Radicals

- Metabolism in your mitochondria



- Environmental pollution (smog, ozone, NO_2)
- Radiation exposure:
 - sunlight (UV-light), X-rays, etc.
- Smoking:
 - 10,000,000,000,000,000 free radicals/cigarette!



Free Radicals & Antioxidants

Antioxidants fight free radicals

- **Slow down aging process & improve health:**
 - over 30,000 research studies on antioxidant health benefits
 - affecting over 50 health conditions, including cardiovascular function, eye health, CNS health, skin health, etc.
- **Many antioxidants work together:**
“Antioxidant Defense System”
 - Relies on a steady supply of dietary antioxidants



LifePak[®] 40+ Antioxidants

- All 8 forms of natural vitamin E: 300 IU
- Buffered vitamin C: 500 mg
- Selenium, Copper, Zinc, Manganese
- 6 Carotenoids:
 - as found in 5-10 fruits & vegetables per day
- Over 20 Flavonoids:
 - 6 Catechins, Quercetin, naringenin, hesperidin,
 - 3 Soy isoflavones, Over 10 grape seed polyphenols
- Alpha-Lipoic Acid: 30-50 mg



LifePak[®] Science is Measurable



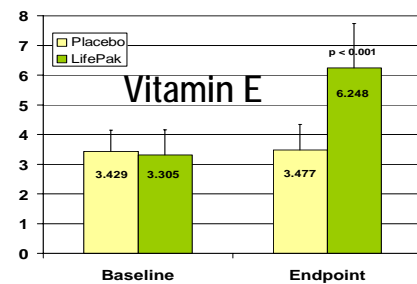
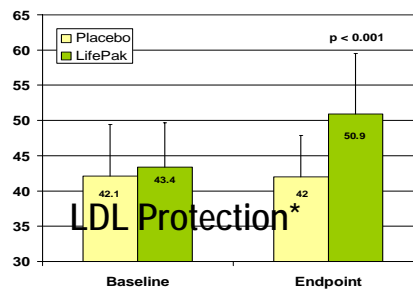
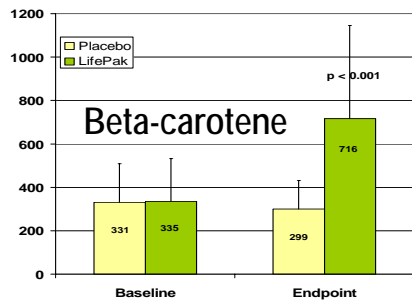
- First to show antioxidant and cardiovascular benefits in double-blind studies*
- 200,000+ published studies on LifePak's antioxidants
- Nearly 800,000 published studies on all LifePak ingredients

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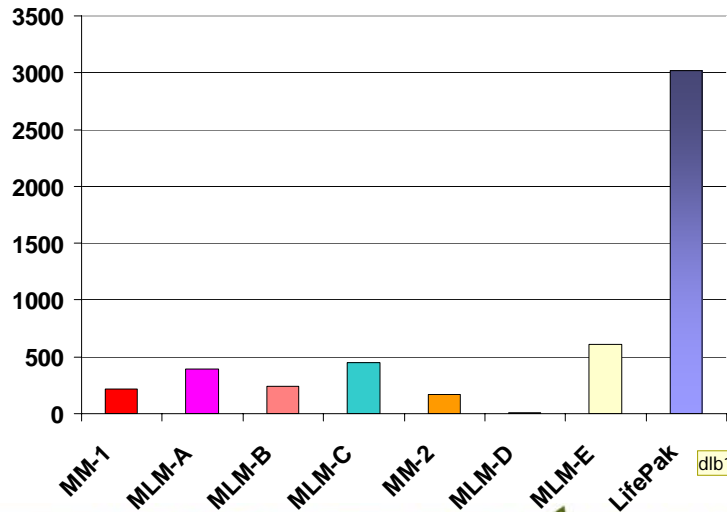
LifePak[®] Clinical Study Antioxidant and Cardiovascular Health*



Smidt CR, Seidehamel RJ, Devaraj S, Jialal I.
FASEB Journal/Vol.13 No.4, p.A546, March 1999.

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LifePak[®] Antioxidant Capacity (ORAC) Jan 2003



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Pharmanex[®] BioPhotonic Scanner



- LifePak[®] augments the entire antioxidant defense system*
- The effect can easily be demonstrated using the BioPhotonic Scanner
- Clinical studies identify link between scores and healthy diet and lifestyle

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Pharmanex BioPhotonic Scanner

- Invented by Werner Gellermann, Ph.D. (U. Utah)
- Patent rights licensed to Pharmanex
- Measures carotenoid antioxidants in skin
 - important group of antioxidants
 - part of the antioxidant defense system in the body
 - good indicator of your carotenoid antioxidant status
- Based on Raman spectroscopy
- Highly specific for carotenoids
- Non-invasive and safe
- Rapid (3 minutes)



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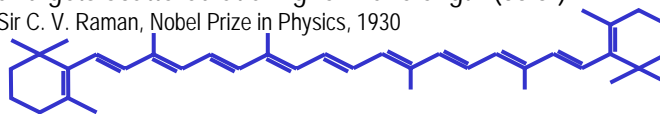
What is Raman Spectroscopy?



"Raman" effect

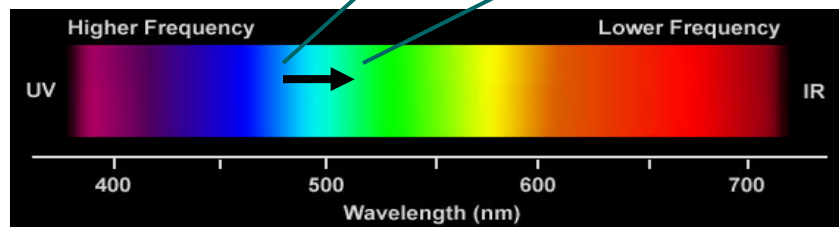
Intense monochromatic light (one color only) interacts with molecules that have vibrational energy (e.g., carotenoids) and gets scattered at a higher wavelength (color).

Sir C. V. Raman, Nobel Prize in Physics, 1930



Carotenoid molecules shift blue laser light color to green:

from 473 nm to 510 nm



Scanner Science is Measurable

- New York Academy of Sciences, *Feb 2003*
- Oxygen Club of California, *Feb 2003 and Feb 2004*
- FASEB/American Society of Nutritional Sciences - *April 2003 and April 2004*
- Gordon Research Conference, *Jan 2004*
- Review paper published in *Current Topics in Nutraceutical Research*, *April 2004*

Gordon Research Conferences



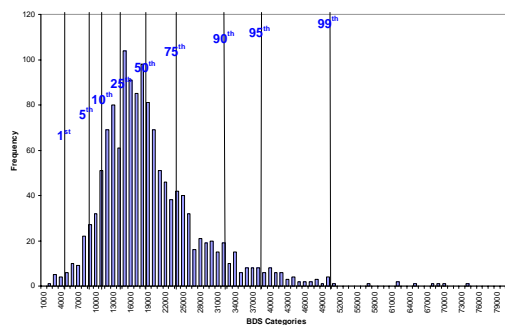
FASEB



Demographic Study - Sep 2002

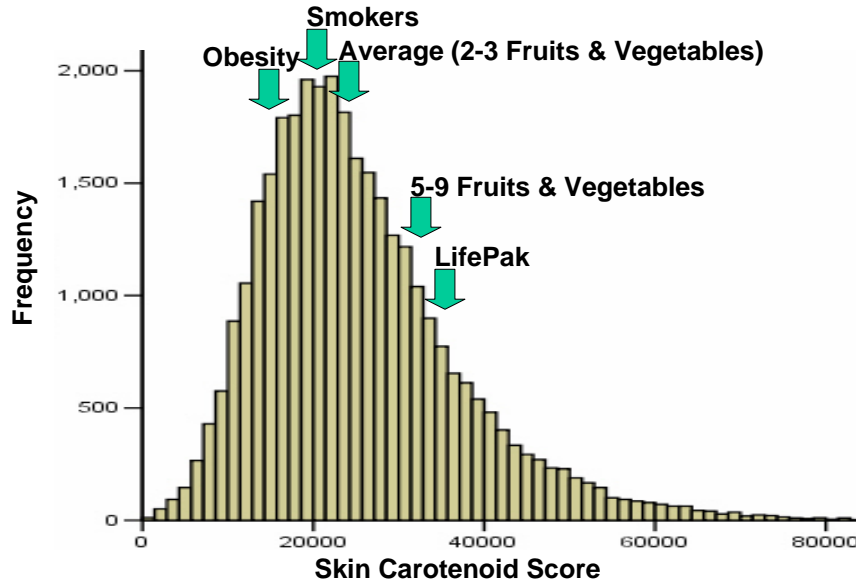
1,375 Subjects: Results show that Skin Carotenoid Signal:

- Is not influenced by Age, gender or skin pigmentation (race/ethnicity)
- Is high in people who eat more fruits & vegetables
- Is high in people who take LifePak
- Is low in people who smoke or have oxidative stress (free radical damage)

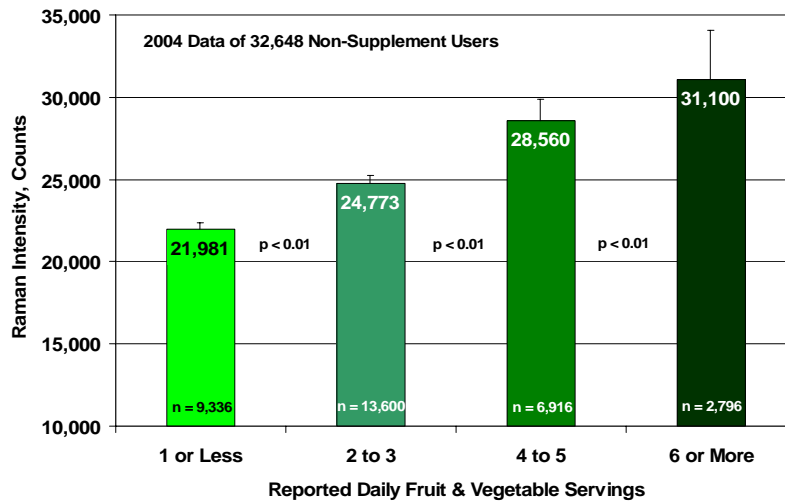


2004 Data Histogram

Mean = 25,406
32,948 Subjects

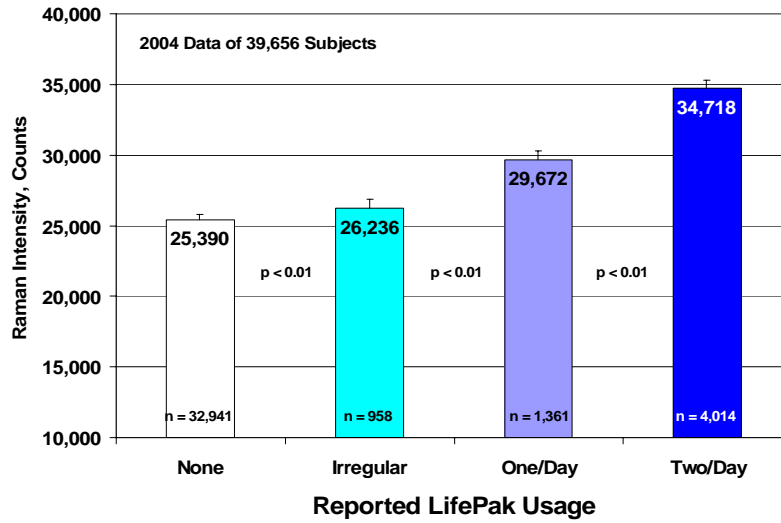


2004 Data: Fruits & Vegetables



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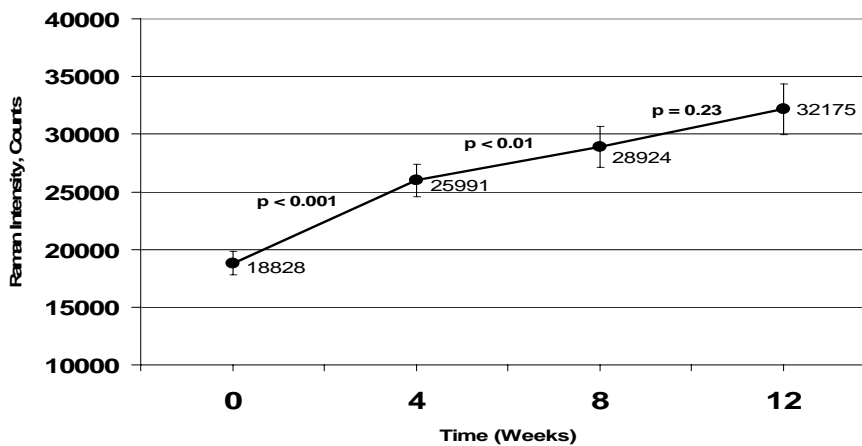
2004 Data: LifePak Usage



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Clinical Study - Sep 2002

LifePak[®] ↑ Scanner Score*

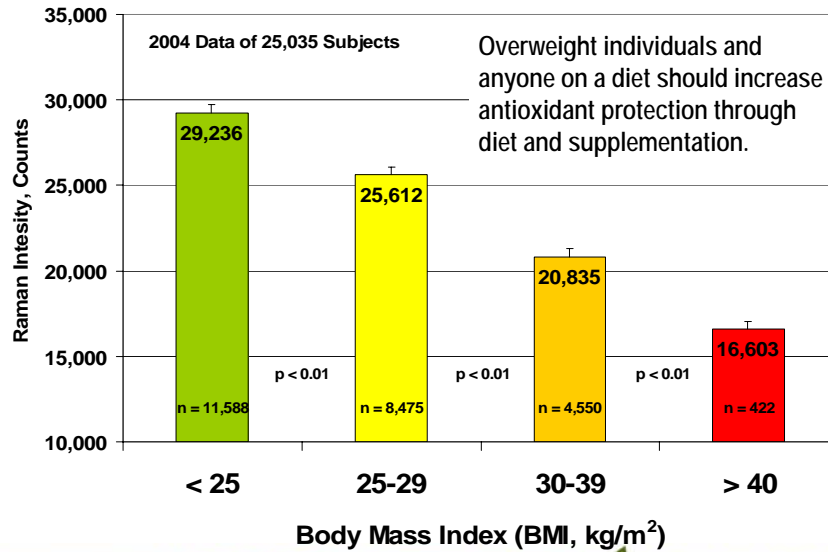


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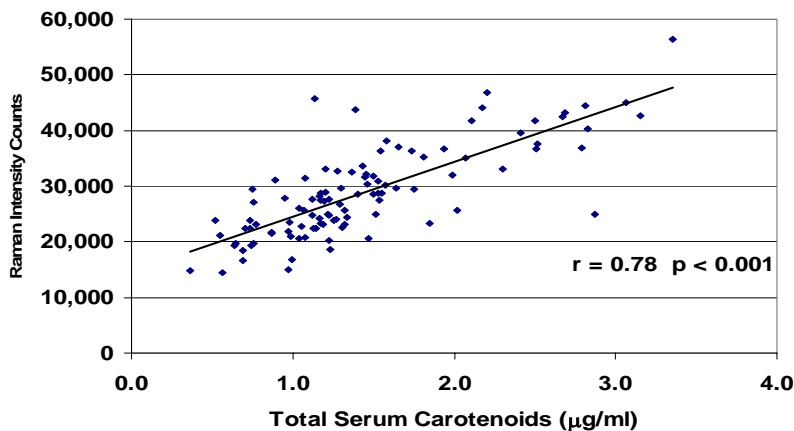
Body Fat - Inverse Correlation



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Carotenoid Correlation Study

June 2003

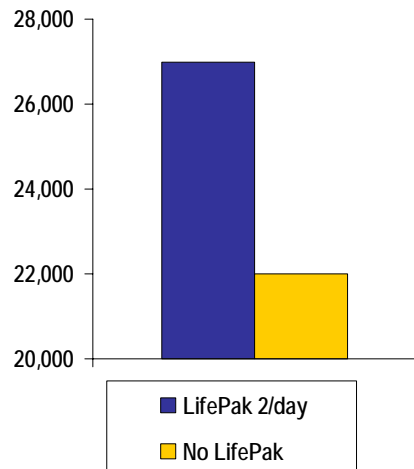


Pending publication, FASEB April 2004



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Scan Values in Asians



- Singapore study - Dec 2003
- Thailand study - Jan 2004
- Same data relationship as U.S. study (diet, supplements, body fat, lifestyle)
- 25,000 average with 82% of participants taking LifePak
- LifePak users (2/day) scored 25% higher than non-LP users

* Internal data on file



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Summary of Scanner Research

- Data from 300,000 scans and Asian studies correlate with original demographic study of 1,300 participants
- Known risk factors that induce oxidative stress reduce scanner score
- Healthy diets improves score
- Long-term LifePak[®] supplementation improves score*
- Score is related to lean body mass & body fat
- Desirable score is the blue zone, the higher the better

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Media Coverage in 2003

Self Magazine April 03
Elle Magazine Sep 03
Ms. Fitness Magazine Oct 03
NBC Today in LA
KNXV ABC News
Phoenix AZ News 3
WHDH-TV NBC Boston MA
WHAS 11 News Louisville KY
News All Morning New York
KUTV News Salt Lake City
NewsChannel 4 Columbus OH
CNBC Asia - Singapore

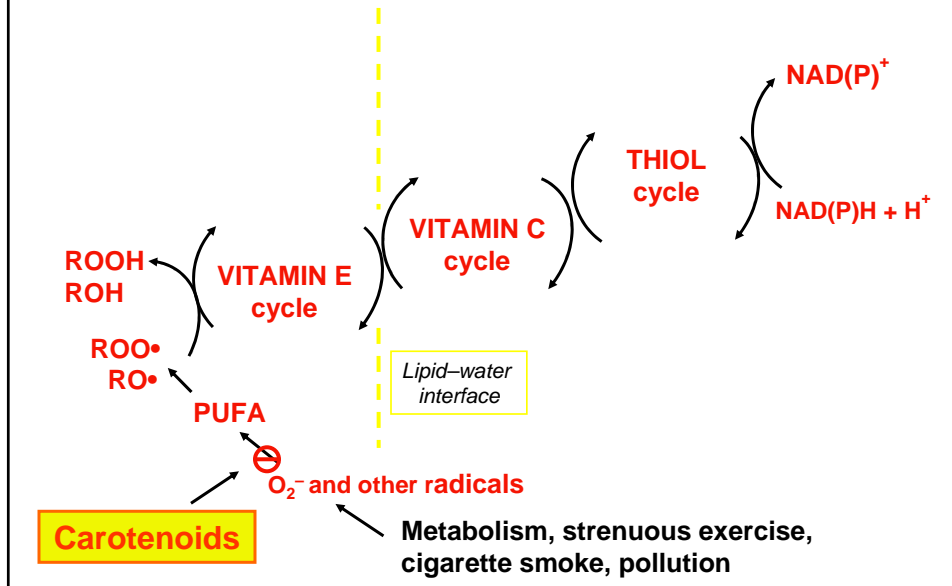


How Does Measuring Skin Carotenoids Predict Antioxidant Status?



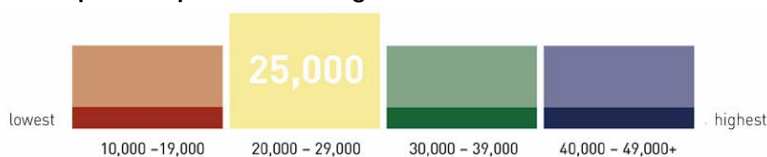
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The Antioxidant Network



Skin Carotenoid Scores

- Example of a person reading 25,000:



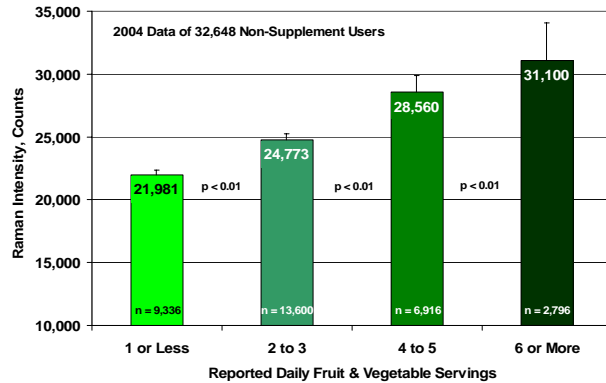
- **RED:** 19,000 and less: Poor diets, no/ineffective supplements, genetic factors, or smoking.
- **YELLOW:** 20,000 - 29,000: Better diets and/or supplements.
- **GREEN:** 30,000 - 39,000: Healthy diets rich in fruits & vegetables and/or good supplements.
- **BLUE:** 40,000+: Excellent diets high in fruits & vegetables and excellent supplements.



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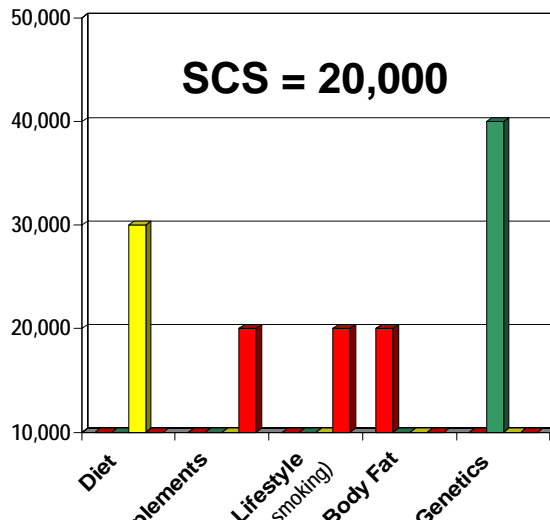
What Does "25,000" Mean?

- Serum equivalent ~1 mcg/ml ($\pm 10\%$, 95% CI)
 - 1,000 units ~0.04 mcg/ml
- 2-3 fruits/veg./day
- Average diet



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How Can I Improve My Score?



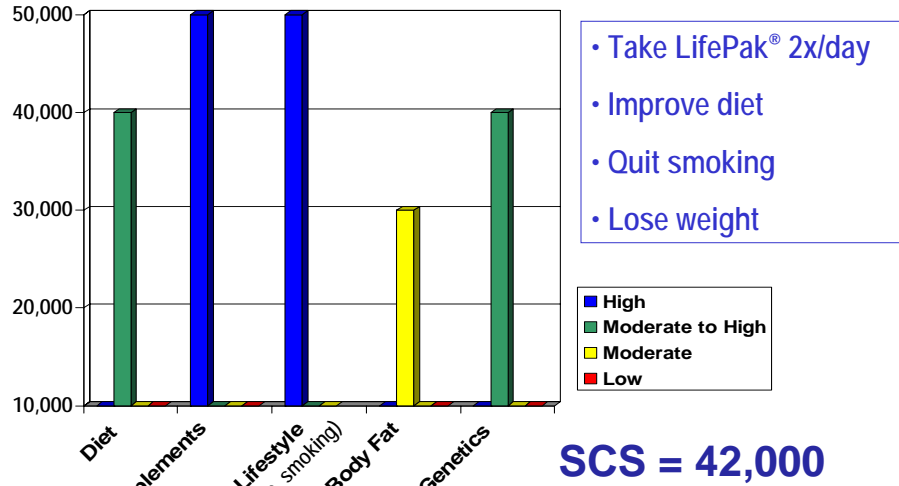
- Moderate fruit/veg. intake
- Irregular supplement use
- Smoker
- High body fat

■ High
■ Moderate to High
■ Moderate
■ Low



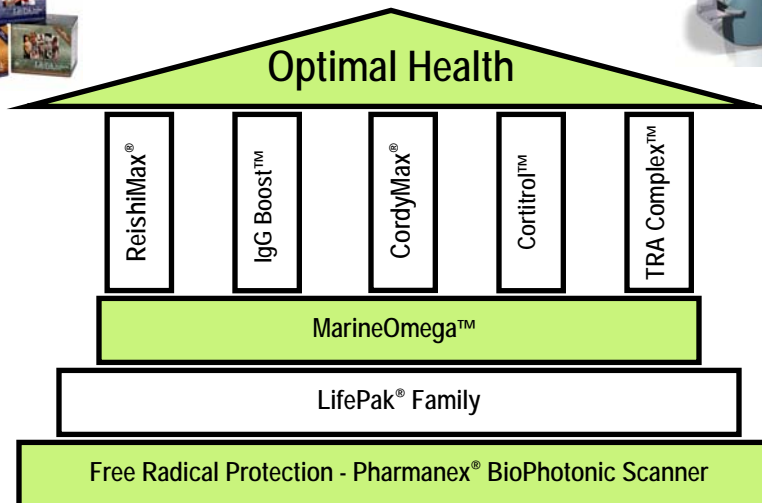
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How Can I Improve My Score?



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Live Better, Longer



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difference