# Suboptimal Nutrient Status: impact on blood pressure, metabolic syndrome and the aging population

This nutrition course includes an in-depth discussion of the following topics:

#### I. Determining patient nutrient status

- a. Physical exam
- b. Serum testing
- c. Organic acid testing

## II. Metabolic Syndrome (MetS)

- a. Definition of MetS
  - i. Sunita et al. Metabolic syndrome, diet and exercise. Best Practice and Research Clinical Ob and Gyn. 2016
  - ii. Han T. Lean M. A clinical perspective of obesity, metabolic syndrome and cardiovascular disease. J Med CV Disease. 2016.
  - iii. 5 Clinical findings (<a href="https://www.nhlbi.nih.gov/health/health-topics/topics/ms/signs">https://www.nhlbi.nih.gov/health/health-topics/topics/ms/signs</a>)
  - iv. ABCD's of Met S (Anthropometric, Biomarkers, Clinical, Diet)
  - v. BMI required as part of initial intake
  - vi. Underlying causes of MetS
  - vii. Research updates
  - viii. Strategies for lifestyle changes to reach patient healthcare goals

#### III. Considerations for the aging patient

- a. Gupta C. Prakash D. Nutraceuticals for geriatrics. J Traditional Comp Med. Jan 2015.
  - i. Aging are at increased risk suboptimal nutritional status
  - ii. Hormesis
  - iii. Genetic and family history impact on aging health
  - iv. Lifestyle and exercise impact on aging health
  - v. Diet and nutrition impact on aging health
  - vi. Specific suboptimal nutrients
  - vii. Nutrient dense foods: lifestyle alternatives
  - viii. Strategies to improve nutrient status in aging patient

# IV. Impact of suboptimal riboflavin on blood pressure

- a. Wilson et al. Blood Pressure in Treated Hypertensive Individuals with the MTHFR 677TT Genotype is responsive to Intervention with Riboflavin. Hypertension. March 2013
- b. Shi et al. Riboflavin intake and 5-year blood pressure change in Chinese adults: interaction with hypertensive medication. Food and Nutrition Bulletin. 2013.

- c. MacCartney et al. Dietary contributors to hypertension in adults reviewed. 2015.
- d. Discuss absorption and metabolism of riboflavin
- e. Discuss food sources
- f. Discuss groups at risk for suboptimal levels
- g. Discuss clinical signs of suboptimal levels

#### V. Clinical pearls: putting it all together and into practice

- a. Clinical signs of suboptimal nutrient levels
- b. Textbook of Functional Medicine
- c. Escott-Stump, Nutrition and Diet-Related Diagnosis
- d. Gaby, Nutritional Medicine
  - i. Understanding a healthy clinical analysis
  - ii. Nails
  - iii. Skin
  - iv. Hair
  - v. Eyes
  - vi. Nose
  - vii. Tongue
  - viii. Case examples

# Georgia Nab, D.C., M.S., C.N.S., C.W.W.S.

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Chiropractor with over 20 years of field chiropractic experience including extensive patient education on living a wellness lifestyle through chiropractic, nutrition, and exercise.

#### **Experience:**

Wellness Chiropractor, Speaker, Author Standard Process, Palmyra, WI February 2012 to Current

- Wellness chiropractor for all employees and spouses
- Nutritional counseling for all employees and spouses
- Responsible for employee educational programs:
  - Monthly Lunch and Learn programs
  - Quarterly educational presentations
- Presenter of educational nutrition and diagnosis for Health Care Professionals and Students
- Author 1 Degree of Change (2014)

Adjunct Professor for the University of Western States University of Western States, Portland, OR May 2016 to Current

- Presenter of CEU courses
- Subject matter expert

Health Care Professional Monitor Affiliated Monitors, Inc. February 2011 to Current

 Provide independent, neutral monitoring to oversee the implementation of consent orders, settlement agreements, court orders or other dispositions in enforcement actions brought by government agencies against regulated health care professionals. This is on an as needed basis.

Staff Chiropractor Cornerstone Family Wellness, Overland Park, KS July 2010 to April 2011

- Responsible for the clinical management of chiropractic patients.
- Oversee daily management of practice.
- Internal talks and patient education.

Chiropractor/Owner A Wellness Movement, Wichita, KS June, 1999 to September, 2010

- Diagnosed and treated musculoskeletal conditions of spinal column and extremities to prevent disease and correct abnormalities of body.
- Examined patient in order to determine nature and extent of disorder.
- Performed physical, neurologic and orthopedic examinations, laboratory tests and other procedures.
- Used CRX digital x-ray machine (same unit used at Cleveland Chiropractic College).
- Manipulated spinal column and other extremities to adjust, align and correct abnormalities caused by neurologic and kinetic articular dysfunction.
- Nutritional counseling centered on Standard Process and Designs for Health nutrition.
- Lab testing included LabCorp, Metametrix, DiagnosTechs and Alcat food allergy testing.
- Utilized supplementary measures, such as exercise, rest, water, light, heat and nutritional therapy.
- Monthly outside educational talks to groups from 10 -100 people.
- Conducted on-site daily exercise programs for patients.
- Conducted several successful weight loss challenges based on BMI, increased muscle mass, etc. (based on TANITA readings).
- Additional training in corrective spinal care and scoliosis correction based on Pettibon and CLEAR Institute training. This resulted in improved patient health, compliance and quality of life.
- Internal patient education on living healthy lifestyle with monthly internal educational talks at my office including topics such as raw food, burst training, detoxification, having a non-toxic home, raising healthy children, etc.
- Knowledgeable in all areas of running a successful and profitable chiropractic, nutrition and wellness business.

Staff Chiropractor Ashmont Chiropractic Center, Boston, MA October 1997 to April 1999

- Responsible for the clinical management of chiropractic patients.
- Oversee daily management of chiropractic practice.

Staff Chiropractor Orr-Radcliffe Chiropractic, Colorado Springs, CO January 1995 to June 1997

- Responsible for all aspects of patient care and management.
- Oversee daily management of chiropractic practice.

#### **Education:**

Certified Nutrition Specialist (CNS)

• February 2016

Masters of Human Nutrition and Functional Medicine

University of Western States, March 2015

Certified Worksite Wellness Specialist (C.W.W.S.), June 2013

Applied Clinical Nutrition

Texas Chiropractic College, September 2007

**Doctor of Chiropractic Degree** 

Cleveland Chiropractic College-Kansas City, September 1994

Certification in Acupuncture 100 hours

Certification in Applied Kinesiology 100 hours

Proficient in Pettibon/CLEAR-Institute Scoliosis Correction

#### **Professional Associations:**

American Chiropractic Association (ACA) ACA Council on Nutrition Chiropractic Society of Wisconsin American Society for Nutrition Certified Nutrition Specialist

#### Publications/Books

Chiropractic Economics, published July 2016
ACA News, published May 2016
Footlevelers, published October 2015
ACA News, published May 2015
1 Degree of Change, published January 2014
Chiropractic Economics August 2013 "Nutritional Diagnostic Tools", Volume 59, Issue 13

# **Standard Process Presentations (Internal and External)**

NUHS Lunch and Learns, offered quarterly on various topics, Lombard IL, 2016
Northwestern Health Sciences – Homecoming, Bloomberg MN, February 2016
Northwestern Health Sciences - Purification, Bloomberg MN, October 2015
Chiropractic University Homecoming, Overland Park KS, October 2015
Functional Medicine Approach to Adrenal Health, Webinar, September 2015Cleveland
NYCC Homecoming, Seneca Falls NY, September 2015
NUHS Homecoming, Lombard IL, June 2015
Spanish Black Radish, Webinar, April 2015
Southern California University Extravaganza, Irvine CA, Oct 2014
University of Western States Homecoming, Portland OR, Oct 2014
Better Together, ACA Council on Nutrition, Denver CO, May 2014
Healthy Mind, Body and Mood Conference

- Dallas, TX, March 2014
- Irving, CA, April 2014

New York, NY, April 2014

Winter Getaway Seminar, San Juan Puerto Rico, February 2014

Whole Food Support, Quarterly presentation, August 2013

Digestive Health, Lunch and Learn, August 2013

Visual Signs of Nutritional Insufficiencies, Lunch and Learn, Numerous occasions

Corporate Wellness Model, Lunch and Learn, June 2013

Bone Health, Lunch and Learn, 2013

Pancreas Health, Lunch and Learn, April 2013

At the heart of it all: Nutritional Strategies for Cardiovascular Health, Webinar, April 2013

Liver Health, Lunch and Learn, March 2013

Purification, Lunch and Learn, January 2013

Gut Strength, Quarterly presentation, November 2012