Check for new resources at <a href="https://www.InflammationMastery.com/download-video-podcasts-pdf">https://www.InflammationMastery.com/download-video-podcasts-pdf</a>

Please note that videos and articles are constantly being added to these resource pages; use this listing as a guide while periodically checking for updates and new information.

<u>OVERVIEW OF SOURCES (MOSTLY VIDEOS)</u>: Several different video channels and means to access videos, transcripts and articles (unique but with some overlap)

- 1. https://vimeo.com/dryasquez main video archive
- 2. https://www.ichnfm.org/public includes videos and PDF articles
- 3. <a href="https://vimeo.com/ichnfm">https://vimeo.com/ichnfm</a> includes larger presentations and documentaries <a href="https://vimeo.com/ichnfm/vod\_pages">https://vimeo.com/ichnfm/vod\_pages</a>
- 4. http://www.youtube.com/c/DrAlexVasquezICHNFM
- 5. https://www.brighteon.com/channel/biomedicaleducation
- 6. <a href="https://www.bitchute.com/channel/medicaleducation">https://www.bitchute.com/channel/medicaleducation</a>

#### PDF ARTICLE ARCHIVE LOCATIONS

- 1. <a href="https://ichnfm.academia.edu/AlexVasquez">https://ichnfm.academia.edu/AlexVasquez</a>
- 2. https://www.researchgate.net/profile/Alex Vasquez2
- 3. https://www.ichnfm.org/public
- 4. https://www.inflammationmastery.com/reprints

#### **UNIQUE** VIDEOS AND ARTICLES

Pharma Echo Chamber, Sociopolitical Matrix, and Power Vortex: A Diagram-Centric Conceptualization. Int J Hum Nutr Funct Med 2019

• PDF download: https://www.academia.edu/38476348/

#### Scientific Writing and Journal Editing: Tips #1

- VIDEO: https://vimeo.com/318326979
- PDF: https://www.academia.edu/38426918
- VIDEO: https://www.facebook.com/InflammationMastery/videos/2017718101674712/

#### Compilation 2019 Vitamin D articles and letters 2004-2019 by Dr Alex Vasquez

- PDF download: https://www.academia.edu/40429791
- 2017 article: https://www.ichnfm.org/d
- 2017 blog: https://www.ichnfm.org/d3

#### THEMED VIDEOS AND ARTICLES: immunity, Va€\$ines

2019 Vitamins Against Viruses: Implausible Pro-Vaccine Publications Contrasted Against Ignored Public Health Campaigns and Double-Blind Placebo-Controlled Clinical Trials. *Journal of Orthomolecular Medicine* 

- PDF download: https://www.academia.edu/39406350
- Web version: https://isom.ca/article/vitamins-against-viruses
- Additional source: https://www.ichnfm.org/public

Check for new resources at <a href="https://www.InflammationMastery.com/download-video-podcasts-pdf">https://www.InflammationMastery.com/download-video-podcasts-pdf</a>

#### EXCERPT Politics of Antiviral Nutrition (Cysteine, Glutamine): Why Nutrition is not taught in Medical School

- Download: https://vimeo.com/drvasquez/download/373497465/15e5a6ce2b
- Video: <a href="https://vimeo.com/373497465">https://vimeo.com/373497465</a>

#### EXCERPT Roles of Cysteine (NAC, acetylcysteine, whey) in Immune Defense against Viral Infection

- Download: <a href="https://vimeo.com/drvasquez/download/374254752/d53da6229b">https://vimeo.com/drvasquez/download/374254752/d53da6229b</a>
- Video: https://vimeo.com/374254752

#### EXCERPT Antiviral Nutrition Science: Dose of NAC / Acetyl-cysteine in HIV-AIDS Infection

- Download: https://vimeo.com/drvasquez/download/369165464/dadf0241e9
- Video: https://vimeo.com/369165464

#### Medical Education, Drug Safety Education...or...Drug Sales Training

• DOWNLOAD: https://vimeo.com/drvasquez/download/357243119/b5a29912c7

#### Vitamin D against HPV (human papilloma virus): Actionable Information and Paradigm Shift

- Download: https://vimeo.com/drvasquez/download/251566879/4606da9fe9
- Video: https://vimeo.com/251566879

Download and Share Research Review (updated 20mar2019): Acute encephalopathy followed by permanent brain injury or death

- VIDEO: https://vimeo.com/322315232
- DOWNLOAD AND SHARE: https://vimeo.com/drvasquez/download/322315232/2d5d596d3b

#### THEMED VIDEOS AND ARTICLES: corruption of science, fish oil

Bad Science in Medical Nutrition: Politics of Fish Oil

- VIDEO: https://vimeo.com/314997927
- DOWNLOAD: https://vimeo.com/drvasquez/download/314997927/2e99a835bf
- PDF: https://www.academia.edu/38289348

2019 Editorial Vasquez Pizzorno. Concerns About Integrity of Scientific Research Process—Focus on Recent Negative Publications Regarding Nutrition, Multivitamins, Fish Oil and Cardiovascular Disease. Integrative Med

- PDF download: https://www.academia.edu/39907759
- Additional source: https://www.ichnfm.org/public

Fake Placebos and Red Herrings make Anti-Nutrition Headlines and Direct the Course of Healthcare and Medical Education: Critique of Effect of Vitamin D and Omega-3 Fatty Acid Supplementation on Kidney Function in Patients with Type 2 Diabetes published in JAMA 2019

- PDF download: https://www.academia.edu/41041712
- Article: <a href="https://www.inflammationmastery.com/critique-effect-vitamin-d-and-omega">https://www.inflammationmastery.com/critique-effect-vitamin-d-and-omega</a>

BRIEF Critique of "Effects of n-3 Fatty Acid Supplements in Diabetes Mellitus: ASCEND Study" N Engl J Med 2018 Aug

Check for new resources at https://www.InflammationMastery.com/download-video-podcasts-pdf

- VIDEO: https://vimeo.com/287650812
- PDF: <a href="https://www.academia.edu/37964035">https://www.academia.edu/37964035</a> Please note that this was a formal submission to the NEJM that was rejected despite its merit
- PDF: https://www.academia.edu/37329403
- DOWNLOAD: https://vimeo.com/drvasquez/download/287650812/f1b45ab894

## Critique of "Effects of n-3 Fatty Acid Supplements in Diabetes Mellitus: ASCEND Study" New England Journal of Medicine 2018 Aug

- VIDEO: https://vimeo.com/287266715
- PDF: https://www.academia.edu/37326521
- DOWNLOAD: https://vimeo.com/drvasquez/download/287266715/69e887fc7a

#### Short review of "Supplemental Vitamins and Minerals for CVD Prevention and Treatment"

- VIDEO: https://vimeo.com/273402598
- Download: https://vimeo.com/drvasquez/download/273402598/44c2c128ce
- PDF: https://www.academia.edu/36790803

#### Perpetuating Nutritional Ignorance among Doctors and Recycling Bad Science at JAMA and AMA

- VIDEO: https://vimeo.com/265987272
- DOWNLOAD: https://vimeo.com/drvasquez/download/265987272/bbcfb27773
- PDF:

https://www.academia.edu/36470484/Another\_nail\_in\_the\_coffin\_for\_JAMA\_and\_AMAs\_credibility

## Review of "Associations of Omega-3 Fatty Acid Supplement Use with Cardiovascular Disease Risks" JAMA Cardiology 2018

- VIDEO: https://vimeo.com/255648523
- PDF: https://www.academia.edu/35935996

#### **SAMPLE ARTICLES:**

- 1. <a href="https://www.academia.edu/38088930/Orthomolecular medicine catalytic creativity and the psychos ocial ecosystem">https://www.academia.edu/38088930/Orthomolecular medicine catalytic creativity and the psychos ocial ecosystem</a>. Journal of Orthomolecular Medicine 2018
- 2. <a href="https://www.academia.edu/34732937/Vasquez">https://www.academia.edu/34732937/Vasquez</a> A. Biological plausibility of the gut brain axis in au tism. Annals of the New York Academy of Sciences 2017
- 3. <a href="https://www.academia.edu/34072801/Open Correction to PLOS One and Grave Concern about the a Journal s Editorial Quality and Review Process Comment on Microbiome restoration diet improves digestion cognition and physical and emotional wellbeing. PLOS One 2017 Jun. Int J Hum Nutr Funct Med 2017
- 4. <a href="https://www.academia.edu/31412957/How to Understand Refute and Plan Studies Using Vitamin">https://www.academia.edu/31412957/How to Understand Refute and Plan Studies Using Vitamin</a>
  D final version . Int J Hum Nutr Funct Med 2017
- 5. <a href="https://www.academia.edu/29418268/Correspondence regarding Cutshall Bergstrom Kalishs Evaluat ion of a functional medicine approach to treating fatigue stress and digestive issues in women in Complement Ther Clin Pract 2016</a>

Check for new resources at <a href="https://www.InflammationMastery.com/download-video-podcasts-pdf">https://www.InflammationMastery.com/download-video-podcasts-pdf</a>

- 6. <a href="https://www.academia.edu/22766183/Neuroinflammation">https://www.academia.edu/22766183/Neuroinflammation</a> in fibromyalgia and CRPS is multifactorial

  <a href="https://www.academia.edu/22766183/Neuroinflammation">https://www.academia.edu/22766183/Neuroinflammation</a> in fibromyalgia and complex in fibromyalgia and compl
- 7. <a href="https://www.academia.edu/21878146/Ending the Exploitation of Experts Teachers and Professors Begins with Educating Them about Employment Curbing Enthusiasm to Preserve Enthusiasm. Int J Hum Nutr Funct Med 2016
- 8. <a href="https://www.academia.edu/18078062/The clinical importance of vitamin D cholecalciferol a paradi gm shift with implications for all healthcare providers. Altern Ther Health Med. 2004</a>
- 9. <a href="https://www.academia.edu/17119323/Gustafson C Vasquez A. Alex Vasquez DC ND DO FACN Mit ochondrial Dysfunction and the Emerging Mitochondrial Medicine Interview by Craig Gustafson. I ntegrative Medicine 2013</a>
- 10. <a href="https://www.academia.edu/16360218/The Microbiome Arrives to Prime Time in Primary Care Implications for the Anti-Dysbiotic Treatment of Fibromyalgia.">https://www.academia.edu/16360218/The Microbiome Arrives to Prime Time in Primary Care Implications for the Anti-Dysbiotic Treatment of Fibromyalgia.</a> Nutr Perspect 2015
- 11. <a href="https://www.academia.edu/13945385/International Journal of Human Nutrition and Functional Medicine Best of 2014">https://www.academia.edu/13945385/International Journal of Human Nutrition and Functional Medicine Best of 2014</a>
- 12. <a href="https://www.academia.edu/12870819/Vasquez">https://www.academia.edu/12870819/Vasquez</a> A. Translating Microbiome Microbiota and Dysbiosis

  Research into Clinical Practice The 20
  Year Development of a Structured Approach that Gives Actionable Form to Intellectual Concepts

  Int J Hum Nutr Funct Med 2015
- 13. <a href="https://www.academia.edu/12840976/Vasquez">https://www.academia.edu/12840976/Vasquez</a> A. Reply to role of Western diet in inflammatory autoimmune diseases by Manzel et al. In Current Allergy and Asthma Reports volume 14 issue 1 January 2014. Curr Allergy Asthma Rep 2014
- 14. <a href="https://www.academia.edu/12764110/Reducing Pain and Inflammation Naturally Part 3 Improving Overall Health While Safely and Effectively Treating Musculoskeletal Pain. Nutr Perspect 2005</a>
- 15. <a href="https://www.academia.edu/5636450/Mitochondrial Medicine Arrives to Prime Time in Clinical Care">https://www.academia.edu/5636450/Mitochondrial Medicine Arrives to Prime Time in Clinical Care Nutritional Biochemistry and Mitochondrial Hyperpermeability Leaky Mitochondria Meet Disease Pathogenesis and Clinical Interventions. Altern Ther Health Med 2014
- 16. <a href="https://www.academia.edu/3862834/Calcium">https://www.academia.edu/3862834/Calcium</a> and vitamin D in preventing fractures Data are not sufficient to show inefficacy. BMJ British Medical Journal 2005
- 17. <a href="https://www.academia.edu/3862833/Treatment">https://www.academia.edu/3862833/Treatment</a> of Hypovitaminosis D in Infants and Toddlers. Journal Clinical Endocrinology Metabolism 2008
- 18. <a href="https://www.academia.edu/3862832/Musculoskeletal disorders and iron overload disease Commen t on the American College of Rheumatology guidelines for the initial evaluation of the adult patient with acute musculoskeletal symptoms. Arthritis and Rheumatism 1996</a>

Check for new resources at <a href="https://www.InflammationMastery.com/download-video-podcasts-pdf">https://www.InflammationMastery.com/download-video-podcasts-pdf</a>

#### **OTHERS**

Antiviral Nutrition Protocol ebook, articles, video https://www.inflammationmastery.com/antiviral

- 2019 video re-introduction https://vimeo.com/357388714
- DOWNLOAD: https://vimeo.com/drvasquez/download/357388714/695f555d7c
- See also: https://www.inflammationmastery.com/antiviral
- See also series of blogs and articles:
  - 1. ARTICLE The Importance of Having and Using a Structured Approach to the Management of Viral Infections: Introduction: http://ichnfm.org/antiviral
  - 2. VIDEO One Hour of Video Tutorial on Antiviral Strategies and Immune Nutrition: http://ichnfm.org/antiviral2
  - 3. ESSAY The Vaccination Indoctrination: A Few Personal Reflections from a Physician: <a href="http://ichnfm.org/antiviral3">http://ichnfm.org/antiviral3</a>
  - 4. VIDEO Barcelona presentation 2016: Examining Immunity: <a href="http://ichnfm.org/antiviral4">http://ichnfm.org/antiviral4</a>
  - 5. PDF Unified Antiviral Strategy published by ICHNFM: <a href="https://www.ichnfm.org/antiviral5">https://www.ichnfm.org/antiviral5</a>
  - 6. This series is listed sequentially with the prefix ichnfm.org/antiviral with a number suffix

2019 BMJ.com Response to Article "Prevalence of cervical disease at age 20 after \_\_\_\_\_ with bivalent HPV \_\_\_\_\_ at age 12-13 in Scotland": public health campaigns to improve vitamin D nutriture occurred within same timeframe as HPV \_\_\_\_\_ [rapid response].

• PDF: https://www.academia.edu/39201317

Drug injury shown to cause fibromyalgia-like clinical presentation:

• VIDEO: <a href="https://vimeo.com/347925713">https://vimeo.com/347925713</a>

Fibromyalgia 2019 Epic Functional Medicine Conference Introduction:

• VIDEO: https://vimeo.com/342454661

Fibromyalgia diagnosis criteria changed to include drug injury

- VIDEO: https://vimeo.com/337090478
- DOWNLOAD: https://vimeo.com/drvasquez/download/337090478/0710547085

Fibromyalgia Functional Medicine Conference Presentation: Introduction part 1

- English: https://vimeo.com/ondemand/fibromyalgia2019
- VIDEO: https://vimeo.com/342454661
- Subtitulos español castellano: https://vimeo.com/ondemand/fibromialgia2019

Introduction to Cardiovascular Nutrition (cardionutrition #1): Ketogenic Diet and Potassium Citrate

- VIDEO: https://vimeo.com/277472451
- PDF: https://www.academia.edu/36947369

Importance of acid-base balance, serum bicarbonate, potassium citrate, urine pH

- VIDEO: https://vimeo.com/282027203
- DOWNLOAD: https://vimeo.com/drvasquez/download/282027203/d7b9b59040
- PDF: https://www.academia.edu/37138783

Check for new resources at <a href="https://www.InflammationMastery.com/download-video-podcasts-pdf">https://www.InflammationMastery.com/download-video-podcasts-pdf</a>

How to read a multivitamin and mineral label: Introductory concepts (free video download)

• VIDEO: https://vimeo.com/274281484

#### DOWNLOAD and SHARE: Under-reporting by healthcare providers

- VIDEO: https://vimeo.com/325221191 download available
- DOWNLOAD AND SHARE: https://vimeo.com/drvasquez/download/325221191/4e54ad00a4

#### DOWNLOAD and SHARE: Senator describes iatrogenic death of his daughter

- VIDEO: https://vimeo.com/325221258
- DOWNLOAD: https://vimeo.com/drvasquez/download/325221258/e0c195e7e0

#### Hyperkalemia, Laboratory Assessment of Renal Function: 2016 edit of 2012 lecture

• VIDEO: https://vimeo.com/152296851

#### FIBROMYALGIA Pathology, Politics, Nutrition, Functional Medicine, Dysbiosis, Microbiome, Mitochondria

You can download this video file here: https://vimeo.com/drvasquez/download/308187060/12e5fc6928

#### NAC video introduction

https://vimeo.com/drvasquez/download/363903395/cf3090f769

Additional articles and book excerpts have been amended to the previous publication in order to provide context and orientation to the author's main works.

#### **BOOK EXCERPTS, CHAPTERS:**

- https://www.amazon.com/Dr-Alex-Vasquez/e/B00AT5764Y
- <a href="https://www.ichnfm.org/im4">https://www.ichnfm.org/im4</a>
- <a href="https://www.ichnfm.org/volume-1-essential-knowledge">https://www.ichnfm.org/volume-1-essential-knowledge</a>
- <a href="https://www.ichnfm.org/volume-2-inflammatory-disorders">https://www.ichnfm.org/volume-2-inflammatory-disorders</a>

#### **PDF articles**: Full-text archives of the author's articles are available per the following:

- <a href="https://ichnfm.academia.edu/AlexVasquez">https://ichnfm.academia.edu/AlexVasquez</a> (main archive/repository)
- https://www.researchgate.net/profile/Alex\_Vasquez2 (archive/repository)
- <a href="https://www.inflammationmastery.com/reprints">https://www.inflammationmastery.com/reprints</a> (cloud-based PDF folder)
- <a href="https://www.ichnfm.org/public">https://www.ichnfm.org/public</a>

#### **<u>VIDEOS</u>**: Access to public videos is available per the following:

- Main archive: <a href="https://vimeo.com/drvasquez">https://vimeo.com/drvasquez</a>
- See also: https://www.ichnfm.org/public
- And to a lesser extent: <a href="https://www.youtube.com/channel/UCPR2pgwFw9L2GUnBgupQ5Aw">https://www.youtube.com/channel/UCPR2pgwFw9L2GUnBgupQ5Aw</a>

#### **WEBSITES**:

- Main: <a href="https://www.inflammationmastery.com/">https://www.inflammationmastery.com/</a>
  - Antiviral: <a href="https://www.inflammationmastery.com/antiviral">https://www.inflammationmastery.com/antiviral</a>
  - o Fibromyalgia: https://www.inflammationmastery.com/fibromyalgia
  - o Migraine: <a href="https://www.inflammationmastery.com/migraine">https://www.inflammationmastery.com/migraine</a>
  - Complete protocol: https://www.inflammationmastery.com/book-nutrition-functional-medicine
- Main: https://www.ichnfm.org/ This is actually a very rich website with many blogs and videos
  - <a href="https://www.ichnfm.org/antiviral2019">https://www.ichnfm.org/antiviral2019</a> and the long series starting with <a href="https://www.ichnfm.org/antiviral2">https://www.ichnfm.org/antiviral2</a>, <a
  - https://www.ichnfm.org/braininflammation

**SOCIAL MEDIA UPDATES**: Note that updates are made on a regular basis to the following social medial pages, with some overlap but also some topic-specific specialization, which is self-explanatory by the titles of these pages:

- Dr Alex Vasquez 's Inflammation Mastery <a href="https://www.facebook.com/InflammationMastery">https://www.facebook.com/InflammationMastery</a>
- Migraine Headaches, Hypothyroidism, and Fibromyalgia https://www.facebook.com/MigraineHypothyroidismFibromyalgia
- International Journal of Human Nutrition and Functional Medicine https://www.facebook.com/IJHNFM
- International College of Human Nutrition and Functional Medicine (higher quality and academic news)
   <a href="https://www.facebook.com/IntCollHumNutrFunctMed">https://www.facebook.com/IntCollHumNutrFunctMed</a>
- Revista Latinoamericana de Nutrición Humana y Medicina Funcional https://www.facebook.com/RevLatinoNutrHumMedFunc
- Antiviral Nutrition https://www.facebook.com/AntiviralNutrition
- NaturopathicRheumatology https://www.facebook.com/NaturopathicRheumatology

As of 2019 and for the foreseeable future, the most current versions of all major patient management and clinical treatment protocols are published in Inflammation Mastery, 4th Edition as a single volume of 1,182 pages available in full-color print at discounted pricing directly from ICHNFM from https://www.ichnfm.org/im4, while the formats are available via several different platforms, including Amazon's Kindle (free) software, Barnes and Noble's Nook, Apple iBook, etc as hyperlinked below. Per popular request by students who were studying (as a required textbook) only one section at a time, "IM4" was also published in two easier-tocarry separate volumes under the name Textbook of Clinical Nutrition and Functional Medicine, which contain chapters 1-4 (pages 1-712+index) and 5 (713-1154+index), respectively. Video access is included with *IM4* and *TCNFM*, *1*+2.

Availability in print and digital formats (examples):

- https://www.ichnfm.org/im4
- https://www.amazon.com/Inflammation-Mastery-4th-Immunosuppression-Polypharmacyebook/dp/B01KMZZLAQ
- https://books.apple.com/us/author/alexvasquez/id1139497284
- https://www.barnesandnoble.com/w/inflammationmastery-4th-edition-alexvasquez/1123259586?ean=9780990620464

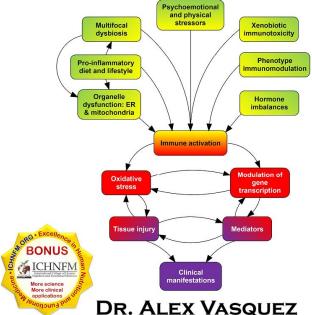
### **INFLAMMATION MASTERY**

#### 4TH EDITION

CLINICAL NUTRITION, FUNCTIONAL MEDICINE, MITOCHONDRIAL DYSFUNCTION, MICROBIOME & DYSBIOSIS, FUNCTIONAL INFLAMMOLOGY, PAIN MANAGEMENT, INTEGRATIVE RHEUMATOLOGY, NUTRITIONAL IMMUNOMODULATION, IMMUNONUTRITION & ANTIVIRAL STRATEGIES

The Colorful and Definitive Guide Toward Health and Vitality and away from the Boredom, Risks, Costs, and Inefficacy of Endless Analgesia, Immunosuppression, and Polypharmacy

3-Part Learning System of Text, Illustrations, and Video



ICHNFM.ORG

INTERNATIONAL COLLEGE OF HUMAN NUTRITION AND FUNCTIONAL MEDICINE

#### TEXTBOOK OF CLINICAL NUTRITION AND FUNCTIONAL MEDICINE, VOL. 1

ESSENTIAL KNOWLEDGE FOR SAFE ACTION AND EFFECTIVE TREATMENT INFLAMMATION MASTERY & FUNCTIONAL INFLAMMOLOGY, VOLUME 1 The Colorful and Definitive Guide toward Health and Vitality and away from the Boredom, Risks, Costs, and Inefficacy of Endless Analgesia, Immunosuppression, and Polypharmacy

3-Part Learning System of Text, Illustrations, and Video 4th Edition, 2016 • Beautiful Full-Color Printing



#### TEXTBOOK OF CLINICAL NUTRITION AND FUNCTIONAL MEDICINE, VOL. 2

PROTOCOLS FOR COMMON INFLAMMATORY DISORDERS

INFLAMMATION MASTERY & FUNCTIONAL INFLAMMOLOGY, VOLUME 2 Clinical Applications from the Colorful and Definitive Guide toward Health and Vitality and away from the Boredom, Risks, Costs, and Inefficacy of Endless Analgesia, Immunosuppression, and Polypharmacy

3-Part Learning System of Text, Illustrations, and Video 4th Edition, 2016 . Beautiful Full-Color Printing



DR. ALEX VASQUEZ • ICHNFM.ORG

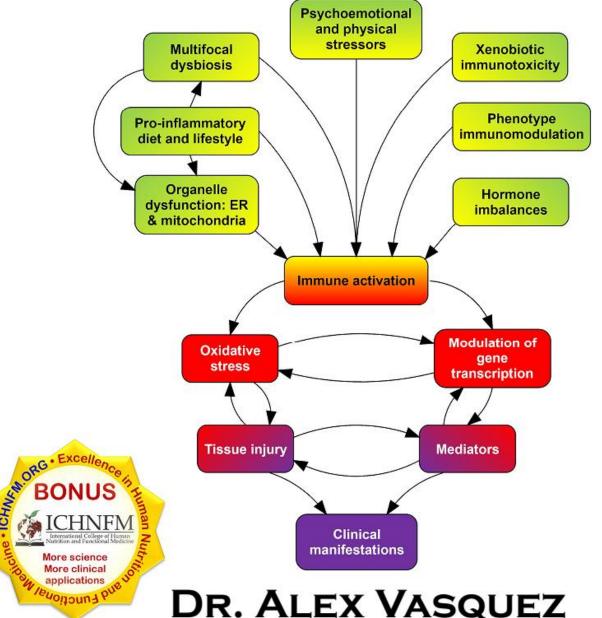
## INFLAMMATION MASTERY

## 4TH EDITION

CLINICAL NUTRITION, FUNCTIONAL MEDICINE, MITOCHONDRIAL DYSFUNCTION, MICROBIOME & DYSBIOSIS, FUNCTIONAL INFLAMMOLOGY, PAIN MANAGEMENT, INTEGRATIVE RHEUMATOLOGY, NUTRITIONAL IMMUNOMODULATION, IMMUNONUTRITION & ANTIVIRAL STRATEGIES

The Colorful and Definitive Guide Toward Health and Vitality and away from the Boredom, Risks, Costs, and Inefficacy of Endless Analgesia, Immunosuppression, and Polypharmacy

3-Part Learning System of Text, Illustrations, and Video





DR. ALEX VASQUEZ

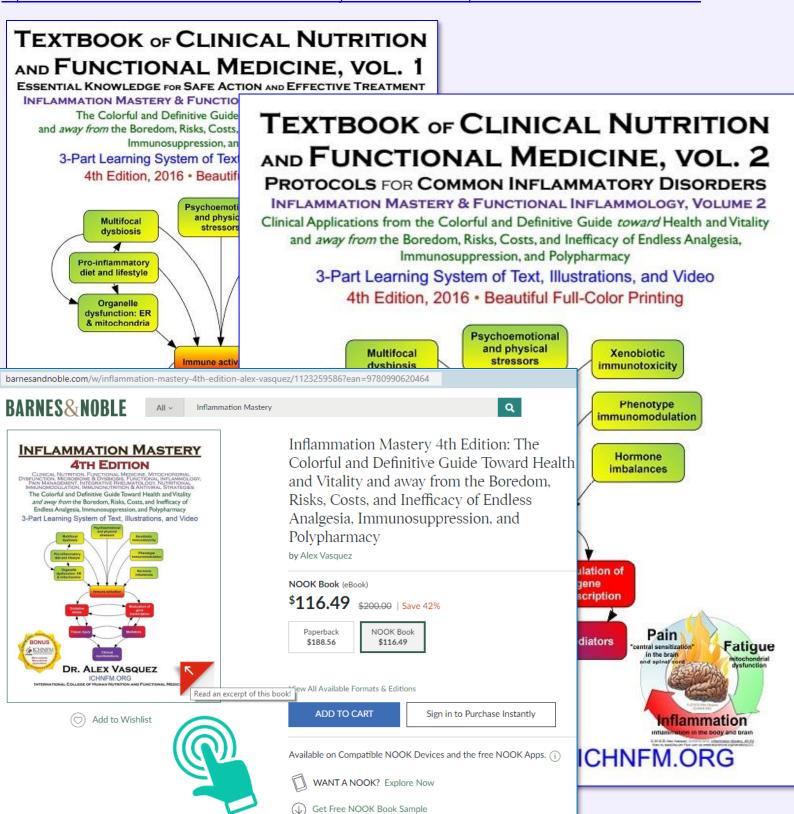
ICHNFM.ORG

Chapter and Introduction				Page
Preamble: download free ebook sample https://www.amazon.com/dp/B01KMZZLAQ				i
1.	. Patient Assessments, Laboratory Interpretation, Clinical Concepts, Patient Management, Practice			1
2.	Management and Risk Reduction: This chapter introduces/reviews/updates patient assessments, laboratory interpretation, musculoskeletal emergencies, healthcare paradigms; the common and important conditions hemochromatosis and hypothyroidism are also included in this chapter since these need to be considered on a frequent basis in clinical practice Wellness Promotion & Re-Establishing the Foundation for Health: Reviewed here are diet, lifestyle,			187
	psychosocial health, and — given the pervasiveness of persistent organic pollutants and their increasingly recognized clinic importance — an introduction to environmental medicine			
3.	•	Basic Concepts and Therapeutics in (Nondrug) Musculoskeletal Care and Integrative Pain		
4.	Management: Nonpharmacologic management of musculoskeletal problems is preferred over pharmacologic (e.g., NSAID, Coxib, steroid, opioid) management because of the collateral benefits, safety, and cost-effectiveness associated with manual, dietary, botanical, and nutritional treatments. A brief discussion of the current crisis in musculoskeletal medicine is provided for contextualization and emphasis of the importance of expanding clinicians' knowledge of effective nondrug treatments  The Major Modifiable Factors in Sustained Inflammation: Major components of the "Functional Inflammology"			303
	Protocol" are reviewed he	ere, from concepts and molecular biology to an emphasis on practical clinical applications  Food & Basic Nutrition	307	
	2)	Infections: Dysbiosis* / Viral**	396 /	
	*T! titl am ** <mark>An</mark> : <u>Au</u> :	his section specific to bacterial dysbiosis was also published separately as a clinical monograph ed Human Microbiome and Dysbiosis in Clinical Disease (Discounted Black and White Printing, azon.com/dp/1512360295) and full-color printing amazon.com/dp/0990620417  This section specific to viral infections is also published separately in full-color paper printing as tiviral Strategies and Immune Nutrition: Against Colds, Flu, Herpes, AIDS, Hepatitis, Ebola, and toimmunity amazon.com/dp/1502894890 and digital ebook Antiviral Nutrition azon.com/dp/8000PDQG4W	540	
	3)	Nutritional Immunomodulation	609	
	4)	Dysmetabolism, Mitochondrial Dysfunction, ERS/UPR, mTOR	622	
	5)	Special Considerations: Sleep, Sociopsychology, Stress, Surgery	674	
	6)	Endocrine Imbalances	688	
	7)	Xenobiotic Immunotoxicity	699	
5.	<del></del>			713
		Hypertension	727	
	2)	Diabetes Mellitus	819	
	3)	Migraine & Headaches*	863	
	Rev Mij	Fibromyalgia* nese two sections specific to migraine and fibromyalgia were also published separately as Pain volution (full-color printing; amazon.com/dp/B01AR3NX0S) and Brain Inflammation in Chronic Pain, graine and Fibromyalgia (black-and-white printing; amazon.com/dp/B01EQ9KMH6/); both versions available in digital ebook formats for reading on phone, computer, iPad via free Kindle software	901	
	5)	Allergic Inflammation	984	
	6)	Rheumatoid Arthritis	1019	
	7)	Psoriasis and Psoriatic Arthritis	1038	
	8)	Systemic Lupus Erythematosus	1053	
	9)	Scleroderma & Systemic Sclerosis	1074	
	10)	) Vasculitic Diseases	1094	
	11)	Spondyloarthropathies & Reactive Arthritis	1108	
	12)	Sjögren Syndrome/Disease	1119	
	13	Raynaud's Syndrome/Phenomenon/Disorder	1127	
	14)	Clinical Notes on Additional Conditions: Behçet's Disease, Sarcoidosis, Dermatomyositis and Polymyositis	1131	

Index & Appendix 1154

As of 2019 and for the foreseeable future, the most current versions of all major patient management and clinical treatment protocols is published in *Inflammation Mastery, 4<sup>th</sup> Edition* as a single volume of 1,182 pages available in full-color print at discounted pricing directly from ICHNFM from <a href="https://www.ichnfm.org/im4">https://www.ichnfm.org/im4</a>, while the digital formats are available via several different platforms, including Amazon's Kindle (free) software, Barnes and Noble's Nook, Apple iBook, etc as hyperlinked below. Per popular request by students who were studying (as a required textbook) only one section at a time, "IM4" was also published in two easier-to-carry separate volumes under the name *Textbook of Clinical Nutrition and Functional Medicine*, which contain chapters 1-4 (pages 1-712+index) and 5 (713-1154+index), respectively. Video access is included with *IM4* and *TCNFM,1+2*. Availability in print and digital formats (examples): <a href="https://www.ichnfm.org/im4">https://www.ichnfm.org/im4</a>, <a href="https://www.ichnfm.o

https://www.amazon.com/Inflammation-Mastery-4th-Immunosuppression-Polypharmacy-ebook/dp/B01KMZZLAQ https://www.barnesandnoble.com/w/inflammation-mastery-4th-edition-alex-vasquez/1123259586?ean=9780990620464



## INFLAMMATION MASTERY

4<sup>TH</sup> EDITION: THE COLORFUL AND DEFINITIVE GUIDE TOWARD HEALTH AND VITALITY AND AWAY FROM THE BOREDOM, RISKS, COSTS, AND INEFFICACY OF ENDLESS ANALGESIA, IMMUNOSUPPRESSION, AND POLYPHARMACY

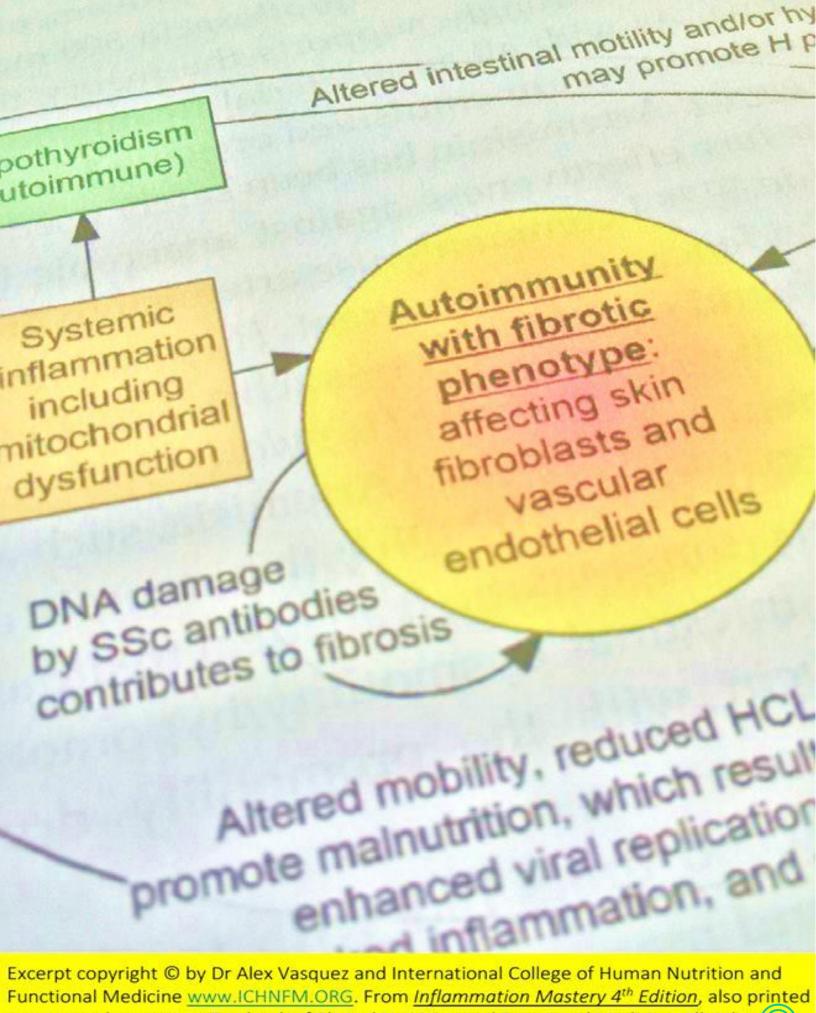
A Three-Part Learning System of Text, Images, and Video

### ALEX VASQUEZ D.C. N.D. D.O. F.A.C.N.

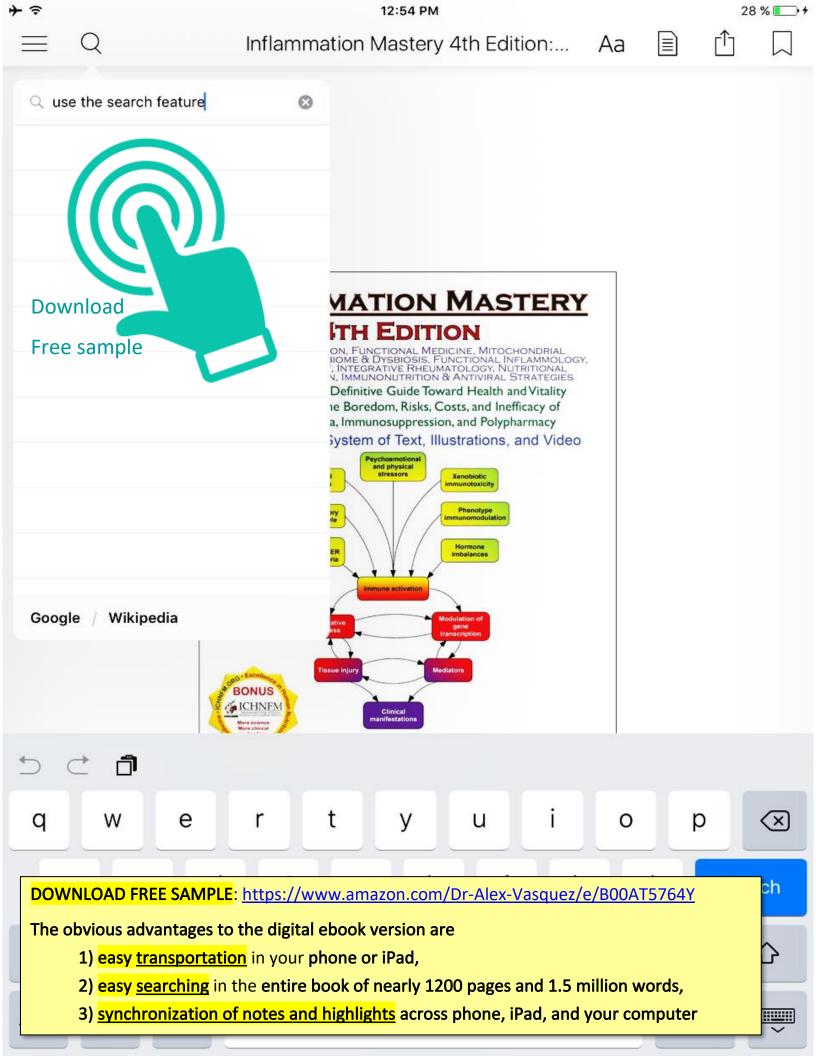
- Doctor of Osteopathic Medicine, graduate of University of North Texas Health Science Center, Texas College of Osteopathic Medicine (2010)
- Doctor of Naturopathic Medicine, graduate of Bastyr University (1999)
- Doctor of Chiropractic, graduate of University of Western States (1996)
- Fellow of the American College of Nutrition (2013-present)
- · Former Overseas Fellow of the Royal Society of Medicine
- Editor, International Journal of Human Nutrition and Functional Medicine IntJHumNutrFunctMed.org. Former Editor, Naturopathy Digest; Former/Recent Reviewer for Journal of Naturopathic Medicine, Alternative Therapies in Health and Medicine, Autoimmune Diseases, International Journal of Clinical Medicine, and PLOS One
- Private practice of integrative and functional medicine in Seattle, Washington (2000-2001), Houston, Texas (2001-2006), Portland, Oregon (2011-2013), consulting practice (present)
- Consultant Researcher and Lecturer (2004-present), Biotics Research Corporation
- Teaching and Academics:
  - Director of Programs, International College/Conference on Human Nutrition and Functional Medicine ICHNFM.org
  - Founder and Former Program Director of the world's first accredited university-affiliated graduate-level program in Functional Medicine
  - Adjunct Professor, Integrative and Functional Nutrition in Immune Health, Doctor of Clinical Nutrition program at Maryland University of Integrative Health
  - Former Adjunct Professor (2009-2013) of Laboratory Medicine, Master of Science in Advanced Clinical Practice
  - Former Faculty (2004-2005, 2010-2013) and Forum Consultant (2003-2007), The Institute for Functional Medicine
  - Former Adjunct Professor (2011-2013) of Pharmacology, Evidence-Based Nutrition, Immune and Inflammatory Imbalances, Principles of Functional Medicine, Psychology of Wellness
  - Former Adjunct Professor of Orthopedics (2000), Radiographic Interpretation (2000), and Rheumatology (2001), Naturopathic Medicine Program, Bastyr University
- Author of more than 100 articles and letters published in JAMA—Journal of the American Medical Association, BMJ—British Medical Journal, TheLancet.com, JAOA—Journal of the American Osteopathic Association, Annals of Pharmacotherapy, Journal of Clinical Endocrinology and Metabolism, Alternative Therapies in Health and Medicine, Nutritional Perspectives, Journal of Manipulative and Physiological Therapeutics, Integrative Medicine, Current Allergy and Asthma Reports, Nutritional Wellness, Evidencebased Complementary and Alternative Medicine, and Arthritis & Rheumatism: Official Journal of the American College of Rheumatology

INTERNATIONAL COLLEGE OF HUMAN NUTRITION & FUNCTIONAL MEDICINE





as a two-volume set as Textbook of Clinical Nutrition and Functional Medicine. All rights reserved and enforced internationally. See ICHNFM.ORG for details, videos, discounts.



#### Chapter and Introduction

#### Preamble

#### Volume 1

- 1. Patient Assessments, Laboratory Interpretation, Clinical Concepts, Patient Management, Practice Management and Risk Reduction: This chapter introduces/reviews/updates patient assessments, laboratory interpretation, musculoskeletal emergencies, healthcare paradigms; the common and important conditions hemochromatosis and hypothyroidism are also included in this chapter since these need to be considered on a frequent basis in clinical practice
- 2. Wellness Promotion & Re-Establishing the Foundation for Health: Reviewed here are diet, lifestyle, psychosocial health, and—given the pervasiveness of persistent organic pollutants and their increasingly recognized clinical importance—an introduction to environmental medicine
- 3. Basic Concepts and Therapeutics in (Nondrug) Musculoskeletal Care and Integrative Pain Management: Nonpharmacologic management of musculoskeletal problems is preferred over pharmacologic (e.g., NSAID, Coxib, steroid, opioid) management because of the collateral benefits, safety, and cost-effectiveness associated with manual, dietary, botanical, and nutritional treatments. A brief discussion of the current crisis in musculoskeletal medicine is provided for contextualization and emphasis of the importance of expanding clinicians' knowledge of effective nondrug treatments
- 4. The Major Modifiable Factors in Sustained Inflammation: Major components of the "Functional Inflammology Protocol" are reviewed here, from concepts and molecular biology to an emphasis on practical clinical applications
- 1) Food & Basic Nutrition
- 2) Infections: Dysbiosis / Viral
- 3) Nutritional Immunomodulation
- 4) Dysmetabolism, Mitochondrial Dysfunction, ERS/UPR, mTOR
- 5) Special Considerations: Sleep, Sociopsychology, Stress, Surgery
- 6) Endocrine Imbalances
- 7) Xenobiotic Immunotoxicity



Volume 2: Chapter 5—Clinical Applications of the Functional Inflammology Protocol

- 1) Hypertension
- 2) Diabetes Mellitus
- 3) Migraine & Headaches
- 4) Fibromyalgia
- 5) Allergic Inflammation
- 6) Rheumatoid Arthritis
- 7) Psoriasis and Psoriatic Arthritis
- 8) Systemic Lupus Erythematosus
- 9) Scleroderma & Systemic Sclerosis
- 10) Vasculitic Diseases
- 11) Spondyloarthropathies & Reactive Arthritis
- 12) Sjögren Syndrome/Disease
- 13) Raynaud's Syndrome/Phenomenon/Disorder
- 14) Clinical Notes on Additional Conditions: Behçet's Disease, Sarcoidosis, Dermatomyositis and Polymyositis

Index & Appendix

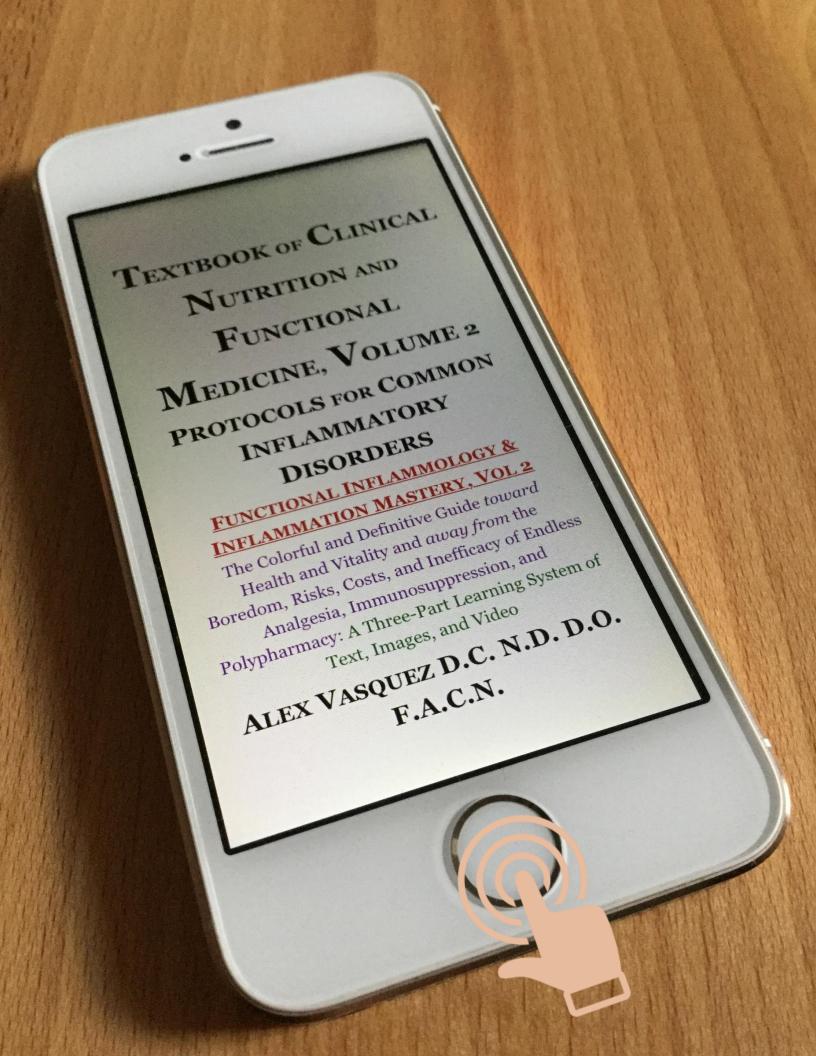


#### DOWNLOAD FREE SAMPLE: https://www.amazon.com/Dr-Alex-Vasquez/e/B00AT5764Y

The obvious advantages to the digital ebook version are

- 1) easy transportation in your phone or iPad,
- 2) easy searching in the entire book of nearly 1200 pages and 1.5 million words,
- 3) synchronization of notes and highlights across phone, iPad, and your computer





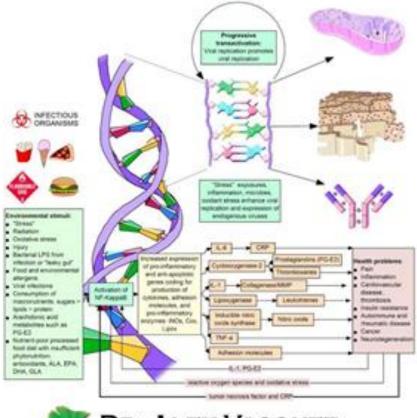




Against Colds, Flu, Herpes, AIDS, Hepatitis, Ebola, Dengue, and Autoimmunity: A Concept-Based and Evidence-Based Handbook and Research Review for Practical Use

Inflammation Mastery series Chapter 6 • Volume 2 of Dysbiosis in Human Disease

2-Part Learning System of Text and Video



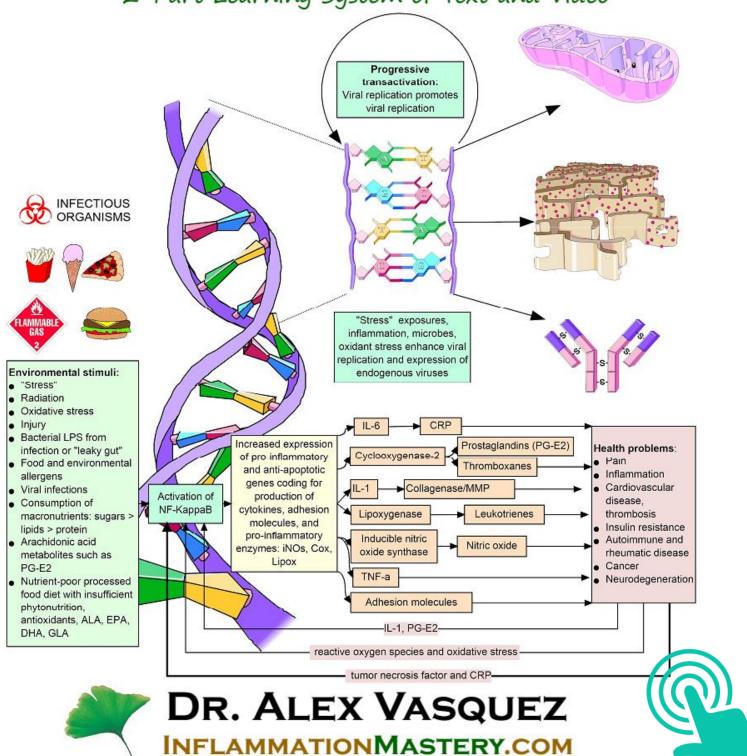




# ANTIVIRAL STRATEGIES AND IMMUNE NUTRITION

Against Colds, Flu, Herpes, AIDS, Hepatitis, Ebola, Dengue, and Autoimmunity: A Concept-Based and Evidence-Based Handbook and Research Review for Practical Use

Inflammation Mastery series Chapter 6 ◆ Volume 2 of Dysbiosis in Human Disease 2-Part Learning System of Text and Video



#### THE PATH AHEAD

# Concerns About The Integrity of The Scientific Research Process—Focus On Recent Negative Publications Regarding Nutrition, Multivitamins, Fish Oil And Cardiovascular Disease



Alex Vasquez, DC, ND, DO; Joseph Pizzorno, ND, Editor in Chief

#### **Abstract**

The next step in reestablishing credibility seems to us honesty and recognizing we all share a common goal of the health and wellness of the human community and the planet. Everyone agrees that the current healthcare system, despite its many incredible successes, is also showing its limitations and is no longer sustainable. We believe the solution starts with us the researchers and editors. A good first step might be formally recognizing the errors and showing how we can and *intend* to get better.

Evidence-based medicine—by definition—requires objective, reliable and accurate research and reviews from which to make the best decisions in patient care and public policy. The causes of inaccurate information, ranging from presumably innocent mistakes all the way to apparently intentional fraud, affect all scientific and biomedical disciplines. While these accidental and intentional errors can derail our understanding of diseases and impact tens of thousands of affected patients, such inaccuracies in the

field of nutrition c worldwide.<sup>2</sup> While a specific disease human populatio nutrition research particularly conte nutrition research healthcare profess nutrition. Clinical vast majority of a medical training p are obviously in gastroenterology<sup>7</sup> training in clini proclaims itself at or potentially hazardous) and then such research is used politically and in the media to disparage, restrict and regulate practitoners and nutrition supplement industry<sup>12</sup> to the detriment of human health.

Several factors disrupting the integrity of nutrition research are commonly found in studies published by "elite" universities in "top-tier" journals, which are then republished and distributed as "headlining news" in

ent policy and ons of people. examples of lications, lists sed solutions. pendent upon stigative and s of clinical rovements are ignorance in

**PDF articles**: Full-text archives of the author's articles are available per the following:

- https://ichnfm.academia.edu/AlexVasquez
- https://www.ichnfm.org/public
- VIDEO: BRIEF Critique of "Effects of n-3 Fatty Acid Supplements in Diabetes Mellitus: ASCEND Study" <a href="https://vimeo.com/287650812">https://vimeo.com/287650812</a>
- VIDEO: Bad Science in Medical Nutrition: Politics of Fish Oil https://vimeo.com/314997927

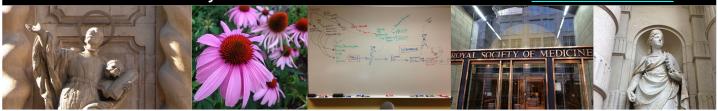
including the entire territory of clinical nutrition.<sup>10</sup> A major and serious problem arises when unskilled and invalid research is published by authors (including nonphysician journalists<sup>11</sup>) in major journals which mischaracterizes the validity of nutrition interventions (e.g., essentially always concluding that nutritional interventions are inefficacious

examples of questionable or inaccurate publications related to nutrition. Perceived shortcomings are documented with both citations here and links to more detailed and authoritative reviews and video presentations. In some instances, speculations regarding the cause and consequences of identified errors are provided.

tion

eview recent

#### International Journal of Human Nutrition and Functional Medicine www.ICHNFM.ORG



Perspective, Opinion, Editorial • Education • Academia • Wage Theft • Corruption

### Ending the Exploitation of Experts Begins with Educating Them about Employment, Curbing Enthusiasm to Preserve Enthusiasm

Alex Vasquez DC ND DO FACN

#### My own paths toward and perspectives on Education

My passion for teaching and education began "formally" when I was about 9 years of age, sitting on the floor of Ms Hall's 4th grade classroom; from that vantage as I sat somewhat near my best friend Robert, I saw the destructive power of bad teaching and discrimination, and from that day I started analyzing teachers, teaching methods, educational and social structures, and ways to convey knowledge and inspire students. Additionally inspired by my teacher of English and Literature in my final years at Riverside Military Academy, I began college with the plan of eventually teaching "something—most likely English and Literature" because I appreciated and valued teaching, proper grammatical structure, and nuanced use of language; I later developed and interconnected my interests in teaching, writing, language, physiology, medicine, and nutrition to complete three doctorate degrees in the health sciences and publish more than 120 articles, letters, rebuttals, monographs, and books on a wide range of topics, with those publications ranging from dense 1-page Letters and Responses to published research up to single-author textbooks of more than 1,180 pages. I have taught at various and universities at the undergraduate, graduate/Masters, and Doctorate levels and have lectured internationally for post-graduate medical education. I see teaching not simply as effective transferal of information, but also as a means to interconnect and inspire generations of people, notably in a reciprocal manner. At its best, teaching and learning are activities that reflect and support love for life itself.

## Oh, the stories I could tell you about the innards of Academia, "nonprofits", and "accredited" schools

I would be happiest to tell you that Academics and

Administrators are vanguards support for fellow Professors, and commitment is to truth and realit setting ablaze the passions of the they teach, lead, and supervise; I'd in flower fields like a professoria

Updates: The most complete version of Functional Medicine® ISSN 2378-4881

PDF articles: Full-text archives of the author's articles are available:
 https://ichnfm.academia.edu/AlexVasquez

- https://www.inflammationmastery.com/reprints
- <a href="https://www.ichnfm.org/public">https://www.ichnfm.org/public</a>

singing a rhythmical rendition of "The Hills are Alive...with the...Passions of Education and Intellectual Integrity." But a pollyannic representation of my observations would be a misrepresentation of the realities I have seen and experienced. I have seen university presidents lie to their students, expel experts for the sake of maintaining their own petty powers and preferences, and I have seen entire academic administrations lie (misrepresent) in unison to their boards of trustees and their accreditation commissions. I have seen stand-alone academic programs make millions of dollars in profit, while its administrators refuse to pay a living wage to doctorate-level infrastructure and while allowing themselves 6-week European vacations during major institutional initiatives. I have seen administrators lie to accreditors and allow students to cheat their way through graduate programs (by bypassing faulty examination software in online programs), and I have seen accreditors turn a blind eye to obvious university corruption, made worse when the accreditation commission is infiltrated by university administrators—thus did "accreditation" come to lose its value. I have seen "nonprofit educational institutions" underpay their faculty, plagiarize from their faculty, resell the work of other professionals without notice or compensation, and then pay their upper administrators in excess of US\$160,000 for less than part-time work—thus did "nonprofit organization" come to lose its value. I have seen schools blackmail excellent professors and leaders in education with gag orders, legal threats, and financial bribery (range US\$25,000 up to \$250,000) to buy their silence about institutional corruption. I have corresponded with employment attorneys, State Attorneys General, and US Department of Education, most of whom shrugged their shoulders and said, "That's the way it is in academia." Sorry

Copyrights: Copyright © by author(s) and memational conege of Frankair Natural And Frankair Natural Medicine www.forth m.org

Free access: Freely available; distributable with appropriate citation to author, publication (International Journal of Human Nutrition and Functional Medicine), and publisher's website: ICHNFM.ORG. All content, text, and image rights reserved by author(s) and ICHNFM.

Citation: Vasquez A. Ending the Exploitation of Experts Begins with Educating Them about Employment, Curbing Enthusiasm to Preserve Enthusiasm. Int J Hum Nutr Funct Med 2016; epub in press

International Journal of Human Nutrition and Functional Medicine (ISSN 2378-4881) ICHNFM.ORG/journal

Barceloneta sunset © 2019 by Dr Vasquez

Tutorial & Editorial • Scientific Writing • Journal Editing • Professional Experience • Video

## How to Improve Scientific Writing and Journal Editing: A Short Narrative-Video Guide, Part I

#### Alex Vasquez DO ND DC FACN

#### Introduction

"Hello everyone, Dr. Alex Vasquez here, and today I'm going to start a different series of videos, and this time the conversation is going to focus around journal editing and writing. I'm calling this "Editing and Writing Tips #1", and I'm going to start with a few of my own perspectives and experiences, then I'll talk about a few basics, and a few influential ideas. In later videos, I will talk about some more specific examples, and then perhaps at some point we will have a review and conclusion.

#### Early Experiences and Influences

Very briefly I'll talk about some of my own experiences, and the reason for my doing this is to share with you and segue into some examples that I think are very important. Basic though they might be, a lot of our success in various fields of life actually comes from respecting and appreciating and utilizing those basic concepts.

Let us start here with some of my initial experiences. I started becoming aware of language and the fact that I had some facility for it, first, when I was about 12 years old. I remember writing a poem in class, and again this is somewhat peripheral to the main topic of

today, but I do remember that elkind of my entryway, I think, in that our assignment was to wr remember writing this poem in cla on and on, and—compared with so I just realized that writing for me

Then again, when I wa military school, I remember in ou

being asked questions, and I remember just how the answers to understanding grammar and language just came very easy to me, and I do remember feeling like I had some facility for the structure of language.

Another influential experience I had when I was about 11 years old, totally unrelated to language, is that we took, in the late 1970s or early '80s, a Computer Science class in our elementary school, and I remember that class also specifically having some influence on me, in terms of structuring logic. We basically had to write our own computer programs and this was back when

computers were very new. Obviously today everybody has computers; back in the late '70s, computers were a novelty. I

"Writing comes from the entirety of one's experience." Dr Alex Vasquez

consider myself lucky to have taken this Computer Science class; it was obviously extremely basic, but we did have to write some code and what I remember from that is just the sequential manner in which communication has to take place in order to be successful. In this case, we were writing programs for computers and doing basic

kind of my entryway, I think, in PDF articles: Full-text archives of the author's articles are available:

- https://ichnfm.academia.edu/AlexVasquez
- https://www.inflammationmastery.com/reprints
- https://www.ichnfm.org/public
- See original video here: <a href="https://vimeo.com/318326979">https://vimeo.com/318326979</a>

Source: International Journal of Human Nutrition and Functional Medicine ® (IJHNFM) <a href="https://www.ichnfm.org/journal">https://www.ichnfm.org/journal</a> is published by the International College of Human Nutrition and Functional Medicine ® (ICHNFM). Copyrights © held by the author(s) and <a href="https://www.ichnfm.org/journal.org/">ICHNFM.ORG</a> Citation: Vasquez A. How to Improve Scientific Writing and Journal Editing: A Short Narrative-Video Guide, Part 1. Int J Hum Nutr Funct Med 2019;7:1 <a href="https://www.ichnfm.org/journal2019a">https://www.ichnfm.org/journal2019a</a> Externally archived at <a href="https://www.academia.edu/38426918">https://www.academia.edu/38426918</a>

# JOURNAL OF ORTHOMOLECULAR MEDICINE



#### **Editorial**

Misrepresentations of Clinical Nutrition in Mainstream Medical Media: Growing Importance of Legitimate Expertise in Independent Peer-Reviewed Publications - Part 1

#### 2018 As a Milestone in the Post-Truth Era

Among the various topics that have either interested or fascinated me throughout my youth and well into my adult years, Nutrition has certainly reigned supreme. My personal routine has been to read as much as reasonably and practically possible on the topic, while not doing so to the exclusion of other topics in biomedicine, psychosociology and philosophy. Thus, with roughly 30 years of experience in reading books and primary research in the field of Nutrition, I could not help but notice the radical departures that occurred in 2018 from the previous norms to which I had grown accustomed.

Of course, 2018 was not the first year during which "bad research" was published in mainstream medical journals and then replicated throughout the echo chamber of mass media; one could observe this periodically occurring throughout the past 50 years, starting not at least with the demonization of dietary cholesterol and the glorification of processed foods, especially refined grains and so-called vegetable oils. But in 2018 what many of us observed was

not simply poorly performed research but, in s es, radical departures from any attempt to predescriptions that could be considered "reasor previous standard.1 Especially related to the trition, mainstream medical journals and the which parrots their conclusions have begun overt misrepresentations of Nutrition with regard for science, logic, biomedical history and

One has to be aware of a few key ironies terize mainstream medical discussions of nutri that 1) medical physicians receive essentially in clinical nutrition in their graduate school ein their post-graduate residency training<sup>2</sup>, 2) sicians and organizations publish "research' commentaries (both of which commonly cond

tritional interventions are inefficacious or unsafe), despite their lack of formal education on the topic, and then 3) mainstream medical voices consistently call for "regulating the nutrition supplement industry" despite their lack of training on the topic and because of negative conclusions based on their own poorly conducted research and self-serving conclusions. As such, not only are the map-makers blind, but they mislead their blind followers, and then both groups promote themselves as expert cartographers and guides when advising the public on an area that none of them have studied or understood. We should have no surprise whatsoever when the "medical community" publishes poorly conducted and self-serving "research" on the topic of nutrition, to reach their desired conclusion that nutrition is unsafe and inefficacious, and that the profitable market needs to be managed of course by the selfsame "medical community" that is never received a decent 15 minutes on the topic of therapeutic nutrition. Pervasive and persistent ignorance on the topic of nutrition among medical physicians must be understood as intentional and strategic, because otherwise this problem would have been solved 30 years ago when it was first discussed during what was called at the time the "golden age of nutrition." The easiest way to manipulate people and to keep them in a perpetual state of confusion, ineffectiveness, and dependency is to

es, radical departures from any attempt to predescriptions that could be considered "reasor previous standard." Especially related to the

- https://ichnfm.academia.edu/AlexVasquez
- https://www.ichnfm.org/public
- VIDEO: BRIEF Critique of "Effects of n-3 Fatty Acid Supplements in Diabetes Mellitus: ASCEND Study" https://vimeo.com/287650812
- VIDEO: Bad Science in Medical Nutrition: Politics of Fish Oil <a href="https://vimeo.com/314997927">https://vimeo.com/314997927</a>

when pondering the probable future of intellectual integrity and the products of education.

#### PERSPECTIVES

## Mitochondrial Medicine Arrives to Prime Time in Clinical Care: Nutritional Biochemistry and Mitochondrial Hyperpermeability ("Leaky Mitochondria") Meet Disease Pathogenesis and Clinical Interventions

Alex Vasquez, DC, ND, DO, FACN

Alex Vasquez, DC, ND, DO, FACN, is director of programs at the International College of Human Nutrition and Functional Medicine in Barcelona, Spain and online at ICHNFM.org. (*Altern Ther Health Med.* 2014;20(suppl 1):26-30.)

Corresponding author: Alex Vasquez, DC, ND, DO, FACN E-mail address: avasquez@ichnfm.org

## MITOCHONDRIAL MEDICINE ARRIVES TO GENERAL PRACTICE AND ROUTINE PATIENT CARE

Mitochondrial disorders were once relegated to "orphan" status as topics for small paragraphs in pathology textbooks and the hospital-based practices of subspecialists. With the increasing appreciation of the high frequency and ease of treatment of mitochondrial dysfunction, this common cause and consequence of many conditions seen in both primary and specialty care deserves the attention of all practicing clinicians.

We all know that mitochondria are the intracellular organelles responsible for the production of the currency of cellular energy in the form of the molecule adenosine triphosphate (ATP); by this time, contemporary clinicians should be developing an awareness of the other roles that mitochondria play in (patho)physiology and clinical practice. Beyond being simple organelles that make ATP mitochondria

play clini inflammatic disease such disorders su stated durin Nutrition an September 1

**PDF articles**: Full-text archives of the author's articles are available:

- https://ichnfm.academia.edu/AlexVasquez
- https://www.inflammationmastery.com/reprints
- <a href="https://www.ichnfm.org/public">https://www.ichnfm.org/public</a>

mitochond

considered on a routine basis in clinical practice. *Mitochondrial medicine* is no longer an orphan topic, nor is it a superfluous consideration relegated to boutique practices. Mitochondrial medicine is ready for prime time—now—both in the general practice of primary care as well as in specialty and subspecialty medicine. What I describe here as the "new" mitochondrial medicine is the application of assessments and treatments to routine clinical practice primarily for the treatment of secondary/acquired forms of mitochondrial impairment that contribute to common conditions such as fatigue, depression, fibromyalgia, diabetes mellitus, hypertension, neuropsychiatric and neurodegenerative conditions, and other inflammatory and dysmetabolic conditions such as allergy and autoimmunity.

#### **BEYOND BIOCHEMISTRY**

Structure and function are of course intimately related and must be appreciated before clinical implications can be understood and interventions thereafter applied with practical precision. The 4 main structures and spaces of the mitochondria are (1) intramitochondrial matrix—the innermost/interior aspect of the mitochondria containing various proteins, enzymes of the Krebs cycle, and mitochondrial DNA; (2) inner membrane—the largely impermeable lipid-rich convoluted/invaginated membrane that envelopes and defines the matrix and which is the structural home of many enzymes, transport systems, and important structures such as cardiolipin and the electron

ce—contains kinase and omparatively n) and—like h active and that need to to appreciate the highest

mitochondrial dysfunction to clinical diseases must be importance; just as we have come to appreciate the

## **JOURNAL OF ORTHOMOLECULAR MEDICINE**



**VOLUME 33, NUMBER 6** 

**PUBLISHED: DECEMBER 2018** 

#### **Editorial**

#### Orthomolecular Medicine, Catalytic Creativity, and the Psychosocial Ecosystem

#### **Transitioning From One Year to the Next**

Various cultures since time immemorial have marked and celebrated the winter solstice with celebrations, meals with friends and family, and time away from work; transitioning from one calendar year to the next has given people pause and a moment to reflect on the events that happened in the past year and what might be anticipated in the next. Reflection with anticipation along with the realization that the future is somewhat malleable inclines people to imagine how the future might be shaped by the exertion of some modicum of creativity and effort. Any realistic conception of how we might improve the near future must segue from our recent past; we must have an awareness of what is going on around us as we look toward the future to visualize ourselves living within it and also acting upon it. What is going on in the world and how might I act upon that trend and flow in order to improve both its transition and its destination? What should each of us do on a personal level to (in the words of Mahatma Gandhi) be, embody, and materialize the change(s) that we want to see in the world?

#### Salutation and Introduction From the Journal's New Editor

Over the past few years I have reflected on several occasions how much I enjoy editing, and so I was correspondingly surprised and pleased when I was offered the opportunity to be the next Editor for the Journal of Orthomolecular Medicine. I began studying nutrition and orthomolecular concepts

school in the early 199 trition" book that I read Your Nerves (1975) by this was followed imm tures of Jonathan V Wr of whom would later b University. By the mid-Jeffrey Bland PhD had tional medicine, which

PDF articles: Full-text archives of the author's articles are available per the following:

- https://ichnfm.academia.edu/AlexVasquez
- https://www.inflammationmastery.com/reprints
- https://www.ichnfm.org/public

and personal<sup>3</sup> reasons. By this time my own personal library contained several hundred books, mostly dedicated to nutrition and health with another large section on philosophy and psychology. In 1994, I joined the Review Staff of the Journal of Naturopathic Medicine, and I started publishing nutrition articles, perhaps most of which might be seen as practice in preparation of an important letter published in 1996 by the American College of Rheumatology in their journal Arthritis and Rheumatism. Since those early years and during the course of three doctorate degrees and teaching thousands of students/attendees internationally, I have reviewed for4 and published in<sup>5</sup> a wide range of refereed journals in addition to publishing commissioned books, chapters, and independent publications and videos. Being an author and reviewer for many different publications—along with my experiences teaching internationally, treating patients in various settings, designing and directing academic programs, and producing educational videos-has given me a wide range of experiences and insights that I hope to bring to the benefit of the Journal of Orthomolecular Medicine.

#### We Must Work Together if We Are Going to Succeed

I have to start this conversation with a few hopes, assumptions, and beliefs, namely that you (the reader) and I (the author and new Editor) have a few things in common. On a professional level, by virtue of the fact that you are reading this essay, I will assume that you are interested or actively engaged in healthcare, medicine, nutrition, research and/or public health. I might also imagine that some smaller percentage of our new and established readers are perhaps less inclined toward the mechanisms and more drawn to the Journal of Orthomolecular Medicine for its potential humanin my teen years and more diligently as Lentered graduate, istic insights and social contributions; we can reasonably

competent healthcare ate nutrition) are basic mit a counterargument of my assertions, they more to the point, my dless of personal poshare some common the following:

 we each want to receive and deliver the best healthcare possible: If we have a problem, then we each want the best possible solution. Efficiency of time or money is not the top priority when we are seeking solutions



Mini-Review • Continuing Education • Microbiome • Dysbiosis • Infectious Disease

# Translating Microbiome (Microbiota) and Dysbiosis Research into Clinical Practice: The 20-Year Development of a Structured Approach that Gives Actionable Form to Intellectual Concepts Alex Vasquez DC ND DO FACN

#### **Experience and Perspectives**

popular, bu

to do with it

the comple Project, the

that live in

to anxiety of

tantalizing therapeutic

being integr

Medicine microbiota

Many years ago when I published my first books<sup>1,2</sup> and articles<sup>3</sup> detailing "dysbiosis", the word could hardly be found in the Medline index, the topic was controversial at best and ethereal at worst, the term "microbiome" (first published in French in 1949 and in English in 1988) was virtually unknown, and I spent most of the time and space in my lectures and articles substantiating and defending the condition's existence. These days, everyone is talking about microbiome, dysbiosis, "leaky gut" (thanks largely to Leo Galland MD), and my 1996 article on "Silent Infections and Gastrointestinal Dysbiosis" has been downloaded at least 4,000 times and is one of the top 1% most popular articles on Academia.edu.4 In the preparation of my dysbiosis lecture at a major functional medicine conference in 2010, I found that only 180 Medline articles indexed the term "dysbiosis", and now-slightly less than five years later-more than 1,200 articles index that term. Obviously, the dysbiosis concept has

PDF articles: Full-text archives of the author's articles are available:

- https://ichnfm.academia.edu/AlexVasquez
- <a href="https://www.inflammationmastery.com/reprints">https://www.inflammationmastery.com/reprints</a>
- https://www.ichnfm.org/public
- See various videos and course excerpts here: https://www.ichnfm.org/image-gallery-dysbiosis-course

"Dysbiosis" is an important concept, but doctors cannot treat concepts.

We have to define, describe, and deconstruct the microbes, molecules, and mechanisms into their components, then rebuild a conceptual scaffold and intellectual structure that becomes a useful tool that, with study and experience, can be used in a clinical setting to effective benefit.

practical application is a bit indelicate and cumbersome beyond the most commonly repeated advice of advocating probiotics, avoiding antibiotics, perhaps delving into using botanical antimicrobials and laboratory testing. Breath testing (an insensitive test for only one subtype of gastrointestinal dysbiosis) and microbiologic testing have become popular to the point of overuse as doctors grapple for clinical clues. (Noteworthy in the conversation on functional laboratory testing is that one functional medicine laboratory in particular used inaccurate proprietary microbe-identification methods to extract

ney only to uffering and



Updates: The most complete version of this article is available at the following location http://intjhumnutrfunctmed.org/
Copyrights: Copyright © 2015 by author(s) and International College of Human Nutrition and Functional Medicine www.ICHNFM.org
Free access: Freely available and distributable with all content, text, and image rights reserved by author(s) and ICHNFM.
Citation: Vasquez A. Translating Microbiome (Microbiota) and Dysbiosis Research into Clinical Practice: The 20-Year Development of a Structured Approach that Gives Actionable Form to Intellectual Concepts. Int J Hum Nutr Funct Med 2015;v3(q2):p1



6801 Biotics Research Drive Rosenberg, TX 77471 Toll Free: 1-800-231-5777 www.bioticsresearch.com

# CME

CONTINUING MEDICAL EDUCATION

## THE CLINICAL IMPORTANCE OF VITAMIN D (CHOLECALCIFEROL): A PARADIGM SHIFT WITH IMPLICATIONS FOR ALL HEALTHCARE PROVIDERS

Alex Vasquez, DC, ND, Gilbert Manso, MD, John Cannell, MD

Alex Vasquez, DC, ND is a licensed naturopathic physician in Washington and Oregon, and licensed chiropractic doctor in Texas, where he maintains a private practice and is a member of the Research Team at Biotics Research Corporation. He is a former Adjunct Professor of Orthopedics and Rheumatology for the Naturopathic Medicine Program at Bastyr University. Gilbert Manso, MD, is a medical doctor practicing integrative medicine in Houston, Texas. In prac-

tice for more than 35 years, he is Board Certified in Family Practice and is Associate Professor of Family Medicine at University of Texas Medical School in Houston. **John Cannell**, MD, is a medical physician practicing in Atascadero, California, and is president of the Vitamin D Council (Cholecalciferol-Council.com), a non-profit, tax-exempt organization working to promote awareness of the manifold adverse effects of vitamin D deficiency.

therapeutic applications available for cholecalciferol, which can be

classified as both a vitamin and a pro-hormone. Additionally, we

also now realize that the Food and Nutrition Board's previously defined Upper Limit (UL) for safe intake at 2,000 IU/day was set

far too low and that the physiologic requirement for vitamin D in

adults may be as high as 5,000 IU/day, which is less than half of

the >10,000 IU that can be produced endogenously with full-body

sun exposure.<sup>1,2</sup> With the discovery of vitamin D receptors in tis-

sues other than the gut and bone—especially the brain, breast, prostate, and lymphocytes—and the recent research suggesting

hile we are all familiar with the important

role of vitamin D in calcium absorption and

bone metabolism, many doctors and

patients are not aware of the recent research

on vitamin D and the widening range of

InnoVision Communications is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians. The learner should study the article and its figures or tables, if any, then complete the self-evaluation at the end of the activity. The activity and self-evaluation are expected to take a maximum of 2 hours.

#### **OBJECTIVES**

Upon completion of this article, participants should be able to do the following:

- 1. Appreciate and identify the manifold clinical presentations and consequences of vitamin D deficiency
- 2. Identify patient groups that are predisposed to vitamin D. hypersensitivity
- 3. Know how to imple proper doses and with

PDF articles: Full-text archives of the author's articles are available:

- https://ichnfm.academia.edu/AlexVasquez
- <a href="https://www.inflammationmastery.com/reprints">https://www.inflammationmastery.com/reprints</a>
- https://www.ichnfm.org/public
- See new article posted here <a href="https://www.ichnfm.org/d">https://www.ichnfm.org/d</a>

Reprint requests: InnoVision Communica phone, (760) 633-3910 or (866) 828-296 innerdoorway.com. Or visit our online Cl -therapies.com and selecting the Continua

## **BRAIN INFLAMMATION**

IN CHRONIC PAIN, MIGRAINE AND FIBROMYALGIA

THE PARADIGM-SHIFTING GUIDE FOR DOCTORS AND PATIENTS DEALING WITH CHRONIC PAIN



Fatigue

mitochondrial dysfunction



inflammation in the body and brain

© 2016 Dr Alex Vasquez, ICHNFM.ORG, Inflammation Mastery, 4th Ed. Brain by IsaacMao per Flickr.com via creativecommons.org/licenses/by/2.0

Alex Vasquez, D.C., N.D., D.O., F.A.C.N.

ICHNFM.ORG • InflammationMastery.com/pain

#### DOWNLOAD FREE SAMPLE: https://www.amazon.com/Dr-Alex-Vasquez/e/B00AT5764Y

- VARIOUS VIDEOS AND BLOGS: https://www.ichnfm.org/braininflammation
- INFO: https://www.inflammationmastery.com/fibromyalgia
- INFO: <a href="https://www.inflammationmastery.com/migraine">https://www.inflammationmastery.com/migraine</a>
- From <u>Inflammation Mastery, chapter 5</u>, the two sections specific to migraine and fibromyalgia were also published separately as *Pain Revolution* (full-color printing;

https://www.amazon.com/dp/B01AR3NXOS) and *Brain Inflammation in Chronic Pain, Migraine and Fibromyalgia: The Paradigm-Shifting Guide for Doctors and Patients Dealing with Chronic Pain* (black-and-white printing; <a href="https://www.amazon.com/dp/B01EQ9KMH6/">https://www.amazon.com/dp/B01EQ9KMH6/</a>); both versions are also available in digital ebook format for phone, computer, iPad via the free Kindle software



#### ANNALS OF THE NEW YORK ACADEMY OF SCIENCES

Issue: Annals Reports
COMMENTARY

### Biological plausibility of the gut-brain axis in autism

Alex Vasquez D

Organic abnormalities with neuroinfl purine metabolism, neurotransmitter noted in autism, and many of these abn metabolites, and heightened serum le

Keywords: gut-brain axis; autism; me

In their recent review, Sherwin among many other issues, the regut microbiome–brain axis with section subtitled "Microbiota-base the treatment of autism: hype or et al.1 largely discuss preclinical the 2017 open-label study by K used a sequence of oral vancomy polyethylene glycol laxative, an human fecal microbiota transpl clinical benefit in subjects with autical study by the sequence of oral vancomy

Readers will likely benefit from tional relevant clinical studies, in lication by Sandler et al.3 showin of autistic manifestations followin oral vancomycin, as well as cas ing positive impact of various an apies (metronidazole, ketoconazo cillin) in patients with autism.<sup>4,5</sup> have been shown to have gut dys as well as Clostridia species,6 th group of bacteria noted for their pr rotoxic substances. International consistently demonstrated that have heighted production of 3-(3-3-hydroxypropionic acid (HPHP) phenylalanine metabolite of Closi trointestinal tract.<sup>7,8</sup> HPHPA repo with the conversion of dopamine to

Autism, ysbiosis, and the ut-Brain Axis An Excerpt from "Deciphering the Gut-Brain Axis in Clinical

Practice"

Alex Vasquez

doi: 10.1111/nyas.13516

Ann. N.Y. Acad. Sci. 0 (2017) 1–2 © 2017 New