



Conquering Cancer™ Digest

BY NATHAN CRANE

What's the Best Anti-Cancer Diet?

BY NATHAN CRANE

The best diet that both prevents the formation of cancer and heals it after diagnosis is obviously a huge topic. It's been the subject of countless books and documentaries and it feels like everyone "should" know by now what to eat for optimal health and healing... and yet real-life experience shows me that this simply isn't the case.

It's a sad reality that most family doctors and oncologists have very little nutrition training, and very few cancer patients receive much in the way of good dietary advice within the standard medical model. Most of their appointment time and focus is taken up with testing, treatments, and prescriptions – not tips for meal planning.

Instead of getting into an exact prescription of what to eat at every meal, I'm going to share with you the broad strokes of what several very smart doctors recommend their patients eat. While there are a few differences, you'll see there is much agreement on the core of what makes up the very best anti-cancer diet.

Over the past 10+ years I have had the benefit of interviewing many of the top integrative cancer doctors and nutritionists on the subject of foods that heal, and those that harm. Their advice has informed both my own dietary choices and what I recommend to others.

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Dr. Dana Flavin

Dr. Dana Flavin and I hosted a 6-week cancer coaching program in the summer of 2022. One of our weekly Q&A sessions was dedicated to the anti-cancer diet. In that session, Dr. Flavin (who is both an MD and ND as well as a professor of pharmacology) shared the nutritional advice that she gives to her cancer patients.

In a nutshell, here are Dr. Flavin's "Rules" for what and what not to eat:

- Organic is extremely important
- Consume lots of vegetables and fruits; especially sulphur-containing veggies such as broccoli, cauliflower, cabbage, kale, Brussels sprouts, turnips, bok choy, and kohlrabi
- No red meat, poultry, or fish
- No white flour or wheat flour; stick with ancient grains
- No dairy products made with cow's milk (use almond milk, rice milk, or hazelnut milk)
- Get your protein from organic tofu, beans, broccoli, almonds, chestnuts, pumpkin seeds, hemp seeds, squash seeds, sunflower seeds, millet, sprouted seeds, and nuts
- Maximum of one cup of coffee per day with NO sugar (can use erythritol or stevia for sweetener)
- For oils use only olive oil, coconut oil, and ghee (ideally made with goat or sheep's milk)

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Why no red meat? Because it has too much iron that can stimulate tumor growth. It has too much arginine, which can stimulate tumor growth. Very often in spite of the fact that it could be organic beef, they're still eating from grass that's been contaminated...

- DR. DANA FLAVIN

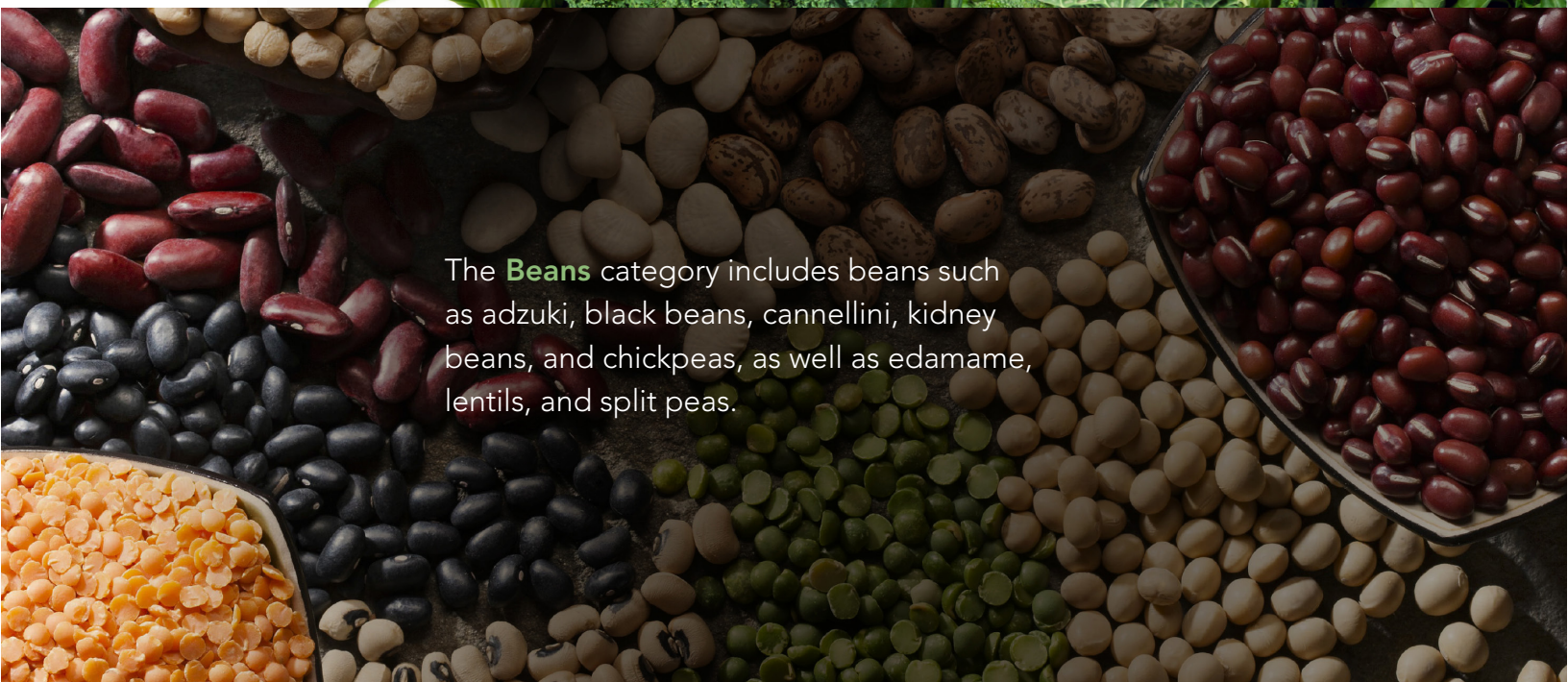
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The other key foods that Dr. Fuhrman wants people to ditch are salt, oil, and sugar. You may already have noticed that none of Dr. Fuhrman's recipes include these three ingredients.

Greens refers to green vegetables and green leafy veggies such as arugula, bok choy, broccoli, Brussels sprouts, cabbage, collard greens, kale, mustard greens, and watercress. Cauliflower (even though it's white and not green) is included in this category.



The **Beans** category includes beans such as adzuki, black beans, cannellini, kidney beans, and chickpeas, as well as edamame, lentils, and split peas.

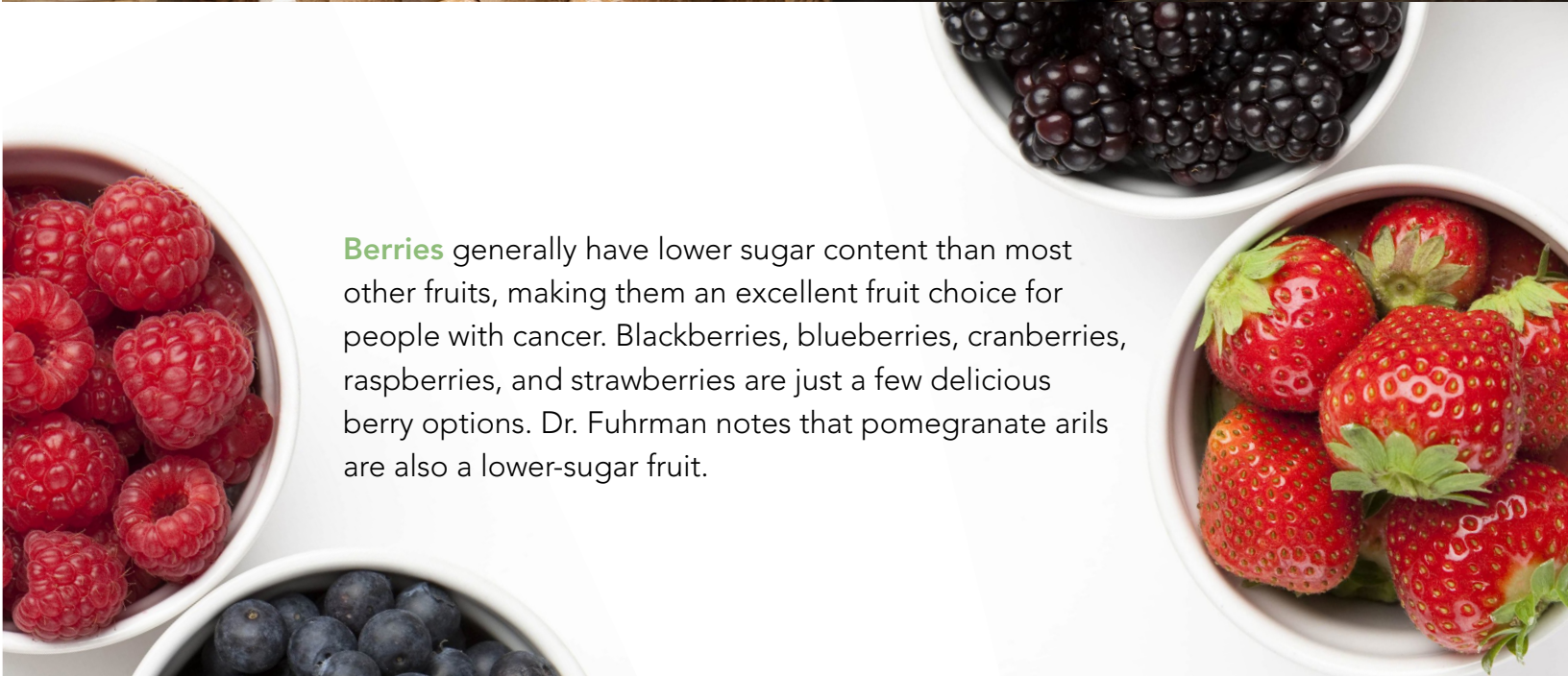


Not only does the **Onions** category encompass all the different colors and varieties of onions (green, red, white, Spanish, etc.), it also includes chives, garlic, leeks, scallions, and shallots.

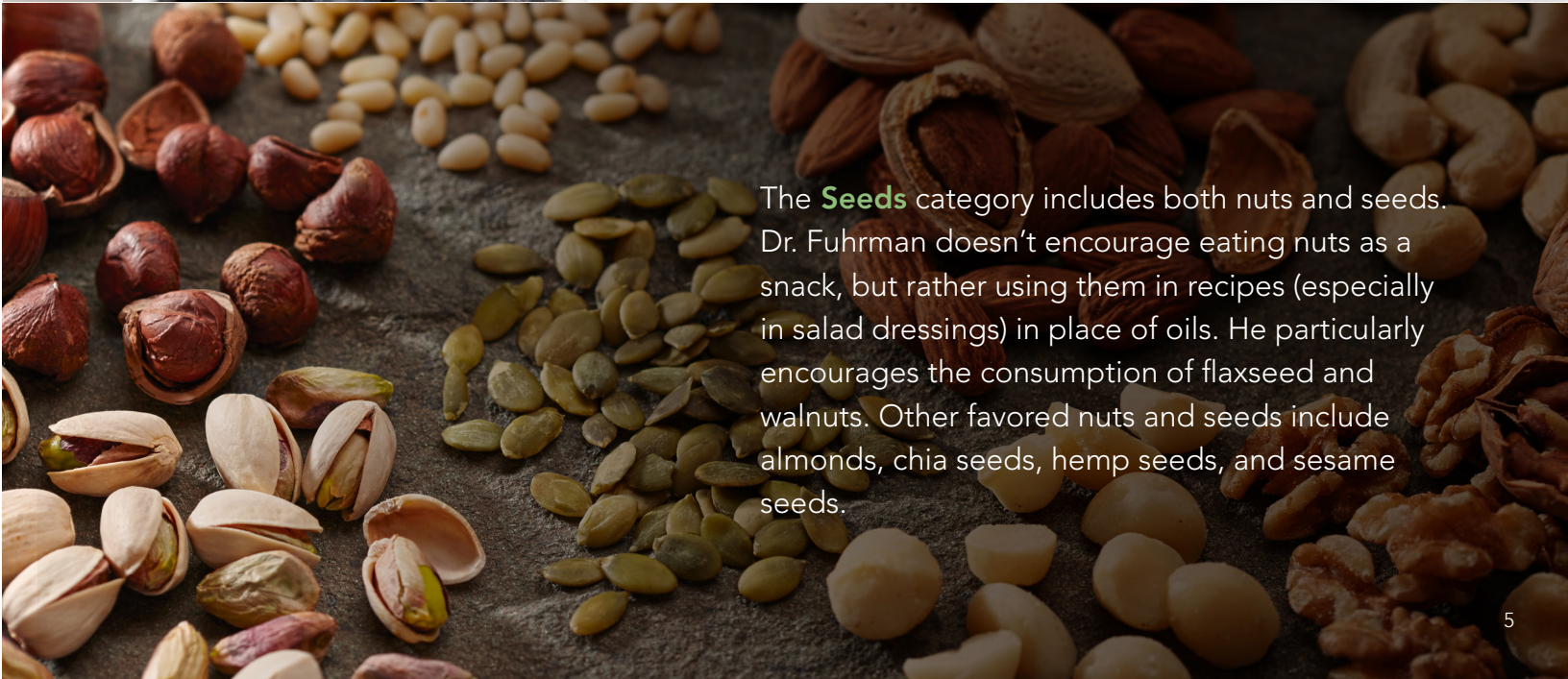




Mushrooms can be the common culinary mushrooms such as button mushroom, cremini, and portobello and/or any of the medicinal mushrooms such as lion's mane, maitake, reishi, and shiitake. (See issue 1 for more about the cancer-fighting power of mushrooms.)



Berries generally have lower sugar content than most other fruits, making them an excellent fruit choice for people with cancer. Blackberries, blueberries, cranberries, raspberries, and strawberries are just a few delicious berry options. Dr. Fuhrman notes that pomegranate arils are also a lower-sugar fruit.



The **Seeds** category includes both nuts and seeds. Dr. Fuhrman doesn't encourage eating nuts as a snack, but rather using them in recipes (especially in salad dressings) in place of oils. He particularly encourages the consumption of flaxseed and walnuts. Other favored nuts and seeds include almonds, chia seeds, hemp seeds, and sesame seeds.

How to Fit the G-BOMBS into Your Meals

Dr. Fuhrman recommends including two or more G-BOMBS with every meal, with your goal to consume all six at some point every day.

Here's a way you can fit all of the G-BOMBS into one meal:

Make a large salad with lots of leafy greens and your favorite raw veggies. Add cooked beans (e.g., chickpeas, black beans) along with some chopped raw onion, lightly-sautéed mushrooms, and top it with a delicious nut/seed-based dressing. Have a small bowl of berries for dessert and that's all six G-BOMBS right there!



In September 2021, Dr. Fuhrman published an article in the *International Journal of Disease Reversal and Prevention*² presenting seven (7) cases of patients who had adopted a nutrient-dense, plant-based (i.e., Nutritarian diet) following a cancer diagnosis.

According to the journal abstract, “Patients generally reported improved quality of life, intentional weight loss, no recurrence, and improvement in other aspects of health in the years after cancer diagnosis provoked their dietary change.”



Dr. Michael Greger

Dr. Michael Greger is a physician, *New York Times* bestselling author, and internally recognized speaker on nutrition, food safety, and public health issues, who I have interviewed several times.

He created a “Daily Dozen Checklist” for his book *How Not to Die* to inspire people to include the most nutrient-dense, disease-fighting foods in their diets.

Dr. Greger’s Daily Dozen:

- | | |
|--------------------------------|------------------------------|
| 1. Beans | 8. Nuts |
| 2. Berries | 9. Whole Grains |
| 3. Fruits (other than berries) | 10. Spices |
| 4. Cruciferous vegetables | 11. Exercise |
| 5. Greens | 12. Beverages - 1750 ml |
| 6. Vegetables (other colors) | (around 7.5 cups) per day of |
| 7. Flaxseed | water/green tea/hibiscus tea |

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[T]he nice thing about dietary interventions is that a healthy diet is good for all the organ systems of your body.

- DR. MICHAEL GREGER

You can download a colorful PDF of Dr. Greger’s Daily Dozen with suggested serving sizes for free here:

Metric measurement version: <https://nutritionfacts.org/app/uploads/2018/03/metric.png>

Imperial measurement version: <https://nutritionfacts.org/app/uploads/2018/03/imperial.png>

There’s also a free Daily Dozen app you can download to track your servings, analyze your progress, and learn along the way. Links to both the ios and android apps can be found at <https://nutritionfacts.org/daily-dozen/>



Dr. Antonio Jimenez

Dr. Tony Jimenez is the founder and chief medical office for the Hope4Cancer clinics in Mexico, which offers these dietary guidelines for cancer patients³:

- Low glycemic/pescatarian
- Plenty of organic, fresh, seasonal veggies, spices, and herbs (8-12 servings of fresh vegetables/day)
- Low-fructose fruits (e.g., berries, guavas, dragon fruit)
- High in fiber from gluten-free whole grains and legumes
- Any fats comes from either plant-based options (avocado, seeds, nuts, olive, coconut, and flaxseed oils) or from ghee (only based on Ayurveda's medicine original recipe) and wild cold water fish (not farm-raised)
- A maximum of 6 organic, free-range eggs per week

Some of the other key points that the Hope4 Cancer team recommend in conjunction with an anti-cancer diet include⁴:

Diet rotation & variation - Don't eat the same things all the time. Eat a greater variety of whole foods to obtain more micronutrients and follow the path of Mother Nature (i.e., eat with the seasons).

Consistent dietary habits - Try and stick to eating at the same times every day, but don't get stressed out if you can't follow your schedule exactly. The stress is worse for you than moving your usual mealtime!

Quality Matters - Eat organic as much as possible. Avoid GMOs and processed foods.



What Does the Scientific Literature Show? Findings From the AICR

The American Institute for Cancer Research (AICR) is a non-profit charity that funds cancer research and provides tools and information to help people prevent and survive cancer.

In conjunction with the World Cancer Research Fund (WCRF), they completed a systematic review of the global scientific literature to analyze how various foods affect the risk of developing cancer.⁵

“Convincing” or “probable” evidence means there is strong research showing a causal relationship to cancer – either decreasing or increasing the risk. The research must include quality human studies that meet specific criteria and biological explanations for the findings.

“Limited suggestive” evidence means results are generally consistent in overall conclusions, but it’s rarely strong enough to justify recommendations to reduce risk of cancer.

Based on the research review, the AICR/WCRF have made the following food-related determinations in regards to cancer:

There is a probable evidence that foods containing **dietary fiber** **DECREASE** the risk of:

- Colorectal cancer
- Weight gain, overweight, and obesity*

**This is important, because there is strong evidence that excess body fat increases the risk of several different cancers. (See more on this on page 16)*

There is a probable evidence that **non-starchy vegetables and fruit combined** **DECREASE** the risk of:

- Aerodigestive cancers overall (such as mouth, pharynx and larynx; esophageal; lung; stomach and colorectal cancers)

There is a probable evidence that **whole grains** **DECREASE** the risk of:

- Colorectal cancer

Limited evidence suggests that **non-starchy vegetables** may **DECREASE** the risk of:

- Estrogen receptor-negative (ER-) breast cancer

Limited evidence suggests that **non-starchy vegetables and fruits combined** may **DECREASE** the risk of:

- Bladder cancer

Limited evidence suggests that **foods containing carotenoids** may **DECREASE** the risk of:

- Lung and estrogen receptor-negative (ER-) breast cancers

Limited evidence suggests that **tea** may **DECREASE** the risk of:

- Bladder cancer

Limited evidence suggests that **foods containing beta-carotene** may **DECREASE** the risk of:

- Lung cancer

Limited evidence suggests that **fruit** may **DECREASE** the risk of:

- Lung cancer (in people who smoke or used to smoke tobacco) and squamous cell esophageal cancer

Limited evidence suggests that **citrus fruit** may **DECREASE** the risk of:

- Stomach cancer (cardia type only)

Limited evidence suggests that **coffee** may **DECREASE** the risk of:

- Mouth, pharynx, larynx and skin cancers, though more research is needed to determine if these are cause and effect associations.

Limited evidence suggests that **foods containing isoflavones** may **DECREASE** the risk of:

- Lung cancer

Limited evidence suggests that **foods containing soy** may **DECREASE** the risk of:

- Deaths from all causes in breast cancer survivors 12 months or more after diagnosis

“Consistent findings from population studies indicate no increased risk for breast cancer survivors who consume soyfoods. In fact, limited evidence shows the potential for greater overall survival and perhaps decreased recurrence, among women a year or more after diagnosis who include moderate amounts of soy.”

- American Institute for Cancer Research

Keep in mind that only the most common types of cancer are usually studied, so a food that decreases breast cancer, for instance, may also be beneficial for many other types of cancer. There's just not enough available research to be included in this type of literature review.

From the above statements we can draw the following conclusions about what anti-cancer foods we should be eating. As you'll notice, they align very well with what our doctor friends recommend we eat:

- Foods high in dietary fiber (e.g., beans, nuts, fruit, vegetables, and whole grains)
- Whole grains
- Non-starchy vegetables
- Fruits (including citrus fruits)
- Foods containing carotenoids (e.g., carrots, bell peppers, apricots, collard greens, kale, acorn squash, sweet potatoes, spinach)
- Foods containing beta-carotene (e.g., sweet potatoes, carrots, dark leafy greens, butternut squash, cantaloupe, romaine lettuce, red bell peppers, apricots, broccoli, podded peas)
- Foods containing isoflavones (e.g., soy, lentils, beans, peas)
- Soy foods



Based on their research review, the American Institute for Cancer Research (AICR) makes particular mention of the following foods for their demonstrated anti-cancer effects⁷:

Apples	Cranberries	Soy
Asparagus	Flaxseed	Spinach
Blueberries	Garlic	Squash (winter)
Broccoli	Grapefruit	Strawberries
Cruciferous Vegetables	Grapes	Tea
Brussels Sprouts	Kale	Tomatoes
Carrots	Oranges	Walnuts
Cauliflower	Pulses/legumes (dry beans, peas, lentils)	Whole grains
Cherries	Raspberries	
Coffee		

What Exactly Are Whole Grains?

A **whole grain** is a grain of any cereal or pseudocereal (seeds that are consumed like grains) that contains the endosperm, germ, and bran. Refined grains, on the other hand, retain only the endosperm.⁸ Whole grains are minimally processed and therefore contain more fiber and nutrients than refined grains.

Ancient grains are a group of grains and pseudocereals that have remained mostly unchanged for thousands of years.

Common Name	Considered an Ancient Grain*	Gluten Free*	Notes
Amaranth			
Barley			Good source of beta glucans
Brown rice			
Buckwheat			
Bulgur/Cracked wheat			
Corn/Maize	Blue corn		
Einkorn (wild wheat)			More protein than modern red wheat
Ezekiel Bread/Sprouted Bread			Flourless bread made from a variety of sprouted whole grains & legumes
Farro			
Fonio			A type of millet
Freekeh			
Kamut/Khorasan Wheat			
Millet			

 Yes

Common Name	Considered an Ancient Grain*	Gluten Free*	Notes
Oats		Oats are inherently gluten-free, but are frequently contaminated with wheat during growing or processing, so look for a brand that's tested to be gluten free	Good source of beta glucans
Popcorn			
Quinoa			Complete protein source
Rye			
Sorghum			
Spelt			
Teff			
Whole wheat			

 Yes



Key Takeaways

As you can see, even top cancer doctors and nutritional experts don't agree on every single aspect of diet, but there are far more similarities than differences in their recommendations. The main variance is that some allow for a small amount of animal foods, but none recommend red meats, and never processed meats like hotdogs or sausages. (My personal take is to avoid animal products altogether.)

If you compare all the recommendations outlined above, you'll see that vegetables, fruits, whole grains, and legumes should make up the bulk of your diet – whether you already have a cancer diagnosis or are looking to prevent cancer or cancer recurrence.

Depending on your budget and what's available in your area, try and source the highest quality food you can find. This means whole foods as close to how they appear in nature as possible that are free from pesticides. Your food should be organic whenever possible and non-GMO.

I often get the question about whether it's okay to cheat or not when following an anti-cancer diet. What you do the majority of the time (i.e., 90% of the time) is going to be what moves the needle. But if you have an active cancer diagnosis, I like this advice from Dr. Fuhman:

“

If your life is on the line, you want to and need to do the gold standard of nutritional excellence. Anything less than ideal would be selling you out. So if you have a serious issue, you are better off not touching any oil, any salt, or any animal products. You want to make every day, every meal, and every bite count towards protecting and prolonging your life and reversing your disease.”⁹

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In a Hurry Anti-Cancer Soup

BY JOEL FUHRMAN, M.D.

This is a stream-lined version of Dr. Fuhrman's classic Anti-Cancer Soup (see *Issue 1*) brimming with greens, beans, onions and mushrooms.

SERVES: 6

Directions

Place all ingredients except cashews in a large stock pot. Bring to a boil then reduce heat to a simmer, cover and cook for 30 minutes or until the vegetables are soft.

Add cooked soup and cashews to a food processor or high powered blender and blend until smooth and creamy. For a chunky soup, only blend a portion of the cooked soup and then return to the pot.

PER SERVING: Calories 363, Protein 18 g, Carbohydrates 65 g, Sugars 22 g, Total Fat 7.2 g, Saturated Fat 1.3 g, Cholesterol 0 mg, Sodium 243 mg, Fiber 13.7 g, Beta-Carotene 34016 ug, Vitamin C 218 mg, Calcium 353 mg, Iron 7.3 mg, Folate 302 ug, Magnesium 206 mg, Potassium 2540 mg, Zinc 3.5 mg, Selenium 12.9 ug

Ingredients

- 3 large onions, chopped
- 5 large zucchini, cut into 1-inch pieces
- 2 cups mushrooms, any type, chopped
- 1 pound kale, tough stems removed, chopped
- 1 pound mustard greens, tough stems removed, chopped
- 1 1/2 cups cooked beans, any variety or 1 (15 ounce) can low-sodium or no-salt-added beans, drained
- 6 cups carrot juice*
- 2 cups water
- 1 tablespoon Dr. Fuhrman's VegiZest or other no-salt seasoning blend, adjusted to taste
- 1/2 cup raw cashews

*use a good quality refrigerated carrot juice



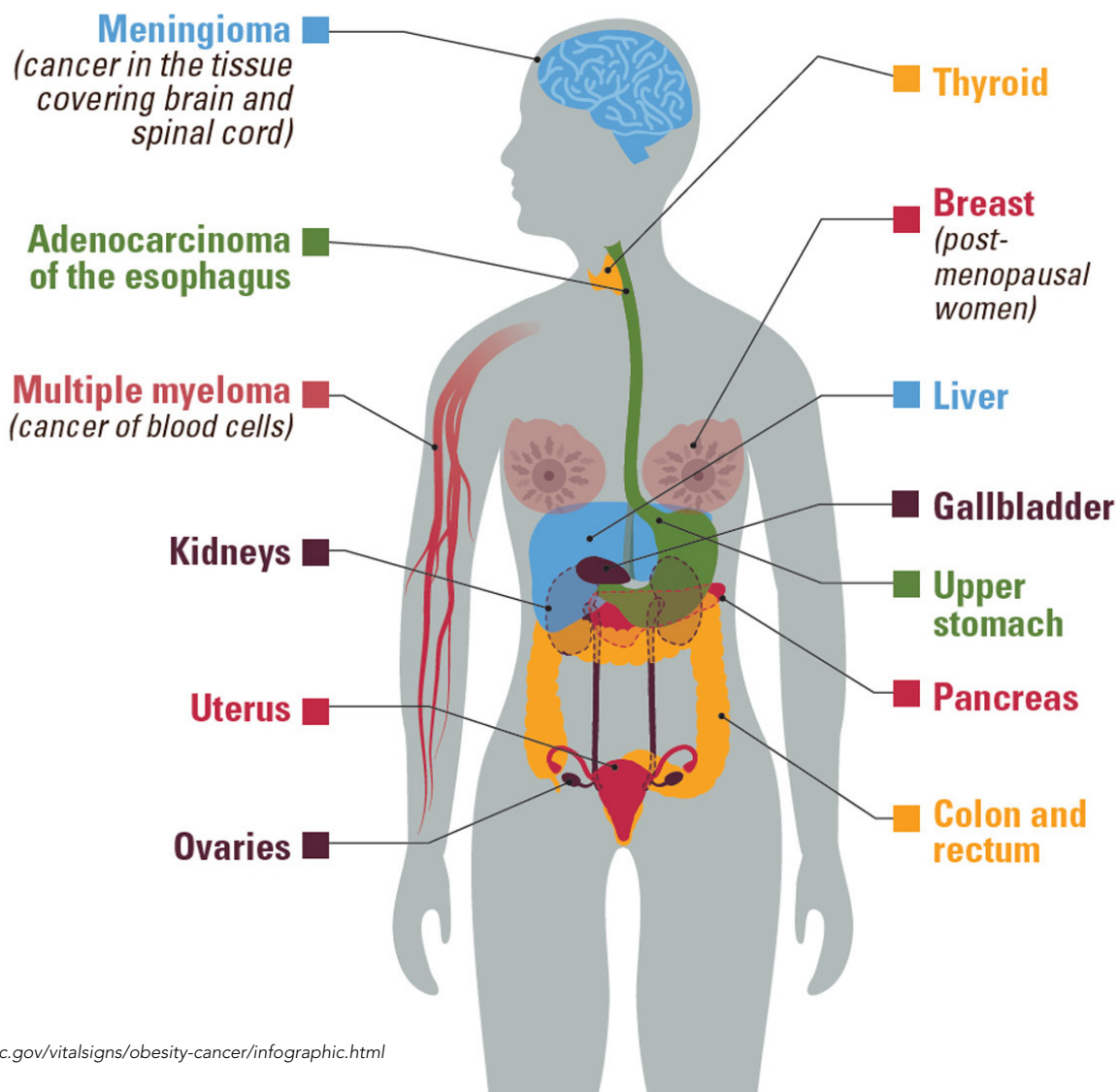
13 Types of Cancer Associated with Overweight & Obesity

BY NATHAN CRANE

One of the greatest benefits of eating a healthful diet is that it's the best path to achieving an optimal body weight.

In 2017, the Centers for Disease Control and Prevention (CDC) released a new *Vital Signs* report showing that obesity and overweight are associated with 13 types of cancer.

These 13 cancers make up around 40% of all cancers diagnosed in the U.S.! The report authors studied American cancer data from 2005 to 2014 to determine trends associated with overweight and obesity. What they found was non-obesity related cancers actually *decreased* during that time period, but obesity related cancers *increased*.



Other key findings of the report included¹

- Cancers related to obesity INCREASED by 7% between 2005-2014, while non-obesity related cancers DECREASED by 13%.*
- Obesity impacts women more. 55% of all cancers related to obesity were diagnosed in women, versus 24% in men.
- Black, American Indian, and Alaskan native males all had higher incidence rates than white males.

**excluding colorectal cancer*

Obesity Is An Independent Risk Factor for Several Alcohol-Related Cancers

In Issue 5 we looked at the impact of alcohol on cancer risk. (As a reminder, even one glass per day of a so-called “healthier” alcohol such as red wine increases your cancer risk.)

If you're overweight or obese, drinking alcohol is even riskier. According to recent research presented at the European Congress on Obesity in May 2022, being overweight or obese are independent risk factors that significantly increase one's chances of developing alcohol-related cancers.² This is the first study that closely examined the relationship between obesity – as measured by body fat percentage, waist circumference, and body mass index (BMI) – and alcohol consumption.





Study participants were first divided into three groups (tertiles) according to their body fat percentage, waist circumference, and BMI. They were then further classified according to their self-reported alcohol consumption based on U.K. alcohol guidelines of 14 units of alcohol or less per week.

This study clearly shows that **people with higher body fat percentage levels who consumed more alcohol were at greater risk of developing cancer.**

For example, people in the highest body fat percentage tertile who drank within the recommended alcohol guidelines were 53% more likely

to develop alcohol-related cancers than those with the lowest body fat percentage who never drank. Those who drank above alcohol guidelines were at 61% greater risk.

“
From a cancer-
prevention
standpoint, the
safest level
of alcohol
consumption is
total avoidance.”³

DR. ELIF INAN-EROGLU
University of Sydney, Australia

What’s more, a clear relationship was observed between greater waist circumference and the risk of developing obesity-related cancers upon alcohol intake, regardless of the actual extent of consumption.

While this is an observational study based on self-reporting of behaviors, it’s clear that alcohol consumption and obesity – individually and combined – greatly increase your risk of getting cancer.

Sources

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3. <https://scitechdaily.com/being-overweight-amplifies-the-harmful-effects-of-alcohol-on-cancer-risk/>



8

Ways Berberine Fights Cancer

You may have heard of berberine as an increasingly popular supplement for weight loss and blood sugar management. This is because berberine has been recognized for its antioxidant, anti-inflammatory, and lipid-lowering properties that strongly influence how carbohydrates are metabolized by the body.¹

While it may seem that berberine is a relatively new phenomena in the supplement world, documented use of berberine dates back over 3,000 years! It has long been used in traditional Chinese medicine (TCM), Ayurveda, and other healing traditions to control diarrhea caused by bacterial infections, and manage gut disorders such as inflammatory bowel disease (IBD), and other inflammatory conditions.^{2,3}

Berberine is known for its antioxidant, anti-inflammatory, anti-diabetic, anti-obesity, and anti-microbial activities.

What Is Berberine?

Berberine is a bright yellow alkaloid compound found in the bark, leaves, roots, rhizomes (underground stems), and fruit of various plant species. Alkaloids are naturally occurring organic compounds that contain at least one nitrogen atom.

Some of the best-known sources of berberine include European barberry, goldenseal, goldthread, Oregon grape, phellodendron, and tree turmeric.



Berberine is available over-the-counter (OTC) in the U.S. and is considered an herbal dietary supplement.



Plants that Contain Berberine

Common Name of Plant	Plant Part	Scientific Name
Prickly Poppy	Leaves	<i>Argemone mexicana</i>
Barberry	Root	<i>Berberis vulgaris</i>
Tree turmeric	Root, stem bark	<i>Berberis aristata</i>
Boxthorn barberry	Root	<i>Berberis lyceum</i>
Chutro	Root	<i>Berberis asiatica</i>
Oregon grape	Root	<i>Berberis aquifolium</i>
Nepal barberry	Root	<i>Berberis floribunda</i>
Michay	Leaves, stem	<i>Berberis congestiflora</i>
Croatian barberry	Root	<i>Berberis croatica</i>
Chochar	Root	<i>Berberis petiolaris</i>
Nilgiri barberry	Stem bark	<i>Berberis tinctoria</i>
Yellow-dye tree of Sudan	Bark	<i>Coelocline polycarpa</i>
Chinese goldthread	Root	<i>Coptis chinensis</i>
Japanese goldthread	Rhizome	<i>Coptis japonica</i>
California Poppy	Root	<i>Eschscholzia californica</i>
Goldenseal	Root	<i>Hydrastis canadensis</i>
Oregon grape	Root	<i>Mahonia aquifolium</i>
Amur cork tree	Bark	<i>Phellodendron amurense</i>
Long-headed poppy	Root	<i>Papaver dubium</i>
Poppy	Aerial root	<i>Papaver hybridum</i>
Wild sweetsop	Fruit	<i>Rollinia deliciosa</i>
Yellow root	Root, stem	<i>Xanthorhiza simplicissima</i>
Heart-leaved moonseed	Leaf, stem	<i>Tinospora cordifolia</i>
Jangkang	Stem bark	<i>Xylopi macrocarpa</i>

Source: https://www.researchgate.net/figure/List-Of-Plants-Contain-Berberine_tbl1_346439412

Berberine and Diabetes

Modern research studies show that berberine can lower levels of cholesterol, LDL-cholesterol, and triglycerides, both in laboratory animal models as well as in individuals with high cholesterol.⁴

Berberine, both by itself and in combination with other traditional Chinese medicine herbs, has also been shown to have anti-diabetic properties. For example, berberine improves the body's sensitivity to insulin and influences how blood sugar is taken up and used by our body's cells.^{1,5,6}



How Berberine Helps Fight Cancer

Most promisingly of all, an abundance of recent research carried out in various cancer cell lines and animal models of cancer shows that **berberine has powerful, multifaceted anti-cancer properties.**⁷

Berberine has been studied in relation to several types of cancer including:

- breast
- cervical
- colorectal
- gastric
- liver
- lung
- ovarian
- prostate

Even better, results from a double-blind, randomized, placebo-controlled trial examining the effects of berberine on reducing the risk of recurrence of colorectal cancer in human patients (discussed in more detail further on) indicate that berberine is both safe and effective.^{8,9}



Let's take a closer look at 8 key ways in which berberine has been shown to fight cancer



01.

Preventing cancer cell growth

A unique, defining quality of cancer cells is that they grow and multiply continuously and relentlessly. In laboratory experiments, berberine has been shown to prevent many types of cancer cells from growing, via multiple mechanisms.^{10,11}

02.

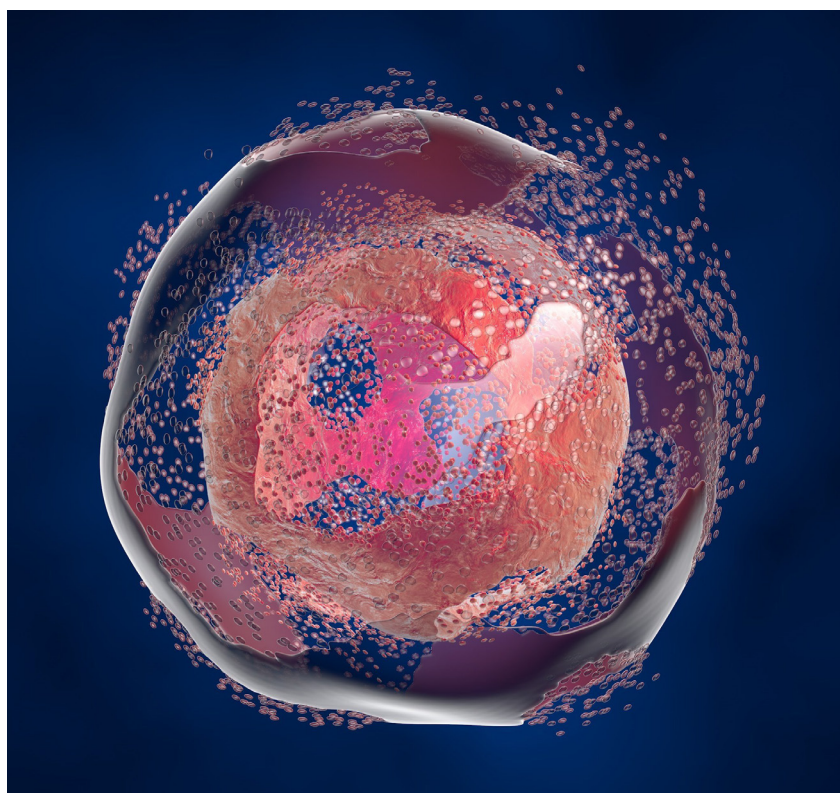
Triggering programmed cell death (apoptosis)

Apoptosis, or programmed cell death, is when damaged, infected, or cancerous cells in our body are deliberately killed off via a sequential series of programmed steps. This is a common method our body uses to get rid of unwanted cells. The process of apoptosis is blocked in many cancer cells. In laboratory experiments, berberine has been shown to overcome this block and induce apoptosis in multiple types of cancer cells, thereby killing them.¹²⁻¹⁴

03.

Induction of autophagic cell death

Autophagy is a natural, controlled destruction of damaged and unwanted cells in our body, along with the orderly breakdown and recycling of various cellular components. Berberine has been shown to induce autophagic cell death in cancer cells in laboratory experiments.¹⁵⁻¹⁷



04.

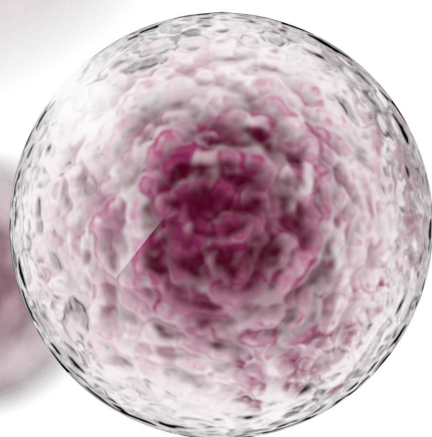
Enhancing immune killing of cancer cells

Chemical derivatives of berberine have been shown to enhance the activity of immune white blood cells known as natural killer (NK) cells, which specialize in killing tumor cells and virus-infected cells in our body.¹⁸ In other words, berberine appears to enhance the immune system's ability to fight cancer.

05.

Preventing invasion and metastasis

In laboratory experiments, berberine was shown to prevent the growth and penetration of many types of cancer cells into neighboring tissues (known as invasion).¹⁹⁻²¹ This strongly suggests that berberine can prevent the ability of cancer cells originating in one area of the body to migrate to other areas – a life-threatening process known as metastasis.



06.

Preventing angiogenesis

As they grow and multiply within a tumor, cancer cells stimulate the formation and growth of new blood vessels (known as angiogenesis) to supply them with much-needed oxygen and nutrients. In laboratory experiments, berberine has been shown to prevent angiogenesis triggered by cancer cells, potentially restricting tumor growth.²²

08.

Strengthening the anti-cancer actions of standard therapies

Berberine has been shown to act synergistically with conventional anti-cancer therapies. If this can be replicated in human patients, it means that a lower (and less toxic) dose of these therapies could be used in clinical situations, with little to no loss of efficacy.²³⁻²⁵

07.

Managing the tumor microenvironment

Cancer cells are known to secrete various compounds into their immediate environment, or “microenvironment.” This prevents the immune system from recognizing and killing them and allows them to grow and multiply unhindered. Berberine prevents cancer cells from manipulating their microenvironment via its anti-inflammatory actions and by direct interaction with various components of the immune system. This leads to slow or completely stopped cancer cell growth, and even cancer cell death.⁵



Clinical Trials – Early Results

The results of a promising double-blind, randomized, placebo-controlled trial examining the effects of berberine on the risk of recurrence of colorectal cancer in human patients were published in early 2020.^{8,9}

During the follow-up monitoring period of two years after berberine treatment, only 36% of participants in the berberine group – compared to 47% in the control group – had developed recurrent adenoma (non-cancerous tumors). This difference was reported to be significant and no serious adverse events were reported.



In conclusion, berberine appears to be both safe and effective in reducing the risk of recurrence of colorectal adenoma.

At present, ten other clinical trials examining the possible benefits of berberine against various human cancers are ongoing. Of these, six have been completed, of which one has reported preliminary results on safety, but not efficacy.^{26,27}



Contraindications & Warnings

Several studies have shown that, in general, berberine is very safe and has low toxicity toward healthy cells.³⁰ However, berberine should be avoided by pregnant or breastfeeding women, as it may worsen jaundice in infants.²

Further, clinically relevant doses of berberine have been shown to affect the metabolism and change the concentrations (blood levels) of other drugs taken at the same time.²

Therefore, supplements and medications containing berberine should never be consumed without consulting your healthcare provider first, especially if you are already taking other medications.



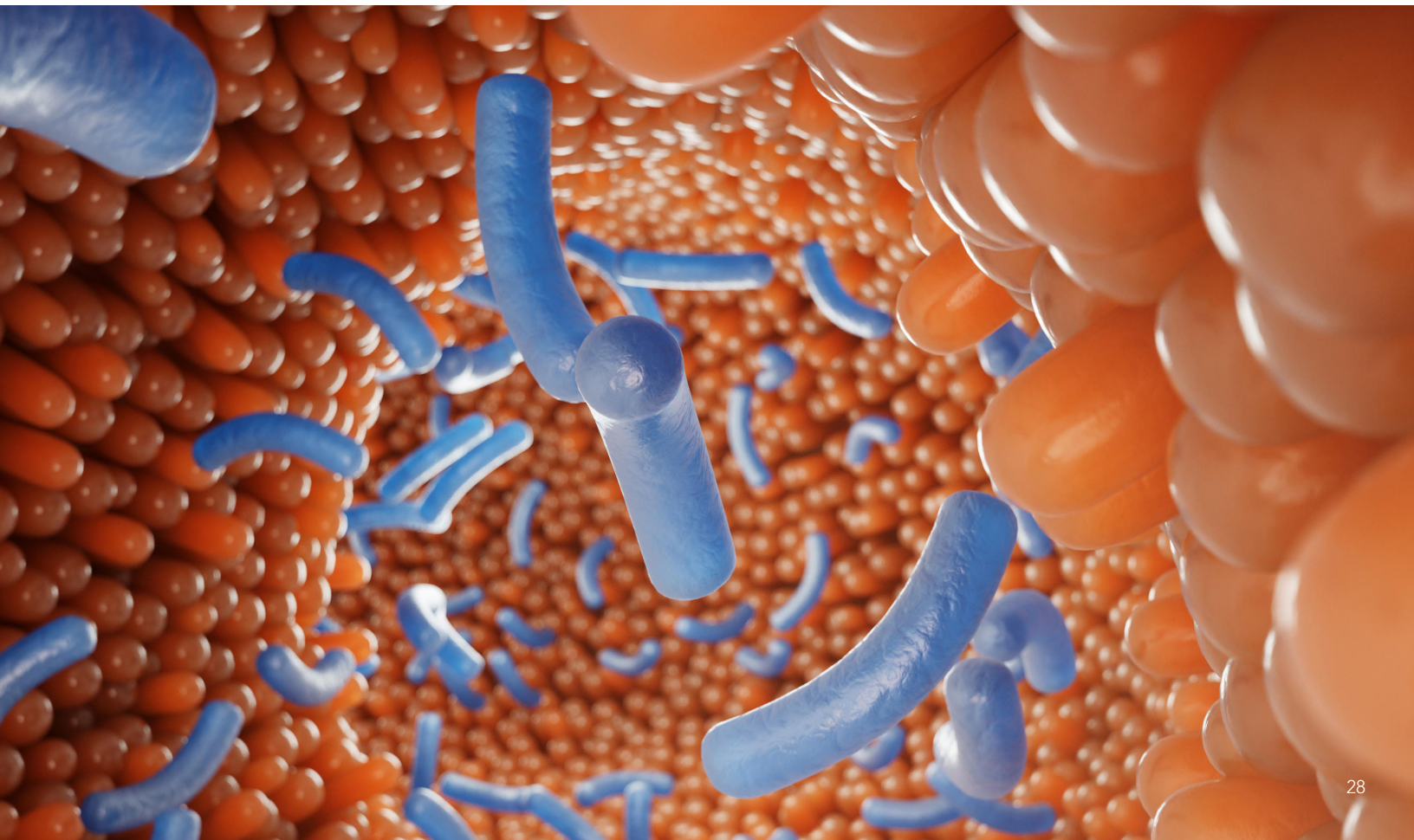
Berberine Is Poorly Absorbed in the Gut

Research has shown that berberine has very low bioavailability, meaning that only a tiny portion of the active compound is actually absorbed by the digestive tract.

Various approaches have been tried to enhance the intestinal absorption.²⁸ For instance, a micro-emulsifying delivery system was seen to increase berberine's absorption by 2.4-fold.²⁹ Further, in laboratory experiments, a chemical derivative of berberine was shown to be more toxic to cancer cells than berberine.³¹



Several studies in humans have suggested that combining berberine with silymarin (found in milk thistle) increases absorption of berberine. However, it's not yet known whether the benefits seen are due to the additive effects of berberine and silymarin or from increased absorption of the berberine alone.³² Research into this area continues.



Berberine Supplements

Berberine is typically sold as berberine HCL or sulfate in capsule or tablet form containing hundreds of milligrams per serving. The other primary format is goldenseal extract or root powder which usually contains less than 30mg of berberine per serving.

The usual supplement dosage for blood sugar control is 500mg of berberine HCL or sulfate taken two to three times per day. There is no established dose for goldenseal.

An independent review by ConsumerLab.com of berberine and goldenseal supplements found that three-quarters of the goldenseal they tested failed to contain the stated quantity of berberine and one powder contained no detectable berberine at all!³³ The berberine capsules and tablets did do better in testing.



From ConsumerLab's testing, they recommend the following berberine supplements as their top picks for quality and cost:

- Amazing Formulas™ Berberine (1 capsule, once daily)
- Dr. Whitaker Berberine 500 mg (1 capsule, 3 times daily)
- Dr. Whitaker GlucoGold (1 tablet, 3 times daily)
- NutriCology® TriBiotics (1-2 vegetarian capsules, 2-3 times daily)
- Thorne Research Berberine-500 (1-2 vegetarian capsules, 2 times daily)



Key Takeaway

Berberine has been safely used in traditional medicine for a wide array of uses for thousands of years.

Modern research into berberine as an agent to help prevent and treat cancer is extremely promising.

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Blueberry Pomegranate Dressing

BY JOEL FUHRMAN, M.D.

SERVES: 6

This fruity, creamy dressing will not only make your salad taste great, it will make it more nutritious. Berries and pomegranate juice are rich in antioxidants and the healthy fat in nuts and seeds increases nutrient absorption.

Directions

Blend ingredients in a high-powered blender until smooth and creamy.

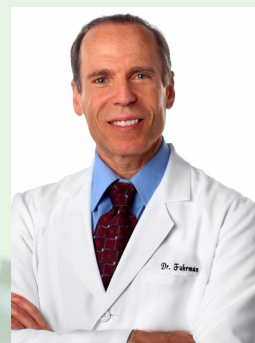
PER SERVING: Calories 105, Protein 3 g, Carbohydrates 12 g, Sugars 8 g, Total Fat 5.9 g, Saturated Fat 0.7 g, Cholesterol 0 mg, Sodium 4 mg, Fiber 2.1 g, Beta-Carotene 16 ug, Vitamin C 1 mg, Calcium 14 mg, Iron 0.8 mg, Folate 23 ug, Magnesium 40 mg, Potassium 155 mg, Zinc 0.7 mg, Selenium 4.4 ug

Ingredients

- 2 cups fresh or thawed frozen blueberries
- 1/2 cup pomegranate juice
- 1/4 cup raw cashews
- 1/4 cup raw sunflower seeds
- 1/4 cup Dr. Fuhrman's Wild Blueberry Vinegar or other fruit flavored vinegar

Joel Fuhrman, MD

is a board-certified family physician, nutritional researcher and seven-time *New York Times* best-selling author. He serves as the President of the Nutritional Research Foundation. Dr. Fuhrman has authored numerous research articles published in medical journals and is on the faculty of Northern Arizona University, Health Science Division. His two most recent books are *Eat to Live Quick and Easy Cookbook* and *Fast Food Genocide*.





The Power of Energy Healing

BY **NATHAN CRANE** WITH **DONNA EDEN**

The following is a condensed version of my interview with Donna Eden for the Healing Chronic Stress and Disease Summit. Donna Eden has been teaching people how to work with the body's energy systems to reclaim their health and vitality for decades. Donna's among the world's most sought, and most authoritative spokespersons for energy medicine. She has taught more than a hundred thousand people worldwide – both lay people and professionals – how to understand the body as an energy system. Her classic book, *Energy Medicine*, is a textbook in hundreds of healing classes.



Nathan: From your perspective, what is energy medicine, and what would you wish more people understood about it?

Donna Eden: Energy medicine uses all the different energies that flow through us, flow around us, flow between us, as the medicine for our bodies. It really recognizes that energy is all there is, there is nothing else. I mean, we appear solid, but we're really these latticeworks of force fields.

You can approach your healing right into those energy systems, in between those spokes in the healing field, and approach it there and heal it there, and the body always strives to heal; it wants to heal. So all you have to do is get on board and really engage with your energies, learn how to speak energy. It's much easier than anyone would ever expect. It's like it's very available once you move into that realm.

I'd like to say energy is really intelligent. It is far more intelligent than our intellects. It's like the body already knows how to heal, so if you are in sync with your energy and can communicate, your body begins to heal by itself. It knows how to heal, to do that.

Nathan: What's fascinating to me is how for thousands of years our ancestors have been tuned into energy as a form of healing. Qi gong dates back 5,000 years, for example. Our modern scientists, using all the advanced technology we have, are just barely starting to understand this field. How is it possible to understand this comprehensive, vast knowledge of energy

without the use of all of these modern technological tools?

Donna Eden: I believe that for thousands upon thousands of years, this is what was natural for everybody. There wasn't a doctor to go to and see. You of course healed yourself, and you did that with the energies in your body.

I think what happened is, as the world got less and less natural and more and more technological, and all of our advances that have been wonderful, they also lost something. They lost that connection to nature and what is natural. I think our ancient ancestors really understood that we were a part of nature, and you could just watch how nature heals and how trees or flowers bloom and die. It's just all what was natural. I think that it's been a much shorter time that we've been away from that.

I think this next century is going to absolutely be about Western medicine and Eastern medicine or energy medicine blending more, being more connected. Because so many people, physicians or nurses in Western medicine, they come into our classes now. I think anybody who has a sense of really wanting to help people heal, they know that something else is going on other than the pharmaceutical medicines they're handing people.

Nathan: People who are on a healing path who may have chronic disease or are already doing research and trying to eat better, I think what often happens is we try to dissect things into individual

parts. So it's the diet for the body and the meditation for the mind. Could you talk more about that? How do you look at healing from your perspective?

Donna Eden: We are all so different. Your energy is as unique as a thumbprint, but it's also we have patterns that we can rely on. But if you also keep in mind that your energy is going to be unique, and so you can find out through energy testing. I teach people how to energy test so that people who can't see or can't register it in other ways always get the answer through energy testing. So you can find out the foods or the vitamins you need, and you can find out how many of those vitamins you need. It's something you can really rely on.

I [believe in psychology] but I also know that many, many times, it is not about some in-depth thing to figure out. It's more let's just shift the energy. Every human being on this planet can learn to shift their energy so that they can feel better in every way. Mentally, physically, emotionally, every which way, they can feel better.

The other thing is that there are so many stresses in our bodies these days, and it could be emotional, but it could be that we are bombarded constantly from energies outside of our own field all the time. And so you can learn to work with your energies to move the stresses out of your body. And then you can learn, after you've moved the stresses out, how to bring joy in, and those kinds of things. It's not at all just physical.

Nathan: How does energy medicine support the health and healing of our mental and emotional state?

Donna Eden: Oh, so completely. Let me just ask you a question. Have you ever, when you got stressed, thrown your hand up to your forehead? "Oh, no!" It's just sort of an automatic thing that we do. I think that our ancient ancestors must have known that, because we still do it. We have carried it forth for thousands of years. And here's what happens. When you get stressed, you lose blood from your forebrain. You can lose as much as 80 percent of the blood from your forebrain to go into your body for the fight-or-flight response or freeze.



If you cannot flee or fight or freeze, then the blood eventually comes back up, but it's slow in coming. I think our ancestors knew that if they put their hand up here – because their hand is electromagnetic, the blood is electromagnetic – you draw your blood back up into the forebrain, and you can think again.

It's just a simple tool technique to help you get back to some sort of balance, like if you're

arguing with a mate or feeling stressed out about something bad. You can get yourself back and feel good again by just holding those points on your forehead.

I love to help people out of stress. I had a practice for 28, 30 years, but I don't have my practice anymore because I just teach it now. I love to have people be stunned and shocked how quick they can snap out of something. It's really thrilling. And the more you do energy medicine, you are more and more thrilled with the miracle of it. You never get tired of seeing, "Oh, my God, it worked." I love it.

Nathan: You had offered to share a simple practice we can all do at home to help us reduce stress, to help us to heal energetically. So if you'd love to lead us, that'd be great.

Donna Eden: Yes. I'm going to talk just a little tiny bit. There is a meridian that is also considered a radiant circuit called "Triple Warmer." Triple Warmer governs the fight, flight, or freeze response in the body, so it gets really overactive in the body. When it does, it sucks energy from other places in the body so that you can't seem to pull it together or get out of that.

Here's a simple way to help you take Triple Warmer down so that it gets more balanced with the other meridians. So you're going to rub your hands together and shake it off. Now lay your hands over your eyes, your closed eyes.

Now you're going to take a deep breath

in through your nose, and as you let your breath out, drag your fingers to your temples. Here at your temples, you're going to take a deep breath in and out. *[Inhales and exhales deeply]*.



► [Click here to follow along with Donna and her husband, David Feinstein as they demonstrate the stress relief technique](#)

Now you're going to take another deep breath in and go above your ears. And let your breath out. Go behind your ears, down the neck, and hang on the shoulders.

You have just traced about half of Triple Warmer backwards. Now you're going to take a deep breath in. Push your fingers into your shoulders. Drag them across and land on your heart chakra, and just take a deep breath there. *[Inhales and exhales deeply]*. Your heart is on the same element as Triple Warmer, and suddenly your heart tends to take over more. Even your loving compassion takes over more. It's an amazing balance. I love that one. The more you do it, the more it works for you, because your body learns to follow your lead more and more.

Nathan: Yeah. I mean, instantly. It was maybe 30 seconds or a minute, and, yes, immediately I felt relaxed and calm. Can

you explain more how and why that works, and why each of the movements?

Donna Eden: Yes. The very beginning, when I had you lay your fingers over your eyes, this is the beginning of something called the “regulator flow.” So I mix up Triple Warmer and regulator because we want to really regulate that stress and help it move out of your body.

And then right here in your temple are Triple Warmer neurovasculars. Some people sort of massage their temples, I think instinctively trying to move that energy out, that Triple Warmer energy out. So every time you just hold here, or hold here, the blood moves through that area, and it’s very calming.

Then when you go up around your ears, that’s tracing Tracing Triple Warmer meridian backwards. It’s going backwards, which is to sedate it, to calm it down. Then when you get to the neck, you’ve got a blend of Triple Warmer and your vagus nerve. The Triple Warmer is part of the sympathetic nervous system, and the vagus nerve is the parasympathetic, so vagus can help you calm down. When you push your fingers into your shoulders, drag them across, and you’re really engaging both of those, you come down here, and your heart takes over.

Nathan: Beautiful, thank you for explaining that. So how often do you do these energy practices? How often do you recommend people to implement them?

Donna Eden: One of the great things about

energy medicine is it’s always going to help you. You could do it one time and think, “Oh, that feels good. I’m just going to sit down.” Or, you might think, “I’m really in a bad way. I’m going to do this a few times.” It’s learning to listen to your higher wisdom. It’ll just say, “all right, you’ve had enough.” There’s no set amount on anything. It’s what feels good. You’re not going to harm yourself.

I had multiple sclerosis for years, from the time I was 16 until 31. I was told I would never get over it, that I was going to die. I was told I wouldn’t be able to walk again. All of these things. That’s how the daily energy routine came about. I found that if I straightened out my energy so that it was flowing precisely as it was meant to flow, then the body knew how to heal, and you didn’t have to go up against blocks and problems in the body. Your body would move that healing force. So it’s really, really valuable.

Nathan: I’m feeling more energy in my body already just from the little bit we did. I have daily practices, meditation and qi gong and energy practice as well, so learning more of these methods from you is certainly wonderful and something I could add to my own toolkit. Thank you so much for the work you do.

Donna: Thank you very, very much.

Nathan Crane



Nathan Crane is a natural health researcher and holistic cancer coach. He is an award-winning author, inspirational speaker, Amazon #1 bestselling and 20x award-winning documentary filmmaker.

Nathan is the Director of the Health and Healing Club, President of the Holistic Leadership Council, Producer of the Conquering Cancer Summit, Host of the Conquering Cancer Documentary Series, and Director and Producer of the award-winning documentary film, Cancer; The Integrative Perspective.

Nathan discovered powerful holistic solutions to overcome years of trauma, homelessness, depression, and suicide attempts to find a life of meaning, purpose, health, and fulfillment.

He has received numerous awards including the Accolade 2020 Outstanding Achievement Humanitarian Award, and the Outstanding Community Service Award from the California Senate for his work in education and empowerment with natural and integrative methods for healing cancer.

With more than 15 years in the health and wellness field as a researcher and advocate, Nathan has reached millions of people around the world with his inspiring messages of hope and healing.

His website is NathanCrane.com