



*Newest Solutions to Cancer  
Prevention & Control: A Review  
of the Most Effective Natural  
Approaches*

**Dr. Sandra J. Bevacqua**

**WORLD INTEGRATED SYSTEMS IN  
HEALTH**

# SOME QUESTIONS TO BE ADDRESSED

- What causes cancer?
- Why is it that some people get cancer easily while others do not?
- What are the most effective approaches (therapy, markers, testing, etc.) to cancer?
- What nutrients/diet have been associated with cancer prevention +/- or control?
- How can natural therapies +/- or nutrition-based support be integrated with standard treatments e.g. chemotherapy, radiation?
- Has this approach been successful?



# HOW WE GET CANCER

- The Risk Factors:
  - Smoking
  - Air, Water, and Food Pollutants
  - Diet High in Animal Fats and Chemicals
  - Unstable Blood Sugar
  - Inflammation/Obesity
  - Nutritional Deficiency
  - Low Fiber Diet (Dysbiosis, decr Diversity)
  - High Mental or Physical Stress

**We have control over most of these!**



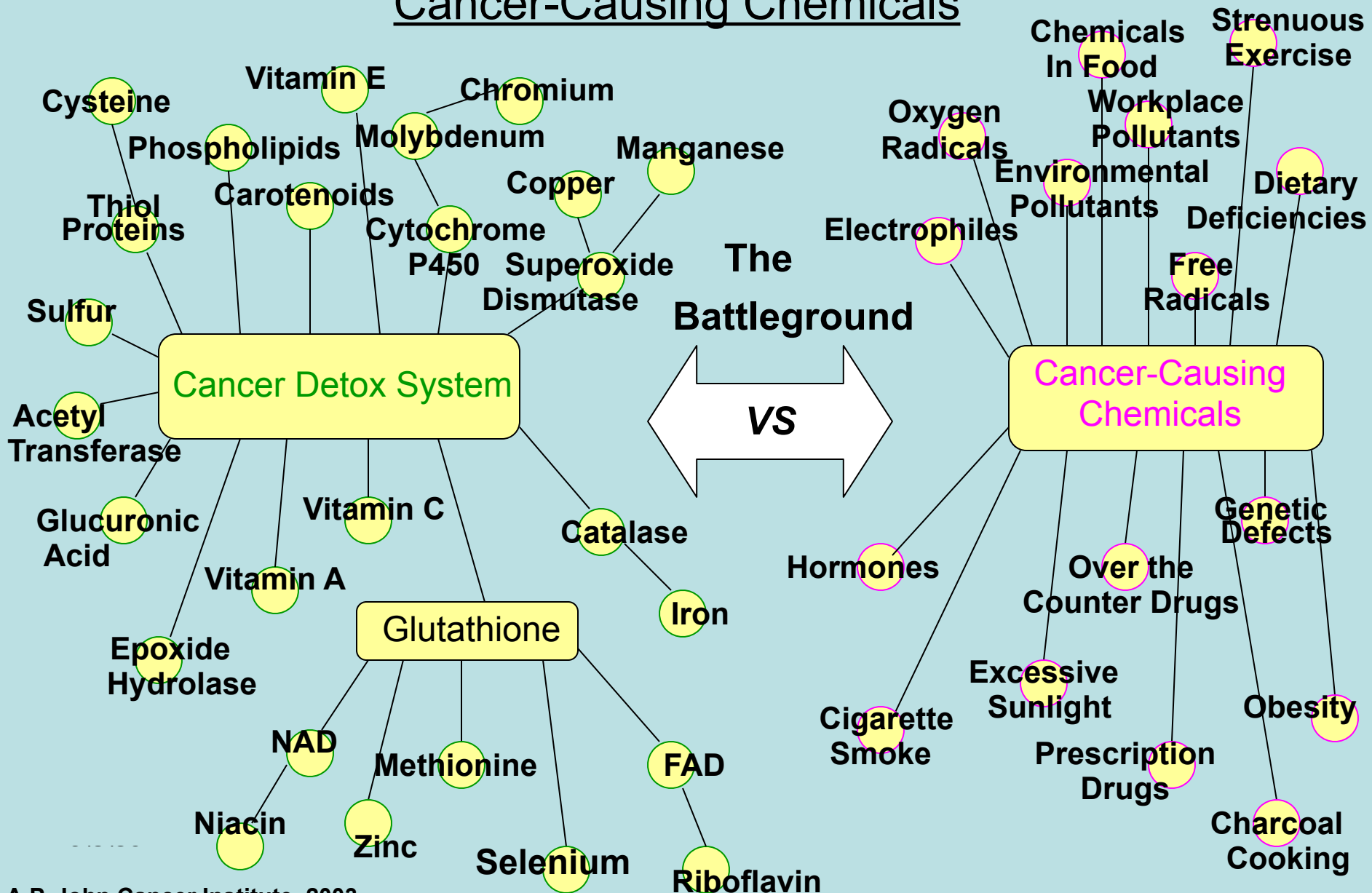
# SOURCES OF KNOWN CARCINOGENS

- Plasticizers- Phthalates
- Synthetic Hormones
- Certain components of prescription and non-prescription medications
- Alcohol
- Tobacco/Vaping (nicotine & nornicotine)
- Excessive or Insufficient Sunlight
- Toxic/Heavy metal exposure
- Flame retardants
- Pesticides/Herbicides/Fungicides
- Preservatives: Nitrates, Nitrites, etc.

**So, how do we detox...?**



# The Never Ending Battle of the Cancer Detox System and the Cancer-Causing Chemicals



EFFECTIVE NATURAL APPROACHES TO CANCER:  
INSULIN POTENTIATED THERAPY AND THE WARBURG WAY

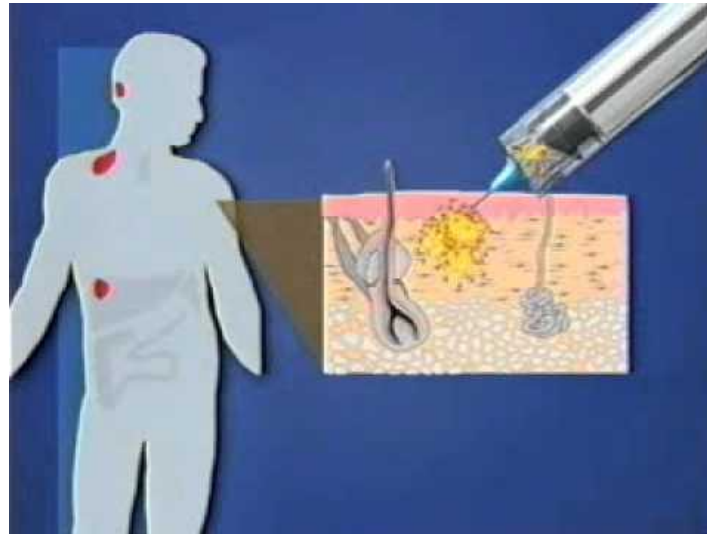


Dr. Otto Warburg

- **Advantages:** Low cost, no weight loss or any serious side effects, increased appetite, excellent success rate, and surprising pain relief.
- **Disadvantages:** Still uses chemotherapy and “officially” unavailable in the U.S.A.



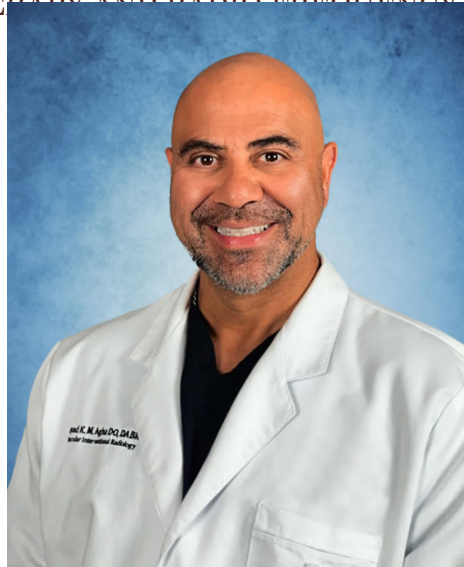
EFFECTIVE NATURAL APPROACHES TO CANCER:  
DENDRITIC CELL VACCINE



- **Advantages:** No chemotherapy and can result in complete eradication of wide-spread or scattered metastases in bone and lymph nodes.
- **Disadvantages:** High cost and no insurance coverage, multiple visits necessary, and can potentially be painful initially when working well.



EFFECTIVE NATURAL APPROACHES TO CANCER:  
CRYOTHERAPY AND RADIO FREQUENCY ABLATION



Dr. Ayad Agha, DO

- **Advantages:** Insurance will pay for most patients, no chemotherapy or toxicity, and excellent precision and success rates.
- **Disadvantages:** Short recovery time needed after each treatment, anesthesia required, and can get expensive if no insurance.





EFFECTIVE NATURAL APPROACHES TO CANCER:  
IV VITAMIN C AND/OR OZONE THERAPY, RGCC



Dr. DeeAnn Saber, NMD

- **Advantages:** Moderate to low cost with insurance, low to no toxicity, and highly effective for many solid tumors.
- **Disadvantages:** Requires regular appointments, close monitoring of dosage, and G6PD blood test prior to start of IV Vitamin C.

Onconomics Plus RGCC™



RGCC



# EXAMPLE FROM GENETICS PORTION OF REPORT

## ANGIOGENESIS

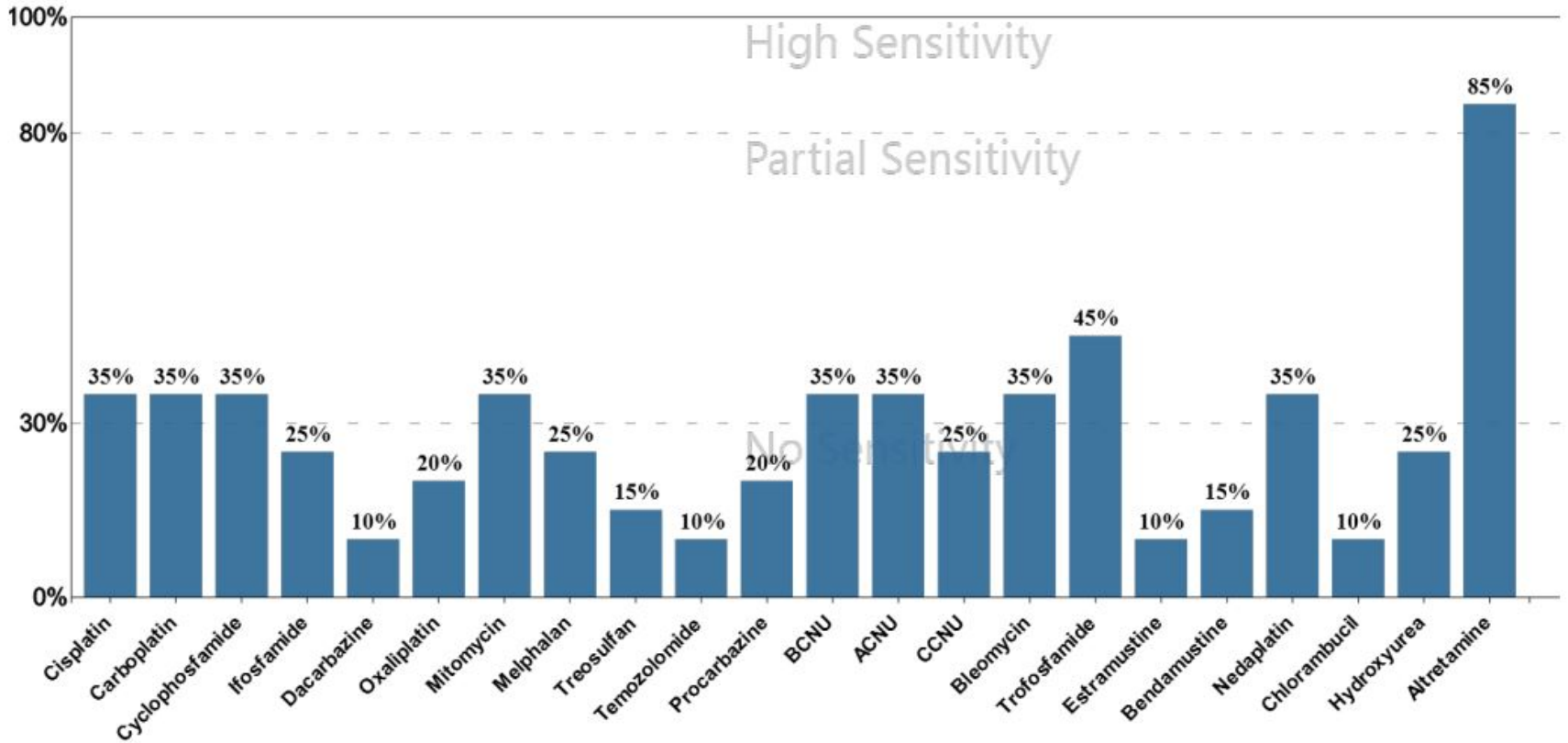
FUNCTION	CLINICAL RISK	NAME	RELATED	RESULTS	OUTCOME
Angiogenesis	HIGH RISK	VEGF	Angiogenesis	55	HIGH RISK
		FGF	Angiogenesis	45	HIGH RISK
		PDGF	Angiogenesis	30	HIGH RISK
		ANG 1	Angiogenin I	20	HIGH RISK
		ANG 2	Angiogenin II	10	HIGH RISK

## CELL CYCLE REGULATION & IMMORTALIZATION / APOPTOSIS

FUNCTION	CLINICAL RISK	NAME	RELATED	RESULTS	OUTCOME
Increase protein Synthesis	HIGH RISK	E2F1	Transcr. Fact of TS & topo I	10	HIGH RISK
Rapid Cell Cycle	LOW RISK	CDC6	Initiation of DNA replication	Normal	LOW RISK
Immortalization	HIGH RISK	h-TERT	M2 crisis- aggressive phen.	15	HIGH RISK
Regulation of apoptosis	HIGH RISK	Bcl-2	Apoptosis	30	HIGH RISK
		Bax	Apoptosis	15	HIGH RISK
		CD95 (fas-r)	Apoptosis related receptor	30	HIGH RISK
Cell cycle Rate	HIGH RISK	p27	Cell arrest (G0)	20	HIGH RISK
		p53	Cell cycle regulator	40	HIGH RISK
		p16	Apoptosis	Normal	LOW RISK



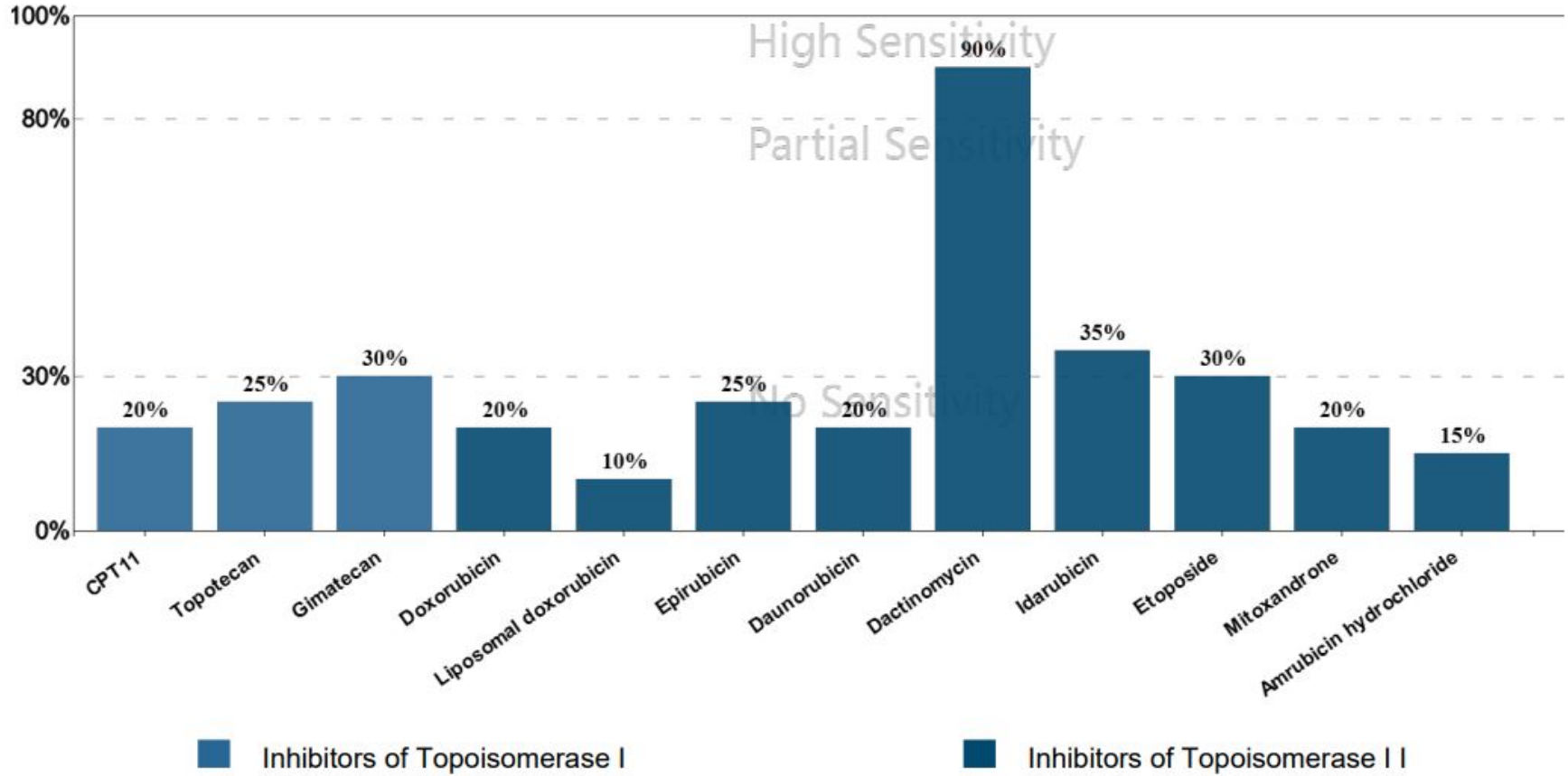
# Alkylating Agents



High Sensitivity: Altretamine



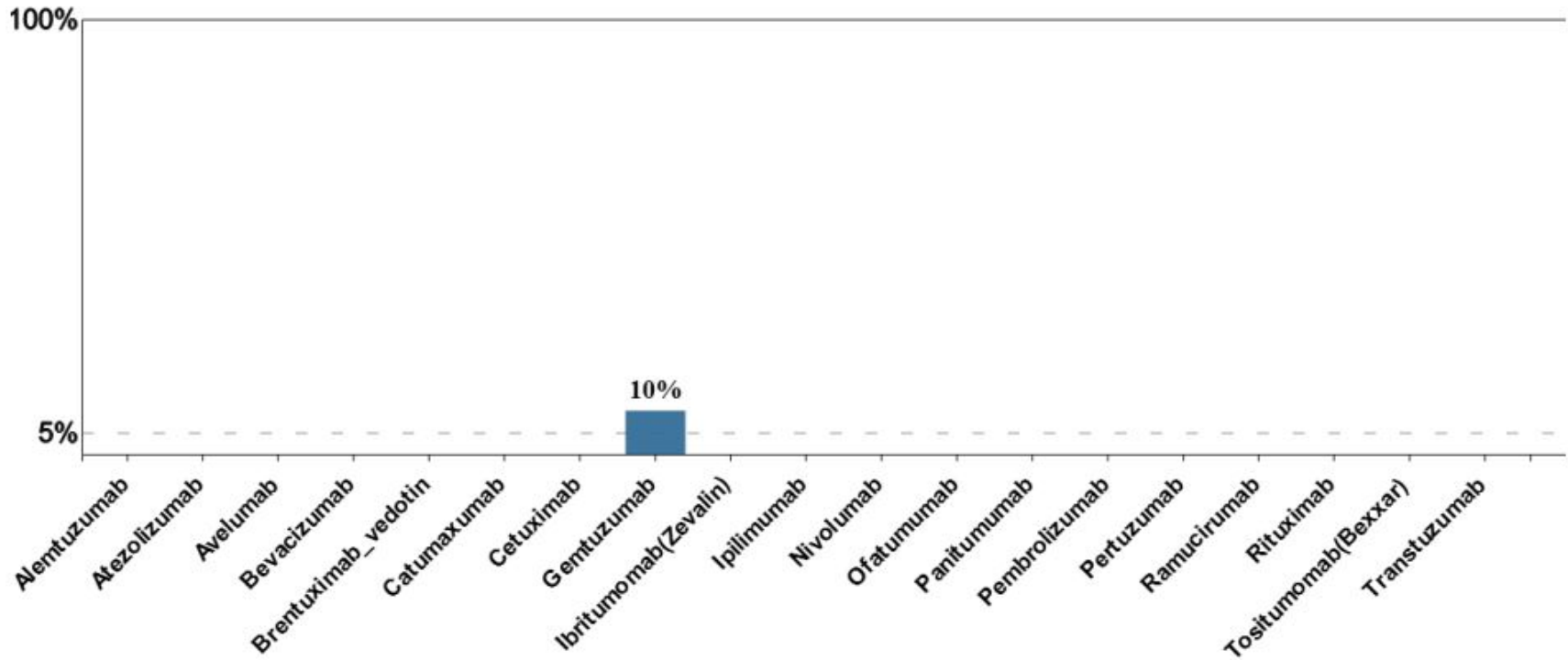
## Inhibitors of Topoisomerase I & II



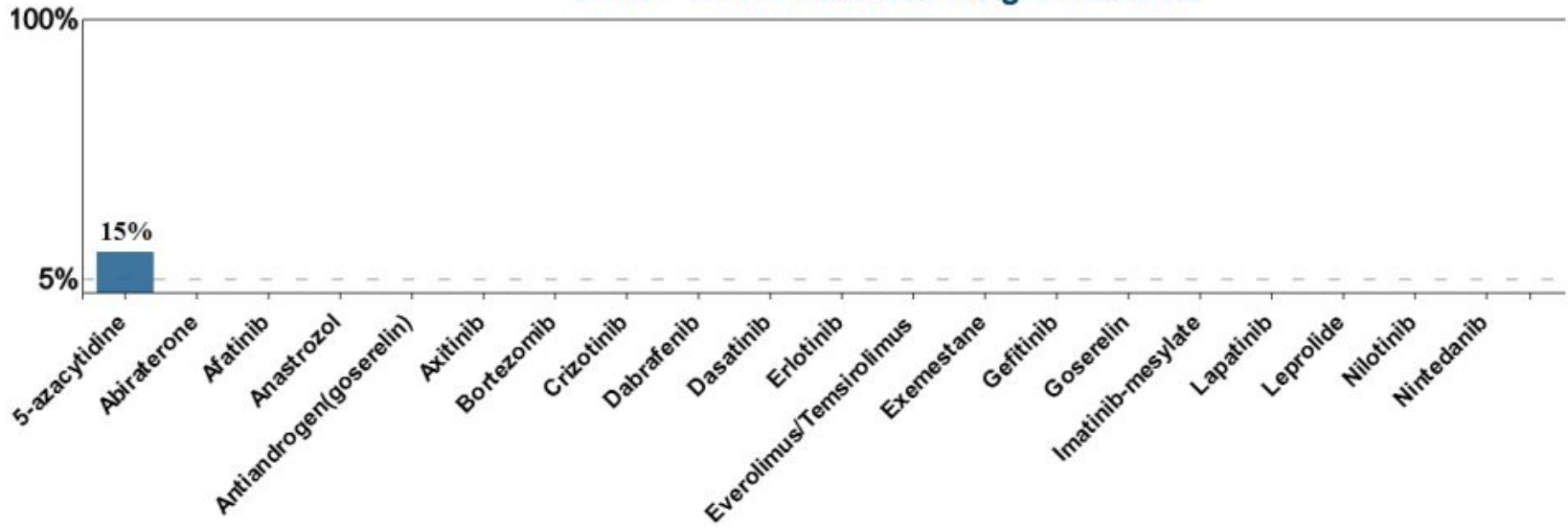
High Sensitivity: Dactinomycin



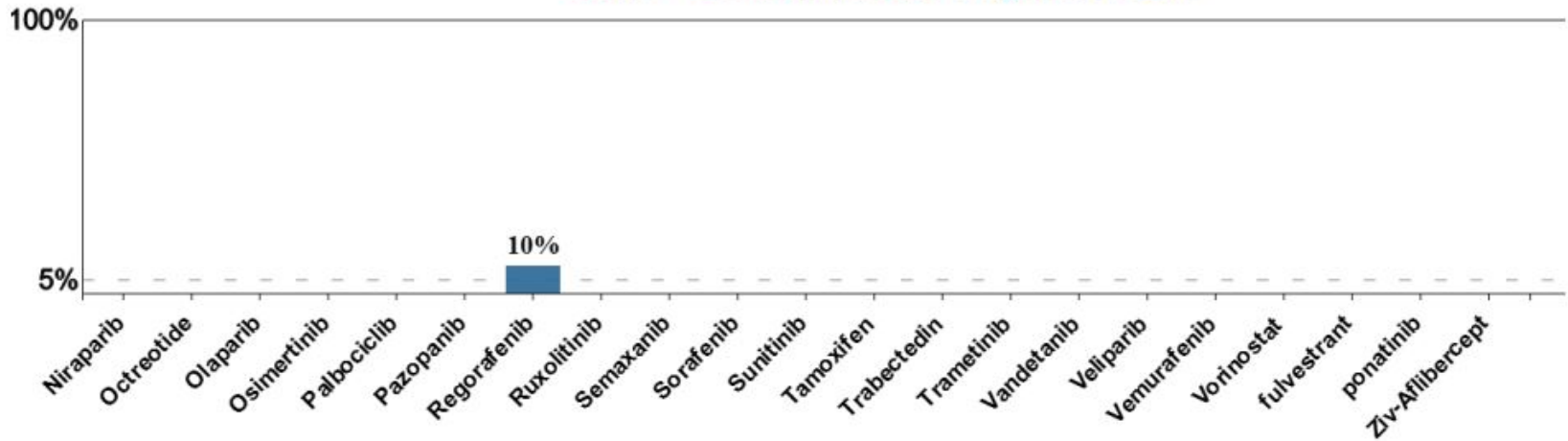
## Moab - Monoclonal Antibodies



### SMW - Small Molecular weight molecule

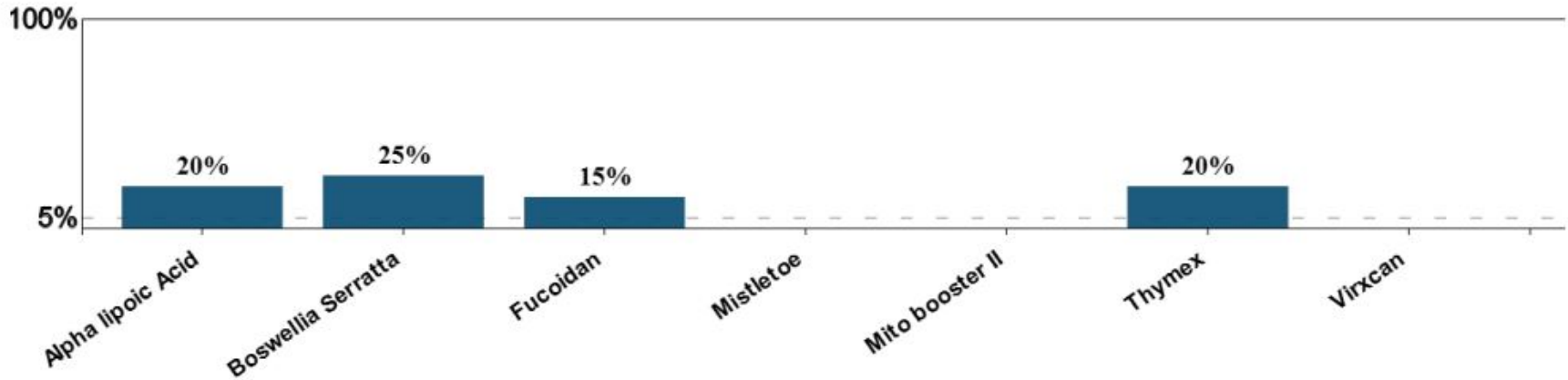


### SMW - Small Molecular weight molecule



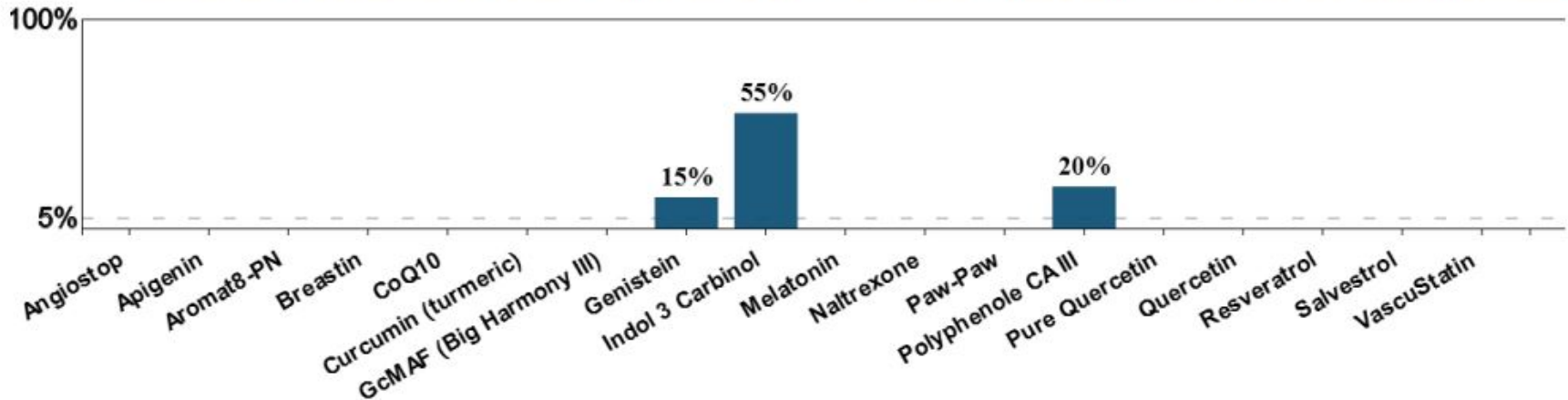
## Class II (Immunostimulants/ immunomodulators)

Immunostimulants / immunomodulators release of Cytokins and increase of PBMC & NK



## Class III (PK inhibitors)

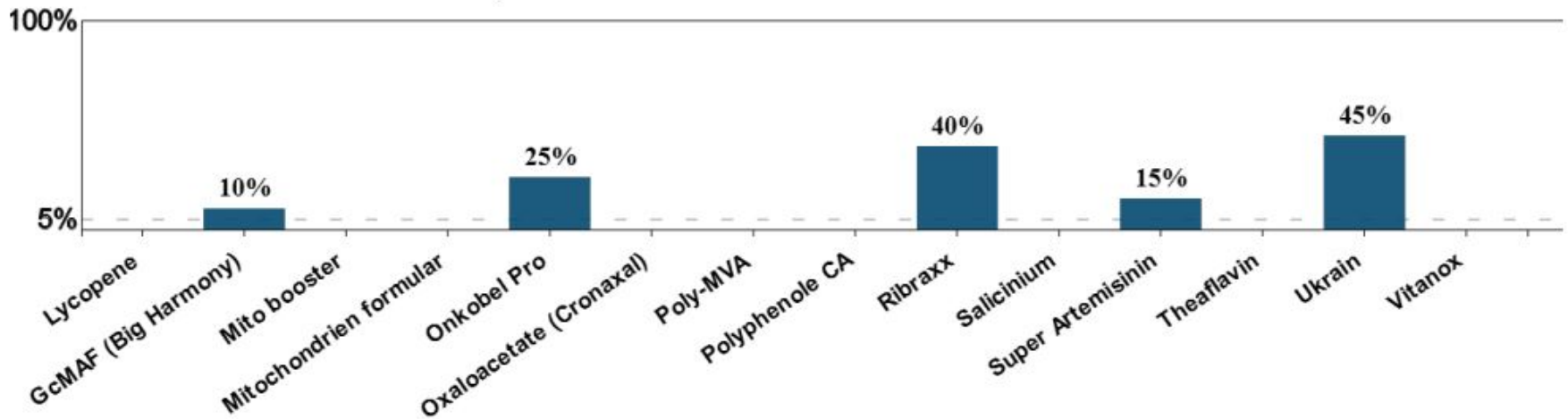
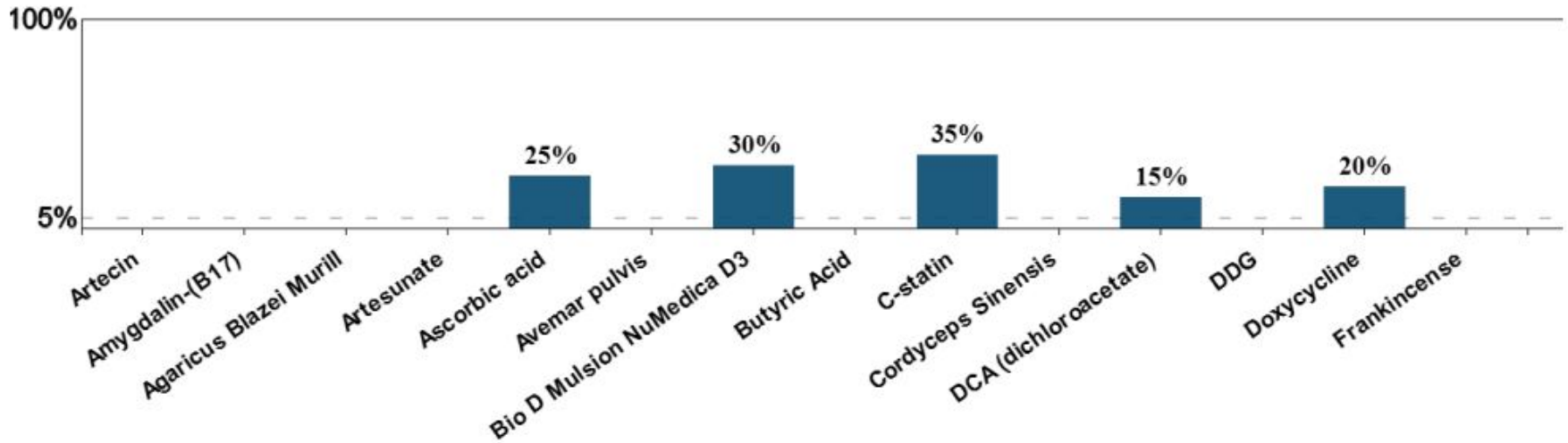
Inhibitors of growth factors receptor inhibitors of EGFr, IGFr, VEGFr, PDGFr, FGFr signal transduction pathways





## Class I (cytotoxic Agents)

Activation of Caspase (especially 3 and 9) and cytochrom C re



# VITAMIN C

- IV Vitamin C was shown to increase the quality of life and reducing side effects in women with **breast cancer** who were being treated with chemotherapy and radiation.
- In a 2014 study, 27 women using chemotherapy for advanced **ovarian cancer** experienced excellent results yet fewer side effects while using IV vitamin C.
- The ascorbic acid effect is more accurately described as preventing the alkalization of urine rather than producing an acid urine. This occurs by preventing or decreasing ammonia production by bacterial urease.  
<http://jama.jamanetwork.com/article.aspx?articleid=400449>



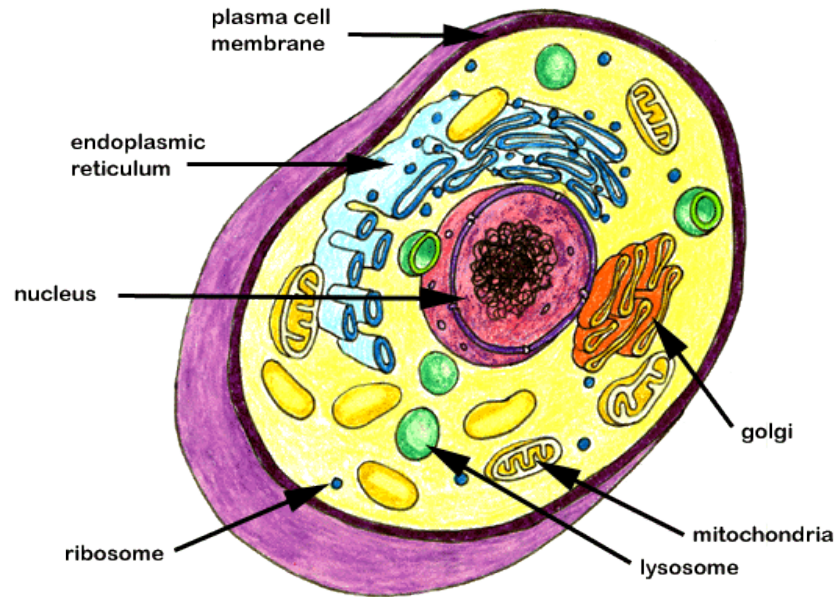
# VITAMIN E – TOCOPHEROLS & TOCOTRIENOLS

- Protects the body against damage from radiation (less tissue scarring, fibrosis and necrosis)



# ALPHA LIPOIC ACID

- Protects against mitochondrial damage and neurotoxicity during chemotherapy



○ <http://www.ncbi.nlm.nih.gov/pubmed/25526924>

○ <http://www.ncbi.nlm.nih.gov/pubmed/9606603>

○ <http://www.ncbi.nlm.nih.gov/pubmed/6129179>

○ <http://www.ncbi.nlm.nih.gov/pubmed/18809400>



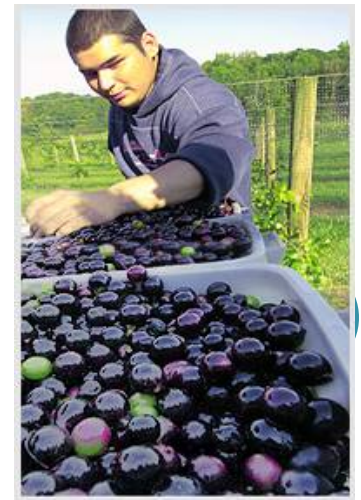
**RESEARCH: REVISITING THE ALA/N (ALPHA-LIPOIC ACID/LOW-DOSE NALTREXONE) PROTOCOL FOR PEOPLE WITH METASTATIC AND NONMETASTATIC PANCREATIC CANCER: A REPORT OF 3 NEW CASES.**

- IV Alpha-Lipoic Acid and oral low dose Naltrexone were given to three individuals with metastatic **pancreatic cancer**.
  - Patient #1 is alive in well 78 months after initial diagnosis
  - Patient #2 was shown to be clear via PET scan within 5 months of therapy
  - Patient #3 was shown to be cancer free via PET scan within 4 months of therapy.



# RESVERATROL, I3C & FLAVANOIDS

- Resveratrol is the most notable of the **dietary polyphenols** for prevention of cancer and CVD.
- Highly abundant: makes up 10% of grape skin biomass.
- Antagonist of tumor initiation, promotion and progression. Strong inhibition of **prostate cancer** in vitro.
- Indole-3-carbinol and resveratrol work synergistically to prevent (and possibly reverse) **breast cancer**.
- Anti-inflammatory- COX-2 and phorbol ester-resp. protein kinase C isoenzymes inhibition.
- Other Flavonoids are also very effective at:
  - **Decreasing Lymphedema**
  - Stimulating Various Immune Functions



# CURCUMIN (TURMERIC) ALONE:

- Inhibits the proliferation of tumor cells
- Decreases inflammation (Memory Building!)
- Inhibits the transformation of cells from normal to tumor
- Inhibits the synthesis of a protein thought to be instrumental in tumor formation
- Helps your body destroy mutated cancer cells so they cannot spread throughout your body
- Helps prevent the development of additional blood supply necessary for cancer cell growth (**angiogenesis**)
- Has chemosensitization activity and radiosensitization activity!!!

**Recent evidence suggests that Turmeric (root, extract or powder) has more immune building effect than curcumin alone.**

**Use Both!**



# THERE ARE SOME ISSUES WITH GETTING ENOUGH CURCUMIN

- Poorly Absorbed
- There are very few potent CR products
- None proven to achieve therapeutic anti-cancer effect (yet).
- Look for QC
  - 100% Organic
  - Controlled Release
  - Thorough testing!





MULTITARGETING BY CURCUMIN AS REVEALED BY  
MOLECULAR INTERACTION STUDIES,  
S.C. GUPTA, ET AL, *NAT. PROD. REP.*, 2011,28, PG 1937-1955

- *"The molecular basis of a disease is related to dysregulation of an array of signaling molecules. With the advent of advanced molecular tools, we now know that **over 500 different genes of the signaling pathways control any given disease.** However, most currently available treatments are based on the modulation of a specific single target. **Curcumin is a functionally labile molecule with the potential to (simultaneously) modulate the biological activity of (a multitude of) signaling molecules either indirectly or directly...**"*





# VITAMIN D

- Regulates gene expression and repairs damaged DNA
- **Increases apoptosis**, or the self-destruction of mutated cells (which, if allowed to replicate, could lead to cancer)
- Reduces the proliferation and spread of many types of cancer cells (blocks iron-dependent lipid peroxidation)
- Encourages all cells to differentiate (cancer cells often lack differentiation)
- Reduces the growth of new blood vessels from pre-existing ones (one step in the transition of dormant tumors to active tumors)...



# CALCIUM



- Excess calcium in the G.I. tract decreases the incidence of **colon cancer**. It is thought to bind excess bile +/-or stomach acid, thereby protecting the mucosa.
- Lancet; 200 male subjects, 49 developed colon CA All had 400 mg or less of calcium per day.
- Average Americans get 600 mg per day.
- Sloan Kettering: “1250 mg per day are needed to prevent colon cancer”.
- National Institute of Health recommends 1500 mg.



# ZINC



- Decreases toxicity of certain chemotherapies
- Several studies report increased survival in patients with **melanoma**
- Zinc deficient diets increased the number of tumors generated by cadmium exposure (while significantly reducing the number of pre-neoplastic lesions)
- Strengthens and restores immune function
- Is **vital** for the metabolism of **Vitamin A**
- Protects against the release of cancer cells into circulation during surgery and the disruption of clinically invisible satellite deposits
- Adults: 30-90 mg per day



# EXERCISE, DETOX AND WEIGHT MANAGEMENT

- Step 1. Schedule some physical activity into your day planner at least 15-30 minutes per day.
  - Start with 5 min if 15-30 is a challenge.
  - Make it high priority! Reward yourself for perfect attendance.
  - Walking, sweeping, gardening and dancing all count.
- Step 2. Achieve your normal weight by setting and achieving small exercise and detoxification goals.
  - Detoxification makes it **MUCH EASIER** to maintain an optimal weight and an active vibrant body. **Find an exercise and detox program that is right for you. (7)**



# TO AVOID/CONQUER CANCER:

- Eat a diet rich in produce: esp. yellow, orange, red, dark green and purple **fruits and vegetables (5-8 servings per day)**.
- Eat **cruciferous vegetables** and **berries** at least 3x/week.
- Add **anti-inflammatory seed oils** or **olive oil** to food regularly
- Ingest **fish** (3x/week) and **seeds** (daily) or supplement with EPA, DHA, and GLA daily.
- Depending on activity level, eat at least 15-25g **digestible protein** at each meal. Eliminate corn-fed red meats and pork.
- Maintain 30-45g fiber/day.
- **Fast** (green juice or water) as is appropriate.
- Choose the cleanest food you can find!
- Stay **Oxygenated** and **Hydrated** (1/2 body weight in oz/day)
- **Exercise** ( $\geq 30$  min/day) and get sufficient **Sleep**

**Practice Tolerance, Love, and Laughter Daily!**



# WHAT DO YOU MEAN BY “I CAN’T



- If a person is not willing to or cannot ingest certain foods, then supplement appropriately with **high quality** supplements.
- Pay attention to:
  - Formulation: choose food supplements when possible
  - Double-blind peer review studies to demonstrate **cleanliness, absorption, and effectiveness.**
  - Quality control issues (Products should be tested for and free of E. coli, Salmonella, pesticides, fungicides, herbicides, and common heavy metals at the very least.)



# IF YOU ARE DOING CHEMO AND RADIATION

- Here's some info/suggestions:





# HOW TO INTEGRATE DIET AND SUPPLEMENTATION WITH CHEMOTHERAPY AND RADIATION

- Certain anti-oxidants and foods may interfere with chemotherapy treatments.
- Other anti-oxidants (Resveratrol, Vitamin C) can protect normal cells while making chemotherapy more effective by increasing apoptosis within cancer cells.
- Current recommendations during treatment:
  - On all days, use proven non-interfering nutrients such as protein supplement, B-Complex, Resveratrol, Fiber, Probiotic, Zinc, Calcium, and EFAs.
  - In USA, Anti-oxidants such as Vit E class, Vit A and Carotenoids, >500mg/ day Vit C should be withheld on the day before, the day of and the day after chemotherapy or radiation treatment.





## Should Supplemental Antioxidant Administration Be Avoided During Chemotherapy and Radiation Therapy?

Brian D. Lawenda, Kara M. Kelly, Elena J. Ladas, Stephen M. Sagar, Andrew Vickers, Jeffrey B. Blumberg

**"...antioxidants may protect tumor cells as well as healthy cells from... radiation therapy and some chemotherapy agents."**

"...On the basis of our review of the published randomized clinical trials, we conclude that the use of **supplemental antioxidants during chemotherapy and radiation therapy should be discouraged** because of the possibility of tumor protection and reduced survival."

J Natl Cancer Inst 2008;100:773-783

## Impact of antioxidant supplementation on chemotherapeutic efficacy: A systematic review of the evidence from randomized controlled trials

-Block KI, et al, 2007



### Results

Of 845 articles considered, 19 trials met the inclusion criteria. Antioxidants evaluated were: glutathione (7), melatonin (4), vitamin A (2), an antioxidant mixture (2), vitamin C (1), *N*-acetylcysteine (1), vitamin E (1) and ellagic acid (1). Subjects of most studies had advanced or relapsed disease.

**Conclusion:** Out of 19 higher quality studies of antioxidant supplementation during chemotherapy, **none have reported reduced efficacy and some show improved survival, tumor responses and/or less toxicities than controls**

designed studies of antioxidant supplementation concurrent with chemotherapy are warranted.



# ANTI-OXIDANT THERAPY DURING CANCER TREATMENT

- Since 1970, 280 peer-reviewed in vitro and in vivo studies including 50 human studies involving 8,521 participants (5,081 of whom were given supplemental nutrients), have consistently shown that non-prescription antioxidants and other nutrients **do not interfere** with therapeutic modalities for cancer.
- Furthermore, they **enhanced** therapeutic modalities for cancer (chemo & radiation), while **decreasing side effects and protecting normal tissues**.
- In 15 human studies, 3,738 participants who took antioxidants and other nutrients with chemo actually had **increased survival rates and less symptoms**.

# NUTRITIONAL SUPPORT FOR CANCER PREVENTION

- Protein– veg. based- (soy decr prostate, breast cancer, etc)
- Fiber – at least 6 sources- 5g fiber/ 20lbs body weight/day
- Probiotics- for intestinal health and detox.
- Water – 1/2 your body weight in ounces/day
- Air- Breath deeply/and exercise on a regular basis !!!
- All the antioxidants – There are 1000's !
  - Resveratrol, Flavanoids, Carotenoids, Vit E, Vit C, lipoic acid, ECGC, curcumin, produce (esp.cruciferous, dark green leafy veggies, and colors!)
- B-vitamins- prevent cancer, inhibit tumor growth, used by chemotherapy, clears diarrhea from radiation.
- Omega 3 Fatty Acids- decr inflammation, bal. fats, etc.
- Minerals- Calcium, Zinc, Selenium, Manganese, etc.

**Don't forget LOVE, LAUGHTER,  
and TOLERANCE!**



# LIFESTYLE ACTIONS TO TAKE:

- Choose an anti-inflammatory and blood sugar stabilizing diet (<http://www.wish4life.com/library-blog/anti-inflammatory-diet-suggestions>)
- Establish a urinary **pH of 7.0-7.6** (range depends on the diagnosis and treatment choices)
- Gradually work up to 1 gram of fiber/ 5lbs of body weight ( $\leq 45g$ )
- Consider choosing foods +/- herbs instead of chemicals or non-essential prescription medications only when the alternative has been shown to be effective (indiv test results are helpful)
- Replace house cleaning chemicals with natural (edible) products that clean effectively
- Replace sweet and alcoholic beverages with fun, “cool-looking” non-alcoholic beverages and add laughter! 😊

**Consider engaging in an effective detoxification protocol that is appropriate for the diagnosis, prognosis and treatment plan**



# CONCLUSIONS

- Our bodies have a sophisticated system in place that is designed to protect us from cancer.
- Our day-to-day choices (lifestyle) and gut diversity determine how well that system functions.
- It is imperative that the body be fed so that it may:
  - become mildly alkaline (pH ~7.35)
  - develop a **STRONG** immune system
  - have all it needs to efficiently detoxify
- The use of more nutrient-based whole life wellness programs are highly recommended. These programs are presently getting excellent results in the prevention and control of numerous types of cancers.



# TRANSFORMATIONAL MEDICINE

Please contact Dr. DeeAnn Saber, NMD to learn more about various treatments and testing options offered.

2028 E Prince Rd  
Tucson, AZ 85719

(520) 209-1755 – Office

<https://tfmnd.com/>  
[info@tfmnd.com](mailto:info@tfmnd.com)





QUESTIONS? CALL TO SCHEDULE  
15 MINUTES WITH DR SANDY:

WISH

With every good WISH for your  
health and happiness!

*World Integrated Systems in Health*

7131 N. Giaconda Way  
Tucson, AZ 85704

520-743-0575 - Office

520-743-4252 - Fax

[www.DrSandyBevacqua.com](http://www.DrSandyBevacqua.com)

[Wish2@Wish4Life.com](mailto:Wish2@Wish4Life.com)

