

Food as Medicine

Brigitte Brady RD, LDN

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Food as Medicine



- Eating patterns that promote disease prevention
- Functional foods
- A word on herbal and food supplements
- Novel practices using food as a treatment for chronic illness

BLUE ZONES

LONGEVITY HOTSPOTS

LOMA LINDA
CALIFORNIA

NICOYA
COSTA RICA

SARDINIA
ITALY

ICARIA
GREECE

OKINAWA
JAPAN

BLUE ZONE LIFE LESSONS



MOVE NATURALLY



RIGHT TRIBE



RIGHT OUTLOOK



EAT WISELY

Five Blue Zones Worldwide

Ikaria, Greece

Okinawa, Japan

Ogliastra region, Sardinia

Loma Linda, California

Nicoya Peninsula, Costa Rica





Blue Zone Commonalities

Lifestyle

- Strong faith community
- Deep social networks
- Physical activity
- Lots of water

Dietary Pattern

- Legumes, nuts, & seeds
- Locally grown produce
- Heart healthy fats
- Whole grains

Limit: Meat, eggs, dairy, fish, processed foods, alcohol & added sugars

The Mediterranean Diet

- Derived from Blue Zone dietary patterns
- Includes Blue Zone lifestyle qualities

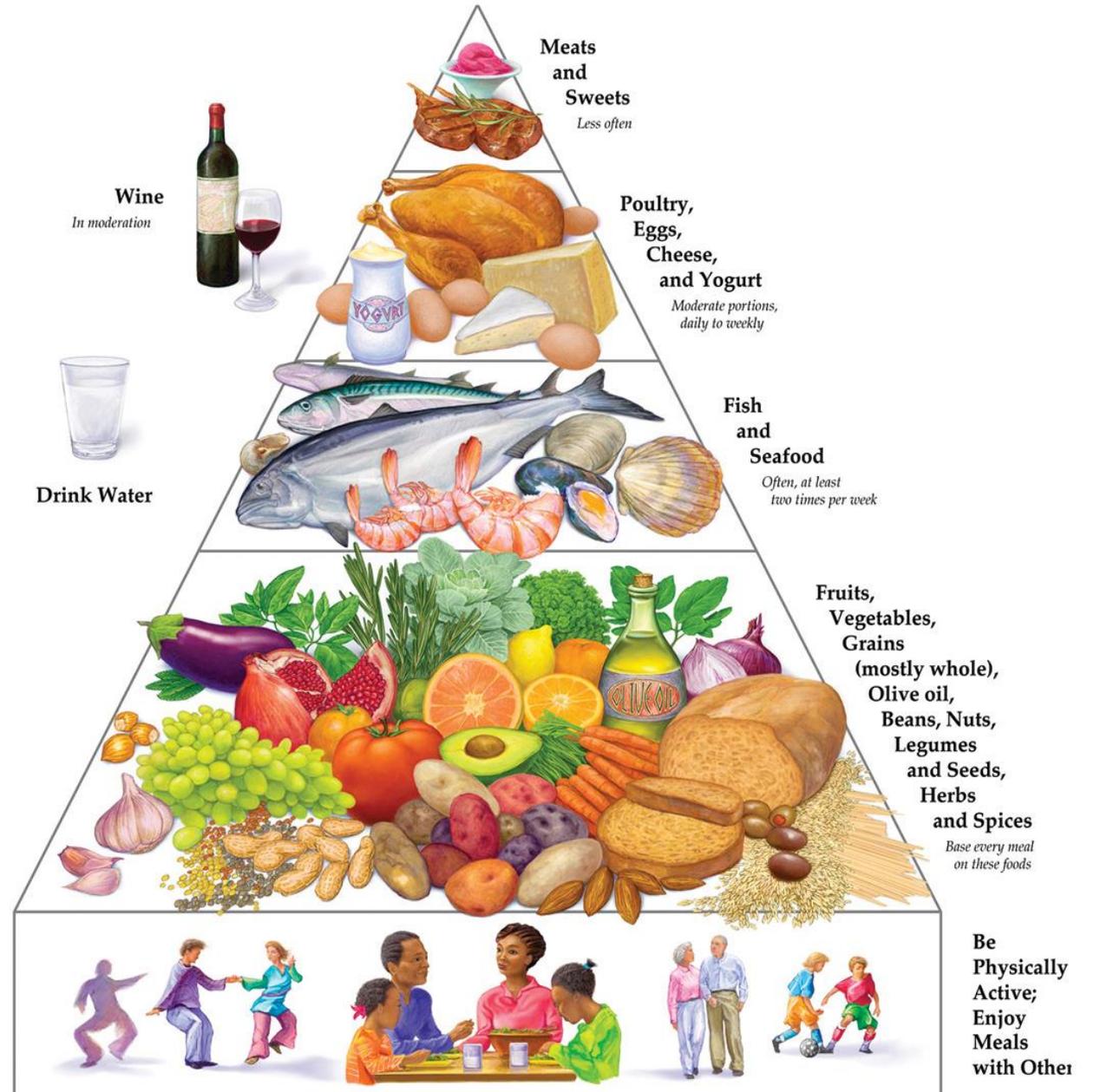


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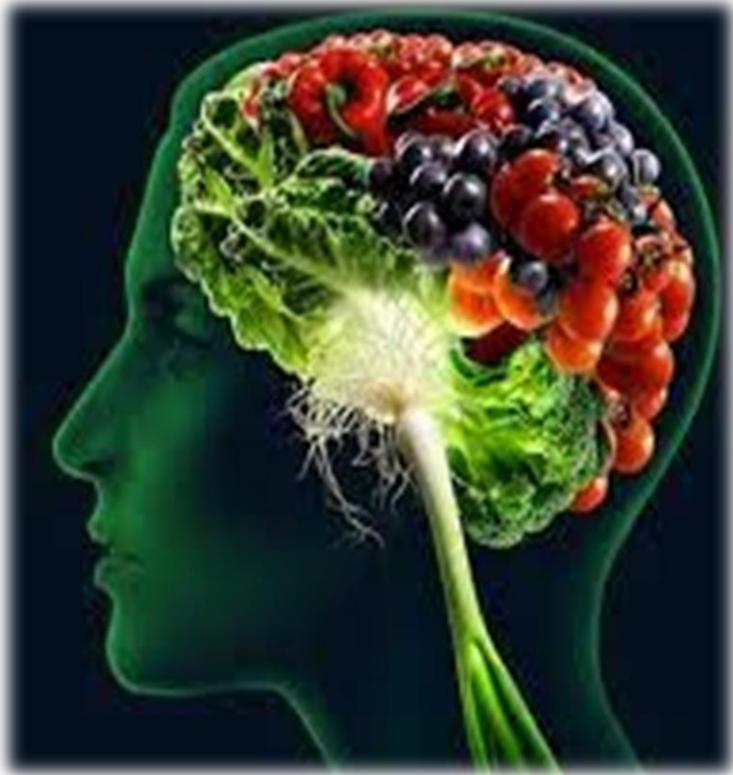
The DASH Diet

Dietary Approaches to Stop Hypertension

- Foods rich in fiber, potassium, calcium, magnesium
- Limits sodium, saturated fat, added sugars
 - ≤ 2300 mg sodium per day (roughly 1 teaspoon)
- Avoids processed foods – focus on fruits, vegetables, whole grains, healthy fats, lean protein, and low-fat dairy



The MIND Diet



Eat certain foods and avoid others to help prevent or delay cognitive decline

- Combination of Mediterranean and DASH diets
- May help reduce the risk of Alzheimer's
- Plant-based, nuts, poultry, fish, and beans
 - Increased intake of leafy greens, berries, and minimally processed whole grains
- Limits red meat, dairy, fast food, fried food, pastries, butter/margarine

Functional Foods

- Fruits & vegetables: antioxidants, phytochemicals (sterols, flavonoids, anthocyanins, etc.)
- Olive oil: monounsaturated fats (tocopherols, polyphenols)
- Nuts & seeds: vitamin E, L-arginine, omega-3 fatty acids
- Whole grains: fiber, B-vitamins
- Tea & Coffee: antioxidants, polyphenols





A Word on Herbal & Food Supplements



Use Caution with...

**Herbal & Food
Supplements**

Botanicals

Adaptogens



- Not approved or regulated by the FDA
- Many interact with prescription medications
- Health claims are often not proven
- May not get what you pay for

Emerging Food as Medicine Interventions

- Medically tailored meals
- Medically tailored groceries
- Produce prescriptions
- Culinary medicine



Medically-Tailored Meals (MTMs)



- Healthy, home-delivered meals
- Customized for individuals living with advanced illnesses
- RDN approved
- 10 meals per week – 5 lunches and 5 dinners
- Especially beneficial for those experiencing food insecurity or limited mobility

MTMs are associated with:

- Decreased inpatient hospital admissions
- Fewer emergency transports and ED visits
- Fewer admissions to skilled nursing facilities
- A decrease in overall healthcare costs
- Improved quality of quality of life



MTMs are associated with (cont.):



- Increased diet quality
- Fewer incidences of hypoglycemia in people with diabetes
- Fewer trade-offs in food vs. filling prescription medications
- Better adherence to medication regimens

Medically Tailored Groceries (MTGs)

Individualized grocery lists or grocery packages that meet a person's dietary needs/preferences.

Provides plans for:

- Regular Healthy Diet
- Heart-Healthy Diet
- Consistent Carbohydrate Diet (Diabetic Friendly)
- Renal Diet (Kidney-Friendly)
- Pescatarian Diet
- Vegan Diet



Example of a Medically Tailored Grocery Plan:

Heart Healthy Diet – Grocery Plan

For clients that have or are at risk for CVD

Diet Specifics:

- Sodium: < 300mg per serving
- High fiber foods
- No trans-fats and minimal saturated fat
- Encourages lean animal protein (fish, chicken breast, turkey)
- Fewer choices of animal proteins higher in fat (pork, beef, chicken leg)
- Promotes consumption of whole fruits, vegetables, whole grains, and heart-healthy fats (unsaturated)



Benefits of MTGs:

- Decreased A1c in people with diabetes
- Fewer ED visits, hospitalizations and readmissions
- Lower cost of healthcare
- Increased medication adherence
- Increased fruit and vegetable consumption



Produce Prescriptions

Also known as food “farmacies”

- Vouchers, coupons, EBT cards, discount codes
- Redeemed at local grocers or markets for produce

Benefits:

- Increase fruit and vegetable consumption
- Lower A1c in people with diabetes



Culinary Medicine



- Blends the art of food and cooking with the science of medicine
- Teaches medical professionals about nutrition through the culinary arts
- Enables the medical professional to better serve and understand their patients

Why do we need Culinary Medicine?

Little nutrition education in medical training

- Only 1/3 of med schools have dedicated nutrition course
- Average of 24 hours of nutrition ed during medical school
- 88% of instructors expressed need for additional education
- Less than half of graduating resident physicians feel they have adequate training in preventative dietary measures



What Culinary Medicine Brings to the Table

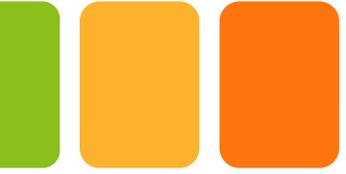
- Cooking skills positively correlate with vegetable consumption
- Home meal preparation is associated with consumption of a healthier diet overall
- Home meal consumption reduces risk of diabetes and CVD



Barriers for the Food as Medicine Movement



- Reactive vs. proactive nature of the U.S. healthcare system
- Changes needed to Medicare and Medicaid
- Sustainable funding sources
- Lack of dedicated research
- Delivery of education to medical professionals



“Let food be thy medicine and
medicine be thy food.”

- Hippocrates





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