


**WELCOME TO THE
FUNCTIONAL MEDICINE
CERTIFICATION TRAINING**



FUNDAMENTALS OF FUNCTIONAL MEDICINE
TAL COHEN, DAOM, MS-HNFM

1

Gain a deeper understanding of chronic diseases and offer personalized treatment based on each patient's individual function and biochemistry.



**REGAINHEALTH
SCIENCE**

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Wherever the art of Medicine is loved, there is also a love of Humanity. ~Hippocrates

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What is Functional Medicine?

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Functional Medicine is a new form of diagnosis and treatment that has been developing from the **understanding that certain factors**, such as our lifestyle, diet, physical or emotional trauma, and /or chemical exposure/accumulation **can trigger a pathologic reaction.**

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Is it a technique?

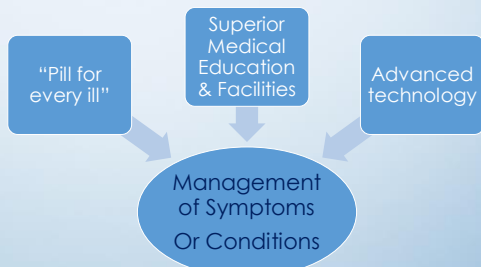
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Functional Medicine is a
different approach
to healthcare

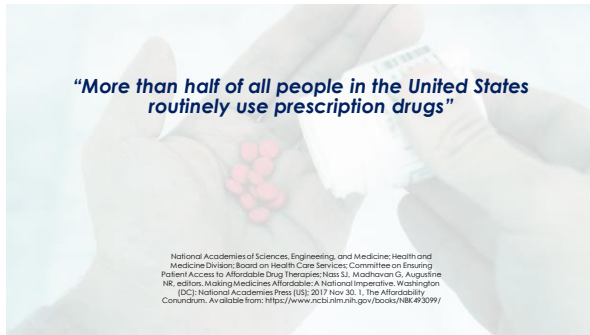
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Why Functional Medicine?

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Health & Disease in U.S.

In the U.S, Each year, about 795,000 people suffer a stroke ^[1]


On average, one person every 40 seconds ^[2]



1. Go, AS, et al. Heart Disease and Stroke Statistics – 2013 Update.
2. CDC Million Hearts: strategies to reduce the prevalence of leading cardiovascular disease risk factors, United States, 2011.

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Medicine in the U.S



The number of people living with stroke is projected to increase by 4 million by 2030.

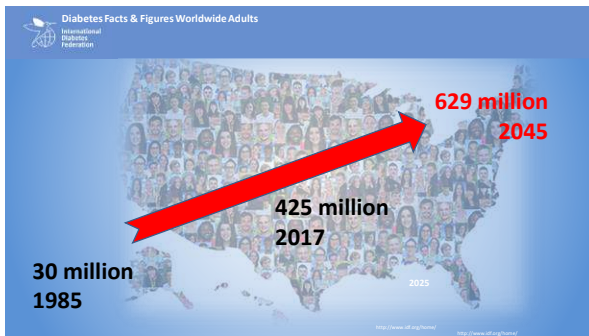
Go, AS, et al. Heart Disease and Stroke Statistics – 2013 Update.

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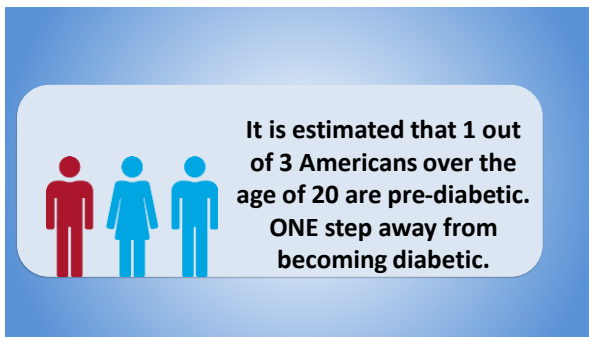


Every day, **3,835** people
are diagnosed with diabetes
type 2 in the U.S alone.

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Every year, there are 1,437,199 new cancer cases in the US.

Almost 3 new cancer patients every minute!

By the year 2030, that number will be over 50 percent higher.



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Every hour and half,
40 women are
diagnosed with breast
cancer.

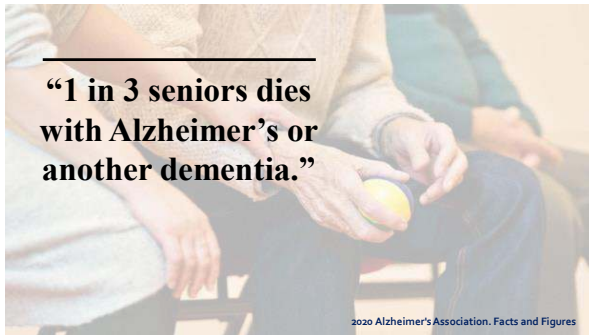
Source: CDC.gov

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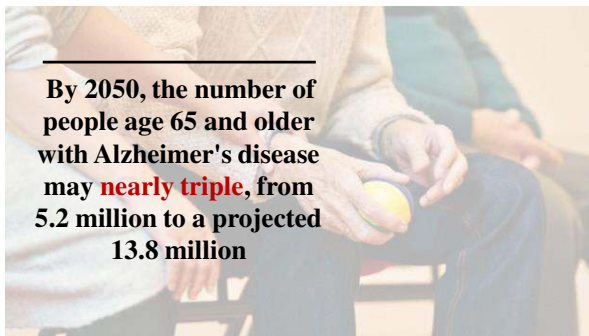
**One in 10 people age 65
and older (10 percent)
has Alzheimer's
dementia.**

2020 Alzheimer's Association. Facts and Figures

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The Functional Medicine Approach

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Principle #1

Focus on Cause of Chronic Disease, Instead of
Just Symptoms

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In comparison to 'mainstream medicine', the Functional Medicine doctor focuses on finding and addressing the "triggers" of disease, as well as improving healthy function, instead of focusing on the symptoms and prescription to manage symptoms.

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The good physician treats **the disease**;
The **great** physician treats **the patient** who
has the disease.”

William Osler, MD.
A physician, educator, author, public speaker, an innovator in
medicine.



Dr. Osler 1849-1919

Source: "William Osler c1912" by Unknown - [1]. Licensed under CC BY 4.0 via Commons -
https://commons.wikimedia.org/wiki/File:William_Osler_c1912.jpg#/media/File:William_Osler_c1912.jpg

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See the 'whole' person, not just the disease.

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Starting with the patient's medical history,
organ/system survey, and lab review

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Principle #2

Deeper Understanding of Triggers of Chronic
Diseases

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Exterior exposure & Endocrine Dysfunction

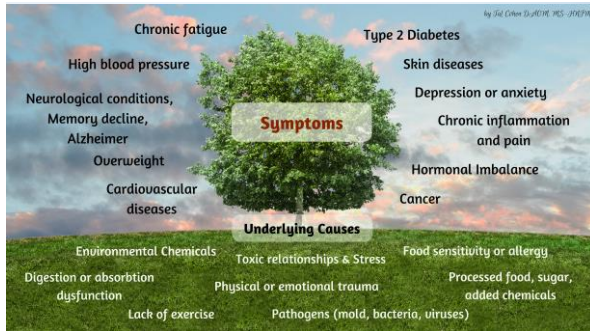
*"These findings provide strong evidence that BPA triggers INS-1
cells (rat insulinoma cell line) dysfunction and apoptosis"*

*"We found that BPA suppressed cell viability and disturbed GSIS
(glucose-stimulated insulin secretion) in a dose-dependent
manner."*

Lin, Y., Sun, X., Qiu, L., Wei, J., Huang, Q., Fang, C.,
Ye, T., Kang, M., Shen, H., & Dong, S. (2013).
Exposure to bisphenol A induces dysfunction of
insulin secretion and apoptosis through the
damage of mitochondria in rat insulinoma (INS-1)
cells. *Cell death & disease*, 4(1), e460.
<https://doi.org/10.1038/cddis.2012.204>



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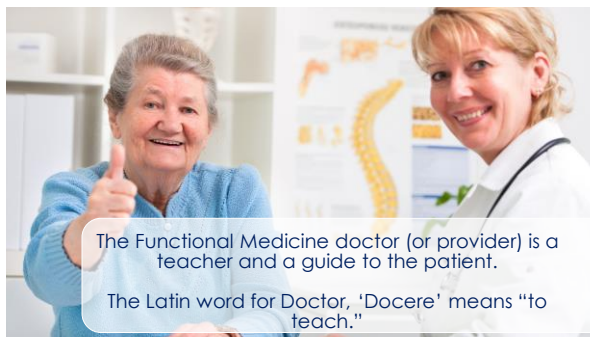


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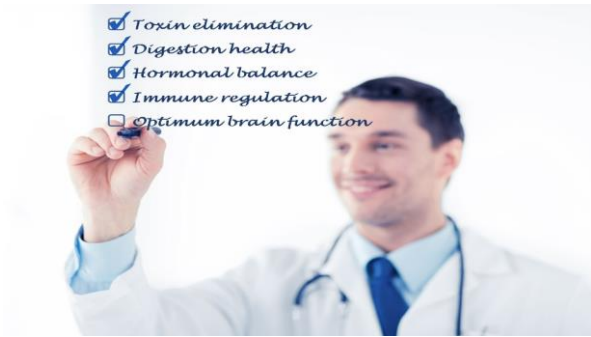
Principle #3

Guide Your Patients Towards Healthier Life

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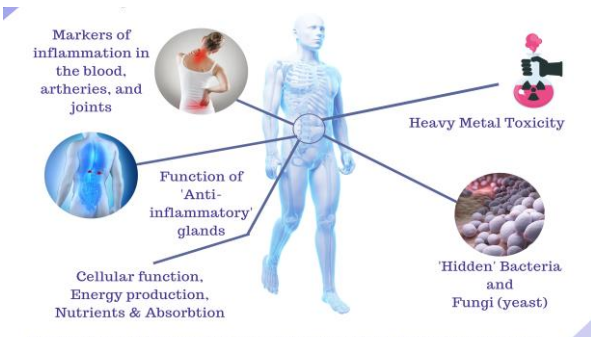


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Principle #4

Comprehensive Lab Testing & Integrative
Protocols

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Principle #5

Empower your patients to take control of their health

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*"In some disease conditions, more than 40% of patients sustain significant risks by **misunderstanding, forgetting, or ignoring** healthcare advice."*

Martin LR, Williams SL, Haskard KB, Dimatteo MR. The challenge of patient adherence. Ther Clin Risk Manag. 2005 Sep;1(3):189-99. PMID: 18360559; PMCID: PMC1661624.

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*"Physician-patient partnerships are essential when choosing amongst various therapeutic options **to maximize adherence**"*

Martin LR, Williams SL, Haskard KB, Dimatteo MR. The challenge of patient adherence. Ther Clin Risk Manag. 2005 Sep;1(3):189-99. PMID: 18360559; PMCID: PMC1661624.

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Patients need to understand their condition, treatment options, and the 'WHY' behind each treatment.

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Focus on your patient's goal.

Not on medical necessity.



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What you will be learning in this training?

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Learn about...

- The Fundamentals of Functional Medicine
- Immune Imbalance & Chronic Diseases
- Digestive, Absorptive, and Microbiological Imbalances
- Evidence-Based Nutritional Protocols
- Environmental Chemicals & Detoxification
- Hormonal Imbalance
- Calming The Mind: Psychophysiology of Mood Disorders
- Aging and Women's and Men's Health
- Mitochondria Function & Chronic Diseases
- Structural Integrity & Treating Chronic Pain
- Using Technology in Patient Care
- Case studies & Successful Clinical Protocols
- Coaching, Marketing, and Sales in Functional Medicine

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Choosing a comprehensive approach to health starts by asking the question: ***"What led this patient to develop chronic disease?"***



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Principle #6

Internal Web-Like Connection Between Organs and Systems

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Gut-Brain Connection

A connection between gut function, microbiome, inflammation, and mood disorders.



Appleton J. (2018). The Gut-Brain Axis: Influence of Microbiota on Mood and Mental Health. Integrative medicine (Encinitas, Calif.), 17(4), 28–32.

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Principle #7

Supporting Organ Reserve

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'Organ reserve' refers to the ability of an organ to successfully return to its original physiological state following repeated episodes of stress.

Atamna H, Tenore A, Lui F, Dhahbi JM. Organ reserve, excess metabolic capacity, and aging. *Biogerontology*. 2018;19(2):171–184. doi:10.1007/s10522-018-9746-8

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'Organ reserve' depends on many factors:

- Mitochondrial function (e.g. apoptosis)
- Structural integrity
- Detoxification ability (elimination of harmful chemicals)
- Nutritional and antioxidant status (cellular function and protection)
- Stress (productive vs destructive, lack of vs too much)

Atamna H, Tenore A, Lui F, Dhabhi JM. Organ reserve, excess metabolic capacity, and aging. *Biogerontology*. 2018;19(2):171-184. doi:10.1007/s10522-018-9746-8

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Adaptogenic herbs are known in Chinese, Ayurvedic, and Traditional medicine for their tonic effect on organs or systems.



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Health Benefits of Ginseng

- "Both in vitro and in vivo results indicate that ginseng has potentially positive effects on heart disease"
- "Ginseng is a promising treatment for fatigue. Both American and Asian ginseng may be viable treatments for fatigue in people with chronic illness."

1. Lee, C. H., & Kim, J. H. (2014). A review on the medicinal potentials of ginseng and ginsenosides on cardiovascular diseases. *Journal of ginseng research*, 38(3), 141-146. <https://doi.org/10.1016/j.jgr.2014.03.001>
2. Aring NM, Millstine D, Marks LA, Nall LM. Ginseng as a treatment for Fatigue: A Systematic Review. *J Altern Complement Med*. 2018;24(7):424-433. doi:10.1089/acm.2017.0361

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Principle #8

Vital and Thriving, Not Just Disease-Free

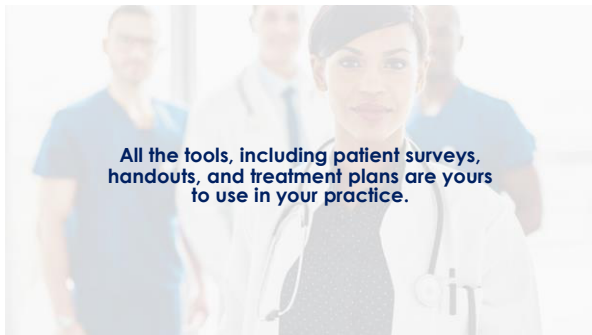
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"Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity."



World Education Service. Constitution. Retrieved from <https://www.who.int/about/who-we-are/constitution>

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All the tools, including patient surveys, handouts, and treatment plans are yours to use in your practice.

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