Mentor goals:

- To declare what is possible and establish a commitment to that possibility
- Address personal and professional barriers limiting the ability to serve
- Evolution of vision/mission/ethics that drive success
- Create immediate action steps to apply learning and growth
- Construct the round table of applied trophologists
Mentoring the mentor:

- Who are the mentors? – Practitioners
- Who are we mentoring? – Patients and GAP
- What’s the purpose? – Optimized life
- How does it work? – Whatever you learn you teach someone else (anyone else)
- Who’s is included? – Self selection, you pick yourself

Mentoring the mentor:

- Each participant attends monthly teleconferences (1 hour in duration, 4th Thursday of month) creating a round table discussion/exploration of the dynamics and details of a nutrition-based wholistic practice
- Each participant chooses a colleague in his/her world to convey the notes and information – no information squandering
- Issues/problems/questions are considered a learning process for everyone, although individual’s remain anonymous
- All questions, comments, case studies to be directed through email to SP rep who will compile and include in next teleconference (must be submitted 10 days prior)
Approach to wisdom

Nothing is more beautiful or powerful than an individual acting out of his conscience, helping to bring the collective conscience to life.

Norman Cousins

Reviewing Part I - Dyslipidemia

Part I considered:
- Structure of lipid molecule and various ways to influence
- Consideration of traditional and less traditional risk factors involved in coronary artery disease (CAD)
- Review of fractionated lipid studies by Spectrocell Labs for the assessment of risk effacement of biochemical individuality
- Vitamin C chronic deficiency and resultant Lipoprotein a increased production speculatively due to genetic activation
- Demonstration of mechanisms to reduce lipid profile using low glycemic dietary lifestyle

Part II will consider:
- Many nutritional ways to influence lipid profiles
- Finally a sequential formula for intervention to achieve lipid management
Managing Lipoprotein Dyslipidemia

♫ For decades the primary blood marker associated with cardiovascular disease has been cholesterol – total cholesterol at first then LDL and HDL, deemed ‘bad and good’ cholesterol.

♫ Additional risk factors have emerged including c-reactive protein as an indication of inflammation and homocysteine as measuring the attachment potential to the wall of the artery.

♫ Although lifetime coronary heart disease mortality can be correlated to cholesterol, it does not predict CHD events in individuals as well as could be hoped.
The Lipid Players

LDL – total amount of cholesterol found in low-density lipoprotein particles – currently specialists seek to limit under 70 with high risk individuals – large clinical trials have confirmed that LDL reduction decreases the risk for future events

HDL – total cholesterol found in high density lipoprotein particles – these particles are thought to assist in transporting cholesterol from the tissue to the liver for removal – In general a 1 mg/dl increase in HDL results in a 2-4% decrease in risk (most seen in women)

Non-HDL cholesterol – total amount minus HDL – easily derived form simple lab test make this useful in cost prohibitive cases – high risk <130 mg/dl, moderate risk <160, low risk <190

Triglycerides – a form of fat in the blood is elevated in insulin resistant dyslipidemia – fasting TG above 150 is a criteria of metabolic syndrome, below 150 is normal, 150-199 borderline high, 200-499 high, over 500 very high

Apolipoprotein B – a protein found in the outer shell of all lipoproteins – each VLDL, IDL and LDL particle contain 1 molecule of apo B so it is an estimate of the atherogenic character of the lipid particles – guidelines say high risk <90, moderate risk <110, low risk <130

Apolipoprotein A – found within HDL only – A ratio > 1 of Apo B to Apo A is considered atherogenic

VLDL – becoming a key constituent of atherogenic profile related to insulin resistance and diabetes

Lipoprotein a – essentially same structure as LDL except it has apo (a) covalently attached to the surface of LDL particles which make it promote coagulation and increase oxidative inflammatory activity – Niacin is only reliable way to lower Lp(a)
Anatomy of Lipoproteins -

- Cholesterol and triglycerides are transported through the blood in particles called lipoproteins, that are classified by their relative densities

- Lipoproteins have a shell derived from phospholipids, free cholesterol and apolipoproteins – and a central core of triglycerides and cholesterol esters

- The number and size of the various particles and corresponding lipoprotein levels and the more accurate markers of atherogenic potential

Lipid Structure -
The Cholesterol Game -

- Traditional risk factors of CAD are total cholesterol, HDL, LDL, Triglycerides, ratios (only 50-60% accurate)
- Individualized risk factors fill in the blank:
  - Genetics – Lipoprotein a
  - Nutrition – Homocysteine
  - Inflammation – C-Reactive protein
  - Viscosity – Fibrinogen
- Apolipoprotein A1 = HDL (good guy)
- Apolipoprotein B + lipoprotein a = LDL (bad guy)
- Apo B/ Apo A1 ratio is best predictor of CAD
- lipoprotein a - hereditary marker for CAD, carotid atherosclerosis, cerebral infarction risk – niacin (3-4 g/day reduces up to 38%)

Capillary Function & Fragility

- Scurvy has always been a feared disease – vascular disease is subclinical scurvy
- Vitamin C is required to build collagen (tissue cement and reinforcement), without which vascular integrity declines
- Vascular integrity must be maintained to maintain positive pressure system - weakened vessels (leaking) require repair by lipoprotein (a) (wrapped with apolipoprotein b – it plugs and seals the vessel
- Less plugging material and less adhesive tape (apo b = less risk for heart disease
- Lipoprotein (a) most effective repair molecule to survive subclinical scurvy – chronic C deficiency results in excessive repair and buildup of atherosclerotic tumors/plaque
- Lipoprotein (a) is heart risk factor 10 times greater than LDL

- 0-20 mg/dl - low risk for heart disease
- 20-40 mg/dl - medium risk
- >40 mg/dl - high risk
Vitamin C - Lipoprotein(a) Connection

- High Vitamin C levels = little or no need for lipoprotein(a) molecules – level falls over time
- Low Vitamin C levels = great need for repair lipoprotein(a) molecules – level builds over time
- Prehistoric inherited genetic advantage developed during the ice ages – excessively activated in modern times
- Animals capable of synthesizing Vitamin C have little to no lipoprotein(a), and no incidence of vascular events
- Coronary arteries under tremendous stress – compresses and flattened 70 times/minute – when collagen levels fall these arteries will leak and become increasingly inflamed – sticky to plaque
- Cataplex C (3), Cardioplus (6), Vasculin (6), Cataplex ACP (3), Collagen C (3), Cataplex B (6), Cataplex G (6), Organic Minerals (6), Magnesium (3), L-Carnitine (150 mg), L-Proline (500 mg), L-Lysine (500 mg), CoQ10 (25 mg), Folic Acid (2)
- Gingko Biloba reduces Lpa significantly

Homocysteine & Vascular Risk

Relative risk of CAD with major risk factors

Castelli et al., JANA 256:2235, 1996
Homocysteine Metabolism

The Transulfuration Pathway

- Methionine
  - Methyl acceptor
  - Methylated acceptor
  - S-adenosylmethionine
  - S-adenosylhomocysteine
  - Vitamin B12
  - Folate Cycle
  - Vitamin B6
- Cysteine
- Sulfate + H2O
- Urine

Homocysteine Metabolism

- Tuna Omega (4), Gingko (2), Niacinamide (2), Gastrofiber (3), Homocysteine support, Cholaplex (4), Phase II diet
Tuna Omega (4), Gingko (2), Niacinamide (2), Gastrofiber (3), Homocysteine support, Cholaplex (4), Phase II diet
2 - Glycemic Management

- Phase II diet limiting glycemic index
- Prevent insulin spikes
- Protein three times per day
- 40/30/30 CHO/protein/fat
- Starches are source of cravings
- Cravings mean insufficient protein and fat
#2 Core Physiologic Principal

Glycemic balance
- Introduce glucose – source in starch, alcohol, sugars
  - Increased blood glucose
    - Hunger – Sugar cravings
    - Insulin up-regulation
      - Hypoglycemia – blood sugar too low
        - Protein/fat
          - Increased satiety
            - Increase gluconeogenesis
              - Mitochondria proliferate

- Increased energy/stamina/productivity/independence

- Increased satiety
  - Stress – Increased Cortisol
    - Hypoglycemia – blood sugar too low
      - Increased energy/stamina/productivity/independence

- Insulin up-regulation
  - Adaptation – Insulin Resistance
    - Protein/fat
      - Increased satiety
        - Increased gluconeogenesis
          - Mitochondria proliferate

- Anabolic weight/fat gain

- Adrenal/Pancreas stress
  - Food dependency / fatigue

- Increased glycemia
  - Hypoglycemia
  - Anabolic weight/fat gain

- Increased energy/stamina/productivity/independence

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Phase II diet for balancing blood chemistry (edited from Melvin Pagn's work)

Removing Starches will control your blood sugar, which will remove THE major stress on your body: Hypoglycemia

The 1st and most important step is to remove, pastas, bread, white potatoes and rice

The 2nd step is to consume protein/healthy fats

The 3rd step is to balance your carbohydrate intake

The 4th step is to balance your protein intake

The 5th step is to balance your fat intake

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Whole Health Institute 1401 West Houston, TX 77006
(713) 522-0750 www.WholeHealthIA.com
Research – Ketogenic Diet

- In 12 men (mean age 36.7 years) who switched from diet of protein/CHO/fat 17-47-32 to 30-8-61 (compared with 8 control subjects)
- 33% reduction in fasting triglycerides
- 29% reduced post-prandial lipemia after fat rich meal
- 34% reduction in fasting insulin levels
- 11.5% increase in HDL cholesterol

Nutrient Benefits in Dyslipidemia

- Low fat diets
- Low Glycemic diets
- Niacin (Nicotinic Acid)
- Pantethine (Pantothenic Acid)
- Policosanol
- Phytosterols
- Omega-3 Fatty Acids
- Tocotrienols (Vitamin E)
- Red Yeast Rice (RYR)
- Berberine
- Guggulipids
- Artichoke
- Garlic

Nutrient Benefits in Dyslipidemia

- Low fat diets – Much debate has occurred in the past 2 decades over influence of low fat diets on lipids – One central truth emerged that required label warnings for content of hydrogenated trans fatty acids. Intake of hydrogenated polyunsaturated oils in place of saturated fats increases both total cholesterol and LDL-C, and more recently has been shown to reduce LDL particle size and Apo A levels, while increasing both Apo B and Lp(a) further promoting atherogenesis.

- Low Glycemic diets – Dumesnil et al (2001) showed that a reduced glycemic index diet out performed the American Heart Association Step I diet in reducing caloric intake, Apo B, triglycerides and insulin, while increasing LDL particle size.
Nutrient Benefits in Dyslipidemia

Dietary Fiber – Increased consumption of both soluble and insoluble fiber (especially researched are sources of oats, psyllium and flax) have shown numerous health benefits including reducing CVD risk by increasing the LDL particle size and reducing the number – recent studies have shown fiber supplementation has outperformed statin use. Gastrofiber (3 at bedtime or Whole Food Fiber can be used to supplement the diet

Niacin (Nicotinic Acid) – First reports of lowering lipids were in 1955, and numerous studies since then. It is understood to inhibit free fatty acid mobilization from peripheral adipose tissue to the liver, thus decreasing synthesis of triglycerides, VLDL, and the synthesis of LDL from VLDL. It also appears niacin reduces the breakdown of Apo A-1, which elevates Apo A-1 and leads to enhanced HDL production. Niacin supplementation is available in three forms - Immediate release (IR), extended release (ER), Sustained release (SR). The rate of absorption is crucial in how the liver metabolizes niacin thus effecting efficacy, safety and side effects. Principle side effects include flushing and the SR & ER may induce liver inflammation. Niacin doses range from 250 mg to 3000mg/day, although 2000 mg/day is the maximum dose for effecting HDL and triglycerides. Niacinamide/B12 (2/day) is excellent low dose niacin to achieve these benefits

Nutrients Benefits in Dyslipidemia

- Pantethine (Pantothenic Acid)
- Policosanol
- Phytosterols
- Omega-3 Fatty Acids
- Tocotrienols (Vitamin E)
- Red Yeast Rice (RYR)
- Berberine
- Guggulipids
- Artichoke
- Garlic
Nutrients Benefits in Dyslipidemia

- Fenugreek
- Walnuts
- Carnitine
- Taurine
- Red Wine
- Green Tea
- Pomegranate
- Conjugated Linoleic Acid CLA

Functional Medicine

The work of your heart, the work of taking time to listen, to help, is also your gift to the whole of the world

Jack Kornfield
Dr. Stuart White

Frank – Hopeless heart helped

Presented 02/07 with CAD with bypass surgery (5)
done in 12/04 that failed in 2 months and subsequent
12 stints, routine catheter studies every 3 months

Presented with R & L ear lobe creases, vertigo,
tongue – allergy patches, swollen & coated, puffy
lowered eyelids, dark circles under eyes, cold hands
& feet, chest tension and dull pain, short of breath on
exertion, blood in stools, swollen prostate,
rash/fungus in grin & toenails, burning feet, finger nail
splinter hemorrhages, baby finger nail luna, frequent
urination, irritable, worrisome, fatigue, 3 pm low, loss
of libido, 158 lbs, 65 inches, medication – Lipitor,
Plavix, Niaspan, Hyzaar, Vanexa

Heart disease

Reversing heart disease
Visit after visit — Start today

- See each patient for the lipid status they present
- Teach every patient the principles of starch restriction and insulin reduction and prepare them with concepts to maximize their lifespan and wellspan
- Employ the principles of variousd nutrient intervention to promote healthy lipid profiles – Application sequential intervention to determine what unique biochemical factors are at work in a person’s physiology — this is the work of prevention and correction of the underlying antecedents of CAD
- Be a practitioner who is always developing the patient beyond their request
- Change outcomes, stop disease progression, reveal the inherent healing potential by using principles and products that express The Law (the way it was made to work)
- Use Gastrofiber (3/day), Cholaplex(4/day), Niacinamide (2/day), Tuna Omega (4), Gingko (2), Gotu Kola Complex (2), Garlic 5000 (2), Livton (2), Red Yeast Rice, Tocotrienols, to reduce lipids and optimize the physiology to prevent vascular and heart degenerative changes

The greatest use of your time

Think New Thoughts
Change the world
It wants to