



Food As Medicine:
Doctors for a Food Revolution
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“Disclosure”

We have an unabashed vested interest in increasing access to local, sustainably grown food in underserved communities!



Why Food as Medicine?

(Aren't doctors supposed to care about drugs?)

An Epidemic of Diet-related diseases: Unhealthy eating and sedentary lifestyle are now the leading cause of death in the U.S.

- Diabetes and Pre-diabetes: 100 million Americans
- Cardiovascular disease: 81 million Americans
- Hypertension: 75 million Americans
- Cancer: 41% lifetime risk
- Osteoporosis, Kidney disease, ADHD, GERD, High Cholesterol, Depression, Chronic Pain, Allergy/Eczema, Constipation, etc etc...



Food as Medicine: not a new concept...

Leave your drugs in the chemist's pot if you can heal the patient with food - Hippocrates

Let nothing which can be treated by diet be treated by other means - Maimonides

When diet is wrong medicine is of no use.

When diet is correct medicine is of no need -
Ayurvedic Proverb

The doctor of the future will give no medication, but will interest his patients in the care of the human frame, diet and in the cause and prevention of disease.
- Thomas Edison

Why Food as Medicine: Evidence in the Numbers

➤ **An ounce of prevention...**

➤ Healthier diets could prevent at least \$71 billion per year in medical costs, lost productivity, and lost lives - USDA



State and federal governments spend one thousand times more to treat disease than to prevent it (\$1,390 vs. \$1.21 per person each year) - CDC

...Food Can Be Good Medicine

Prediabetes: Lifestyle changes (diet + exercise) can prevent 2/3 of progression to diabetes, **twice as effective** as pharmaceuticals

Cardiovascular disease: Mediterranean or Anti-inflammatory diet can prevent 70% of cardiovascular disease and premature deaths

Cancer: At least 1/3 of most common cancers preventable through healthy diet: rich in vegetables, whole grains, low in simple sugars. Some foods (e.g., kale, garlic, mushrooms, berries) may directly help the body prevent/fight cancer cells



But...Many Barriers to eating healthy food:



- Access / Food deserts
- Financial resources
- Subsidized obesity
- Fast-food nation
- Lost age of cooking and family meals
- Others?



Barriers to physician talking to their patients about food

- Paucity of nutrition education for medical students and physicians
- Little to no formal training in how to talk with patients about lifestyle modification and motivation for behavioral change
- Not valued by insurance companies, no reimbursement for time

Our Philosophy:

Focus on real, whole foods as a vital part of health and disease prevention. Emphasis on mindful purchase and consumption

Our Vision:

Physician as health advocate & community activist
Patient as empowered, engaged agent for change



“Pharmers for Farmers”

- Get Gardening!
- Clinic/community gardens, farmers markets
- Advocating for community farmers and a just food system



Sonoma Alliance for a Vegetable Outreach Revolution (SAVOR)



- Grassroots group of community partners
- Implemented use EBT and food stamps at local Farmers Markets
- Monthly cooking demos and “Food as Medicine” booth



The doctor will see you now...(and feed you good food)

- Physicians as visible advocates for real food
- Opportunity to expose doctors to foods and cooking skills that they can share with patients
- Fun venue for learning





Veggie Rx

Wholesome Wave: facilitates the link between local agriculture and under-invested communities who demand it.

Active in 26 states ~ 45 partners and over 200 farmers

VeggieRx: Clinical trial examining the effect of doctors prescribing farmers market vouchers to low-income pregnant women at risk for gestational diabetes



Why a clinical trial?

- Power of doctors prescribing vegetables
- What's the biggest barrier? Money, education, access
- Policy implications and change



Supermarket Visits



Rationale

- meeting @ point of purchase
- patient education in context
- meeting pt “where they are”
- education for doctors

What we’ve done:

- one-on-one
- group of doctors to low cost market to strategize
- Group class @ supermarket

"I'd like to see what's out there, and I figured, what better help than a doctor"

"If I had eaten that way as a kid, maybe I'd be healthier now...I'm used to eating badly and trying to break it now."

"I'll feel better about eating avocados now"

"I definitely recommend it, it was fun, you don't feel like you're being preached to...it shows that doctors actually care and see the connection between food and health"



At the Clinic

- Group healthy lifestyle visits: Harnessing the empowerment of groups, supporting lifestyle change
- Waiting room demos: Act of generosity and role modeling



A few tips for heathful/mindful eating

- 1) Eat Real Food. And breakfast.
- 2) Don't drink your calories.
- 3) Start looking at labels. Find out how/where your food was made.
- 4) Bring back family mealtime: sit down, relax, and enjoy your meal.
- 5) Eat with the seasons, learn how to cook (with seasonings).



Drinking your sugar...



Coca Cola

12 oz (355 ml) Can

Sugars, total:	39g
Calories, total:	140
Calories from sugar:	140*

20 oz (590 ml) Bottle

Sugars, total:	65g
Calories, total:	240
Calories from sugar:	240

1 Liter (34 oz) Bottle

Sugars, total:	108g
Calories, total:	400
Calories from sugar:	400

S.A.V.O.R.Y BITES

Updates from the Sonoma Alliance for a Veggie Outreach Revolution



S.A.V.O.R. is a grassroots alliance of people who share a vision of everyone in Sonoma County having easy access to fresh, local food.

EGG-CELANT INFORMATION ABOUT EGGS

What's the difference between the eggs I can get for a dollar a dozen at a big store and the eggs at the farmers market? You might ask. "Do they taste the extra money?" Absolutely! We produce farmers market eggs on the farm for you, your family's health, the local economy, our community and the planet! Plus, the taste is unbeatable. But that wasn't a lie, huh?

Pastured really means free to roam and eat a natural diet. Pasturing is the traditional method of raising egg laying hens and other poultry. It is ecologically sustainable, humane, and produces the tastiest, most nutritious

eggs. This is not necessarily true for "free range" chickens, which may technically have "access to outdoors" but only for a few minutes a day spending the rest of their lives in small cages. Choose pastured and know that you are choosing eggs laid by healthy, happy hens.



Not All Eggs Are Created Equal! Pastured Eggs Much More Nutritious Than Factory Farmed Eggs

Pastured hens' diets are naturally complemented with bugs, earthworms, and other soil critters that give their eggs a huge nutritional boost. While you may remember learning that "eggs are full of fat and cholesterol", that's not exactly true for pastured eggs. Eggs from hens raised on pastured farms have:

- 27% less saturated fat
- 20% less cholesterol
- 40% more Vitamin D
- 3 times more vitamin E
- 7 times more beta-carotene, and
- an 80% more healthy omega-3

than their confinement factory farmed equivalent. Moreover, it's the yolk that contains many of these extra vitamins.

so don't throw out the yolk or you'll miss the best part!

Dark eggs are creamier than chicken eggs, with a thicker shell that gives them longer shelf-life. They have a golden yolk, compared to the pale of a hen's egg, making dark eggs perfect for boiling up baked goods, and making delicious omelets or scrambles with the yolk. They're also great for anything you like to do with double yolk, fried, poached, scrambled, omelets. Find out more information about dark eggs at the Salmon Creek Ranch website at <http://salmoncreek.com>

Bottom line? Buy pastured eggs from local farmers for the best health and planet benefits, get yours here today!



They don't even look the same! Check out the nutrition, dark orange yolk and their protein rich whites. At the pastured egg farm compared to the run-in, diluted look of the store bought egg yolks.

YOU CAN MAKE THIS AT HOME!

"Let food be thy medicine, and medicine be thy food."
- Hippocrates, 460 BCE



Super Easy Frittata

- 6 eggs
- 1 cup water, salt or milk substitute
- 1 cup chopped fresh herbs
- 1/2 a bunch of frozen veggies
- Salt and pepper to taste

Heat 1 tbsp olive oil in a shallow pan over low heat. Pour into pan and cook slowly on stove, lifting the sides once they have formed to let the uncooked liquid portion to flow under.



Use eggs and cook slowly until fully cooked. Egg for stored in a sealed container in the refrigerator for 2 days.

ALL ABOUT KALE

What is Kale?

Kale is a leafy green vegetable and one of the **healthiest** foods on the planet!

For those bored of Kale, is it similar to any other common vegetables?

Kale belongs to the Brassica family that includes cruciferous vegetables such as cabbage, collards, broccoli, and Brussels sprouts.

What makes kale so healthy?

Kale is a nutritional powerhouse! One cup of kale contains:

- Only 33 calories
- A whopping 3 grams of fiber
- More vitamin C than an orange
- Almost as much vitamin A as carrots
- Seven times the beta-carotene of broccoli
- Low of healthy antioxidants
- Calcium, vitamin B6, Magnesium, and other important trace minerals
- 100%+ your daily requirement vitamin K!

That's a lot of vitamins! Does kale help prevent/treat specific diseases?

Yes! Kale contains loads of vitamins, antioxidants and other compounds shown in studies to help **prevent and fight cancer**.

Other compounds in kale may help **preserve vision**, lower cholesterol, reduce risk of heart disease, and help people **maintain healthy weight**.



YOU CAN MAKE: KALE CHIPS!

No surprise, they taste better than the real deal — salty, crunchy, and flavorful. Kale-chip fans: you'll be hooked!

Ingredients:

- Kale
- Olive oil
- Salt
- Optional: parmesan cheese, nutritional yeast, soy sauce, or your favorite seasoning

Instructions:

1. Preheat an oven to 300 degrees F (175 degrees C). Line a non-stick cookie sheet with parchment paper.
2. Wash a bunch or bunches of kale carefully, remove the stems, and tear the kale into pieces. Wash and thoroughly dry kale with a salad spinner. Drain kale with one-of and sprinkle with seasoning salt.
3. Bake until the edges brown but are not burnt, 10 to 15 minutes.
4. Add your choice of additional seasonings (cheese, garlic, etc.) and enjoy!



WHAT'S YOUR FAVORITE TYPE OF KALE?



CURLY KALE

Appearance: Has ruffled leaves and a firm stalk and is usually deep green in color.
Flavor: Lively pungent flavor with delicious bitter peppery qualities.



DINOSAUR (DINO) KALE

Appearance: Long, slender dark blue-green leaves with an embossed texture.
Flavor: Sweeter and more delicate flavor than curly kale.



ORNAMENTAL KALE

Appearance: Can be green, white, or purple, the stalks come together to form a head of kale.
Flavor: Mellow flavor and tender texture.

MyPlate



Anti-inflammatory diet pyramid



Web Resources

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Network for a Healthy California
Champions for Change

Español



**We are moms.
We are dads.**

**We are concerned parents.
We are just like you.**



BE A CHAMPION > **MY KITCHEN >** **BE ACTIVE >** **OUR COMMUNITY >** **RESOURCES >**

We are *Champions for Change!*

We want the best for our kids. We want them to be healthy. We want to protect them from serious health problems like obesity, type 2 diabetes, heart disease, stroke, and certain types of cancer.

So we are making healthy changes in our kitchens, homes, schools, and neighborhoods. We make the rules now. Rules like:

1. [Eat more fruits and vegetables.](#)
2. [Be more active.](#)
3. [Speak up for healthy changes.](#)

You do not have to protect your children from serious health problems. But by helping your family eat more vegetables and fruits...

Change is good. Living in our communities even though we are making changes...

Become a [Champion](#) for a healthy future.



NUTRITION DETECTIVES™
"Teaching Kids to Make Healthy Choices"

Available in English and Spanish!

Gratitudes

- Wholesome Wave *wholesomewave.org*
- Roots of Change *rootsofchange.org*
- Kaiser Permanente Community Benefit
- Vista Family Health Center
- Santa Rosa Farmers Market - Paula Downing
- Collaborators - Wendy Kohatsu, Tara Scott, residents at the Santa Rosa Family Medicine Residency Program, SAVOR