

## WHY BE CONCERNED?

### TODAY'S TOP FIVE HEALTH CONCERNS



#### 1. Heart & Cholesterol

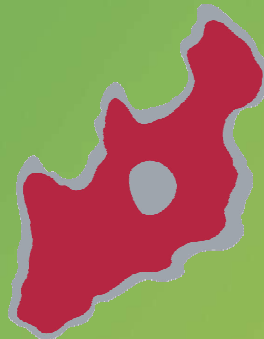
#### Heart & Cholesterol:

More than 950,000 Americans will die of heart disease this year and over 105 million more have total cholesterol levels that put them at risk.

(National Center for Chronic Disease Prevention and Health Promotion)

## WHY BE CONCERNED?

### TODAY'S TOP FIVE HEALTH CONCERNS



#### 2. Cellular Immunity

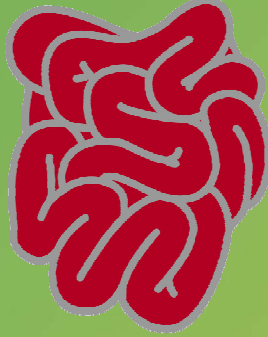
#### Cellular Immune:

Lack of proper nutrition causes cellular damage and weakens the immune system.

(American Medical Association)

## WHY BE CONCERNED?

### TODAY'S TOP FIVE HEALTH CONCERNS



#### 3. Colon & Digestive

#### Colon & Digestive:

An estimated 1/3 of all colon cancer deaths could have been prevented.

(National Institute of Diabetes and Digestive and Kidney Diseases, NIDDK)

## WHY BE CONCERNED?

### TODAY'S TOP FIVE HEALTH CONCERNS



#### 4. Fruits & Vegetables

#### Fruits & Vegetables:

Fewer than 9% of adults achieve the five serving minimum.

(US National Cancer Institute and National Research Council)

## WHY BE CONCERNED?

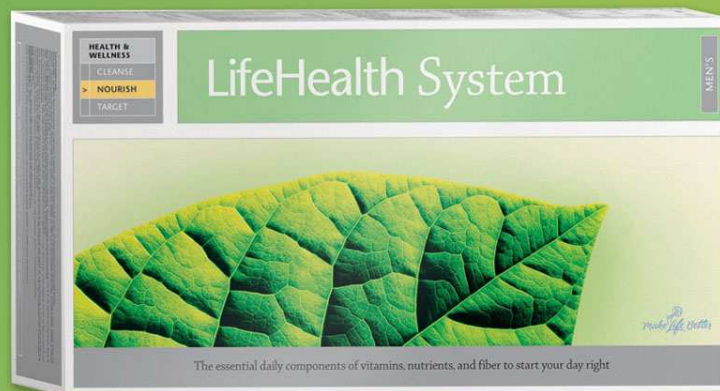
### TODAY'S TOP FIVE HEALTH CONCERNS



Lack of Fiber:  
Most Americans get less than  
half the recommended daily  
amount.

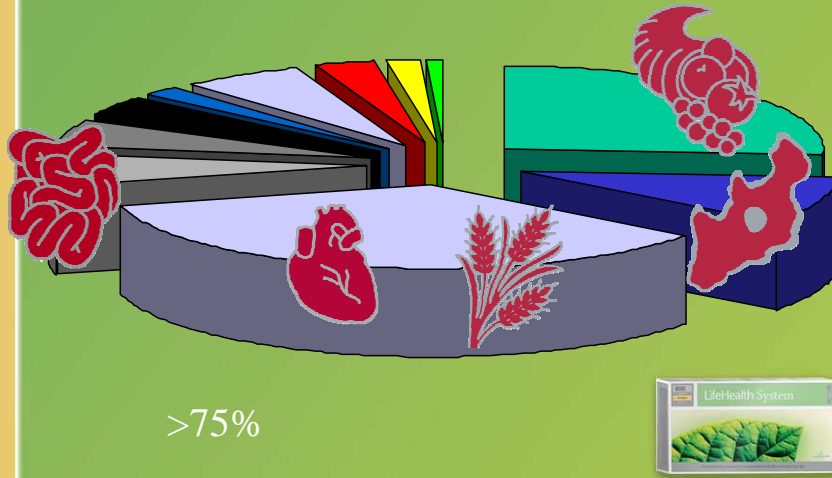
(American Heart Association)

#### 5. Lack of Fiber



**Now there is a daily system that  
addresses today's major health concerns!**

## Causes of Death in the World



Data: World Health Organization

## LifeHealth System FEATURES

Clinically proven to lower total  
cholesterol levels

Critical source of antioxidants

Over 25 essential vitamins, minerals  
Plus phytonutrients

9 grams of fiber

Cold-pressed nutrients from over  
24 fruits and vegetables

Patented formulas for better  
bio-availability



## LifeHealth System CONTAINS



- Bios Life 2® Natural (60 packets)



- Core Health™ (30 packets)



- Fruit Infusion™ (60 capsules)

- Vegetable Infusion™ (60 capsules)



## FRUITS & VEGETABLES

### PROBLEM:

- Many of us do not eat enough fruits and vegetables
- Not all nutritional supplements are equal

### LIFEHEALTH RESPONSE:

- Contains cold-pressed extracts of 24 fruits and vegetables
- Prepared according to proprietary techniques that increase absorption rate



### SCIENCE/RESEARCH:



## Daily Produce 24™



*US National Cancer Institute:  
you should eat 5 servings of  
fruits and vegetables  
everyday!*

Do we? Can we?



## Daily Produce 24™



*Foods contain less phytonutrients today*



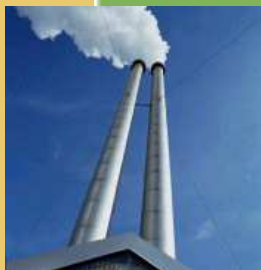
# Environmental Factors



Pesticides and Herbicides destroy valuable nutrients



# Environmental Factors



Pollution results in free radicals that damage antioxidant potential of fruits and vegetables





## Daily Produce 24™

### VEGETABLE INFUSION

#### Contains:

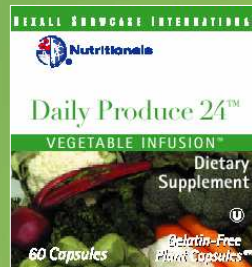
- Parsley
- Kale
- Spinach
- Wheat grass
- Brussels Sprouts
- Asparagus
- Broccoli
- Cauliflower
- Beet Juice
- Carrot
- Cabbage
- Garlic



## Daily Produce 24™

### VEGETABLE INFUSION

#### Naturally occurring nutrients in vegetables:



- Carotenoids
- Flavonoids
- Chlorophylls
- Vitamins
- Minerals
- Prohormones
- Terpenes
- Indole-3-carbonyls
- Other Phytonutrients



## Daily Produce 24™

### FRUIT INFUSION Contains:

- Plum
- Cranberry
- Blueberry
- Strawberry
- Blackberry
- Bilberry
- Cherry
- Apricot
- Papaya
- Orange
- Grape
- Pineapple



## Daily Produce 24™

### FRUIT INFUSION



#### Naturally occurring nutrients in fruit:

- Cyanadins
- OPC's
- Carotenoids
- Flavonoids
- Vitamins
- Minerals
- Other Phytonutrients



## Daily Produce 24™

*How does Daily Produce 24™ work?*

Flash glancing: proprietary cold pressing technique.



## Daily Produce 24™



- High ORAC values
- Superior processing
- V-Caps - Vegetable Capsules
- Whole food nutrition
- No binders and fillers
- Harvested at maturation
- Gently processed - not pasteurized



## Daily Produce 24™



### ORAC

#### *Oxygen Radical Absorbance Capacity*

A test tube analysis that measures the total antioxidant power of foods and other chemical substances.

Since most cellular damage is oxidative, high-ORAC foods may help prevent this damage.



## Changes in life

- Early centuries
- Modern Times
- Life expectancy ~45 years
- Life expectancy > 75 years
- Death cause: infections like tuberculosis
- Death cause: Degenerative diseases like cancer



## Damage of ROS

- **Damage to:**

- DNA
- Proteins
- Lipids
- Skin



- **Could result in:**

- Cancer
- Metabolic disorders, Cataract
- Atherosclerosis, CVD
- Wrinkles



## Oxidative Stress Protection

- **Dietary antioxidants**

- Vitamins, minerals, carotenoids, flavonoids, catechins

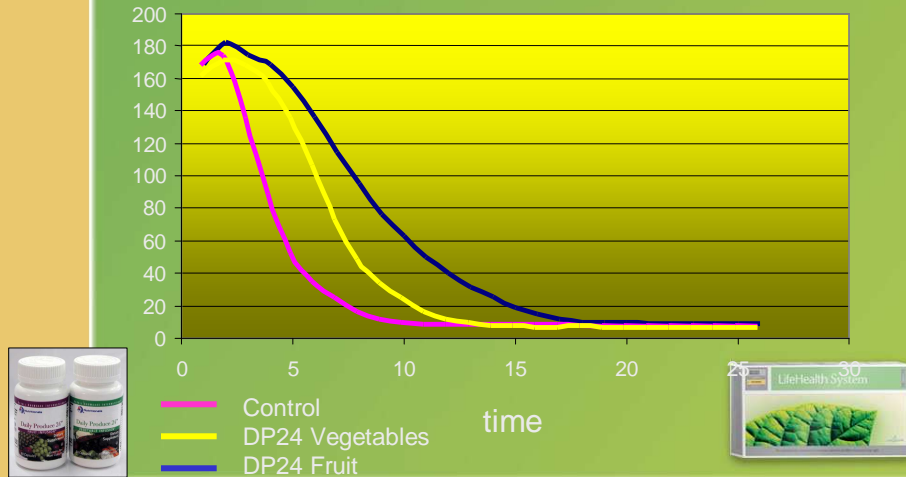
- **Enzymatic antioxidants**

- SOD, catalase, glutathion
- peroxidase



# ORAC of Daily Produce 24

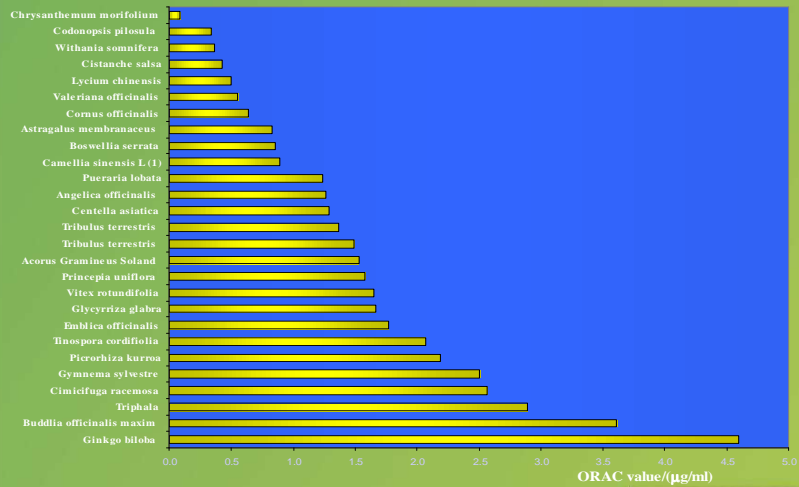
protein



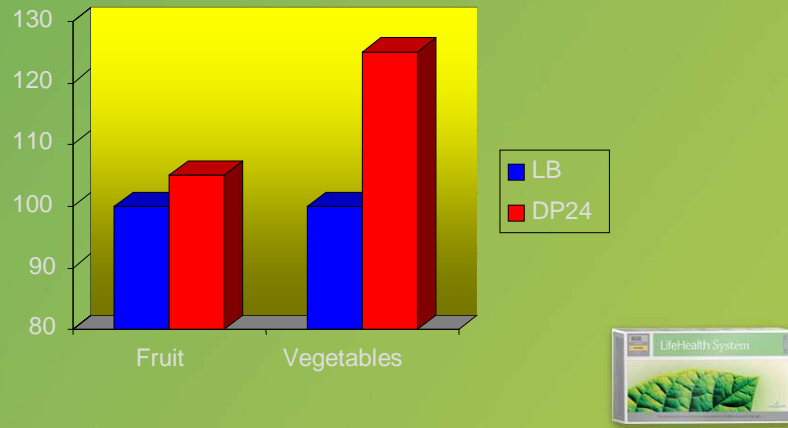
Control  
DP24 Vegetables  
DP24 Fruit



# ORAC



## Comparison between Daily Produce and Leading brand



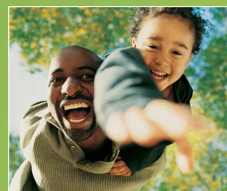
## Daily Produce 24™



*Filling the gap between what we need and what we actually consume*



# FIBER



## PROBLEM:

- Most of us get 12 grams a day, rather than the recommended 30 grams
- Lack of adequate fiber results in digestive disorders, poor colon health, high cholesterol, and heart disease

## LIFEHEALTH RESPONSE:

- By combining both soluble and insoluble fiber, LifeHealth helps improve colon health, as well as aid digestion and lower cholesterol

## SCIENCE/RESEARCH:

- A 10-year study showed how more than 68,000 women were able to lower their risk of heart disease and digestive disorders by increasing the intake of fiber in their diets



The Journal of the American Medical Association

# HEART & CHOLESTEROL

## PROBLEM:

- Heart disease and high cholesterol levels form the most extensive and expensive health concern in North America today

## LIFEHEALTH RESPONSE:

- Contains a patented formula that has helped thousands of people lower their cholesterol

## SCIENCE/RESEARCH:

- Studies conducted by the American Medical Association on over 91,000 men and 245,000 women indicated that, for every 10-gram increase of daily fiber, there was a 14% reduction in all coronary events.



# High Cholesterol

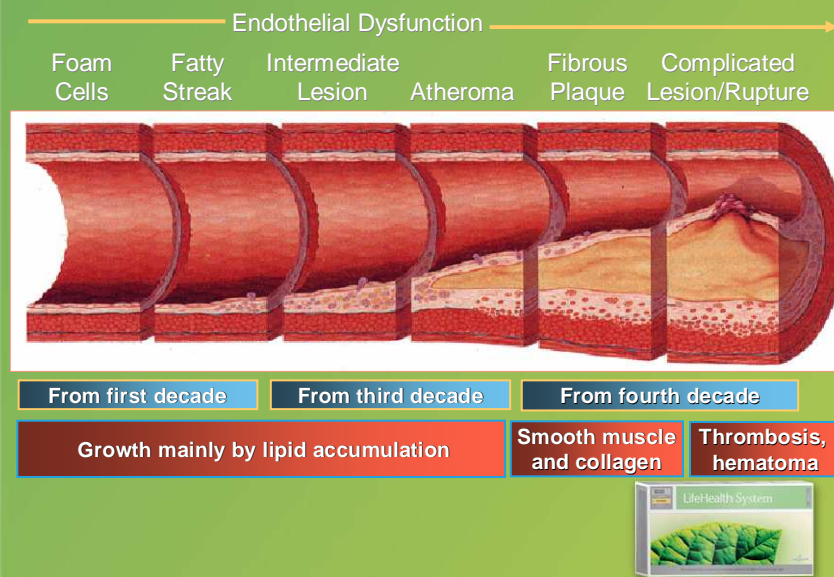
Any sustainable reduction in LDL would be dramatic because:

- For every 1% reduction in LDL, there is a 2% reduction in risk for heart disease.
- For every 1% increase in HDL, there is a 3% reduction in risk for heart disease.



Data: American Heart Association

# Atherosclerosis Timeline



Stary et al. *Circulation*, 1995;92:1355-1374.

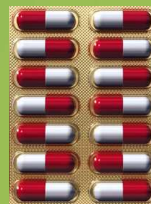
## Cholesterol lowering strategies

- Diet
- Weight Loss
- Exercise (modest impact at best)
- Medications
- Nutraceuticals



## Cholesterol lowering medication

- Statins
  - reduction of cholesterol synthesis
  - cramps, abdominal pain, liver damage, death (rhabdomyolysis)
- Bile acid sequestrants (resins)
  - GI problems
  - taste
  - bad compliance



# Cholesterol lowering medication



- Nicotinic acid
  - reduction VLDL synthesis
  - many contraindications (diabetes, glaucoma, liver)
- Estrogen replacement for women
  - increased breast cancer risk
  - increased endometrium cancer risk



National Cholesterol Education Program

High Blood Cholesterol

Detection

Evaluation

Treatment

Third Report of the National Cholesterol Education Program (NCEP) Expert Panel on Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults (Adult Treatment Panel III)

Executive Summary

National Cholesterol Education Program

NATIONAL INSTITUTES OF HEALTH  
NATIONAL HEART, LUNG, AND BLOOD INSTITUTE

# Diet is an important factor

NCEP diet advice to reduce cholesterol  
Therapeutic Lifestyle Change Diet

Nutrient	Recommended daily intake
Saturated fatty acids	Less than 7% from the total calory intake
Poly-unsaturated fatty acids	Up to 10% of the total calory intake
Single unsaturated fatty acids	Up to 20% of the total calory intake
Total fat	20-25% of the total calory intake
Carbohydrates	50-60% of the total calory intake
Fibre	20 - 30 grams per day
Protein	15% of the total calory intake
Cholesterol	Less than 200 mg per day



## Fiber

“Diets low in saturated fat and cholesterol and high in fiber are associated with a reduced risk of certain cancers, diabetes, digestive disorders, and heart disease.”

July-August 1997 FDA Consumer Magazine

“. . . A diet low in fiber was equivalent to cigarette smoking as a risk factor for coronary artery disease.”

NEJM, 1985; 312:811-818.



## Fiber

The American Heart Association: “you should eat a diet consisting of 30 grams of fiber per day.”

Average diet consists of 12 grams

35



22

14



7



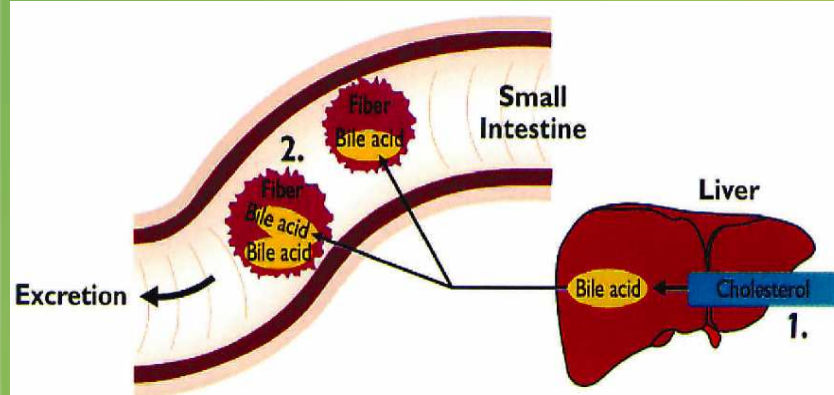
## BiosLife 2 Ingredients

- Patented Fiber Mixture:
  - 3 grams soluble fiber
  - 1.5 grams insoluble fiber
- Vitamins (In particular B-vitamins)
- Minerals
- Chromium (ChromeMate™)



# Cholesterol Lowering Mechanism

## Bile Acid Sequestration



## Clinical Studies (I)

- Cleveland Clinic Foundation
- Double blind placebo controlled clinical study
- 99 subjects following a low fat diet NCEP Phase 1 diet
- Goal: to assess the effect of BiosLife 2 on cholesterol levels



## Clinical Studies (I)

- Tested parameters at week 4 and 8
  - HDL Cholesterol
  - LDL Cholesterol
  - ApoB
  - Homocystein



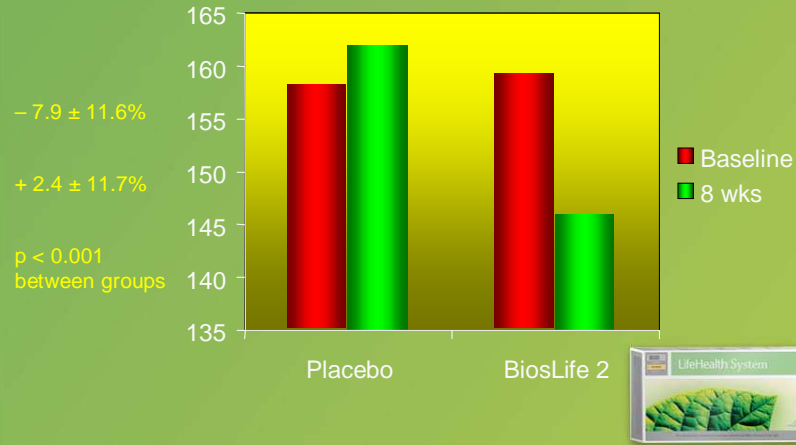
## Clinical Studies (I)

- Inclusion criteria
  - At least 18 years of age
  - No cardiovascular disease
  - LDL-c  $\geq$  130 mg/dL



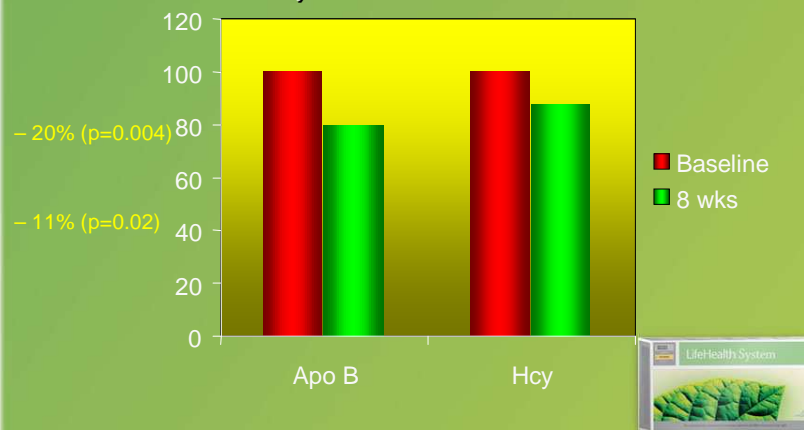
## Clinical Studies (I)

- Results on LDL-c



## Clinical Studies (I)

- Results on ApoB and Hcy (Subgroup on BiosLife 2)

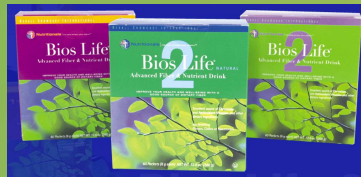


# Clinical Studies (I)

## CONCLUSION:

**“This combination product could be used to reduce the need for concomitant lipid lowering prescription therapy, as well as for advancing self-styled primary prevention strategies.”**

Dr. Dennis Sprecher



# Clinical Studies (II)

- Cardiology Institute, Philippines
- Open label study
- 103 patients with dyslipidemia
  
- Goal: to assess the effect of BiosLife 2 on cholesterol levels in dyslipidemic patients not using medication



# Cholesterol classification

National Cholesterol Education Program

High Blood Cholesterol

Detection

Evaluation

Treatment

Third Report of the National Cholesterol Education Program (NCEP) Expert Panel on Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults (Adult Treatment Panel III)

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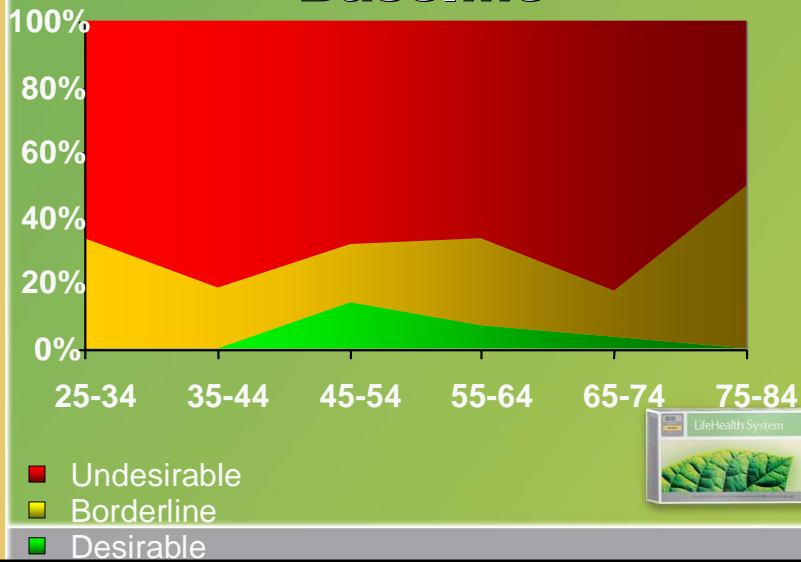
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NATIONAL HEART, LUNG, AND BLOOD INSTITUTE

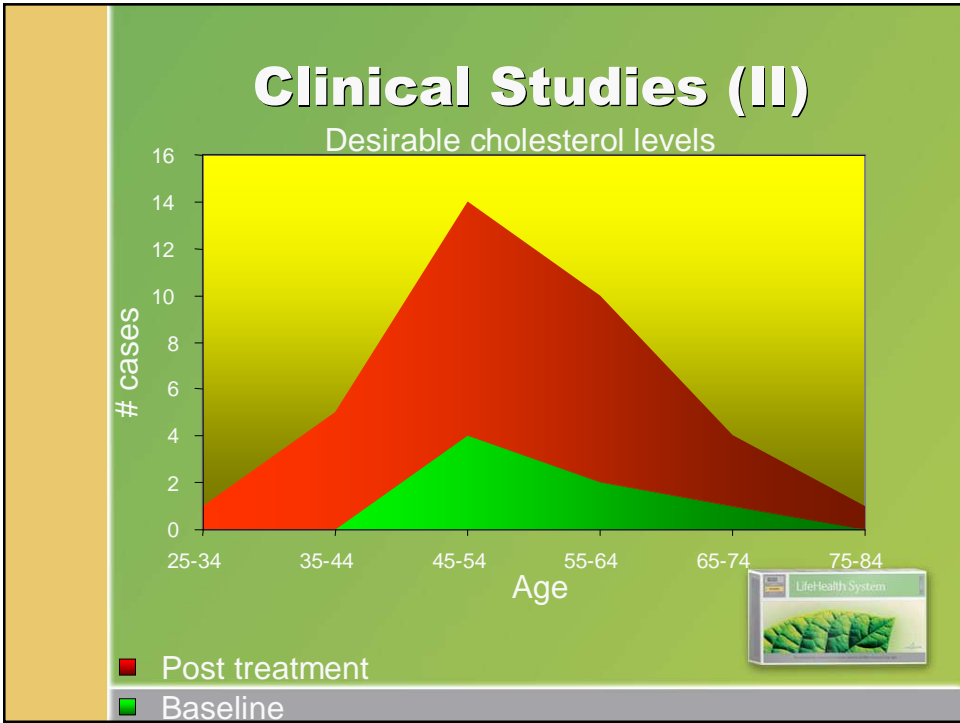
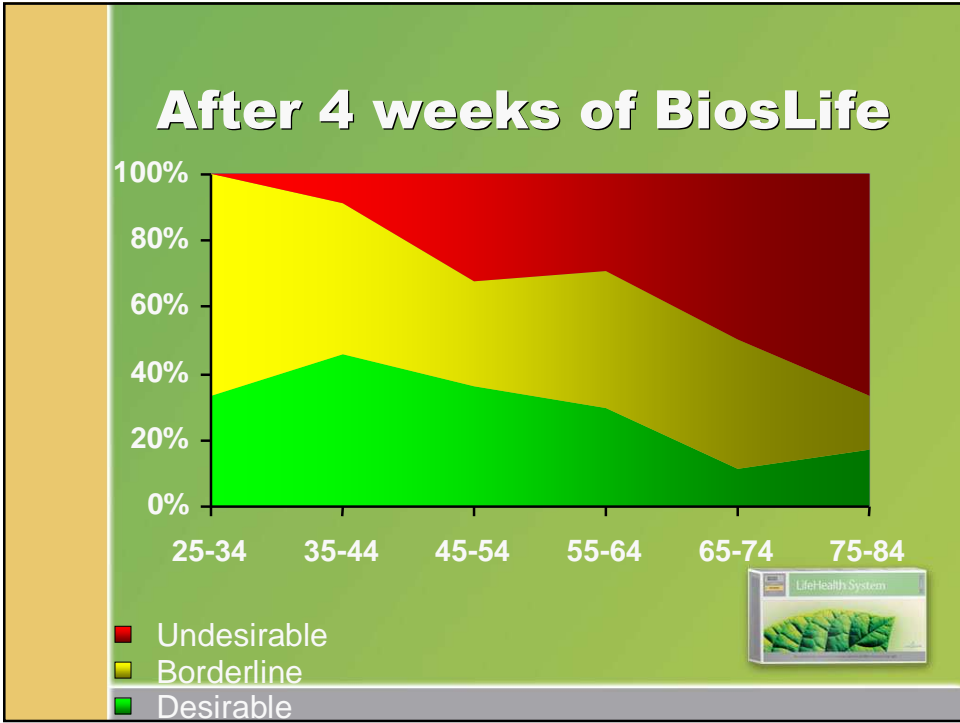
## LDL cholesterol:

**Undesirable:** > 240 mg/dL  
**Borderline:** 200 – 240 mg/dL  
**Desirable:** < 200 mg/dL



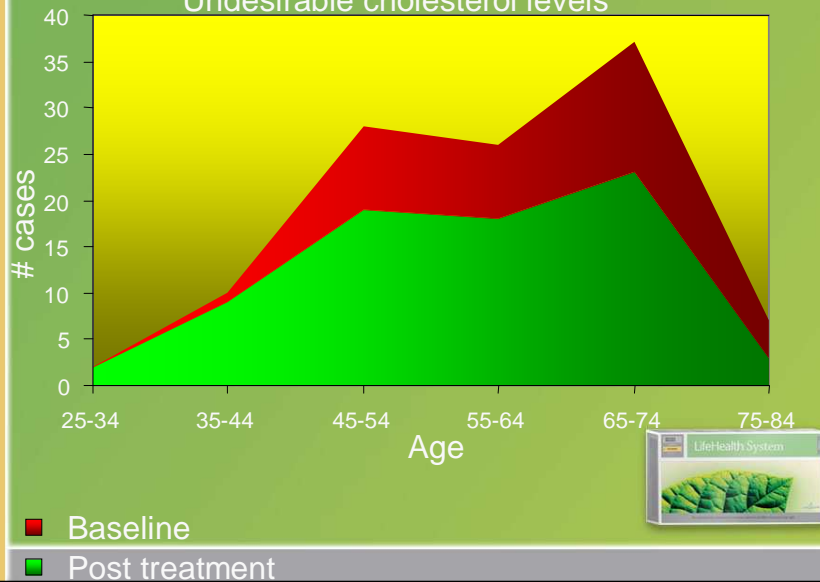
# Clinical Studies (II) Baseline





## Clinical Studies (II)

Undesirable cholesterol levels



## Clinical Studies (II)

CONCLUSION:

**“Patients with elevated total cholesterol should take fiber supplement if their diet is not sufficient to meet the daily intake of 20 – 35 grams of fiber as recommended by the American Dietetic Association.”**

Dr. Edwin B. Balajadia



# VITAMINS & MINERALS

## PROBLEM:

- Without adequate vitamins and minerals, we suffer from a lack of antioxidants
- Pesticides, herbicides, and other environmental factors pose additional problems that our bodies need to contend with.



## CONSEQUENCES of high tech agriculture

- Lack of crop rotation
- Forced early blooming
- Artificial nutrients & ripening methods
- Early harvesting
- Shorter growing time



# VITAMINS & MINERALS

## LIFEHEALTH RESPONSE:

- Contains over 25 readily absorbable vitamins and minerals
- Antioxidants
  - Destroy excess free radicals that damage cells
  - Promote the growth of healthy cells
  - Protect cells against premature aging
  - Support the immune system
  - Reduce occurrence of oxidative stress



# Human Bone



- Normal bone



- Osteoporosis



# VITAMINS & MINERALS

## SCIENCE/RESEARCH:

- Over 130 studies, including those recorded in the August 1993 Mayo Clinic Health Letter, demonstrate how antioxidants can help reduce the risks of disease and visible signs of aging
- The American Heart Association announced that women who consumed high amounts of antioxidants had a 33% lower risk of heart attack and a 71% lower risk of stroke than women who consumed fewer antioxidants



# VITAMINS & MINERALS

## Multi-Vitamin Comparison

Ingredients	Daily Values	Core Health			
	Males: 18-50+	Man Daily Dosage 3 Cap/2 Tabs	Woman Daily Dosage 3 Caps/3 Tabs		
<b>VITAMINS:</b>					
Vitamin A	5000 IU	10,000 IU	200%	10,000 IU	200%
Vitamin B-1 (Thiamine)	1.5 mg	10 mg	667%	10 mg	667%
Vitamin B-2 (Riboflavin)	1.7 mg	10 mg	588%	10 mg	588%
Vitamin B-3 (Niacin)	20 mg	25 mg	125%	25 mg	125%
Vitamin B-6	2 mg	10 mg	500%	10 mg	500%
Vitamin B-12	6 mcg	50 mcg	833%	50 mcg	833%
Biotin	300 mcg	300 mcg	100%	300 mcg	100%
Folate	400 mcg	400 mcg	100%	400 mcg	100%
Pantothenic Acid	10 mg	25 mg	250%	25 mg	250%
Vitamin C	60 mg	250 mg	417%	250 mg	417%
Vitamin D	400 IU	200 IU	50%	400 IU	100%
Vitamin E	30 IU	200 IU	667%	200 IU	667%
Vitamin K	80 mcg	20 mcg	25%	20 mcg	25%
<b>MINERALS:</b>					
Boron		1 mg		1 mg	
Calcium	1000mg	200 mg	20%	400 mg	40%
Chloride	3400 mg				
Choline		10 mg		10 mg	
Chromium	120 mcg	200 mcg	167%	200 mcg	167%
Copper	2 mg	2 mg	100%	2 mg	100%
Iodine	150 mcg	100 mcg	67%	100 mcg	67%
Iron	18 mg			7.8 mg	43%
Magnesium	400 mg	100 mg	25%	200 mg	50%
Manganese		2 mg	100%	2 mg	100%
Molybdenum	120 mcg	75 mcg	100%	75 mcg	100%
Phosphorus	1000 mg				
Selenium	70 mcg	200 mcg	286%	200 mcg	286%
Silicon					
Vanadium		15 mcg		15 mcg	
Zinc	15 mg	15 mg	100%	15 mg	100%