

IODINE

Could this be the solution
to your health problems?

Iodine Medical Conference:
Oct. 4-6, 2007
Coronado, California

“The Safe and Effective
Implementation of
Ortho-iodo-supplementation
In Medical Practice”

Conference Presenters:

- Guy E. Abraham, MD – former Professor of Obstetrics, Gynecology and Endocrinology at the UCLA School of Medicine (Dr. St. Amand was an Assistant Professor of Endocrinology at UCLA!)
- David Brownstein, MD – family physician and one of the foremost practitioners of holistic medicine in Michigan (part of the “goiter belt”)
- Bernard A. Eskin, MS, MD, Professor of Obstetrics and Gynecology and Director of the Menopause/Perimenopause Center at Drexel University College of Medicine
- Jorge D. Flechas, MD, MPH, Medical Director of Flechas Family Practice in Hendersonville, NC, specializing in hormonal therapy for the treatment of Fibromyalgia and Chronic Fatigue and Immune Dysfunction Syndrome (CFIDS)
- William Shevin, MD, DHT (Homeopathic), in private practice at Integral Health Services in Connecticut. Currently has over 300 patients in treatment with iodine therapy.

A Brief History of Iodine

- First discovered in 1811 by a French chemist
- Signaled the “birth” of Western medicine
 - The use of iodine for treating goiter was the first time that a single element (iodine) was used to treat a specific illness (goiter)
- More than 100 years ago, iodine was called “The Universal Medicine”
- The minimum daily dose was one drop which contained 5 mg of diatomic iodine---33 X the RDA!

More Recent History

- 1930's – Iodized salt was introduced & thyroidologists began using thyroid hormones to treat iodine deficiency and simple goiter---The beginning of the “thyroid fixation”!
- 1948 – Wolff-Chaikoff effect concluded that one must avoid inorganic non-radioactive iodine “like leprosy”. Animal studies on rats were never duplicated in humans! Dr. Abraham says, “The ensuing medical iodophobia may have resulted in more suffering and death in the U.S. than both World Wars combined!”
- 1960's – Antibiotics were replacing iodine use in infectious diseases; bronchodilators were used instead of iodine in lung patients; antihistamines replaced iodine for relief of cold symptoms.

The Pendulum is Beginning to Swing the Other Way!

- 1993 – Dr. W.R. Ghent reported the beneficial effects of using 5 mg iodine for Fibrocystic Breast Disease.
- 1997 – Dr. Guy Abraham became aware of Ghent's work.
- 2000 – Dr. Abraham initiated “The Iodine Project” with Drs. Brownstein and Flechas.
- 2007 – “If Dr. Abraham is correct, he deserves the Nobel Prize!”

Why Do We Need Iodine?

- Every cell in the body contains and utilizes iodine
- White blood cells cannot effectively guard against infection without adequate amounts of iodine
- Iodine is concentrated in the glandular system
 - Thyroid, breasts, salivary glands, parotid glands, pancreas, cerebrospinal fluid, brain, stomach, skin, lacrimal glands, etc.

Where Does The Iodine Go?

- Thyroid – 3% (50 mg)
- Fat (700 mg) and Muscle (650 mg) – 70%
- Skin – 20% (Helps you sweat!)
- The body can hold up to 1500 mg
- The thyroid can only hold up to 50 mg
- Iodine is needed for much more than just prevention of goiter!

Iodine Deficiency Problems

- The absence of iodine in the body is a promoter of cancer!
- Lack of iodine in early pregnancy will lead to children with ADD
- The IQ of a child is set between age 2-3. Therefore, it is essential to keep giving nursing mothers iodine until the child is weaned!

“RDA” for Iodine

(Really Dumb Advice)

- Adult male 150 mcg/day
- Adult female 150 mcg/day
- Pregnancy 220 mcg/day
- Lactation 290 mcg/day

“RDA doses of iodine are ineffective in preventing oxidative DNA damage and have no anti-cancer effect in the body.”

Guy Abraham, MD

Problem!

An estimated

95%

of individuals

are deficient

in iodine!

Iodine Deficiency Woes

“Iodine deficiency is the underlying problem responsible for the high rate of cancer (particularly breast, lung, prostate and ovary) as well as the high rate of autoimmune disorders we are seeing in this country.”

David Brownstein, MD

National Health and Nutrition Survey Results

- 1971-2000 NHANES showed iodine levels declined 50% in the United States
- During this time, there was increased incidence of:
 - Thyroid illnesses (hypo, autoimmune)
 - Cancer (thyroid, breast, prostate, endometrium, and ovaries)
- ALL of the above conditions can be caused by iodine deficiency

NHANES 1970 - 2000

(National Health and Nutrition Examination Survey)

- The proportion of the U.S. population with moderate to severe iodine deficiency (<50 ug/L in urine) has increased over 600% in the last 30 years!
- NHANES 1970 – 2.6%
- NHANES 1990 – 11.7%
- NHANES 2000 – 16.8% of U.S. women of childbearing age had urinary iodine concentrations <50 ug/L.

Iodine and ADD

- 16 women living in an iodine-deficient area versus 11 women living in an iodine-sufficient area
- 10 year follow-up of their children
 - ADHD diagnosed in 11/16 in iodine-deficient area versus 0/11 in iodine-sufficient area
 - IQ of children affected
 - Average IQ 88 in iodine-deficient area
 - Average IQ 99 in iodine-sufficient area

Iodine & Prenatal Vitamins

- Only 35% of prescription prenatal vitamins contain iodine
- Of the prenatal vitamins that do contain iodine, only 15% have more than 150 mcg/day
- This is a public health disaster that is unparalleled!

Women of Child-bearing Age

- As with any medication, it is not recommended that you begin taking Iodoral if you are already pregnant or nursing.
- Babies who are not accustomed to the “taste” of iodine in their milk may refuse to nurse.
- It is best to begin iodine supplementation BEFORE you get pregnant, and continue at least until the child is weaned.

Iodine and Cholesterol

- In 1918, researchers demonstrated that feeding iodine to rabbits could prevent the deposition of cholesterol in arteries of rabbits that were fed cholesterol.
- These studies were reproduced and similar results were reported in the literature at least four times.
- This information has been **IGNORED!**

Why is Iodine So Beneficial?

- Elevates pH (Iodine is an alkalizing agent)
- Necessary for the production of thyroid hormones
- Necessary for the production of all the hormones of the body (adrenals, ovaries, testicles, etc.)
- Responsible for the formation of the normal architecture of the glandular tissue, e.g. breast, thyroid, ovary, & prostate

Iodine's Therapeutic Actions

- Alkalinizing agent
- Antibacterial
- Anticancer
- Antiparasitic
- Antifungal
- Antiviral
- Detoxifying agent
- Mucolytic agent (like Guaifenesin)

Conditions Treated With Iodine

- ADD/ADHD
- Asthma
- Atherosclerosis
- Fibrocystic Breast Disease
- Cancer
- COPD
- Diabetes
- Excess Mucus Production
- Hemorrhoids
- Headaches
- Hypertension Infections
- Keloids
- Liver Diseases
- Ovarian Cysts (PCOS)
- Parotid Duct Stones
- Sebaceous Cysts (Acne)
- Thyroid Disorders (hypo, autoimmune, and cancer)

How Do You Ingest Iodine?

- Trace element; not common in most foods
- Ocean foods
 - Cod, bass, haddock, perch
 - Sea vegetables such as seaweed
- Can be found in food products if iodine is added to animal feed or the food source
- Iodized Salt
 - Cost effective way to prevent goiter
 - Inadequate to provide the body's need for iodine

Why Are People Deficient in Iodine?

- Stigma of using salt
 - Hypertension
 - <50% of U.S. households use iodized salt
- Radioactive iodine use in medicine
 - Exacerbates an iodine deficient state
- Chemical exposures: Goitrogens
 - Bromine, chlorine, fluorine (fluoride)
 - Goitrogens competitively inhibit iodine binding as well as decrease iodine uptake
- Declining mineral levels
 - Soil erosion, poor farming techniques, etc.
- Modern Diet

Why Is Our Modern-day Diet Iodine Deficient?

- Many do not eat much ocean fish or sea vegetables
- Inadequate use of iodized salt
- Vegan and vegetarian diets
- Bromine in food and drink
 - Gatorade, Mountain Dew, and other soft drinks
- Bakery products
 - Bromine is now added to bread, pasta, cereal, etc.

What Happened To Bakery Products in Recent History?

- In the 1960's iodine was added to bakery products as an anti-caking agent
 - 1 slice of bread contained the RDA for iodine
- In the 1980's, bromine was substituted for iodine due to misinformation about iodine

What did this substitution do?

Bromine for Iodine = *Double Wammy!*

1. Worsened an iodine-deficiency problem already present in the United States
2. Competitively inhibited iodine in the body by adding a goitrogen (bromine) to bakery products
3. This could be the most STUPID act (amongst many) in the history of the food industry!

Efforts to Ban the Use of Potassium Bromate in Bread

- The UK banned bromate in bread in 1990
- Canada banned bromate in bread in 1994
- Australia still has not finalized its July, 2007 proposal to mandate iodized salt in bread, breakfast cereals, and biscuits.
- As of September, 2007, the U.S. FDA maintains “Potassium Bromate is still listed as a safe additive.”

Bromine

- **Properties:** “Bromine is less active than chlorine but more so than iodine. It unites readily with many elements and has a bleaching action; when spilled on the skin it produces painful sores. It presents a serious health hazard, and maximum safety precautions should be taken when handling it.”
- **Uses:** “Bromine is used in making fumigants, flame retardant agents, water purification compounds, dyes, medicines, and sanitizers.”

(Source: CRC Handbook of Chemistry & Physics)

Bromine Is Used to Kill Pests

- Antibacterial agent for pools and hot tubs
- Fumigant for agriculture (fruits and vegetables)
- Fumigant for termites and other pests
- 1981: 6.3 million lbs. bromide sprayed in California
- 1991: 18.7 million lbs. bromide sprayed in California

Bromine Competes with Iodine

- Animal studies show that bromine intake can adversely affect the accumulation of iodine in the thyroid and the skin
- High bromide intake results in iodine being eliminated from the thyroid gland and replaced by bromine
- Ingestion of bromine has been shown to cause hypothyroidism in animals
- When iodine deficiency is present, the toxicity of bromine is accelerated in the body.
- The element bromide has goitrogenic, carcinogenic and narcoleptic properties.

Bromine and The Endocrine System

- Rats fed a sodium bromide enriched diet for 4-12 weeks
 - Decreased spermatogenesis in highest group
 - Decreased amount of thyroxine (T4) in thyroid gland
 - Decreased concentration of testosterone, human growth hormone and cortisol in blood (deficiencies also noted by Dr. St. Amand in patients with fibromyalgia)
 - Pituitary gland was stimulated to release TSH, FSH, ACTH and insulin
- “...bromide, at least in high doses, directly disturbs the function of the thyroid, testes, and the adrenals.

Bromine Summary

- Bromine is a toxic substance with no known value in the body
- Part of the family of halides
 - Iodine, bromine, fluorine, chlorine
- All halides compete with one another
 - Absorption
 - Receptor binding
- Bromine interferes with iodine utilization in the thyroid as well as other areas of the body (breast, prostate, etc.)

Why Does Bromine Compete?

Both are halogens and are close in molecular weight.

Periodic Table of Elements

1	2																	10							
1	IIA																	0							
1	H																	2							
2	3	4																	10						
2	Li	Be																	Ne						
3	11	12	13	14	15	16	17	18																	18
3	Na	Mg	III B	IV B	V B	VIB	VII B	— VII —	IB	IB	Al	Si	P	S	Cl	Ar									
4	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36							
4	K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr							
5	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54							
5	Rb	Sr	Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Sb	Te	I	Xe							
6	55	56	57	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86							
6	Cs	Ba	*La	Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg	Tl	Pb	Bi	Po	At	Rn							
7	87	88	89	104	105	106	107	108	109	110															
7	Fr	Ra	+Ac	Rf	Ha	106	107	108	109	110															

* Lanthanide Series	58	59	60	61	62	63	64	65	66	67	68	69	70	71
	Ce	Pr	Nd	Pm	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu
+ Actinide Series	90	91	92	93	94	95	96	97	98	99	100	101	102	103
	Th	Pa	U	Np	Pu	Am	Cm	Bk	Cf	Es	Fm	Md	No	Lr

Legend - click to find out more...

H - gas	Li - solid	Br - liquid	Tc - synthetic
■ Non-Metals	■ Transition Metals	■ Rare Earth Metals	■ Halogens
■ Alkali Metals	■ Alkali Earth Metals	■ Other Metals	■ Inert Elements

Detoxifying Bromide/Bromine

- Once bromide is absorbed, it binds tightly to the iodine receptors in the body.
- In addition, bromide can bind to the transport cells for iodide (sodium-iodide symporter--NIS) and damage these cells.
- The oxidized form of bromide--bromine--is stored in the fat tissues.
- Taking iodine in normal (but larger than the RDA) doses can help to competitively inhibit the binding of bromine.
- Iodine supplementation allows the body to detoxify itself from bromine, while retaining iodine.

Iodine & The Hormonal System

- It is impossible to balance the hormonal system without iodine sufficiency
 - Thyroid
 - Adrenals
 - Sex hormones
- Whole body iodine sufficiency generally requires higher doses of iodine/iodide combinations
 - 12.5 to 150 mg/day (per Dr. Brownstein)

Iodine Deficiency and The Thyroid

- Associated with goiter, nodules, hypothyroidism, hyperthyroidism.
- Inorganic iodine therapy will decrease the size of a goiter, and also the size of nodules.
- Inorganic iodine therapy will repair hypothyroidism and hyperthyroidism.
- **BEWARE** that some people are very iodine sensitive and may become hyperthyroid when exposed to iodine. (Your doctor should check iodine levels at 1 month!)

Symptoms of Hypothyroidism

- Brittle nails
- Carpal tunnel syndrome
- Cold hand and feet
- Cold intolerance
- Constipation
- Depression
- Difficulty swallowing
- Dry skin
- Edema
- Elevated cholesterol
- Essential hypertension
- Eyelid swelling
- Fatigue
- Hair loss
- Headaches
- Hoarseness
- Hypotension (low blood pressure)
- Inability to concentrate
- Infertility
- Irritability
- Menstrual irregularities
- Muscle cramps
- Muscle weakness
- Muscle and joint pain
- Nervousness
- Poor memory
- Puffy eyes
- Slower heartbeat
- Throat pain
- Weight gain

Highlighted symptoms are often associated with “fibromyalgia”

Iodine Is A Detoxifying Agent

- Detoxifies the Other Halides
 - Bromine
 - Fluoride
 - Chlorine
- Detoxifies Toxic Metals
 - Mercury
 - Lead
 - Aluminum
 - Cadmium

Fluoride

- Fluoride has been linked to:
 - Bone cancer
 - Dental fluorosis
 - Hip fractures
 - Lowered intelligence
 - Kidney toxicity
- Fluoride problems:
 - Inability of thyroid gland to concentrate iodine
 - Goitrogenic agent
 - More toxic when iodine deficiency is present
 - There are NO long-term studies proving that fluoride has any positive benefit

Fluoride In Medications

(Note: Many have been RECALLED or are considered “dangerous”)

- Astemizole (Hismanal—anti-allergy)
- Baycol
- Ciprofloxacin (broad spectrum antibiotic)
- Fen-Phen (weight loss)
- Flonase (allergies)
- Flovent (asthma)
- Lexapro (SSRI antidepressant)
- Paxil and Prozac (SSRI antidepressant)
- Propulsid (stomach ulcers)
- Posicor (anti-arrhythmic)

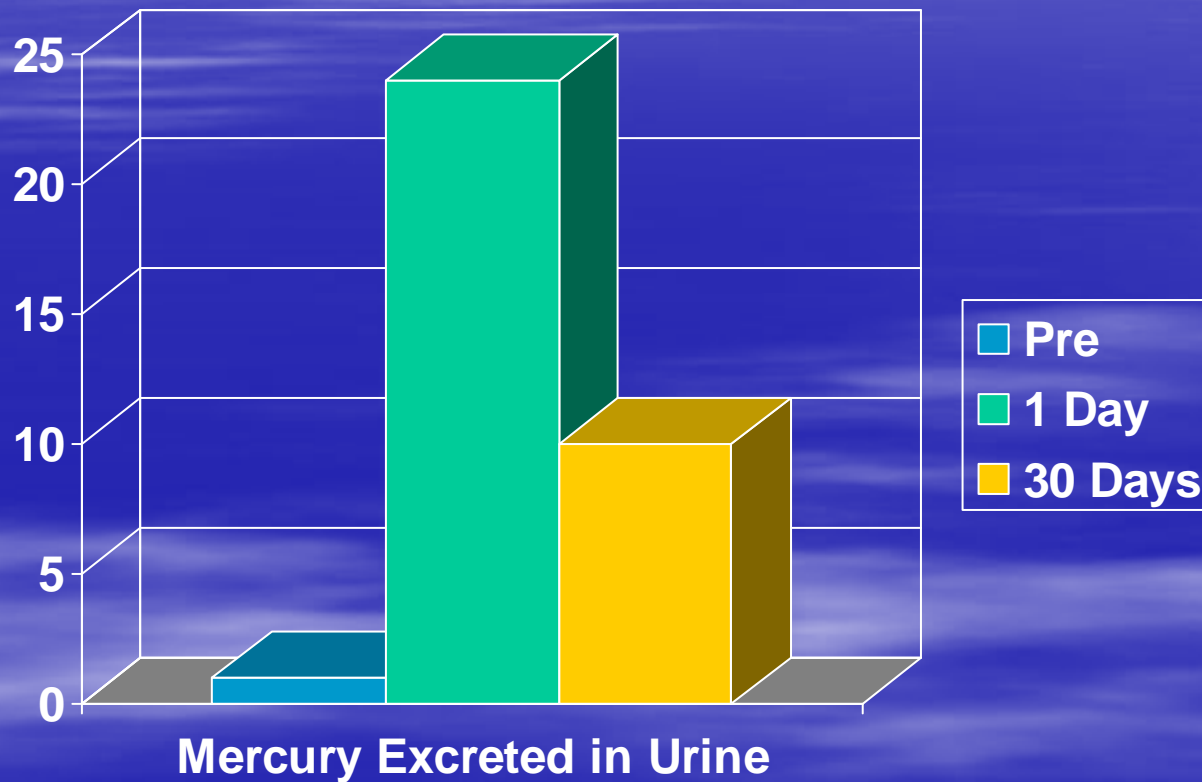
Chlorine

- Disinfectant
 - Hot tubs, swimming pools, chlorinated water
- Whitener
- By-product is dioxin (one of the most carcinogenic agents known, with toxicity second only to radioactive waste!)
- Linked to birth defects, cancer, reproductive disorders, including still birth and immune system breakdown

The beneficial effects
of iodine on
certain clinical conditions
may be due in part to its
detoxifying effect
on environmental toxins!

Iodine and Mercury Detoxification

(50 mg Iodorol administered over 30 days)



Question:

**WHY ISN'T IODINE
THE STANDARD
TREATMENT FOR
DETOXIFYING
MERCURY?**

Fibrocystic Breast Disease

- Cystic breasts
 - Painful to the touch
 - Chronically inflamed and hardened
- Could be precursor to breast cancer
- Causative factors
 - Estrogens
 - Dietary
 - Caffeine
 - Trans fats
 - Vitamin Depletion
 - Vitamin E and Vitamin A

Iodine is a Gatekeeper of Breast Integrity

- During lactation, the breast is more effective in capturing iodide than the thyroid via the sodium/iodide symporter (NIS).
- Iodine treatment of benign breast disease is accompanied by reduced breast size and remission of disease symptoms.
- Iodine induces apoptosis (cell death) by formation of iodolactones of arachidonic acid in both thyroid and breast tissue.

FBD and Iodine

- 167 patients
- Given 10-20 mg/day potassium iodide
- Within 3 months, 72% improvement noted in swelling, nodularity, pain and diffuse induration (hardening) of breasts
- **NO SIDE EFFECTS** reported!

Dr. Flechas' Treatment of FBS

- 50 mg of Iodoral/day for 2-3 years
- Breast pain goes away in just a few weeks
- The cysts, scar tissue and breast nodules (“lumps and bumps”) take up to 2-3 years to resolve.
- Mammograms show 50-80% reduction in scar tissue
- More studies (using biopsy) are needed!

Links Between Breast Cancer & Hypothyroidism

- Hypothyroidism predisposes to a poor immune system
- Studies show an increased risk of breast cancer (from 6% to 12%) when one takes thyroid hormones (T4)
- Incidence of breast cancer among patients taking thyroid hormone (T4) increased the longer the hormone was taken
- The use of thyroid hormones in the presence of iodine deficiency will exacerbate an iodine-deficient condition!

Iodine and Breast Cancer

- Japan and Iceland: Higher intake of iodine and lower incidence of breast cancer
- U.S., Mexico, and Thailand: lower intake of iodine and higher incidence of breast cancer
- Poland, Switzerland, Australia and Russia were found to have elevated rates of breast cancer within localized pockets of iodine deficiency
- Great Lakes Basin has lowest iodine levels and one of the highest breast cancer rates

Iodine: The Japanese Secret to Good Health?

- Mainland Japanese ingest 100 X RDA for iodine (14 mg/day)
- Japanese have lower rates of breast, endometrial and ovarian cancers
- Japanese have a significantly lower rate of fibrocystic breast disease
- Japanese women have longer menstrual cycles than Western women (shorter menses = elevated estrogen levels and lowered progesterone levels)
- Japanese women have lower circulating estrogen levels as compared to Western populations

Iodine and Estrogen

- Low iodine intake leads to a hyper-estrogenic state.
- Hypothyroidism is associated with up to 80-90% free estrogen levels.
- Hyperthyroidism is associated with only 20% free estrogen levels.

Seaweed and Estrogen Levels

- Case study: 3 subjects with abnormal menstrual cycles (<28 days)
- Given bladderwrack (brown seaweed, high in iodine) in doses consumed by mainland Japanese
- Within 3 months, all subjects had longer menstrual cycles and less bleeding
- Increased progesterone levels 2,900%
- Decreased estrogen levels 676%

Iodine Deficiency...

- Induces the earliest form of malignant changes in the breast—dysplasia
- Makes existing cancer more aggressive
- Increases the size of breast tumors

Iodine: Cancer's Enemy?

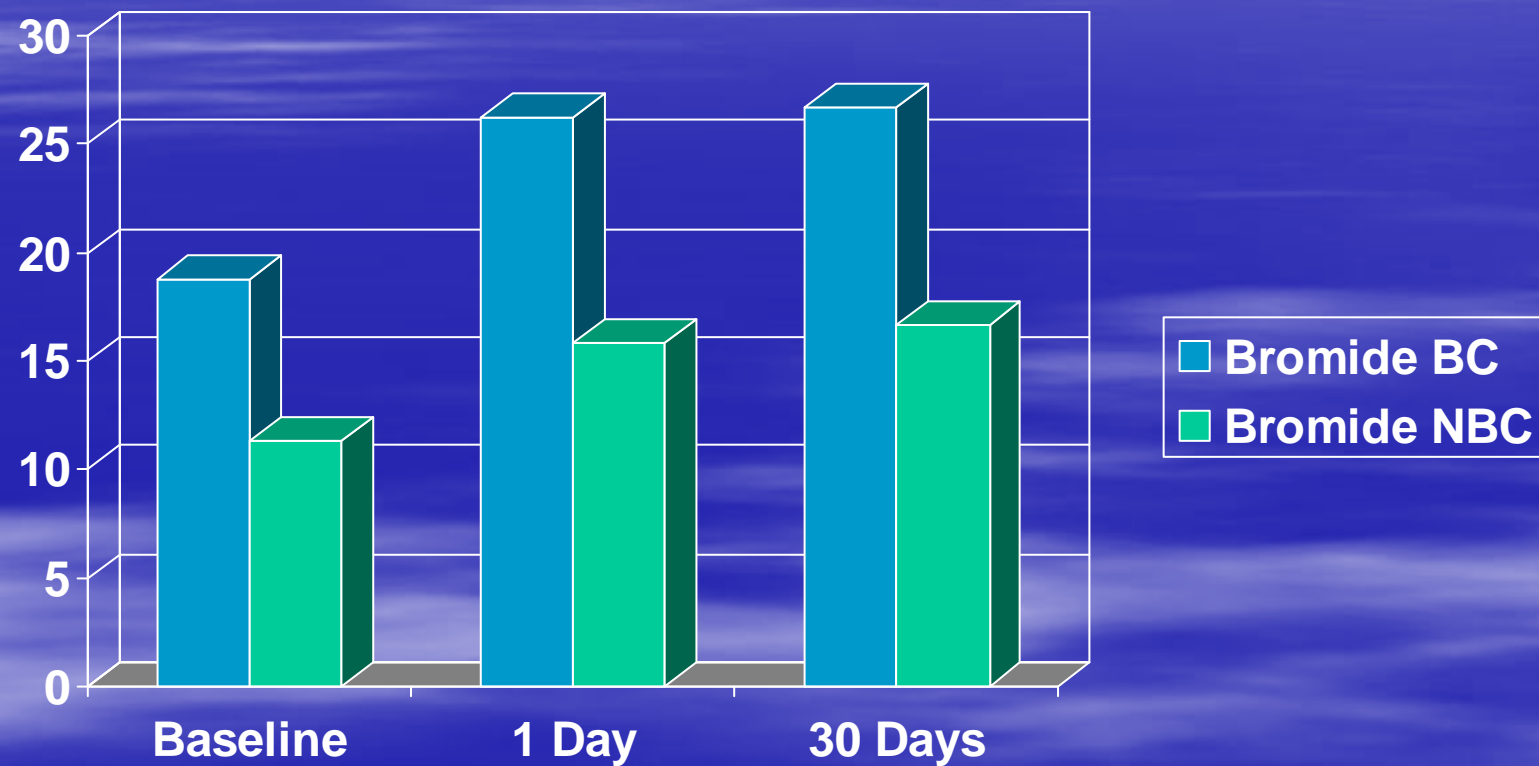
- “Iodine is not toxic to normal cells but IS toxic to cancer cells!”
- “Daily intake of iodine/iodide (Iodoral or Lugol’s Solution) at 50-100 mg would decrease the oxydative burden and DNA damage. Such an effect would be anticarcinogenic in every organ of the human body.”

Guy E. Abraham, MD

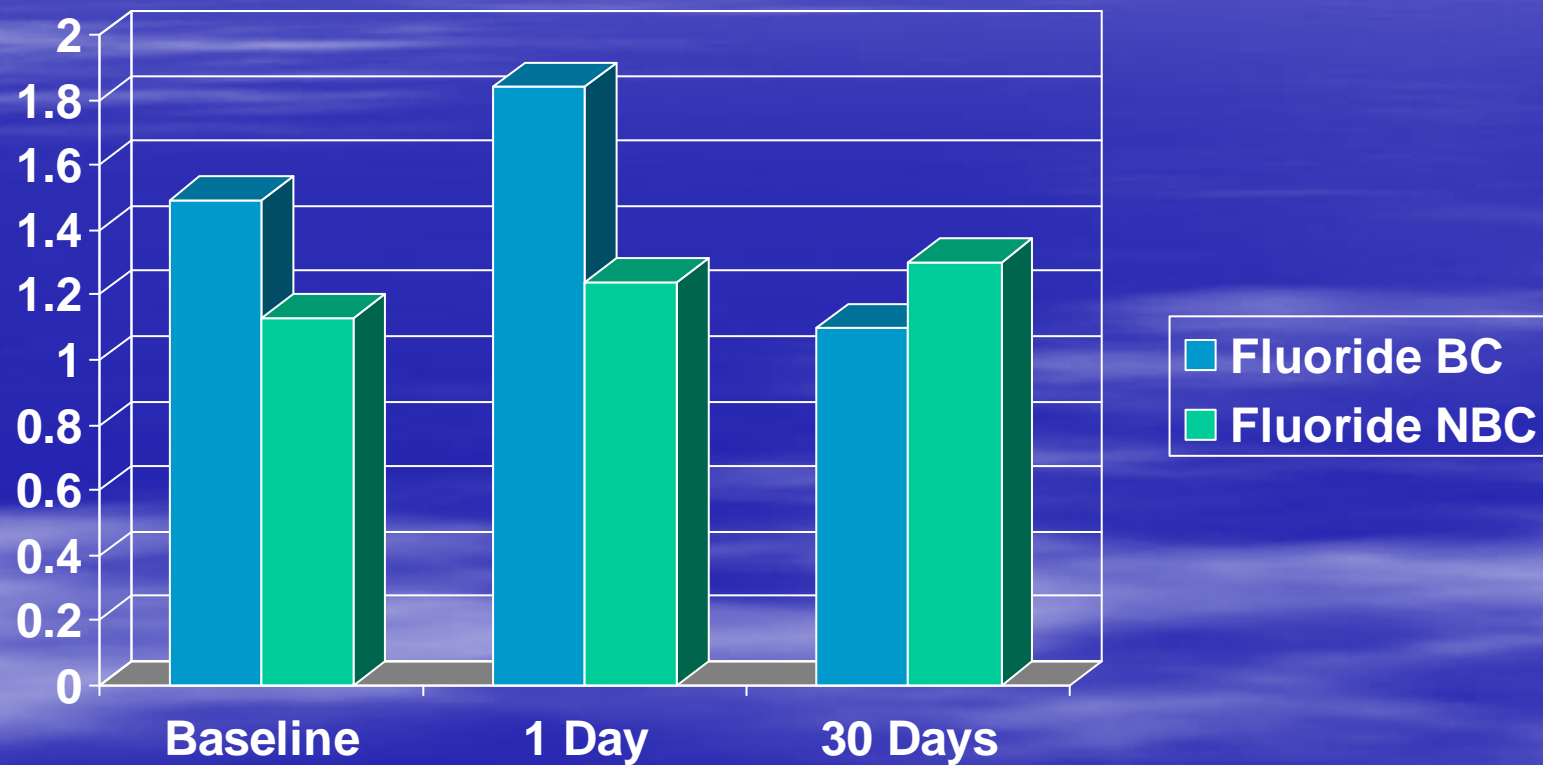
Dr. Brownstein's Study

- 8 women with breast cancer
- 10 women without breast cancer
- Urinary levels of bromine and fluoride excreted were measured at baseline, one day after taking 50 mg Iodoral, and 30 days after taking 50 mg/day Iodoral.
- Initial iodine levels were low in all women tested
- What was shocking was the difference in levels of the toxic halogens bromine and fluoride.
- The way to reduce the body's burden of toxic halides is to increase the body's iodine levels!

Bromine and Breast Cancer



Fluoride and Breast Cancer



Dr. Donald Miller on Fluoride

- WHO (World Health Organization) study shows there is no difference between fluoridated and unfluoridated countries in the tooth decay rate
- More than 30% of our children (per the CDC) are affected by fluoride poisoning---as evidenced by dental fluorosis.
- Other possible manifestations of fluoride poisoning: arthritis, osteoporosis, Alzheimer's disease, and an increased risk of cancer

Question:

**ARE THE
TOXIC HALOGENS
BROMINE AND FLUORIDE
PARTIALLY RESPONSIBLE FOR
THE EPIDEMIC RISE
IN BREAST CANCER?**

Iodine and Prostate Cancer

- Research not as complete as for breast cancer
- Mainland Japanese men have 10 X less prostate cancer than U.S. men
- BPH (Benign Prostatic Hyperplasia) –
Question: Could the prostate be enlarging to absorb more iodine just as breasts enlarge when there is an iodine deficiency?

Iodine Intake, Thyroid Disease & Prostate Cancer - Correlations

- High iodine intake reduces risk of prostate cancer by 29%
- 31% increased risk for prostate cancer following a diagnosis of thyroid cancer
- 21% increased risk for thyroid cancer following a diagnosis of prostate cancer
- Iodine supplementation has a suppressive effect on tumor growth and formation
- Suppressed tumors have significantly higher iodine content

Question:

**WHY ISN'T IODINE
PART OF THE
STANDARD TREATMENT
FOR CANCER?**

Medical Iodophobia

“Medical iodophobia is the unwarranted fear of using and recommending inorganic, non-radioactive iodine/iodide within the range known from the collective experience of three generations of clinicians to be the safest and most effective amounts for treating symptoms and signs of iodine/iodide deficiency (12.5 - 50 mg/day).”

Guy Abraham, MD (2004)

The “Iodine Project”

- Over 4,000 patients tested
- 95.6% have tested low via urine or serum (blood) testing
- Results – After iodine treatment, subjects reported:
 - A sense of overall well being
 - Lifting of “brain fog”
 - Feeling warmer in cold environments
 - Increased energy
 - Needing less sleep
 - Achieving more in less time
 - Experiencing regular bowel movements
 - Improved skin complexion
 - Some subjects reported a dramatic reduction in fibromyalgia symptoms

How Much Iodine Should You Take?

- According to Dr. Flechas, body saturation of iodine can be achieved with 100 mg/day for 6 weeks, then reduced to 50 mg/day.
- Dr. Brownstein thinks 12.5 mg/day may be enough once saturation is achieved.
- Dr. Meletis believes that a “slow and consistent use at a lower dose is better than trying to supersaturate tissues too rapidly.”
- This treatment is very new. There is no consensus yet! “Start slow” would seem to be good advice.

My Personal Experience:

- One tablet – seemed to work well
 - No longer cold all the time!
 - Thinning hair grew back
 - Increased energy, less fatigue
 - Required less sleep
- 2, 3 & 4 tablets – might work even better?
 - Blurry vision & irritated eyes
 - Heart palpitations
 - Night-time indigestion/heartburn
 - INSOMNIA
 - Itchy skin
- At higher dosages, iodine will detoxify bromine, etc. so you need to do “salt loading” and take the companion nutrients.

CAUTION!

**As with any new
medical program,
it is best to proceed
under a
doctor's supervision!**

What is Iodoral?

- Iodoral is a dry tablet form of standardized, inorganic, non-radioactive, potassium iodide/iodine that delivers 12.5 mg of elemental iodine per tablet (5 mg iodine and 75 mg iodide as the potassium salt).
- Clinical practice has shown that a blend of both appears to be better tolerated.
- Iodoral is the tablet form of Lugol's Solution, and is easier on the intestinal tract than the liquid form.
- Iodoral is non-prescription and costs \$38 for 180 tablets at www.breastcancerchoices.org

Of Interest to Fibromyalgia Recovery Group Members

- If you are already taking thyroid medications, be aware that you may need to lower your dose (and perhaps even discontinue taking it). You will need to have your doctor monitor this!
- Iodoral can be taken with other medications, including guaifenesin. Iodine is an element and therefore is not a salicylate.

Thyroid Changes To Expect

- Expect to see the TSH go up for a few weeks (or months) while the NIS system is being stimulated.
- Usually, thyroid tests will show increased T4 and a stable T3.

How Are Iodine Levels Tested?

- Iodine binds to receptors throughout the body.
- If there is sufficient iodine present, iodine will be excreted in the urine.
- If there is an iodine deficiency, iodine will be bound in the body.
- The “Iodine Loading Test” is easy and can be done at home.

The “Iodine Loading Test”

- Upon awakening, the first morning urine is discarded
- 50 mg of iodine/iodide mixture (Iodoral) is taken by the patient
- 24 hrs. of urine is collected, including the first morning urine the following day
- Iodine excretion is measured
- Iodine sufficiency is present when >90% of the iodine is excreted in the urine
- Cost of iodine loading test: approximately \$100

Detoxification Reactions

- Fatigue
- Muscle aches
- Fever
- Diarrhea
- Brain Fog
- Skin rashes

“Detoxification reactions are rare, but it has happened.”

David Brownstein, MD

Alleviating Iodine Problems

- When problems develop with iodine use, think “detoxification”.
- The following may help:
 - Vitamin C
 - Salt
 - Water
 - Liver and kidney support
 - Exercise
 - Clean diet (free of bromide and fluoride)

Synergistic Supplements

- Magnesium
 - is an important part of the iodine treatment plan
 - deficiency is very common
 - nature's relaxing agent
- Vitamin C
 - Can improve and possibly repair the iodine transport mechanism
- Other minerals?
 - Selenium
 - Zinc
 - Iron

Iodine Adverse Effects?

- “Iodoism” may actually be “Bromism”
 - Frontal sinus headache
 - Metallic taste in mouth
 - Increased salivation
 - Sneezing
 - Head cold-like symptoms
 - Acne
- Side effects are rare – Occur in 1-3% of patients
- “Salt loading treatment” is usually effective

Salt Treatment for Bromine Detoxification

- Chloride (salt) increases renal clearance of bromide
- Mix ¼ tsp. unprocessed sea salt (Celtic) in ½ cup warm water and follow with 12-16 oz. water.
- Repeat in 30-45 minutes X 2 until copious urination begins.
- The chloride ion flushes the bromine into the urine.
- May necessitate reduction of the iodine dosage.
- Fluoride, mercury, lead and cadmium in the body are also potential sources of difficulty, although evidently much less commonly than bromine.

William Shevin, MD, DHT

Another Detoxification Reaction?

- In those with high bromide levels
 - Increased body odor - lasts 1-2 weeks
 - Cloudy urine (perhaps with a thick sedimentation) – may last several months
- Pre-ortho-iodo-supplementation, the urine samples were clear.
- We do not know if the presence of bromide in the urine was the cause of the odor or cloudiness.
- Increased fluid intake and magnesium are recommended by Dr. Abraham.

Food For Thought:

- Iodine levels have fallen 50% in the last 30 years
- During this time, elevations in autoimmune disorders, thyroid cancer, breast cancer, prostate cancer, other cancers, and many other diseases, including fibromyalgia and chronic fatigue, have occurred
- “Discovery consists in seeing what everybody else has seen and thinking what nobody else has thought.”
(Albert Szent-Gyorgyi, M.D., Ph.D)

The Iodine Deficiency “Pattern”

- In the thyroid (goiter): cyst, nodules, enlargement, scar tissue, cancer
- In the breast (FBD): cyst, nodules, enlargement, scar tissue, pain, cancer
- In the ovary (PCOS): cyst, nodules, enlargement, scar tissue, pain, cancer

Does Fibromyalgia fit “The Pattern”?

- Are the “cysts and nodules” what we are able to “map”? Dr. Paul St. Amand describes them as the “lumps and bumps of fibromyalgia”.
- Is it possible that the lack of iodine in the MUSCLE may cause fibromyalgia just as lack of iodine in the breast causes fibrocystic breast disease?
- Dr. Flechas thinks this may be the case!
- **The Big Question:** Does fibromyalgia eventually lead to cancer?

Increased cancer risk in patients referred to hospital with suspected fibromyalgia

In the *Journal of Rheumatology* (2007 Jan;34(1):201-6), researchers in Denmark publish the results of their research into cancer rates among patients referred to hospitals with suspected fibromyalgia. Their aim was to analyze whether there was any relationship between fibromyalgia or fibromyalgia-like symptoms and an increased incidence of cancer. They analyzed 1361 patient records. They used the American College of Rheumatology (ACR) criteria to divide patients into groups with and without confirmed fibromyalgia diagnosis. They then followed the cohort's medical history for 15 years and looked at the records of the national cancer register to see if the patients had been diagnosed with cancer.

While they found no association between fibromyalgia and cancer in patients whose fibromyalgia diagnosis was confirmed, they found that women referred to the hospital for muscle pain and/or tenderness who did not meet the fibromyalgia diagnostic criteria did have an increased overall cancer rate, with an increase specifically in breast, lymphatic and hematological cancers.

Iodine and Fibromyalgia

- Dr. Flechas was studying how long it took to saturate people with iodine.
- One of the test subjects had fibromyalgia.
- She began noticing a decrease in FM pain.
- One year later, some of the FM pain was still present, but it disappeared after adding Vitamin B2 and Vitamin B3

One Woman's Results

Symptom	Pre-intervention	Post-intervention
Muscle Pain	3	6
Pain with Exercise	2	9
Joint Pain	3	8
Joint Swelling	2	9
Restless Legs	4	10
Stiffness	4	9
Fatigue	2	9
Insomnia	1	9
Brain Fog	7	9
Dizziness	6	10
Constipation	6	8
Nasal Congestion	4	7
Anxiety	1	9
Depression	3	9
Panic Attacks	2	9

Dr. Flechas on Fibromyalgia

- FM is far more common in middle-aged women (between the ages of 30 and 50 years) than in men.
- FM and CFS are “associated”.
- FM is caused by deficiencies of substances needed in ATP synthesis.
- The role of iodine in ATP synthesis and in normal functions of striated muscles is unknown at this time.
- However, striated muscles contain 33% of the total body iodine in iodine sufficient individuals.

Correlations With Fibromyalgia?

- Many other conditions and diseases seem to be “correlated” with fibromyalgia
 - Fibrocystic breast disease
 - Hypothyroidism
 - Hypoglycemia
 - Adrenal failure
 - Depression
 - Irritable Bowel Syndrome
 - Fungal infections
 - Chronic Fatigue Syndrome
- Many (or perhaps all) of these conditions are also “correlated” with iodine deficiency!

Measuring Fibromyalgia Pain

- Using a dolormeter (or algometer), Dr. Flechas measured fibromyalgia pain at the tender points. A dolormeter measures the pain threshold.
- Pressure from the dolormeter went from 60 to 102 after introducing iodine.
- It went from 102 to 162 when Vitamins B2 and B3 were also added.
- The pain threshold was significantly increased when the patient supplemented with iodine and B vitamins!

Dr. Flechas' Protocol

- 100 mg Iodoral (4 tablets AM, 4 tablets noon) – (Note: Most of the doctors recommend 50 mg or less!)
- Riboflavin (B2) – 300 mg AM
- Inositol Hexanicotinate (B3) – 2 tablets in PM
- 3000 mg Vitamin C
- 200-400 mg Magnesium (up to 1000 mg)
- Selenium (200 mcg)

Think about it...

What have you got to lose?

- Reduced risk for breast cancer
- Release of heavy metals and toxins stored in the body
- Dependence on thyroid hormones
- Perhaps, some of your pain?

What you got to gain?

- Improved feeling of well-being
- Increased energy
- Improved sleep
- Regular bowel movements
- Improved skin complexion

In Conclusion

“Ortho-iodo-supplementation
may be the safest, simplest,
most effective and
least expensive way
to solve the
healthcare crisis
crippling our nation.”

Guy E. Abraham, MD

Resources

- Breast Cancer Choices:
www.breastcancerchoices.org
- Vitamin Research Products:
www.vrp.com
- Dr. David Brownstein:
www.drbrownstein.com
- Dr. Jorge D. Flechas:
www.helpmythyroid.com
- Iodine Research & Products (Dr. Guy Abraham)
www.optimox.com
- The Iodine Group
www.iodine4health.com
- To join the iodine news group
<http://health.groups.yahoo.com/group/iodine/>
- The Fibromyalgia Recovery Group
www.fibromyalgiarecovery.com