CONNECTING THE SOIL WITH HUMAN HEALTH

SAUL BAUTISTA MD, MPH
A great farmer is a great doctor
What Determines Our Health Outcomes

Understanding SDOH and HRSN is Critical to Promoting Health Equity

Understanding SDOH and addressing HRSN is critical to reducing health disparities and promoting health equity. HRSN, including housing, food, transportation, and interpersonal violence or toxic stress can significantly and negatively impact health and well-being and increase health care utilization and costs. While access to high-quality health care is important, estimates indicate that only 20% of an individual's health is based on their access to and quality of health care; whereas a person's social, environmental, and behavioral conditions can determine up to 80% of their overall health.

Source: Institute for Clinical Systems Improvement, Going Beyond Clinical Walls; Solving Complex Problems (October 2014)
"The Standard American Diet (SAD) reflects a nation that is overfed and undernourished".

A suboptimal diet is an important preventable risk factor for numerous non-communicable diseases (NCDs) such as overweight/obesity, cardiovascular diseases (such as arterial hypertension, myocardial infarction, stroke), diabetes mellitus, certain cancers,) It is estimated that in 2017, approximately 11 million deaths worldwide were attributed to dietary risk factors [3].
U.S. Food Consumption as a % of Calories

**Plant Food:**
Vegetables, Fruits, Legumes, Nuts & Seeds, Whole Grains
*Fiber* is only found in plant foods.

**Animal Food:**
Meat, Dairy, Eggs, Fish, Seafood
*Cholesterol* is only found in animal foods. Animal foods are the PRIMARY source of saturated fat.

**Processed Food:**
Added Fats & Oils, Sugars, Refined Grains

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**Guide to Healthy Eating:**
Much easier to understand than the USDA Food Pyramid, with no food industry influence.

Eat LESS from the animal and processed food groups and MORE whole foods from the plant food group.

In general, food from the animal and processed food group contribute to disease, while WHOLE foods from the plant group contribute to good health.


New York Coalition for Healthy School Food * www.healthychoolfood.org

Special thanks to Joel Fuhrman, MD, author of *Disease Proof Your Child: Feeding Kids Right* * Graphics by MichelleBando.com

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**Unprocessed**

Food as it would be found in nature. These foods are generally highest in nutrients and fiber.

**Processed**

Food that is canned, frozen, trimmed, or preserved. These foods still contain essential nutrients. Be careful of added sugar, fat, and salt.

**Ultra-Processed**

Food which contain few nutrients and fiber. These foods are usually sourced from corn, soy, or wheat with added fat and. Many packaged foods fall into this category.
What is a health promoting eating pattern?

Clinical Practice Guidelines for Healthy Eating for the Prevention and Treatment of Metabolic and Endocrine Diseases in Adults: Cosponsored by the American Association of Clinical Endocrinologists/The American College of Endocrinology and the Obesity Society Executive Summary

J. Michael Gonzalez-Campoy, MD, PhD, FACE • Sachiko T. St. Jeor, PhD, RD • Kristie Castorino, DO • Raymond Plociowski, MD • David B. Sarwer, PhD • Karinella T. Thomas, RD • Show all authors

DOI: https://doi.org/10.4158/EP13155.ESGL

Popular Dietary Patterns: Alignment With American Heart Association 2021 Dietary Guidance: A Scientific Statement From the American Heart Association

Christopher D. Gardner, Maya K. Vadiveloo, Kristina S. Petersen, Cheryl A.M. Anderson, Sparkle Springfield, Linda Van Horn, Am Cindy Larnedola, Sherrydee M. Mayo, Joshua J. Joseph and on behalf of the American Heart Association Council on Lifestyle and Cardiovascular Health

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Other version(s) of this article

Food as Medicine
The Healing Potential of Food
A health promoting eating pattern emphasizes mostly minimally processed fruits, vegetables, whole grains, legumes, nuts and seeds, herbs, limits consumption of animal products (red meat, poultry, fish, eggs, and dairy product), and avoids of ultraprocessed foods.
Vegan/ Plant based  vs.  Health promoting eating pattern

"PLANT-BASED"
- highly processed
- additives & added sugar
- less nutrients

vs.

PLANT-BASED
- whole food ingredients
- full of vitamins and minerals
- more nutritious

Vegan mac & cheese, fries, lick of broccoli, vegan cookie

Whole food nutritious salad
What We Actually Do?

Images of various snacks and food items.
What We Actually Do?
GAME
TIME
Which Is More Aligned With A Health Promoting Eating Pattern?

Or
Which Is More Aligned With A Health Promoting Eating Pattern?

Or
Which Is More Aligned With A Health Promoting Eating Pattern?

Or
Plants are important for human health
The link between soil, plant, animal and human microbiomes.

https://doi.org/10.1038/s41579-022-00779-w
The Way We Grow Food Matters

REGENERATIVE AGRICULTURE SHIFTS THE PARADIGM

Compete with Nature  →  Partner with Nature
Disturb Soil  →  Protect Soil
Monoculture  →  Diversity
Reductionist  →  Holistic
Microorganisms help with nutrient absorption (e.g. nitrogen fixation and solubilizing phosphorus ions), fungi translocate them to the plant.
FARMING PRACTICES & SOIL QUALITY MATTERS

Industrial agriculture requires more fertilizer and pesticide use to increase yield

increase in fertilizer use pesticide use can reduce microbial diversity

Glyphosate is a good example

Inhibits enzyme needed for amino acid production

reports show negative effects on beneficial soil, rhizosphere and endosphere microbes

What do we think of when we think of doctor
What does doctoring look like to me?
Healthcare delivery
Food Systems-Markets and Vendors
Food Systems - Urban Ag
We Have A Responsibility To Advocate

Introducing Congressman Earl Blumenauer’s Food and Farm Act

A Capitol Hill Event in Collaboration with Farm Sanctuary
A Couple Tips

EAT MORE WHOLE PLANT FOODS WITH LITTLE TO NO PROCESSING

TRADE ULTRA-PROCESSED FOODS FOR SOMETHING HOME-MADE & NATURAL OR LESS PROCESSED

REDUCE RED AND PROCESSED MEAT CONSUMPTION
A Couple Tips to Recap

SUPPORT YOUR LOCAL ORGANIC, REGENERATIVE FARMER

COMPOST

LET YOUR VOICE BE HEARD WITH THE UPCOMING FARM BILL
A great farmer is a great doctor
Final words to conclude
&
A Couple Plugs
Biography

Education

Family Medicine Residency Program (PGY-2) 2021 – 2022
Prisma Health / University of South Carolina | Greenville, SC

Masters in Public Health, Social and Behavioral Health Sciences – 2021
Rutgers University School of Public Health | Newark, NJ

Internal Medicine & Pediatrics Residency Program (PGY1-2) 2019 – 2021
Prisma Health / University of South Carolina | Greenville, SC

Doctor of Medicine – 2019
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Bachelor of Arts, Biology – 2013
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Associate of Arts, Clinical Lab Science – 2010
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Licensing

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WHAT IS LIFESTYLE MEDICINE?

- Nutrition
- Exercise
- Tobacco & Alcohol
- Stress Management
- Sleep
- Healthy Relationships
Lifestyle medicine is a medical specialty that uses therapeutic lifestyle interventions as a primary modality to treat chronic conditions including, but not limited to, cardiovascular diseases, type 2 diabetes, and obesity. Lifestyle medicine certified clinicians are trained to apply evidence-based, whole-person, prescriptive lifestyle change to treat and, when used intensively, often reverse such conditions.

Applying the six pillars of lifestyle medicine—a whole-food, plant-predominant eating pattern, physical activity, restorative sleep, stress management, avoidance of risky substances and positive social connections—also provides effective prevention for these conditions.
A society of health professionals united to **reverse** chronic disease

Discover evidence-based education, practice resources and networking that support the therapeutic use of lifestyle change as the foundation of health and healthcare.
Citations not included in presentation


FARM DAYS FESTIVAL 2023
September 9-10, 2023

Our Distinguished Speakers

- Peter Singer
- Rich Roll
- Ron Weiss, M.D.
- Dr. Dean Sherzai
- Dr. Ayesha Sherzai
- Dr. Columbus Batiste
- Dr. Meagan Grega
- Sara Farley, Rockefeller Foundation
- Andrew Chignell, Princeton
- Brittany Jaroudi from The Jaroudi Family
- Lianna Levine Reisner, Plant Powered Metro NY
- Janette Spiezo, Sustainable Haus
- Bob Quinn, PhD Author, Grain to Grain
Thank You

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