Holistic Cardiology: From Statins to Hormones

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What is Holistic Medicine?

Holistic medicine is a form of healing that considers the whole person -- body, mind, spirit, and emotions -- in the quest for optimal health and wellness. According to the holistic medicine philosophy, one can achieve optimal health -- the primary goal of holistic medicine practice -- by gaining proper balance in life.

Principles of Holistic Medicine

- All people have innate healing powers.
- The patient is a person, not a disease.
- Healing takes a team approach involving the patient and doctor, and addresses all aspects of a person's life using a variety of health care practices.
- Treatment involves fixing the cause of the condition, not just alleviating the symptoms.
Destination: HEALTH

- Epidemic of chronic diseases
- Decline in generational health
- Cost per year $3 trillion
- 80% disease prevention
- Food as Medicine
In 2008 the US spent 16.2% of its GDP ($2.3 trillion) on Healthcare.

More than national defense, homeland security, education, and welfare...combined.

133 million Americans live with at least one chronic disease...
Heart Disease: 81 million people
Cancer: 11 million people
Depression: 1 in 20 Americans >12 years of age
Diabetes: “One in every 3 children born today will develop diabetes during his/her lifetime”
FUNCTIONAL MEDICINE is a personalized, systems-oriented model that empowers patients and practitioners to achieve the highest expression of health by working in collaboration to address the underlying causes of disease.
Holistic or Integrative Cardiology is Based on Functional Medicine

<table>
<thead>
<tr>
<th>Disease-Oriented Medical Model</th>
<th>Wellness-Focused Medical Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Disease Model dominates medical thinking</td>
<td>• Emphasizes prevention and lifestyle intervention</td>
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<tr>
<td>• Defines health as a disease-free state</td>
<td>• Defines health as a state of optimal wellness</td>
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<tr>
<td>• Traditional Medicine</td>
<td>• Functional Medicine</td>
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Disease-Free State of Optimal Wellness

• Physical Ability
• Energy
• Resilience
• Mental Focus and Clarity
• Vitality
• Emotional Stability
• Meaningful Relationships

Integrative Medicine View of Health
- Chronic conditions are on the rise
- Obesity is sky rocketing
- Expenses are mounting
- High deductible insurance plans turned patients into consumers
- Business are looking to save by implementing wellness programs

Patients Search for Well, Physicians Focus on Not Sick
77 y/o man with known CAD, has 2 stents

HTN, Hyperlipidemia

Lopressor, ASA, Plavix, Zocor

No acute complaints
Active, works out, independent

“My doctor tells me “do what you want” when I ask about supplements”
Cost of supplements: $700/month
77 y/o man with known CAD, has 2 stents

HTN, Hyperlipidemia

Lopressor, ASA, Plavix, Zocor

No acute complaints
Active, works out, independent

What about his lifestyle?
He is eating out
He has a girlfriend
He wants his doctor to look inside the BAG!
What is Your Attitude Toward Supplements?

My attitude toward supplements is:

- Neutral
- Negative
- Positive

How Many of Your Patients Use Supplements?

- None
- Few or Some
- Many
- I do not know
I was diagnosed with elevated cholesterol 2 and ½ years ago (total cholesterol 280, LDL 171). I took Crestor but started getting strange neurological symptoms, and became borderline diabetic. Internist wants me to take Lipitor but I will not. There simply has to be a better way.”
Why Do We Care if Patients are Not Well?

Not Well patients:
- use multiple healthcare resources (expensive and redundant care)
- may require longer hospital stays
- pose increased risk of readmissions (“poor baseline”), lower medication compliance
- seek out alternative care practitioners resulting in revenue diversion of their discretionary income
- unsupervised supplements intake and variable quality alternative interventions are of limited value, pose a safety concern, may be expensive and ineffective

Take control by creating structured and supervised integrative cardiology programs based on evidence and outcomes to increase your value to your patients, and your patients lifetime value (PLV)
Although the collective health of the nation has improved dramatically in the past 30 years, surveys reveal declining satisfaction with personal health during the same period. Increasingly, respondents report greater numbers of disturbing somatic symptoms, more disability, and more feelings of general illness. Four factors contribute to the discrepancy between the objective and subjective states of health. First, advances in medical care have lowered the mortality rate of acute infectious diseases, resulting in a comparatively increased prevalence of chronic and degenerative disorders. Second, society’s heightened consciousness of health has led to greater self-scrutiny and an amplified awareness of bodily symptoms and feelings of illness. Third, the widespread commercialization of health and the increasing focus on health issues in the media have created a climate of apprehension, insecurity, and alarm about disease. Finally, the progressive medicalization of daily life has brought unrealistic expectations of cure that make untreatable infirmities and unavoidable ailments seem even worse. Physicians should become more aware of these paradoxical consequences of medical progress so that they do not inadvertently contribute to a rising public dissatisfaction with medicine and medical care.

Physician Stewardship is Essential for Holistic Health

**Stewardship** is an ethic that embodies the responsible planning and management of resources. The concepts of stewardship can be applied to the environment, economics, health, property, information, theology, etc. (Wikipedia)
How Do We Bridge The Gap?

**Traditional MD Practice**
- Volume-driven
- Insurance fee dependent
- Low touch, high tech
- Ancillary staff engaged with business end
- Physician burnout
- Low efficiency
- Limited patient loyalty
- Decreasing revenue

**Integrative MD Practice**
- Value-driven
- Hybrid/concierge model
- High touch, low tech
- Ancillary staff engaged with patients
- Physician growth
- High efficiency
- Loyal patients
- New revenue streams

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One Condition: Many Imbalances

- Inflammation
- Hormones
- Genetics and Epigenetics
- Diet and Exercise
- Mood Disorders

Obesity

One Imbalance: Many Conditions

- Inflammation

Heart Disease
- Depression
- Arthritis
- Cancer
- Diabetes
GOTOIT Steps: Practicing Functional Medicine

Gather
Organize
Tell
Order
Initiate
Track

<table>
<thead>
<tr>
<th>Purpose</th>
<th>IFM Tools (example)</th>
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<tr>
<td>GATHER</td>
<td>- Initial Assessment - Gastrointestinal Health - General Health - Cultural Health</td>
</tr>
<tr>
<td>ORGANIZE</td>
<td>- Initial Assessment - Gastrointestinal Health - General Health - Cultural Health</td>
</tr>
<tr>
<td>TELL</td>
<td>- Initial Assessment - Gastrointestinal Health - General Health - Cultural Health</td>
</tr>
<tr>
<td>ORDER</td>
<td>- Initial Assessment - Gastrointestinal Health - General Health - Cultural Health</td>
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<tr>
<td>INITIATE</td>
<td>- Initial Assessment - Gastrointestinal Health - General Health - Cultural Health</td>
</tr>
<tr>
<td>TRACK</td>
<td>- Initial Assessment - Gastrointestinal Health - General Health - Cultural Health</td>
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</table>
FUNCTIONAL MEDICINE MATRIX

Physiology and Function: Organizing the Patient’s Clinical Imbalances

- Assimilation (e.g., Digestion, Absorption, Microbiota/Gut Respiration)
- Defense & Repair (e.g., Immune, Inflammation, Infections/Microbiota)
- Structural Integrity (e.g., from Subcellular Membranes to Muscle/Structural)
- Mental (e.g., cognitive function, perceptual patterns)
- Emotional (e.g., emotional regulation, grief, address, anger, etc.)
- Energy (e.g., Energy Regulation, Mitochondrial Function)
- Communication (e.g., Endocrine, Neurotransmitters, Immune messengers)
- Spiritual (e.g., meaning & purpose, relationship with something greater)
- Biotransformation & Elimination (e.g., Toxicity, Detoxification)
- Transport (e.g., Cardiovascular, Lymphatic System)

Modifiable Personal Lifestyle Factors

- Sleep & Relaxation
- Exercise & Movement
- Nutrition
- Stress
- Relationships

Name: ___________________________ Date: _____________ CC: ___________________________ © 2013 Institute for Functional Medicine
The Science of Individuality

• **Emergence**: How genes are translated into patterns of health and disease

• **Exposome**: How internal metabolic factors and the environment influence gene expression

• **Epigenetics**: The study of heritable changes in gene expression or cellular phenotype caused by mechanisms other than change in the underlying DNA sequence

• **Nutritional Genomics or Nutrigenomics**: How different foods may interact with specific genes to increase the risk of common chronic diseases such as type 2 Diabetes, obesity, heart disease, and certain cancers

• **Pharmacogenomics**: Prediction of drug response and clinical outcomes, reduction in adverse events, and selection and dosing of drugs based on genotype
Two Simple Questions:

Causes and Function

• Does this person need to be rid of something (toxic, allergic, infectious, poor diet, stress)?

• Does this person have some unmet individual need required for optimal function?
Old Paradigm

- A team of health care professionals
  - Psychiatrist, pulmonologist, allergist, neurologist, and gastroenterologist
- No one asked: How is everything connected?
- Their job: match the pill to the ill!
- We are asking the wrong questions
The New Paradigm

• Always seek the cause FIRST – again and again

• Focus on 5: Learn how to diagnose and treat the 5 causes of illness
  • Become an expert in toxins, allergens, infections, nutrition, and stress

• Ingredients for optimal function
  • Food, nutrients, hormones, environment (air, light, water), movement, rhythm, love, meaning
To Solve the Gap Problem Develop an Integrative Cardiology Program
Fit in Your GENES
Integrative Heart Health Solution

• Lifestyle
  - Exercise
  - Stress Reduction

• Body Composition
  - Weight Loss
  - Hormonal Balance

• Diet
  - Nutraceuticals
  - Supplements
  - Essential Oils

• Environment
  - Exposure Control
  - Detoxification

Genes

Body Chemistry

Nutrients

Toxins

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A Patient-Centered Approach

- Evaluate events sequentially (ATMs)
- Determine imbalances
- Focus on the matrix
- Reverse root causes (inflammation, oxidation)
- Treat with nutritional, lifestyle, and supplement approaches
3 Phases of FIYG Program

I
• Genetic, biometric, metabolic, nutritional and environmental assessments
• Vascular and cardiac testing
• 1-7 days

II
• Detoxification, nutritional program
• Foundational nutraceutical regime
• Exercise program
• 30 days

III
• Condition-specific supplements
• Bioidentical hormones (only if needed)
• Advance exercise and nutrition program
• Re-assessment in 3 months
CASE STUDY
METABOLIC REMODELING
56 y/o woman with exertional dyspnea for several years

Overweight, hypertension, dyslipidemia, chronic chest pain, depression, arthritis, fatty liver (abnl LFTs, sono), metabolic syndrome, elevated hsCRP and pro-insulin

Multiple cardiac and pulmonary tests over several years, no structural or ischemic heart disease, no pulmonary diagnosis ($$$)

Several ER visits ($$$)

Poor exercise tolerance and poor diet

Good medication compliance (Metoprolol, Diovan HCT, Celexa, Alprazolam, Seroquel, NSAIDS)
<table>
<thead>
<tr>
<th>BIOMETRICS</th>
<th>JANUARY 2015</th>
<th>MARCH 10th</th>
<th>MARCH 25th</th>
<th>MAY 2015</th>
<th>Percent Change</th>
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</thead>
<tbody>
<tr>
<td>WEIGHT (lbs)</td>
<td>257</td>
<td>260</td>
<td>248</td>
<td>242</td>
<td>-5.6%</td>
</tr>
<tr>
<td>BMI</td>
<td>45.5</td>
<td>46.1</td>
<td>43.9</td>
<td>42.9</td>
<td>-5.7%</td>
</tr>
<tr>
<td>HEIGHT (in)</td>
<td>63</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LAB MARKERS (fasting)</th>
<th>JANUARY 2015</th>
<th>MARCH 2015</th>
<th>MAY 2015</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>GLUCOSE (mg/dL)</td>
<td>131 H</td>
<td>129 H</td>
<td>123 H</td>
<td>-6.1%</td>
</tr>
<tr>
<td>HDL(mg/dL)</td>
<td>55</td>
<td>57</td>
<td>61</td>
<td>+1.8%</td>
</tr>
<tr>
<td>CHOLESTEROL (mg/dL)</td>
<td>226 H</td>
<td>213 H</td>
<td></td>
<td>-5.7%</td>
</tr>
<tr>
<td>LDL (mg/dL)</td>
<td>141 H</td>
<td>105</td>
<td>102 H</td>
<td>-27.6%</td>
</tr>
<tr>
<td>HBA1C (%)</td>
<td>7.1 H</td>
<td>NA</td>
<td>6.3 H</td>
<td>-0.8%</td>
</tr>
<tr>
<td>TRIGLYCERIDES (mg/dL)</td>
<td>100</td>
<td>70</td>
<td>78</td>
<td>-22%</td>
</tr>
</tbody>
</table>

Baseline and On FIYG Program
Case Discussion

Symptom Improvement:
• Dyspnea resolved
• Chest pain resolved
• Exercise tolerance improved to 1 mile per day

Weight Loss:
• Modest, comparable to pharmacological weight loss drugs
• Unlike drugs, no side-effects, part of sustainable lifestyle modification

Reversal of Diabetes and Dyslipidemia:
• Metabolic remodeling (inflammation and oxidative stress reduction) produced significant decreases in fasting glucose, HgA1C, and drastically improved cholesterol profile AND THID IS JUST A BEGINNING!
ASCVD Risk Modification

10 year ASCVD risk:
Baseline 6.6%-moderate intensity statin recommended
FLYG program at 4 months 3.0%-ASCVD risk <5%, not in statin-benefit group

http://tools.cardiosource.org/ASCVD-Risk-Estimator/: SBP 130 mmHg, non-smoker, white, woman
Metabolic Remodeling Case Conclusion

FIYG Program resulted in sustained lifestyle modification through application of genomic, environmental, nutritional, exercise and supplements approaches. As a result, patient experienced weight loss, and reversal of metabolic cardiac disease risk factors, such as diabetes and dyslipidemia. Her ASCVD short-term risk was decreased in half in 4 months on the program. She experienced dramatic improvement in symptoms, and regained wellness and vitality.

How Many Patients Like HER Do You See in Your Practice?
Conclusion

• Functional Medicine provides a powerful framework to address root causes of chronic diseases
• Cardiac patients or those with risk factors benefit from functional medicine
• Your practice needs proven and evidence-based protocols and strategic and cohesive team to deliver the new practice paradigm to patients
Destination: HEALTH

Decline in generational health

Cost per year $3 trillion

Epidemic of chronic diseases

Food as Medicine

80% disease prevention