



Recent Advances in Nutritional Medicine

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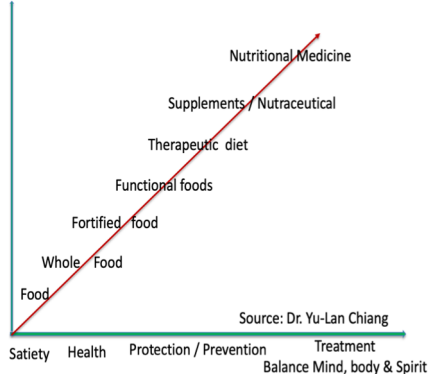


Abstract

In reality, Nutrition matters far more than calories, protein, fat, and carbohydrate etc. Recent studies in the USA found nutrition has the relationship with mood, has the characteristic of anti-inflammation, and even has the function of lower blood pressure such as DASH diet. Nutritional Medicine is a science-based medicine and sees each person as an integrated whole. It looks for the underlying causes, which, although often partly genetic, are usually very much, tied up with nutritional, lifestyle and environmental factors. It provides a holistic outlook on how nutrition impacts health, the relationship between diet and disease, as well as a focused understanding of how nutritional, dietary, lifestyle and environmental factors impact wellbeing through the lifespan. Nutritional Medicine combines food as medicine traditions and dietary therapy with recent scientific advances in nutritional biochemistry and therapeutics, which are now used by naturopathic, conventional and holistic practitioners alike in USA.

Keywords: Nutritional Medicine, Science-based medicine

Nutrition Evolution - Nutritional Medicine



What is Nutritional Medicine?

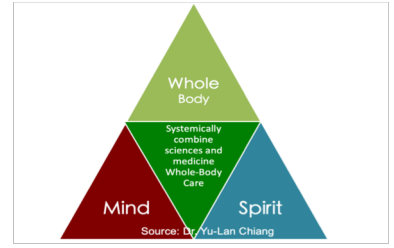
Nutritional Medicine (NM), based on science-based approach and the principle that nutrients which our bodies depend, emphasizes on Whole Body Care and systematically look for the underlying causes including gene, lifestyle, and environmental factors, not just focusing on symptoms to help our mind, body and spirit.

Shortly explanation, Nutritional Medicine, a Whole-Body Care, is based on nutrients to prevent disease, adjuvant treatment of disease, even solve medical problems.



Nutritional Medicine – Whole-Body Care

Nutritional Medicine emphasizes on Whole- Body Care and looks for the root causes of illness. It emphasizes the importance of the practitioner-patient relationship to the healing practice.



Nutritional Medicine vs. Safety, Efficacy, Science-Based Approach

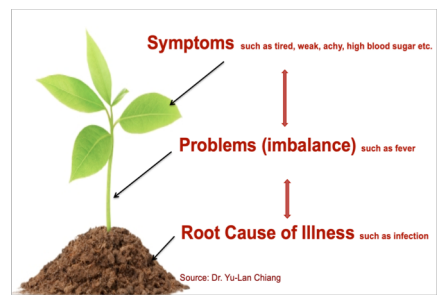
Science-Based Approach is based on scientific principles, which includes prior plausibility, not based on evidence alone and emphasizes on efficacy and safety.

Unsafe/Efficacy Proven	Safe/Efficacy Proven Nutritional Medicine
Unsafe/Inefficacy Unproven	Safe/Inefficacy Unproven

Source: Dr. Yu-Lan Chiang

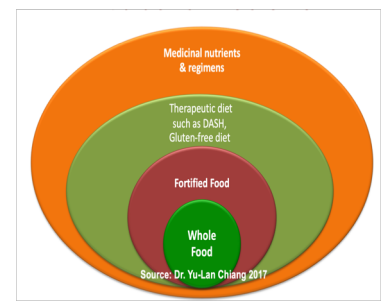
Nutritional Medicine- Root Cause of illness

We take the time to listen to the patients' concerns and is trying to systemically find the **root causes of illness**.



Nutritional Medicine contains four categories

- Whole Food** - Eat rainbow diet, a foundation to maintain a healthy body
- Fortified Food**, adding micronutrients to food, balanced body nutrients' need
- Therapeutic diet** - a diet which is part of the treatment of a medical condition such as DASH diet for hypertension, Gluten-free diet for celiac disease, Ketogenic diet vs. cognitive condition etc.
- Medicinal Nutrients & regimens** Adjective care or treatment diseases such as microbiome vs brain function/ mood/ immune/CVD, Omega-3 for CVD, CoQ10 vs. Statin, Momordica Charantia vs insulin sensitivity, etc.



"Let Food be your Medicine"

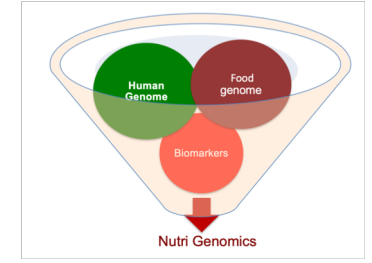
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The Three Types of Nutrients-Related Disease

- Undernutrition**
 - Micronutrient deficiencies - such as Zinc - poor growth, reduced immunity, poor wound healing; Vitamin D - musculoskeletal condition, immunity, mood disorder ...etc.
 - Protein-energy -malnutrition
 - Anaemia – iron, folate, vitamins B12, B2, C, A, copper and protein
 - Osteoporosis – calcium, vitamin D, physical activity
 - Other nutrients vs. mental health, immunity, pregnancy...etc.
- Overnutrition**
 - Energy – obesity, and increase disease risk such as CVD
 - Protein from animal – osteoporosis, renal disease
 - sodium – Hypertension, stroke, heart failure, osteoporosis...etc.
 - Micronutrient excess –fatigue, poor immunity...etc.
- Poor Food Choices**
 - foods with therapeutic effects – tyramine and migraine, sugar - pain / inflammation ...etc.
 - Lack of protective foods – vascular disease, cancer and others
 - Intolerance/allergy – celiac, eczema, IBS, migraine, arthritis and more

New trends of Nutritional Medicine & diseases

- Understand the relationship between diet / nutrients / microbiome and brain function** - Gut beyond digestion - the Gut, Second Brain, as an organ of immunology such as Gut-Brain Axis vs. Autism spectrum Disorder / Alzheimer's disease, mood disorder and others.
- Understanding the relationship between immunity and bowel function**
- Understand the relationship between diet and metabolic function** such as obesity and metabolic syndrome, CVD, Diabetes and others
- Understand the relationship between patients' Lifestyle (behavior) and nutrition & diseases**
- Understand the relationship between environment (such as air/ocean/solid/water pollution) and nutrition & diseases**
- Personalized Nutrition**

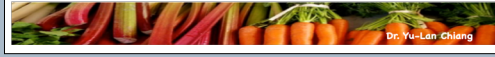


Integrative Medicine Embraces Nutritional Medicine

Conventional Medicine we name diseases based on symptoms. Then, give them solutions usually either drug or surgery. The problem of diseases are not going to be cured by only pills. The patients deserve more options of non-invasive/natural therapies and treatment for their health. **Nutritional Medicine is a one of them.**



Diets don't treat diseases, they treat patients



Dr. Yu-Lan Chiang