

# Providing Complimentary and Alternative Medicine in Primary Care

Friday, June 17, 2011  
Madrid I ~ 12:40pm - 1:25pm

Aunna Herbst, MD  
1605 Kayla Street  
Grove, OK 74344  
Tel: 918-786-7878  
Fax: 918-786-7884  
Email: aunna Herbst@yahoo.com

## Objectives

- What it means for effective health care
- Demonstrate how treatment can be applied
- Some things as technicians we need to know

## Faculty Disclaimer

The OAFP has selected all faculty appearing in this program. According to OAFP policy, all relationships between speakers and proprietary entities will be disclosed.

*The speakers returned a disclosure indicating that they or an immediate family member **does not have** a significant financial interest in or affiliation with a commercial supporter of this educational activity and/or with the manufacturer(s) of commercial products and/or providers of any commercial services discussed in this educational presentation/material.*

*They listed (if applicable) commercial enterprises and the nature of relationship with each, e.g. research grants, stock or bond holdings, speakers' bureau, employment, ownership or partnership, consulting fees, other remunerations (honoraria, travel expenses):*

### Corporate Organizations

None

### Financial Interests/Affiliations

The content of this/these material(s)/presentation(s) in this CME activity will include discussion of unapproved or investigational uses of products or devices as indicated below:

- Research to Support Herbal and Supplemental treatments

**Holistic Medicine  
in Primary Care**  
Aunna Herbst, DO, ND

---

---

---

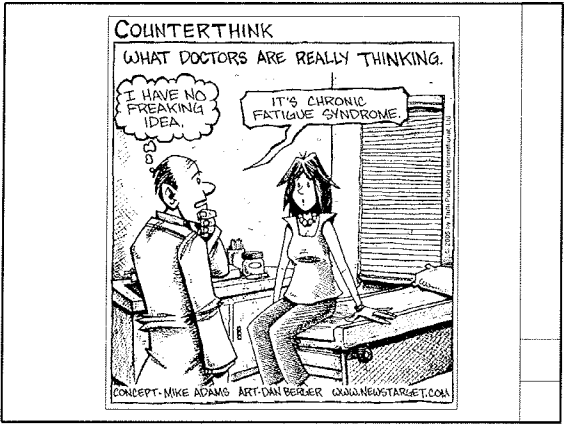
---

---

---

---

---



---

---

---

---

---

---

---

---

**Holistic Medicine  
in Primary Care**  
Aunna Herbst, DO, ND

---

---

---

---

---

---

---

---

**Goals and Objectives**

- 1) Definitions
- 2) Introduce idea for a new approach to our patients
- 3) Model
- 4) Case studies

---

---

---

---

---


---

---

---

**Definitions:**

- **Holistic medicine**- A practice of treating sx's of illness as well as looking for underlying cause of illness. Approaches includes herbal, homeopathy, Natropathy, TCM, Ayurvedic, chiropractic, massage.



---

---

---

---

---

---

---

---

**Definitions (continued)**

**Functional medicine**- "Emerging field of medicine grounded in the functional application of basic sciences."

"Seeks to identify and address the root cause of disease and views the body as an integrated system"

<http://en.wikipedia.org>

---

---

---

---

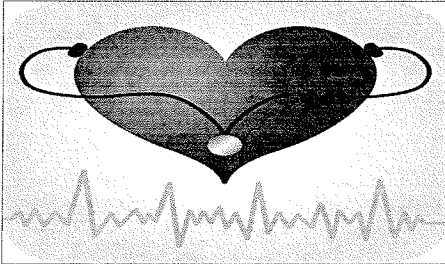
---

---

---

---

Can we explore the underlying etiology and mechanisms -that led to the diagnosis...?



---

---

---

---

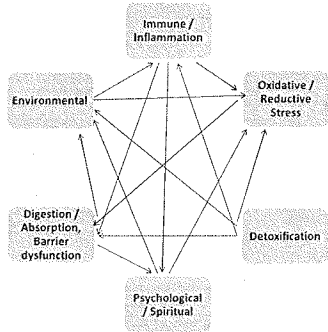
---

---

---

---

### Functional Medicine Model



---

---

---

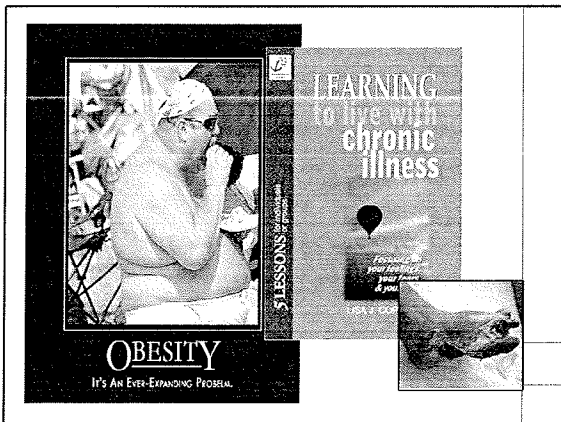
---

---

---

---

---



---

---

---

---

---

---

---

---



### Headaches, Fibromyalgia and Depression/Anxiety, Hot

#### Flashes

- Fatigue- extreme
- Perfumes, smoke and strong cleaners bother her, getting worse
- IBS – “but no big deal” “mostly constipated”
- Yeast infections frequently
- OCP’s made HA worse
- Also worried about this “rosacea”
- Witnessed abuse as child
- “Tried everything”



---

---

---

---

---

---

---

---

### Diet/Lifestyle

- Doesn't like vegetables
- No time for fruit
- Fast food or “out to eat” at night
- Doesn't like fish
- “Meat and potatoes”
- Multivitamin – “if I remember”
- Take Midrin migraine, Esgic daily, Xanax to sleep
- No exercise
- Walk sometimes
- Job is very demanding
- Divorced 2 yrs ago (very stressful)
- Doesn't sleep well – “can't turn my mind off”

---

---

---

---

---

---

---

---

### Lab Work Up/Consults

- CPK (feb 2010)- 253
- CMP, CBC nml
- TSH- nml
- EKG – neg
- MRI, Xray – neg
- ANA – neg
- Gyn – offered HRT – tried but made her migraines worse
- ENT- negative, no “allergies”, no sinusitis
- Neuro – triptans, neuro-epilectics, antidepressants

---

---

---

---

---

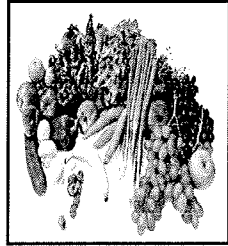
---

---

---

### My *initial* Recommendations [Aug 2010]

- Dietary – remove inflammatory foods
- Medical food BID
- DHA/EPA
- Wean off Esgic, Xanax
- Recommend yoga, Deep breathing, chiro (u/s, tens) and massage



---

---

---

---

---

---

---

---

### Follow up: (3 weeks)

- Reports some improvement in headache severity – still daily. Insomnia is still there but feels like she wants to stop Xanax completely
- Reviewed expanded questionnaire - ?metabolizer P450 problems, IGG4 sensitivities?, SNPs? Estrogen conversion difficulties (mom and sister with hormonal migraines)
- Neuro f/u apt soon

---

---

---

---

---

---

---

---

### Follow up: (5 weeks)

- CPK 173, EOS 16%
- Doing better – off Xanax, Esgic
- Headaches 1-2 per week, no migraines
- Hot flashes severe

---

---

---

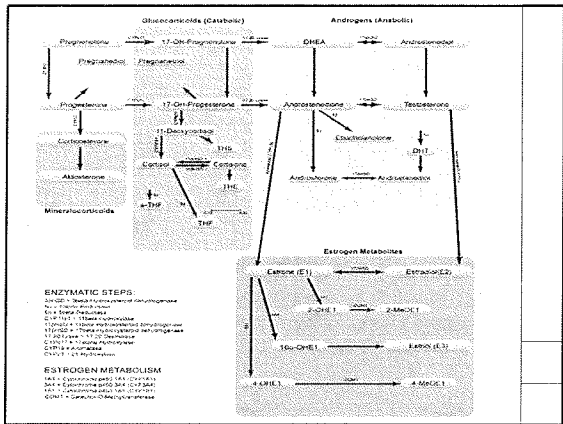
---

---

---

---

---




---

---

---

---

---

---

---

---

**Phone calls - checking in...**

- More good days than bad – less headaches
- Tried massage and chiro regular tx of Tens unit and ultrasound therapy
- Yoga 3 x's per week

---

---

---

---

---

---

---

---

**Hormone panel- (Dec 2010)**

- DHEA < dl, pregn low
- 2-OHE1: 102.2 (5.1-46.6)
- 4-OHE1: 12.3 (<5.3)
- 4-MeOE1 : < dl (>1.9)
- 2-MeOH1: 6.6 (low)
- Testosterone < dl
- DHEA < dl

---

---

---

---

---

---

---

---

## 9 months ...F/U

- No more headaches – occasionally a “twinge of one”, sleeping great. Muscle aches are good – as long as she eats well and juices. NO sinus congestion – no sinus infections this spring.
- Hot flashes are almost non existent.

---

---

---

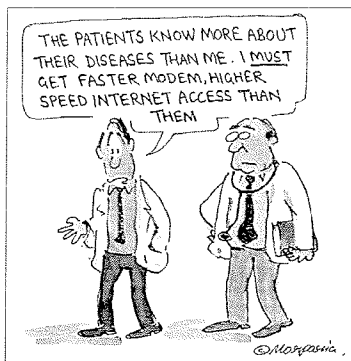
---

---

---

---

---



---

---

---

---

---

---

---

---

## Psoriasis, DM, HTN, obesity

Severe psoriasis LE, hands, nails, psoriatic arthritis...

PMH: Dx'd w/ DM June 2010

HgA1C 8.2%, TG 208, HDL 30, FSBS 238

1<sup>st</sup> visit w/ me: Sept 2010 – “I don’t want to go on insulin”, “my fingers really hurt, tired all the time, liver enzymes are high, can’t tolerate statin – achey, and labs...” brought last labs. “Seems like pain worse around my period.”

---

---

---

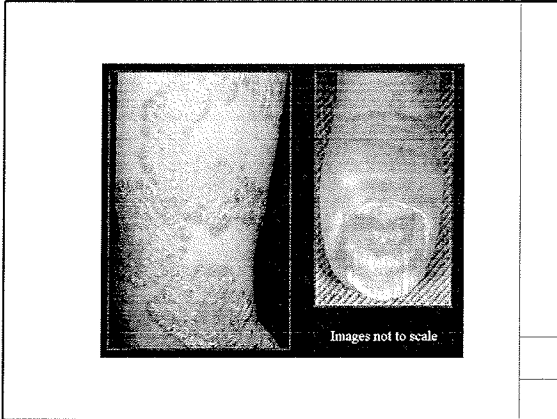
---

---

---

---

---



---

---

---

---

---

---

---

---

### Recommendations:

1. Vitamin D3 \_ 10K IU/day X8 weeks
2. Omega 3 EFA/DHA 3000mg/day +ALA/GLA (primrose oil, borage etc.) 1K/d, Probiotics 2 po q day
3. Diet – Discussed her current daily food intake, advised her to log her food every day and rtc with log, also pay close attention to foods and affects on BS. Check 2 hours after having meal – if curious. NO refined sugar, no simple carbs (bread, pasta, pastries etc)...

1. J Clin Pharm Ther. 1996 Jun;21(3):243-8. Vitamin D analogs and psoriasis. Stewart DG, Leach MH.

2. J Dermatol. 2003 Jun;30(5):429-37. Vitamin D and the skin. Kira M, Kobayashi T, Yoshikawa K. Source Department of Dermatology, Course of Molecular Medicine, Graduate School of Medicine, Osaka University, Suita, Japan

---

---

---

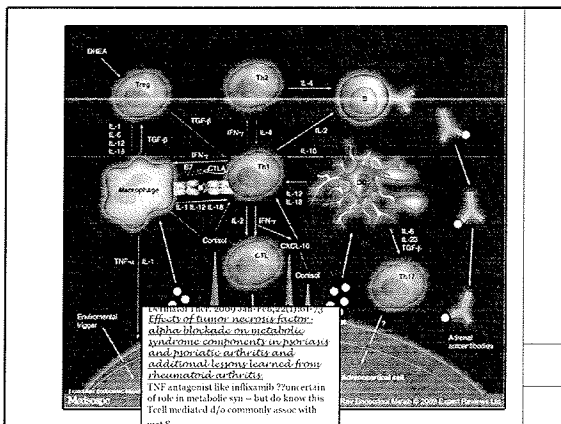
---

---

---

---

---



---

---

---

---

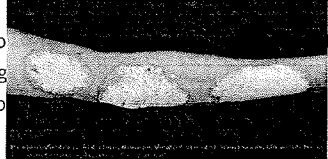
---

---

---

---

## Psoriasis and EPA/DHA



- 2 do
- 1 sig
- 1 no

**BUT...**

- 3 open studies using 10-18 g/d x 6-8 wk all with improvements

---

---

---

---

---

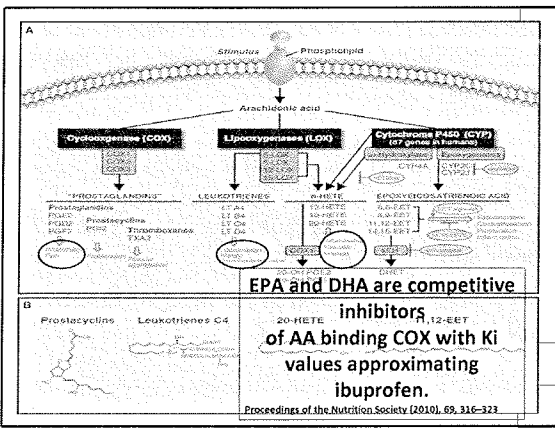
---

---

---

---

---




---

---

---

---

---

---

---

---

---

---

- **Background:** Vitamin-D deficiency and vitamin-D receptor genotype (VDR) are risk factors for several disorders with inflammatory components, including coronary heart disease (CHD) and diabetes, though the mechanisms involved are unclear.
- **Aim:** To examine the hypothesis that vitamin D status modulates the matrix metalloproteinase (MMP) system in a population with a high prevalence of vitamin D deficiency, a situation affecting susceptibility to CHD and diabetes.
- **Design:** Prospective cross-sectional, interventional and embedded studies.
- **Methods:** Circulating MMP2,9, the inhibitor TIMP-1 and C-reactive protein (CRP) were measured during studies of vitamin D deficiency as a risk factor for type 2 diabetes and CHD in 171 healthy British Bangladeshi adults, free of known diabetes or major illness. Vitamin D status, VDR genotype, body-build, blood pressure, lipid and insulin profiles, glucose tolerance, fibrinogen, PAI-1, folate and homocysteine were measured. Vitamin-D-deficient subjects were re-assessed after 1 year's supplementation. MMP, TIMP-1 and CRP levels were measured in 41 subjects halfway through 5-year follow-up. Independent determinants of circulating concentrations of MMP2,9 and CRP were assessed by multiple regression analysis.
- **Results:** Vitamin D status was the sole determinant of circulating MMP9 (inversely) and an independent determinant of CRP (inversely). Determinants of TIMP-1 were MMP9, systolic blood-pressure (directly) and VDR genotype (TaqI). Significant reductions in MMP9 (-68%), TIMP-1 (-38%) and CRP (-23%) concentrations followed vitamin D supplementation.
- **Discussion:** Vitamin-D insufficiency is associated with increased circulating MMP2,9 and CRP, correctable by supplementation. This finding provides a possible mechanism for tissue damage in chronic inflammatory conditions, including CHD and diabetes.

## VITAMIN D

Circulating MMP9, vitamin D and variation in the TIMP-1 response with VDR genotype: mechanisms for inflammatory damage in chronic disorders? QJ MED 2002 95:778-796

---

---

---

---

---

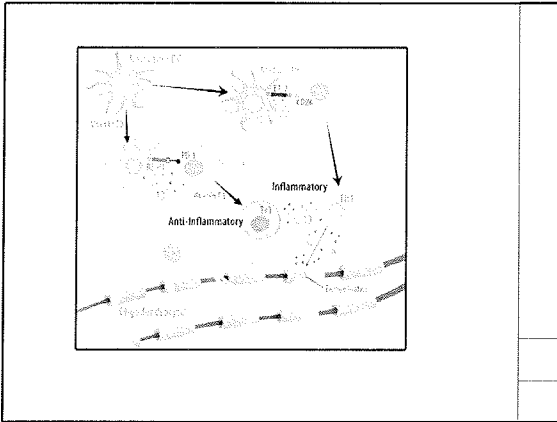
---

---

---

---

---




---

---

---

---

---

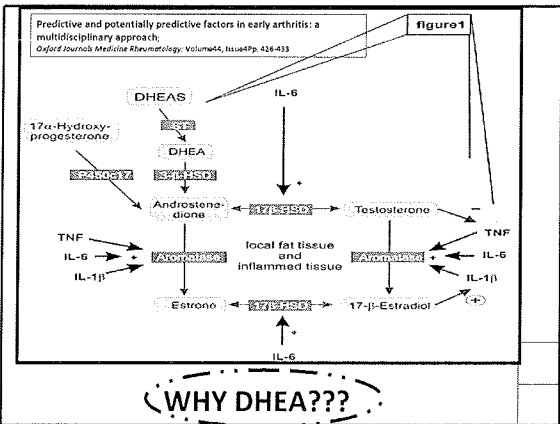
---

---

---

---

---




---

---

---

---

---

---

---

---

---

---

**J Endocrinol Invest. 2002;25(10 Suppl):19-23.**  
**Hypothalamic-pituitary-adrenal axis impairment in the pathogenesis of rheumatoid arthritis and polymyalgia rheumatica.**  
 Cutolo M, Foti D, Di Benedetto A, et al. *J Steroid Biochem Mol Biol.* 2010 Jan 12; 118(2):287-301. doi: 10.1016/j.sbb.2009.12.001. Epub 2010 Jan 12.

**Dehydroepiandrosterone (DHEA) and its sulfate (DHEAS) are immunomodulatory and anti-inflammatory agents. Their levels are decreased in patients with rheumatoid arthritis (RA) and polymyalgia rheumatica (PMR). This decrease is associated with impaired hypothalamic-pituitary-adrenal (HPA) axis function, as evidenced by a blunted response to the corticotropin-releasing hormone (CRH) test. The HPA axis impairment is characterized by a blunted response to CRH, leading to decreased secretion of adrenocorticotropic hormone (ACTH) and cortisol. This, in turn, results in lower levels of DHEA and DHEAS. The HPA axis impairment is also associated with increased levels of pro-inflammatory cytokines (TNF, IL-6, IL-1β) and decreased levels of anti-inflammatory cytokines (IL-10, IL-13). The HPA axis impairment is a key feature of RA and PMR, and it is thought to contribute to the pathogenesis of these diseases. Treatment with glucocorticoids can improve HPA axis function and increase levels of DHEA and DHEAS. This suggests that HPA axis impairment is a reversible condition, and that restoring HPA axis function may be a potential therapeutic target in RA and PMR.**

---

---

---

---

---

---

---

---

---

---

**“Dietary Probiotic Supplementation Enhances NK cell activity in the elderly: an investigation of age related immunological changes”**

“Many elderly subjects are at increased risk of infectious and noninfectious diseases due to an age-related decline in lymphoid cell activity (immunosenescence). Noninvasive means of enhancing cellular immunity are therefore desirable in the elderly”

“Supplementation with HN001 (*Lactobacillus rhamnosus*) or HN019 (*Bifidobacterium lactis*) increased tumoricidal activity by an average of 101 and 62%, respectively; these increases were significantly correlated with age, with subjects older than 70 years experiencing significantly Greater improvement than those under 70 years ”

J Clin Immunol, 2001, Vol 21(4): 264-271

---

---

---

---

---

---

---

---

**Recommendations (con't)**

4. Exercise – start low – 5 mins up to 40 mins daily
5. Multivitamin medical food for diabetics
6. Close follow up

---

---

---

---

---

---

---

---

- Oct 2010– Feel better, BG fasting 130-140's, Psoriasis on LE better, fingertip is sore, very painful. 9# weight loss
- Nov 2010 – Better. Exercising well. Fingers hurt less (7/10-3/10) Feeling great. Sleeping better, c/o some fatigue – “feel like should be better”. 15# weight loss
- Jan 2011- gained 3# after holidays. Psoriasis is gone – pink new skin on LE. Fingers improving. Very excited. Liver enzymes *nml*, but noted TG still 206, vit D rechecked 49
- April 2011- doing well. Fasting BG 120s, HgA1C 7.2% CMP hepatic enz *nml*, tolerating fimbrate, TG101. Nail regrowth both hands. NO pain, no psoriasis plaques – total weight loss 26#

Follow Up - October, Nov, January and April

---

---

---

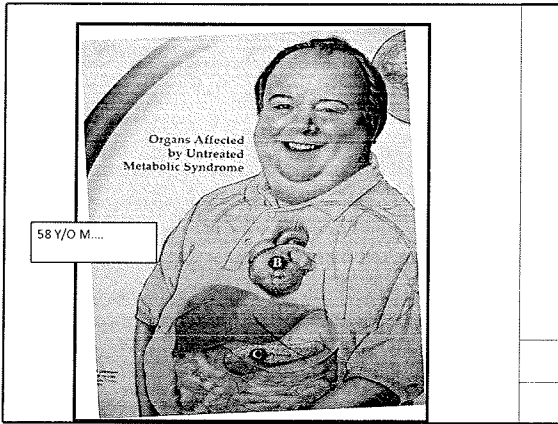
---

---

---

---

---



---

---

---

---

---

---

---

---

### Metabolic Syndrome

- HPI: 58 y/o truck driver, c/o shortness of breath with activity, chest pain, headache and fatigue.
- PMH: heartburn – reflux, constipation
- PSH: none
- SHx : married, tobacco 1-2 ppd/40 yrs, no ETOH, no ID
- Allergies: none
- Meds: TUMS ( 4-6 per day), ASA (about 4/day)
- PE: obese, BMI 33, waist circumference 44 inches (nml <40), HR 92, after sitting 80, wt 226, ht 5'10"

Chest: barreled, +wheezes  
CV: RRR, +m LL sternal border, +brui on L carotid

Labs: CMP, Thyroid, CBC neg; treadmill stress: ST depression inf, later, ant leads; BP increase 222/112; doppler carotid-60% left cc; ECHO- LVH, some regurge. CXR- hyper expanded; EBT-CAC score 485 (>99<sup>th</sup>%)

---

---

---

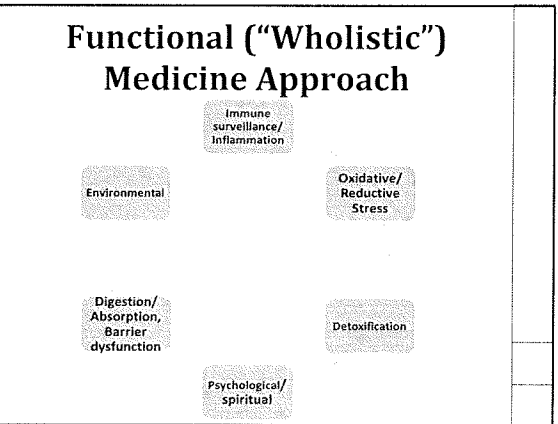
---

---

---

---

---



---

---

---

---

---

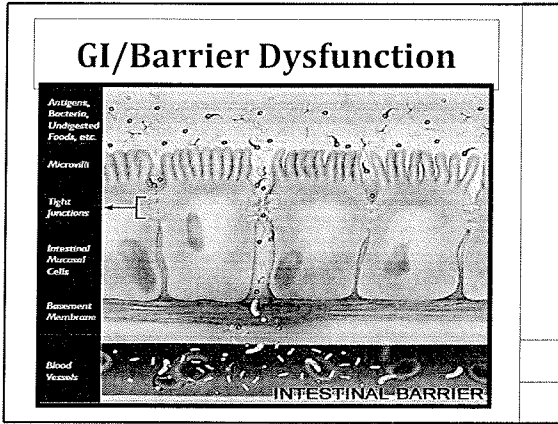
---

---

---







---

---

---

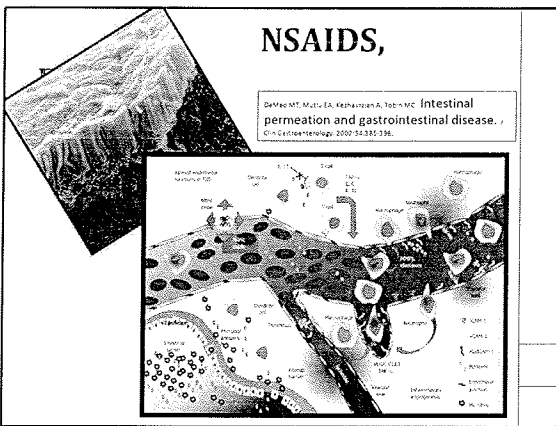
---

---

---

---

---



---

---

---

---

---

---

---

---

### Recommendations (initial)

- 1. Anti inflammatory diet – HIGH vegetables, fruits, lean meats, NO red meat, water, nuts, seeds berries, legumes
- 2. Exercise – weight reduction
- 3. Quit Smoking!!!
- 4. Yoga/meditation/prayer
- 5. Omega 3s 4000mg/d
- 6. MV/Mineral + CoQ10 100mg BID, NAC 600mg bid, Metanx BID
- 7. Probiotics 2 billion CFU BID
- 8. Green tea instead of coffee
- 9. Statin, ACE-I

---

---

---

---

---

---

---

---

### Follow Up (2mths- 6mths)

	2 MONTHS	4 MONTHS	6 MONTHS
BLOOD PRESSURE	179/102 176/98 180/100	120/76 128/83 117/76	117/72 116/70
HOMOCYSTEINE	24	16	7.7
WEIGHT	225	215	182
HGA1C	6.6%	--	4.7%
HEART RATE	93-80	74	66

---

---

---

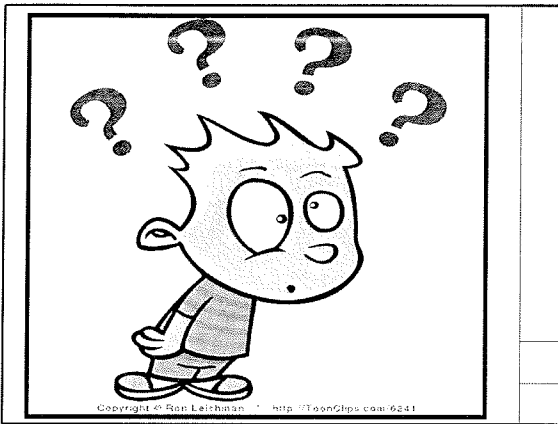
---

---

---

---

---



---

---

---

---

---

---

---

---

• **Primum Non Nocere**  
(First, Do no harm)

• **Vis Medicatrix Naturae**  
(Utilize the healing power of nature)



**THANK YOU!!**

---

---

---

---

---

---

---

---