Fibromyalgia Alternatives

James Biddle, MD
This is simply an educational presentation and is not intended to diagnose or treat any individuals. Diagnosis and treatment of any disease should be done by a licensed healthcare practitioner in an office setting.
Who We Are…

Asheville Integrative Medicine

Evolving the Standard of Health Care for All, While Empowering You to Enjoy Optimal Health.

832 Hendersonville Road, Asheville, NC 28803
828-252-5545
www.docbiddle.com
Who We Are…

Physician-Selected Nutritional Supplements
832 Hendersonville Road, Asheville NC 28803
828-210-0188
www.nutrientsetc.com
Who I am.....

- BA in Biology 1984, University of Missouri – Columbia (genetics & evolution).
- M.D. 1989 @ University of MO – Columbia.
- **Internal Medicine** 1992 in Portland OR – Board Certified; recertified in 2002 and 2012.
- Practicing Integrative Medicine in Asheville since 1997.
- [www.earthaven.org](http://www.earthaven.org), [www.acam.org](http://www.acam.org), [www.ncims.com](http://www.ncims.com)
What I do….

“Integrative Medicine”

Holistic, Nature’s Template, Scientific, Orthomolecular, Sherlock Holmes…

- Bio-Identical ‘Natural’ Hormones
- Diabetes and Nutrition
- Cardiovascular Support
- Allergies, ADD, Autism
- Arthritis and Fatigue
- Toxic Metal Syndromes
- “Challenging Cases”
Who are we?

- Practicing Integrative Medicine in Asheville for over 10 years.
- Joined by:
  - Anne Walch, PA
  - Sharon Willingham, MD
  - John Paul McNeil, PA
  - Sudeshna Dasgupta-O’Brien, MD
What We Do…

Integrative Medicine

Holistic, Nature’s Template, Orthomolecular, Scientific, Sherlock Holmes….

- Bio-Identical ‘Natural’ Hormones
- Diabetes and Nutrition
- Cardiovascular Support
- Toxic Metal Syndromes
- Arthritis and Fatigue
- Allergies, ADD, Autism
- “Challenging Cases”
Fibromyalgia

- A Chronic Condition marked by spontaneous, widespread soft tissue pain, sleep disturbance, fatigue, and widely-distributed areas of tenderness called ‘tender points’.

- Prevalence
  - 3.4% Women,
  - 0.5% Men
1990 American College of Rheumatology Diagnostic Criteria:

- Widespread pains, occurring in all 4 quadrants of body, that persist longer than 3 months.
- Greater than 11 of 18 tender points, with pressure of ~9 lbs (4kg.) during physical exam.
Clinical Paradox: Fatigue & Insomnia

Core Symptoms:
- Tired.
- Achy.
- Brain Fog.
- Can’t Sleep.

Overlap with CFIDS & MCS:
(Chronic Fatigue Immune Deficiency Syndrome and Multiple Chemical Sensitivities).
Symptoms of Fibromyalgia

- Fatigue.
- Increased pain in AM, weather changes, anxiety, stress.
- Improved pain by mild physical activity or stress alleviation.
- Non-restorative sleep – wake early, unrefreshed, with poor concentration.
- Forgetfulness (Classic “Fibro Fog”).
Symptoms of Fibromyalgia

- Mood Changes, Irritability.
- Depression, Anxiety.
- Migraines and Sensitivity to noises, lights, smells.
- Numbness &/or tingling body parts.
- Abdominal pain from IBS.
- Irritable Bladder.
Common Conditions with Fibromyalgia:

- Migraine headaches
- Chronic Fatigue Syndrome
- Irritable Bowel Syndrome (IBS)
- Depression
- Restless Leg Syndrome
- TMJ = Temporomandibular joint syndrome
- Myofascial pain syndrome
- Chronic Sinusitis
Medications

- Conventional treatments, including Elavil (Amitriptyline) at bedtime, etc. These help to manage the symptoms, but do not reverse the underlying causes.
- Recently FDA-approved Lyrica (Pregabalin), an anti-seizure medication.
- Antidepressants.
Integrative Medical Approach

- Individualized symptoms related to multiple systems. Complex to treat so treatment is individualized.

One size does not fit all!
Clues to Etiology

- Women >> Men.
- Age = 30’s, 40’s, and 50’s.
- Overlaps with other Diagnoses.
Hypothalamus

The Hypothalamus Controls:
- Sleep
- Hormonal Function
- Temperature
- Autonomic Function (B/P, pulse, sweats)

Possible Theory = Hypothalamic Mitochondriopathy
“Effective Treatment of CFS and Fibromyalgia” Study

- 38 Active FMS ‘Fibro-Myositis’ Patients.
  Treated for:
  - Subclinical Thyroid, Gonadal, & Adrenal Insufficiency.
  - Disordered Sleep.
  - Neurally-Mediated Hypotension (NMH).
  - Opportunistic Infections.
  - Suspected nutritional deficiencies.
Results:

- 16 “much better,” 14 “better,” 2 “same,” 0 “worse,” 1 “much worse”.

- Long-term, increasing improvements over time, despite patient discontinuation.

- Teitelbaum J. “Effective treatment of chronic fatigue syndrome (CFIDS) and fibromyalgia (FMS)” *Journal of Chronic Fatigue Syndrome*, 2001 Vol.8(2).
Hormone Imbalance

- Pineal Gland.
- Pituitary.
- Thyroid.
- Adrenal.
- Sex Hormones.
Hormone Imbalance

- **Natural HRT:**
  - Estrogens & Progesterone for women.

- **Testosterone** - dose adjusted to age and sex - very powerful treatment, especially in men.

- **DHEA** – don’t exceed 25 mg daily in women or 50 mg daily in men without physician supervision.
Female Hormones

- 20% “strong” estrogens – E1 & E2 ( Estrone and Estradiol)

- 80% “weak” estrogens – E3 (Estriol)

- Progesterone, Testosterone, DHEA, and adrenal hormones.
THE STEROIDGENIC PATHWAYS

Cholesterol → Pregnenolone → 17-OH-Pregnenolone → DHEA → Androstenediol

Androstenediol → Testosterone

Testosterone → DHT

DHT → Androstanediol

Androstanediol → Androsterone

Androsterone → Estradiol (E2)

Estradiol (E2) → Estrone (E1)

Aldosterone → Cortisol → Cortisone

Cortisone → Estrone (E1)
THE STEROIDOGENIC PATHWAYS

Cholesterol → Pregnenolone → DHEA → Androstenediol

Stress

Progesterone → Aldosterone

Cortisol → Cortisone

Androstenedione → Testosterone → DHT

Androsterone → Estrone (E1)

Androstanediol → Androstenedione

Estradiol (E2)
What is a Natural Hormone?

- “Bio-Identical” = Biochemical structure identical to that produced in the body.
- May be synthetic or semi-synthetic.
- Usually fewer side effects and better biological actions than “alien” hormone mimics.
Sub-Clinical Hypothyroidism:

- T4 -> T3 via an enzyme called “5-prime-de-iodinase,” or T4 -> RT3.
- Influenced by starvation, stress, mercury, deficiencies (Zn, Se, Fe, I), and weakness of ovaries &/or adrenals.
- Check TSH &mid-day oral temperatures for 5 minutes under the tongue with non-digital thermometer (11 am – 3 pm). See www.wilsonssyndrome.org.
- Check an Iodine Absorption Test.
Steroid Hormone Synthesis Pathways

Adrenal glands

Cholesterol

Pregnenolone

Aldosterone

Progesterone

Cortisol

DHEA

Androstenedione

Kidneys

Liver

Estrone

Estriadol

Estriol

Progesterone

Testosterone

Androstenedione

Ovaries

Testes

Normal pathway

Andrenal fatigue / Pregnenolone steal
Adrenal Support Options

- **Test ASI** = Adrenal Stress Index (cortisol & DHEA).
- **Address root causes**: Diet, drugs, toxicities, illnesses, lifestyle & emotional excesses, stress, infections
- **Add Salt**: Iodized Sea Salt: 1/8 tsp, 2 - 3 times daily with lots of pure water.
- **Lifestyle Essentials**: Regular rest and consistent sleep patterns. Regular exercise, starting gently.
Adrenal Support Options

- Consider practices of prayer, meditation, chi kung, yoga, tai chi, Relaxation response, rebounding, walking. Practice forgiveness and gratitude. Be in the present moment.
- Vitamins: A good multivitamin; B-complex; Vitamin A 10,000 iu; Vitamin E 400-800 iu.
- Vitamin C 1000 mg twice daily, or more with stress.
- Vitamin B-6 (activated as P5P), 50 mg x 1-2 daily.
- Vitamin B-5 (Pantothenic acid), 500 mg twice daily.
Adrenal Support Options

- **Minerals:** Magnesium 250 mg, 2-3 times daily (less if loose stools).

- **Herbs:**
  - Licorice 1000-2000 mg (1/8 – 1/4 tsp or 2 – 4 capsules) twice daily (not the candy).
  - Adrenal Support herbal blend with Rhodiola, Ashwaganda, Schrizontra, and Holy Basil.
  - Panax or Siberian Ginseng 400 mg, 2 – 3 times daily.
Adrenal Support Options

- **Glandulars:** ACE = Adrenal Cortex Extract from animals, 1 – 2 caps, 1-2 times daily

- **Hormonal:**
  - DHEA 5 to 25 mg each am for women, 25-50 mg for men. Measure levels after treat.
  - Estrogen, Progesterone, and Testosterone if clinically indicated.
  - **Cortisol** (hydrocortisone) at safe physiological dosages (2.5 - 15 mg daily in divided doses) if all else fails. See Safe Uses of Cortisol, William Jeffries, MD

Sleep and Mood

- Sleep Disturbances
- REM (Zaleplon vs Zolpidem Tartrate vs Alprazolam)
- Hormone activity
- Good Sleep Hygiene
- Psychological Cycle
- Resolve insomnia. Try melatonin at bedtime and a Go-Lite in the AM.
Insomnia:

- Avoid hypoglycemia.
- Eliminate all stimulants (coffee, tea, etc.).
- **Magnesium** 400-500 mg at bedtime.
- **Chamomile tea** at bedtime.
Insomnia:

Especially for lack of Stage-4 (non-REM) sleep, with fatigue, depression, apathy, and physical complaints:

- Daily **exercise** for 30-40 minutes, in morning or afternoon. Sunshine in early morning.
- Valerian, chamomile, hops, and passion flower extracts at bedtime - often sold in combinations.
- **Kava Kava**, 250mg (with 30% kavalactones), one hour before bedtime.
Insomnia:

Especially for lack of REM sleep, with irritability, anxiety, worry, and emotional lability:

- **Melatonin**, 0.3 mg to 3 mg at bedtime, preferably timed-released (use the lowest dose which does the job) (*The Lancet* Aug. 26, 1995; 346:541-4).
- **GABA** (gamma-aminobutyric acid) 500-1000 mg at bedtime helps to turn the brain off.
- **5-HTP** (5-hydroxytryptophan) 50-200 mg, or **L-tryptophan** 1000-2000 mg at bedtime, along with:
- **Vitamin B-6** in the form of **P5P** 20-50 mg, and **magnesium** 500 mg.
Insomnia:

- **Walnut milk** - rich source of serotonin. 1/8-1/4 cup of walnuts blended into rice or almond milk before bed. Also consider adding cinnamon, nutmeg, ground flax seeds, sunflower seeds, hemp nuts, and/or lecithin granules.

Pain Alleviation

- Indirect Treatments.
- Acupuncture.
- Chiropractic.
- Counseling.
- Nutrition.
- Yoga.
- Etc, etc, etc…
Exercise

- Regular **weight lifting** involving the affected muscles. Stress management and relaxation training. Correct TMJ or dental problems. Consider PT, biofeedback, massage, craniosacral.
Alleviation of Stress

- Changing perspectives, attitudes, beliefs about self and world, ambitions, imagination, possibilities for change
To drop the tension from your life, practice the art of tranquility by passing peaceful words and thoughts through your mind, day and night. They have a strange healing quality.
Sustainable Nutrition is Scientific:

- **Adequate Protein** (> 15% of calories).
  - (Hecker KD ’01)

- **Healthy Fats** (no Trans-Fats/ Hydrogenated Oils; more Mono-Unsaturated & Omega-3s).
  - (Mead A ’06; Lockheart MS ‘98)

- **Higher Fiber** (more plant-based, veggies, fruits, nuts, seeds, legumes, & truly whole grains).
  - (Trichopoulou A ’03; Liu S ’01; Bazzano LA ’03)

- **Lower Glycemic Index** (less sugar and refined carbs).
  - (Sacks FM ’02; Beulens JW ’07; Flight I ’06; Amano ‘04)
Glycemic Index

![Graph showing the Glycemic Index comparison between High GI and Low GI foods. The graph plots the change in blood glucose (mM) over time (min) with a peak at 30 minutes for High GI and a lower peak at 45 minutes for Low GI.](image)
Sustainable Nutrition

Macronutrients:
- Proteins – amino acid building blocks; muscle.
- Fats – lipids & oils (long carbon chains).
- Carbohydrates – sugars, starch, fiber.

Micronutrients:
- Minerals – Ca, Mg, Zn, I, Li, Cr, Vd, etc.
- Vitamins – A, B’s (esp B-12), C, D, E, K.
- Nutrients – CoQ10, Lipoic acid, Glucosamine, MSM, Probiotics, Enzymes, HCL, etc…
**Essential Nutrients** x 52, including:

- Oxygen – for 3 minutes.
- Water – for 3 days.
- Vitamin C – for 3 months.
- **Essential Amino Acids** – Lysine, Tryptophan, Arginine, Phenylalanine.
- **Essential Fatty Acids** – omega-3’s, -6’s.
- Essential Sugars? – glyconutrients.
- and Vitamin “L” (or at least chocolate).
Fibromyalgia

**B-12:** Clinical Therapeutic Trial of B-12 shots, 1000 mcg SQ daily for 7-10 days, then 1-3 times weekly as needed. Check homocysteine level prior.

**Sleep Apnea:** Check an overnight pulse-oximeter. Sleep Study?
Supplements

- **CoQ10**, 100 mg twice daily.
- **Acetyl-L-Carnitine**, 500-1000 mg twice daily.
- **D-Ribose**, 750-1500 mg twice daily.
Supplements

- **St. John’s Wort** can benefit many, especially by improving sleep and moods. Use 300 mg of standardized Hypericum, 3 times daily. Don’t mix with SSRIs (Prozac, etc).
- **5-HTP**, 50-100 mg at bedtime. May increase up to 100 mg three times daily.
- **Melatonin** 0.3 – 3.0 mg at bedtime for sleep. In the AM, get outside to expose eyes to real light.
Nutraceuticals

- **Magnesium**-Potassium Chelates 250 mg, 3-4 times daily (or Mg-Malate). May cause loose stools. It’s best to get more Magnesium than Calcium each day.

- **MSM** – Methyl Sulfonyl Methane (physiologic sulfur), ½ -1 tsp (2500-5000 mg) twice daily.

- **Cod Liver Oil** (emulsified & orange-flavored) or flax oil, one Tbsp once or twice daily, to provide omega-3 essential fatty acids (*Arthritis and Rheumatism* Aug. 1995;38(8):1107-14).
Nutraceuticals

- **Evening Primrose Oil** (or borage oil) for 750-1500 mg of gamma-linolenic acid (GLA) daily.
- **Vitamin E**, 800 IU once daily *(Alternative and Complimentary Therapies Jan./Feb., 1995;93-95).*
- **Vitamin C**, 1000 mg x 2-3 per day with meals.
Consider testing yourself for toxic metals.

Blood tests are virtually useless for chronic toxicity. Hair analysis can give some clues.

Gold Standard – Chelation Challenge.
Gold Standard – measure urine levels of toxic metals after an oral DMSA **Chelation Challenge**, (15 mg/kg with 6-hour urine) which pulls toxic metals from your body and into your urine, thus giving a good estimate of total body burden.

*Annals of Int Med 1999;130:7-13*
Patient: James Biddle
Collected: 10/17/1997

<table>
<thead>
<tr>
<th>Element</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead</td>
<td>0.90</td>
</tr>
<tr>
<td>Mercury</td>
<td>2.38</td>
</tr>
</tbody>
</table>

0-0.8
0-0.95
Patient: James Biddle
Patient: James Biddle
Collected: 7/21/1999
Patient: James Biddle
Collected: 4/7/2003
According to the World Health Organization, largest exposure to mercury today from dental amalgam fillings, which contain 50% mercury.

Please do not allow any dentist to place additional mercury amalgam fillings in your teeth.

- www.bioprobe.com
- www.IAOMT.org
- Foundation for Toxic-Free Dentistry 1-800-331-2303
Fibromyalgia

Other Etiologies:

- Test for **chronic infection** with mycoplasma or others. See [www.immed.org](http://www.immed.org) or [www.roadback.org](http://www.roadback.org).

- Test for chronic **coagulation disorders** and fibrin deposition. See [www.hemex.com](http://www.hemex.com).
Inhalant Allergy Desensitization

American Academy of Environmental Medicine (316-684-5500) www.aaem.com recommends the use of oral drops as a safe and effective alternative to weekly shots for allergy desensitization (Allergy 1994; 49:309-313)

- Clin Exp Allergy 1994;24:53-59
- Ann Allergy 1990;64:27-31
- Allergy 1986;41:271-279
End-Point Titration

- Skin testing more detailed. Not only what allergic to, but how severe.
- Knowing degree of allergic response tells us the appropriate concentration to mix into the serum, so we can go straight to the treatment dose.
- Also tests for ‘delayed reactions’, especially important for mold.
Oral Drops Advantages

- Research shows similar results with drops of “sublingual” (under the tongue) serum as with injected shots.
- More convenient – treat at home and from a distance.
- Less Costly at $35-45 per month (<$500/yr).
- Safer - no risk of anaphylactic reaction.
- Pain free.
80% have significant improvements in allergy symptoms and quality of life from oral drop desensitization, and often more rapidly than shots.

Now able to do rapid pre-seasonal boosting doses, starting 6-8 weeks prior to pt’s allergy season.
Food Allergies can cause fat storage also…

Burn fat or Store fat

not both

Sugar is burned for energy or stored as fat. Eating excess “Effective CHOs” puts us into fat-storage mode, and keeps us there.
**Food Allergies:** Identify and avoid, especially Celiac Disease or gluten intolerance.

Now able to use oral drop therapy for desensitizing food allergies.

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

Consider ‘Blood-Type Diet’.
Testing

- Correct **leaky gut syndrome, candidiasis, or intestinal dysbiosis**.
- Consider testing CDSA/CP, antibodies for **H. pylori**, and/or Heidelberg gastrogram. Celiac disease?
- Consider treatment for hypochlorhydria (low stomach acid) with **Betaine HCL 650 mg, 2-5 caps at each meal**.
**More Fibro Stuff:**

- **Chronic Infections:** EBV, HHV-6, Mycoplasma pneumoniae, Chlamydia pneumoniae, Tick-borne diseases (Lyme, Babesia, Ehrlichia, Bartonella), Candidiasis, intestinal dysbiosis or parasites.
- **Labs:** ferritin, Vit D (25-OH), homocysteine, TSH.
- **Neurotransmitter testing** – see www.sanesco.net.
- Myer's Cocktail IV Push as needed.
- Individualized essential **amino acids** based on an amino acid panel.
Detoxification

Testing - **Other toxicities** – pesticides, plastics, petrochemicals, solvents, hormones, etc. **IR sauna?**

**Toxic metals** (and deficiencies of nutrient elements). Perform **chelation challenge** with oral DMSA (or IV EDTA-DMPS) then urine collection to test for heavy metals, and **hair analysis** for nutrient elements.
Rx Guaifenesin for Fibro:

Guaifenesin 300-1200 mg twice daily. See www.guaidoc.com and www.mwilliamson.com. For this to work, you must avoid salicylates in medications, herbs, and topicals (especially cosmetics).


- www.fibromyalgiatreatment.com
**From Fatigued to Fantastic:** A Proven Program to Regain Vibrant Health, Based on a New Scientific Study Showing Effective Treatment for Chronic Fatigue and Fibromyalgia – Jacob Teitelbaum, MD ISBM-13: 978-1583330975

www.endfatigue.com
More Guidance -

- **Depression-Free** For Life: A Physician’s All-Natural, 5-Step Plan – Gabriel Cousens, Mark Mayell. ISBN 0060959657.
“What we do to the earth,
We also do to our bodies
and offspring.”

www.earthhaven.org
Remember:

What we do to our world,
We do to our bodies
and to our descendants.

- www.earthaven.org
- www.acam.org
- www.ncims.com