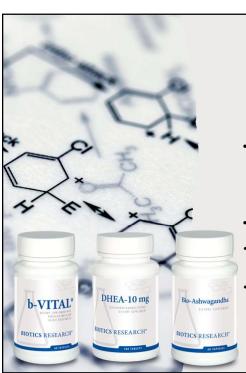


- **GTA** contains 5 mg of whole porcine glandular extract. The addition of selenium (5 mcg) and rubidium (5 mcg) aids in the conversion of T4 T3. Antioxidants reduce free radical inflammation and protect the tablet prolonging shelf life. Use 1-2 capsules tid of GTA when TSH is under 10
- GTA-Forte II when TSH is over 10. GTA-Forte II has 20 mg of glandular extract with the appropriate co-factors. Each capsule of GTA-Forte II is like 1/3 of a grain of thyroid.
- Use of GTA and Meda-Stim balanced 23/25 patients with abnormally high TSH. Always give iodine and selenium when supporting with GTA or script thyroid medication to protect breast, ovary, uterus and prostate.



- Meda-Stim has all the conversion factors necessary to convert T4 to T3.
- Very effective for the patient who is already on Synthroid and cannot switch to Armour.
- This product is very effective for the patient who is no longer experiencing optimal results from Synthroid. Start with 2 capsules tid and reduce as function returns. Both GTA and Meda-Stim work better with lower carbohydrate diets to stabilize insulin levels.
- Whenever someone has results with a hormone therapy and it is no longer effective think **Receptor Detox**. Try a bottle as a clinical trial. Consider 2 bid or as a weekend detox 4 bid for 2 days



Testosterone

- B-Vital provides naturally occurring precursors to naturally increase testosterone. Elk antler has been used in China for thousands of years to increase virility. Peruvian Maca is an adaptogenic substance that will aid in optimizing androgen levels. Consider 2 tid for one-month and adjust or retest as needed.
- DHEA is also needed for testosterone conversion. Biotics has a scored 10 mg product.
- Bio-Ashwagandha was shown to increase 4-fold over men doing resistance exercise in 8 weeks over controls who only exercised. 1-2 capsules bid.
- Always supplement magnesium (500 mg) and zinc (50) when other physicians prescribe testosterone as testosterone will further reduce both magnesium and zinc.

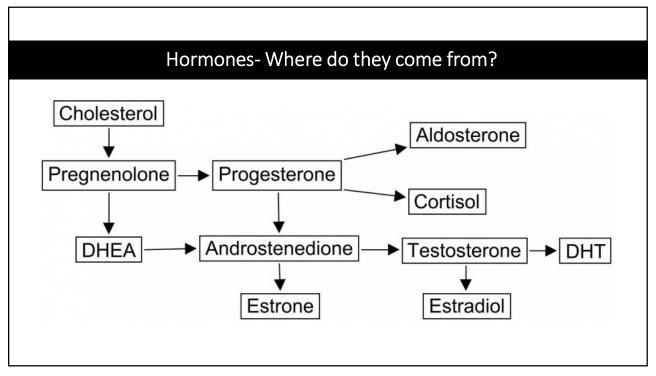
Δ



Growth Hormone

- Gammanol Forte 8 out of 10 women were shown to have their growth hormone significantly increase in an 8-week period. 2-4 tablets tid.
- Men did not achieve significant results with growth hormone but body builders have used it for years to increase lean muscle mass. Patients felt stronger.
- Further pituitary support is found with Cytozyme-PT/HPT.
- Consider using Gammanol Forte with any hormone replacement therapy.

5





Pregnenolone

- **Pregnenolone** is the mother of all hormones.
- Each capsule of **Pregnenolone 25** supplies 25 mg of **Pregnenolone**.
- Dr. Devaki Berkson recommended Pregnenolone
- Memory hormone 25 mg
- To diminish pain you may go up to 75 mg
- Optimal levels of serum pregnenolone is 180 ng/dL. If your pregnenolone is below those levels you can look into supplements.
- The typical dose of pregnenolone is between 50 and 200 mg per day, usually taken first thing in the morning. The pills should be taken on an empty stomach.

7



DHEA

- **DHEA** comes in a scored 10 mg dose.
- For low testosterone use 30-40 mg
- Always repeat testing when using DHEA to titrate levels.



- Detoxify the liver (MCS II-Metabolic Clearing Support), by assuring adequate gallbladder function using Beta-TCP and provide appropriate essential fatty acids (ie Optimal EFA's).
- Optimal thyroid function is necessary for healthy progesterone. According to Dr. John Lee, It is common for people on progesterone to cut back on their thyroid.
- Natragest is a natural progesterone product that contains ionized water that is applied topically. Due to the ionized water clinicians report that Natragest works when other professional creams have failed. ¼ tsp provides 25 mg.





Estrogen

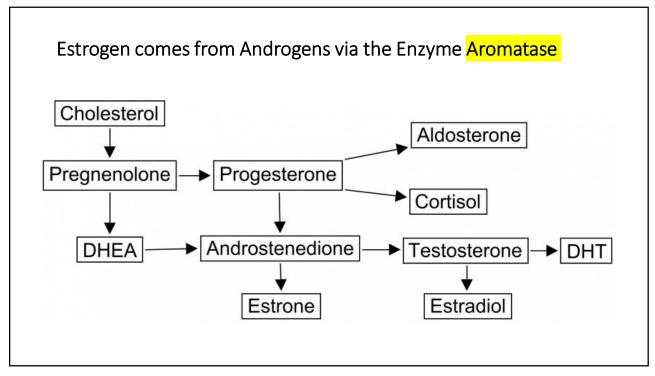
- Estrogen is made by the adrenal glands in menopausal women Support Adrenal Glands
- Bio-FCTS, E-Mulsion 200, ADHS,
 Cytozyme-AD are all products which will stabilize estrogen levels phytochemically via the adrenals.
- **BioDrive** (2-3 bid) was developed by a naturopath 20 years ago. For many people it increases the desire for intimacy. It contains Rhodiola, Damiana, Ginkgo American Panax Ginseng, Stinging Nettle.



Estrogen Reduction

- **Detoxify** the liver to denature and breakdown excess estrogen.
- ADHS 3 bid (stage 1) and MCS II 2 bid (stage 2) will assist in liver detoxification pathways.
- Always evaluate the gallbladder to assure adequate toxic removal systems are functioning.
- Consider **Beta-TCP** 2-5 tid with gallbladder or **Beta Plus (1,2,3, 123 tid)** if gallbladder has been removed.
- Calcium D-Glucarate can also be used 2 tid.

11



Aromatase Inhibitors

As the enzyme aromatase is increased so is estrogen. Shiuan Chen, Ph.D., the Director of the Department of Surgical Research at the City of Hope in Duarte, California found grapes, mushrooms and red wine contain phytochemicals that can suppress aromatase activity. The most exciting, however, is a grape seed extract, procyanidin B, which according to Dr. Chens' research reduces up to 80% of aromatase.

Bio-Cyanidins which is a source of Proanthocyanidins. It contains 35 mg of a 95% pure concentrated form of OPCs (grape seed extract) and 15 mg of Pycnogenol® 1-2 bid

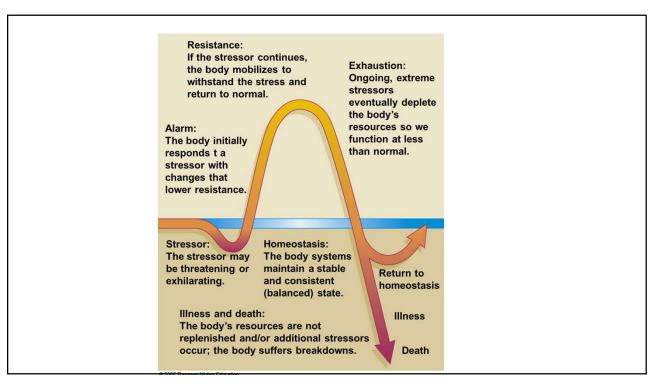
Homone Balance and Protect contains 140 mg of grape seed extract as a 95% OPC's concentration but it contains other aromatase inhibitors like broccoli seed extract, zinc, and iodine. It also has botanicals to inhibit excess cell growth in general. 2 bid

lodizyme-HP supplies 12 mg of iodine as iodine/iodide. Dr. Berkson in her seminars shared that iodine is a major aromatase inhibitor. Receptor Detox (1 bid) and Hormone Balance and Protect (2 bid) supply 3 mg of lodine.

Melatonin .75mg-40 mg



13





ADHS stands for adrenal hyper secretor and is the most cost-efficient way to balance cortisol. It contains adaptogenic botanicals and low dose B vitamins, and other calming nutrients. 3 bid

Bio-Ashwagandha - Ashwagandha is an adaptogenic herb very popular in Ayurvedic medicine. It has been shown to be effective with anxiety, depression, stress, dysglycemia, and increasing stamina. It is especially effective in the adjunctive support of both hypo and hyper thyroid and hypo and hyper adrenal conditions (as an adaptogen it will support both hypo and hyper endocrine problems). General dose is 1-2 capsule twice a day.

Phosphatidylserine - Each capsule is standardized to contain 100 mg of Phosphatidylserine and typically provides a 300 mg blend of phosphatidylinositol, soy phospholipids, phosphatidylcholine, phosphatidylethanolamine and glycerides.

De-Stress - Each capsule supplies 150 mg of a bioactive peptide derived from milk, having anxiolytic activity. De-Stress can be used in any case where psychological stress, insomnia or anxiety are present. 1-2 capsules at bedtime and 1-2 capsules during the day if needed for periods of high stress. Human studies indicate De-Stress has no known side effects and will reduce cortisol in 30 days. Patients generally feel the results within 24-48 hours after the initial dose

15



Cortisol (Hyper)

Clinical Pearl:

Dr. Devaki Berkson said that cortisol is the gorilla on the block when it comes to hormones and receptors. Cortisol will sit on receptors and block other hormones.

She suggested that any time hormones are present assess and support adrenal glands.

Dr. Zatkin and Dr. Boven, two of my mentors, have shared for decades that when you have a thyroid problem always suspect an underlying hyper adrenal function. It acts like the gas and the pituitary will act as a brake trying to slow everything down by reducing thyroid function.



- ADB5-Plus 2-3 tablets bid contains porcine adrenal, vitamins, minerals and adaptogens including Rhodiola necessary for healthy adrenal function. B vitamins and vitamin C are important.
- Cortisol is necessary for uninterrupted sleep, when all else fails consider a trial of 2 capsules of ADB5-Plus before bed.
- Another option to consider is Cytozyme-AD (2-3 tablets bid) which now contains both neonatal adrenal from bovine sources and porcine adrenal tissue.



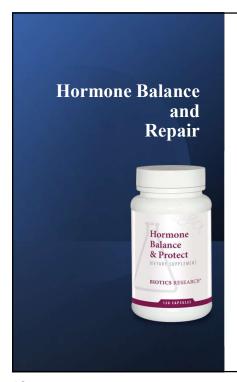
Receptor Detox was developed by Dr. Devaki Berkson to keep receptors clean and functioning at optimal levels. It is also designed to keep hormones in their docking sites to make sure adequate signaling occurs.

Start at 2 bid for 1 bottle then reduce to 1 bid.

This is a new product and feedback has been very supportive. The dosage levels may change as we get more feedback from clinicians. For example, one prescribing doctor that uses pellets as a source of hormones, found that their existing prescriptive pellets were lasting longer than patients that did not use Receptor Detox. She used 4 bid on weekends only.

Use with all hormone replacement strategies to optimize existing, exogenous or hormone precursors.

Consider using with Insulin Resistance and elevated glucose levels when diet, supplements and exercise are not working.



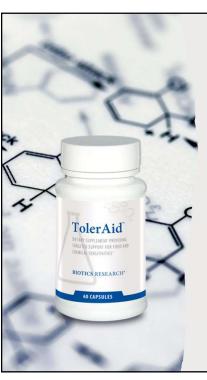
Hormone Balance and Protect developed by Dr. Devaki Berkson to support and feed the Estrogen Receptor Beta cells called ER-beta.

ER-beta receptors site signal for controlled growth which is anticancer by nature. The nutrients involved also slow the breakdown of natural hormones. This will allow them to function at peak performance for the maximum period before the liver and other tissues break them down.

Also, it supports TH1 immune function and functions as a natural low dose naltrexone supplement. Use 2 capsules bid.

Many of the ingredients in Hormone Balance and Protect inhibit cancer stem cell growth.

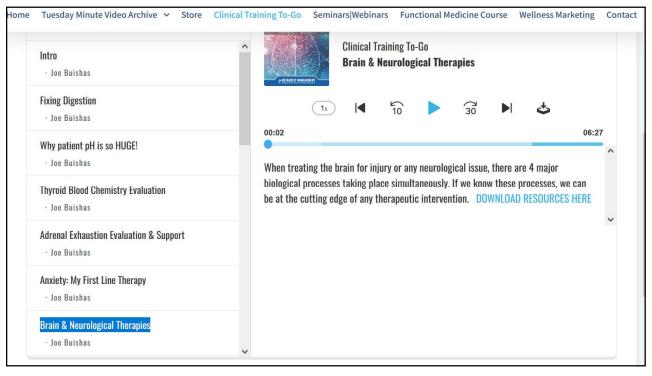
19

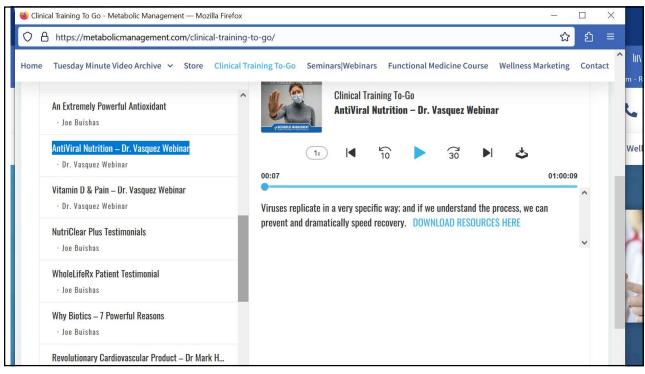


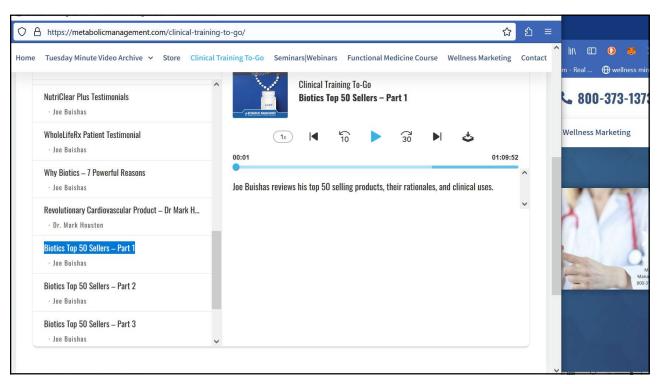
TolerAid

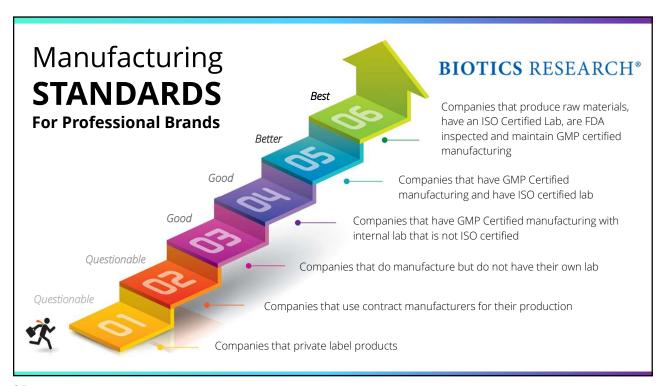
- TolerAid was designed to gently detoxify chemicals by feeding pathways that are genetically compromised. Designed and clinically tested by Dr. Mark Force, Diplomate in the ICAK. Two capsules contain 50 IU of vitamin E, 1 mg of cocarboxylase, 2 mg of riboflavin-5-phosphate, 10 mcg of niacinamide, 6 mg of P-5-P, 100 mcg of methylfolate, 50 mcg of selenium, 150 mcg of molybdenum, 50 mg of quercetin and a proprietary blend of organic juices and sprouts.
- Product has been shown to be effective with sulfite sensitivity and sensitivity to out-gassing and odors and assisting with methylation, chronic fatigue and fibromyalgia, tyramine and chronic and undifferentiated headaches, histamine, inflammation, and generalized pain. 2 capsules twice a day for 2-3 months then reduce to 1 capsule twice a day.
- Has mild methylating properties due to 100 mcg of methylfolate.
- As a result, it reduces histamine levels











Reminder that Botanicals Can Contain Toxins

Material	Supplier	BRC Code	Reason for rejection
Celery	S.	J 1558	Bugs
Primrose oil	D.	K 0098	Exp. date in 2 wks of receipt
Resveratrol 20%	A. N.	K 0410	Hg > 10 ppm
Bitter Melon 4:1	A. N.	K 1420	E. coli O157:H7
Grape Skins Pwd	S. F. H. & NFC	-	APC >100.000 cfu/a
Broccoli	S. B.	L 1535	Pb > 10 pm (154 ppm)
Ginkgo biloba	W. H. C.		Pb > 10 ppm
Isatis Leaf	M.	-	Pb > 10 ppm
Kelp Icelandic	C. B.		As > 10 ppm

Biotics Best Sellers

Exceed all the GMP (Good Manufacturing Practice) Guidelines

Solvents are needed to extract phytochemicals from plants...

Curcumin supplier used carcinogenic solvent – 1,2

Dichloroethane... maximum limit is 5 ppm.

ACTUAL RESULT: 139.3 ppm Nearly 30 times above limit

Who Tests for residues of Solvents? **BIOTICS DOES**

Session 1 of 5

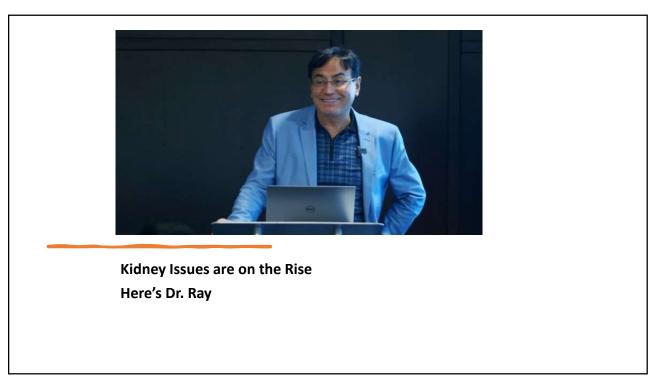
27

Questions?

- After Dr. Ray's presentation we will take a few questions, time permitting.
- You can ask the moderator questions and we will get to as many as we can.









Dismuzyme Plus (SOD)

- Researchers estimate that SOD is the 3rd most prevalent enzyme in our body.
- SOD quenches or transforms the highly reactive superoxide radical into hydrogen peroxide and water.
- Catalase, another primary antioxidant enzyme, changes hydrogen peroxide (H2O2) into oxygen and water.
- Clinical applications for SOD: free radical pathology, low white blood cells, rampant viral or bacterial infection, all forms of arthritis & inflammation, protection against radiation.
- Reduces aging in terms of skin, muscles, bones, joints and brain.



Biotics Best Sellers

Dismuzyme Plus

- SOD is classified as a "primary antioxidant," and work synergistically with the well-known "secondary antioxidants such as vitamins C, A, and E. But, of all the antioxidants, SOD is the most powerful.
- A single SOD molecule can neutralize thousands of free radicals, whereas "secondary antioxidants" can neutralize only one.
- One I.U. of SOD has a life of several days, and catalyzes the elimination of <u>billions</u> of free radicals. But, for simplicity sake, <u>let's</u> <u>just say it's one billion</u>
- · Each mcg of plant SOD yields 6.6 units
- Many Biotics products have 20 mcg of SOD and Catalase per tablet 20 mcg X 6.6 units = 132 units
- 132 units quenches well over 132 Billion oxidative reactions
- This comes for FREE as part of the tableting vegetable culture.



Biotics Best Sellers

33

Dismuzyme Plus Granules

- Review: One I.U. of SOD has a life of several days and catalyzes the elimination of billions of free radicals.
- A tablespoon of Dismuzyme granules yields 1,200 mcg of SOD and 1,200 mcg of catalase. Biotics identifies their SOD enzymes by using McCord/ Fridovich units.
- Each mcg of plant SOD yields 6.6 units. So, 1,200 mcg would yield 7,920 units SOD. Using the calculation above, 1 tablespoon would quench well over 8 trillion free radicals
- For years doctors have been telling me that SOD granules and IAG raises Chronic Low WBC
- I'll be referring to deeper discussion on our weekly video magazine called the Tuesday Minute.. Here's how to access specific topics
- See the link to the right for TM video titled: An Extremely Powerful Antioxidant



Biotics Best Sellers

Bio-D-Mulsion Forte & Bio-D-Mulsion #1

- Bio-D-Mulsion Forte contains 2,000 IU per drop
- Best Value on the market 700 drops (2,000 iu) = \$0.03 per drop
- Bio-D-Mulsion contains 400 IU per drop use with small children or topically on skin
- Key emulsification process uses food grade emulsifiers. All fat soluble nutrients have to be emulsified by the body.
- Never seen someone who can't raise blood levels.
- · Some forms of Vitamin D raise blood levels but cause leaky gut



Biotics Best Sellers

35

Bio-D-Mulsion Forte & Bio-D-Mulsion #1

- "How to Understand, Refute, and Plan Studies Using Vitamin D" A. Vasquez
- Studies done too little Vitamin D.
- Studies are too short. It takes time to increase blood levels. When tissue levels finally become saturated that's when the real study begins
- Susan Wadia-Ellis PhD is the author of "Busting Breast Cancer: Five Simple Steps to Keep Breast Cancer Out of Your Body". Susan made this dramatic statement in her book, "leading vitamin D researchers believe that by raising blood levels to 60 ng/ml we could see at least 80% fewer breast cancer diagnosis each year."
- See the link to the right for TM video titled "Optimal Levels Of Vitamin D"



Biotics Best Sellers

Bio-DK-Mulsion & Bio-DK Caps # 13

DK-Mulsion provides emulsified D, K2, and K1

5 drops provide:

D3 - 5,000 IU (125 mcg)

K2 - 75 mcg

K1-225 mcg

Each DK Capsule (also emulsified) provides:

D3 - 5,000 IU (125mcg)

K2 - 50 mcg

K1 - 500 mcg



37

B12-2000

- B12 is needed for every single cell in our body
- Need B12 for cognitive performance
- B12-2000 is a non-methylated form, therefore it doesn't
 chelate inorganic metals in the mouth and converting them
 into an organic and highly absorbable form.
- Each cherry flavored tablet contains:
 - 2,000 mcg of B12 (as hydroxocobalamin)
 - 800 mcg of folate (as calcium folinate)
 - 2 mg of B6 (as pyridoxal-5-phosphate)



Biotics Best Sellers

B12-2000

- Tastes great
- Useful as to reduce homocysteine which should be < 9
- Anything that reduces the secretion of HCL will reduce absorption of B12; Tagamet Pepcid, Zantac, proton pump inhibitors.
- Metformin the first line therapy for diabetes is also linked to B12 deficiency.
- Find a strong muscle, stretch it and retest if weak; classic need B12
- See the link to the right for TM video titled: Vitamin B12 Deficiency

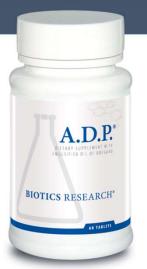


Biotics Best Sellers

39

A.D.P. "Emulsified Oil of Oregano" # 10

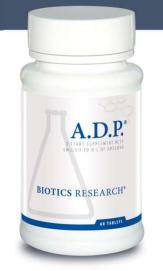
- Oregano oil has been effective in treating many forms of bacteria and fungus, particularly candida
- New research shows in higher doses Oregano oil inhibits mycoplasma
- Dr. Mark Force showed ADP also to be effective in treating many forms of dysbiosis, i.e., Blastocystis hominis, Endolimax nana, Entamoeba hartmanni



Biotics Best Sellers

A.D.P. "Emulsified Oil of Oregano" # 10

- · 4 tablets of micro-emulsified oregano covers the entire GI tract
- Emulsification prevents leaky gut seen reported with other forms of concentrated oregano oil
- Key for really tough cases is higher doses
- 5 tid for 2 weeks then 3-4 tid for 4 weeks
- After 2 weeks add a probiotic at bedtime
- See the link to the right for TM video titled: **Precautionary measures when traveling abroad.**



Biotics Best Sellers