


Complementary Medical Therapies in Lupus



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The Lupus Encyclopedia
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How doctors “think” when recommending treatments





Complementary and Alternative Therapies

- “... group of diverse medical and health care systems, practices, and products that are **not generally considered part of conventional medicine**” National Institutes of Health
- **CAM** = Complementary and Alternative Medicine



Complementary vs Alternative Therapies

- Nonconventional therapies used along with conventional therapies



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- “Complement” conventional therapies



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- “Complement” conventional therapies
- Also called “**Integrative medicine**”




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- Also called “Integrative medicine”
- Nonconventional therapies used in place of conventional therapies



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Large Categories of CAM

- **Mind-Body Medicine**
 - Biofeedback, prayer, meditation, relaxation and art therapies
- **Biologically Based Practices**
 - Dietary supplements, herbal therapies, folk medicine
- **Manipulative and Body-Based Practices**
 - Chiropractic therapy, massage, colonic irrigation and cleansing
- **Energy Therapies**
 - Qi gong, Tai chi, Reiki, therapeutic touch, magnetic therapy
- **Whole Body Systems**
 - Chinese medicine, acupuncture, Ayurveda, witchcraft, homeopathy, naturopathy

MIND-BODY MEDICINE:

- Belief = mental and emotional factors influence health and well-being
- Becoming a part of mainstream medicine
- Most commonly used for:
 - Pain
 - Anxiety
 - Panic disorder
 - Insomnia
 - Headaches
 - Depression

MIND-BODY MEDICINE:

Biofeedback

- Teach brain to control processes not under conscious control



MIND-BODY MEDICINE: Biofeedback

- Teach brain to control processes not under conscious control
 - Blood pressure
 - Brain waves
 - Heart rate
 - Muscle tension
 - Temperature



MIND-BODY MEDICINE:

Biofeedback

- Teach brain to control processes not under conscious control
 - Blood pressure
 - Brain waves
 - Heart rate
 - Muscle tension
 - Temperature
 - Raynaud's phenomenon



MIND-BODY MEDICINE:

Biofeedback

- Do I recommend this?
 - Yes, for:
 - Raynaud's phenomenon
 - Stress
 - Pain
 - Insomnia



MIND-BODY MEDICINE:

Relaxation Therapies

- Large group of techniques
 - Stress reduction
 - Prayer
 - 57% of studies have + results
 - Meditation
 - RA studies show ↓ joint pain and tenderness
 - Hypnosis
 - Studies show ↓ anxiety and cancer pain
 - 2012 fibromyalgia study = ↓ pain/fatigue and ↑ sleep
 - Art Therapy
 - Can help to lessen emotional impact of chronic disease

Relaxation Therapies:

Stress reduction

- Studies show stress can cause lupus flares
 - Divorce
 - Death of loved one
 - Intermittent normal stress (“daily hassles”)
 - Immune system → more active during stress
- 2006 study looked at a stress gene
 - Gene predisposes people to become more stressed than normal
 - Gene makes it more difficult to produce serotonin in brain
 - Serotonin required for mood stabilization and pain relief
 - Lupus patients with this gene had increased lupus nephritis flares when exposed to stress
- Many lupus patients have difficulty with memory
 - Cognitive dysfunction
 - Associated with increased stress

Relaxation Therapies:

Stress reduction techniques part 1

- Learn to say “no”
- Ask for help
- Proactively lighten your load
- Prioritize things in life
- Yoga and T'ai chi
- Biofeedback to learn to decrease anxiety and stress
- Learn deep breathing exercises and “mental imagery”
- Prepare well ahead of any major activity
- Learn to practice good time management
- Schedule rest and relaxation time EVERY DAY

Relaxation Therapies:

Stress reduction techniques part 2

- Say positive things to yourself daily; Complement yourself
 - Don't say negative things; don't criticize
- **Plan on arriving early for all appointments and events**
 - Get ready/prepare for all events earlier than you think is needed

Relaxation Therapies:

Stress reduction techniques part 3

■ Learn not to argue with others

- Learn to accept that everyone has differing ways of doing things
- Many conflicts are not important in the scheme of life
- Learn to relax, take a deep breath, leave before an argument occurs
- Leave before you say something you may regret

Relaxation Therapies:

Stress reduction techniques part 4

■ Learn to live at or below your means

- Too much stress is caused by money problems
- Don't try to keep up with the "Joneses", friends, and other family members
- Studies show that happiness is not increased by material things
- Ask "is this something I truly need?" OR "is it just something I want?"

Relaxation Therapies:

Stress reduction techniques part 5

■ Exercise regularly

- Schedule in at least 8 hours of sleep a night
- Do not skip healthy, planned meals
- Avoid unhealthy meals (sweets, carbs, greasy foods, “fast food”)
- Learn better communications skills if you have difficulties with relationships
- Pray, meditate, hypnosis, art therapy

BIOLOGIC-BASED PRACTICES:

- Dietary supplements
- Herbal therapies
- Folk medicines



Dietary Supplements: Supplements Possibly Helpful in Some People with SLE

- DHEA
- Omega-3 fatty acids
 - Fish oil
 - Flax seed oil
 - Walnuts
- Vitamin D

Dietary Supplements: DHEA

- **DHEA** = **De**Hydro**Epi**Androsterone
 - A steroid hormone
 - Produced by adrenal glands
 - Converted in body to male sex hormones



Dietary Supplements: DHEA

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- **Lower levels than normal in SLE**

Dietary Supplements: DHEA

- **DHEA = DeHydroEpiAndrosterone**
 - A steroid hormone
 - Produced by adrenal glands
 - Converted in body to male sex hormones
- Lower levels than normal in SLE
- **Taking DHEA in studies:**
 - Decreases # of lupus flares
 - May help decrease mild lupus symptoms
 - May help decrease doses of steroids
 - Increases bone density

Dietary Supplements:

DHEA

- **Potential side effects:**
 - Acne (55%)
 - Increased hair growth (15%)
 - Decreases in HDL (good cholesterol)
 - Elevated liver enzymes
 - Elevated blood pressure
- **Do not take if:**
 - You have significant liver disease
 - Polycystic ovarian syndrome
 - Without checking with your doctor 1st

Dietary Supplements: DHEA

- Dosage used in studies:
 - 200 mg a day
- Best obtained by prescription:
 - Compounding pharmacist
 - Village Green Apothecary, Bethesda MD
 - ComCare Pharmacy, Bowie MD

Dietary Supplements: Omega-3 Fatty Acids

- Have beneficial effects on cholesterol and inflammation
- American diets relatively deficient in these fats
 - Higher in omega-6 fatty acids from non-fish meats
 - Omega-6 fatty acids increase cholesterol and inflammation



Dietary Supplements: Omega-3 Fatty Acids

- Omega-3 fatty acids abundant in:
 - Flax seed (highest concentration found)
 - Walnuts
 - Tofu
 - Shrimp
 - Scallops
 - Cold water fish
 - Salmon
 - Halibut
 - Snapper
 - Mackerel
 - Albacore
 - Sardines



Dietary Supplements: Omega-3 Fatty Acids

- Lupus mice fed diet high in omega-3 fatty acids:
 - Less immune system activity
 - Lower autoantibody production
 - Anti-ds DNA
 - Antiphospholipid antibodies
 - Less lupus kidney inflammation (nephritis)
 - Less kidney damage



Dietary Supplements: Omega-3 Fatty Acids

- Human study: 12 patients
 - 5 weeks, 6 grams fish oil daily
 - Followed by 5 weeks “normal diet”
 - Followed by 5 weeks 18 grams fish oil a day
 - Cholesterol levels improved on higher dose of fish oil
 - No differences in their lupus
- Another human study: 26 patients with lupus nephritis
 - 2 years
 - Part time on high doses of fish oil
 - Part time on “normal diet”
 - Cholesterol improved
 - Lupus kidney disease did not improve

Dietary Supplements: Omega-3 Fatty Acids

- Human study: 27 patients
 - Diet high in fish oils
 - Decreased lupus activity compared to placebo
 - Improved blood work compared to placebo
- Another study: 22 pregnant women with antiphospholipid antibody syndrome with recurrent miscarriages
 - Took omega-3 fatty acid supplements daily
 - Only one premature fetal death (lower than expected)

Dietary Supplements: Omega-3 Fatty Acids

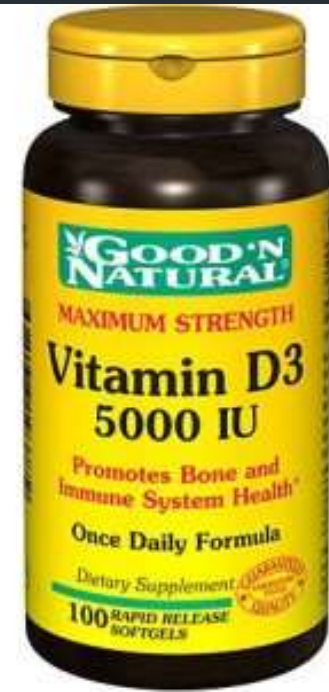
- Sjogren's syndrome
 - Several studies
 - Omega-3 fatty acids improve eye tear production

Dietary Supplements: Omega-3 Fatty Acids

- Summary of studies:
 - Cholesterol values improved in all studies
 - Mice studies encouraging for improving lupus activity
 - Human studies mixed results
 - Only study with positive results used diet, not supplements
 - Questions:
 - Possibly better to do studies in milder lupus?
 - Which is better? Supplements vs diet?
 - Need larger, better human studies in lupus
 - May improve tear production in Sjogren's syndrome

Dietary Supplements: Vitamin D

- Most lupus patients have low vitamin D levels
- Vitamin D is essential for proper immune system function
- More severe SLE associated with lower vitamin D levels



Dietary Supplements: Vitamin D

- Have your levels checked by your doctor
 - Take a supplement if low
 - Eat vitamin D rich foods:
 - Cod liver oil
 - Salmon
 - Mackerel
 - Tuna fish
 - Vitamin D fortified milk and orange juice
 - Vitamin D level goal?
 - Johns Hopkins study suggests a level of around **40 mg/dL**

Dietary Supplements: Controversies

Melatonin

- Released by pineal gland in when less light
 - Signals brain to prepare to sleep
 - Used as a sleep aid
 - Used when traveling across many time zones
 - May increase immune system activity
- 2 lupus mouse studies
 - Female mice lupus improved
 - Male mice lupus worsened
- No human lupus study
- 1 rheumatoid arthritis human study
 - Melatonin → no difference in disease activity
- My recommendation based on this:
 - Melatonin used for sleep may be safe in women with lupus
 - Men with lupus should avoid melatonin



Dietary Supplements: Controversies

■ Garlic

- Some lupus sources recommend not eating garlic or taking garlic supplements
- I can find no studies in lupus to back this recommendation
- Some naturopaths advocate using garlic to “decrease inflammation”
- My recommendation
 - Eat garlic!



Lupus Diet:

- Avoid alfalfa and mung bean sprouts
- Lower than average calorie diet
- Low fat
- Olive oil
- Alcohol in moderation?
- Rich in omega-3 fatty acids
 - Flaxseed
 - Cold water fish
 - Walnuts
- Vitamin D rich foods

Lupus Diet:

Avoid mung bean and alfalfa sprouts

- Contain amino acid **L-canavanine**
- Stimulates the immune system → more active
- 2 studies in monkeys:
 - Fed ground alfalfa sprouts
 - 3 of 5 macaque monkeys developed lupus symptoms
 - Lupus nephritis
 - Hemolytic anemia
 - Developed abnormal lupus blood results
 - + ANA, +DNA, low complement levels
- Baltimore Lupus Environmental Study
 - Eating alfalfa sprouts →
 - Increased chance of lupus



Lupus Diet:

Less calories than average

Low fat diet

- Mice with lupus fed **low calorie diet**
 - Live longer
 - Less lupus kidney disease
 - Less salivary gland inflammation (Sjogren's syndrome)
- Lupus mice fed **high fat diet**
 - Increased immune system activity
 - Increased autoantibody formation

At week 24

'Butterfly' skin rash

PBS/
Untreated
Control



Lupus Diet: Olive Oil

- Rich in eicosapentaenoic acid (a type of omega-3 fatty acid)
- One study, 27 patients
 - 20 grams olive oil daily (close to 1 ½ tablespoons)
 - Lupus activity improved over 34 weeks
 - 17 patients completed study
 - Lupus activity improved



Lupus Diet:

Alcohol in moderation?

- Several studies show that moderate intakes of alcohol
 - Lower risk for lupus in some studies
 - No increased risk for lupus in others
- Many studies show that moderate intake of alcohol →
 - Decreased cardiovascular problems (#1 cause of death in lupus)
 - Increases good cholesterol levels (HDL)
 - May decrease certain cancers



Lupus Diet:

Alcohol in moderation?

- Definition of “moderate” alcohol allowable per 24 hours
 - **Women** = no more than
 - 5 oz wine daily
 - 12 oz beer
 - ½ ounce liquor
 - **Men** = no more than
 - 10 oz wine daily
 - 24 oz beer
 - 1 oz liquor



Lupus Diet:

Alcohol in moderation?

- Cautions!
 - May ↑ risk of breast cancer in genetically predisposed women
 - Do not drink if you have had a substance abuse problem
 - Do not drink if alcoholism runs in your family
 - Should restrict alcohol amounts with certain medications
 - NSAIDs → increased risk of ulcers
 - Tylenol → liver problems if you drink too much alcohol
 - Narcotics and pain relievers → too drowsy
 - Methotrexate → liver problems
 - TALK TO YOUR DOCTOR 1st



Herbal Therapies:

Tripterygium wilfordii hook F

- TwHF

- Chinese herb
- Has anti-inflammatory properties
- 5 small studies in total of 249 lupus patients
- Showed improvements in some lupus symptoms
 - Fatigue
 - Joint pains
 - Fever
 - Rash
 - Lupus nephritis
 - Improved platelet counts
- Side effects:
 - Diarrhea, nausea, vomiting, hair loss, mouth sores, high blood pressure, infertility, fetal malformations
 - One death (man died from heart toxicity)

Herbal Therapies:

Tripterygium wilfordii hook F

- Do I recommend this?



Herbal Therapies:

Tripterygium wilfordii hook F

- Do I recommend this?
 - NO!



Herbal Therapies:

Tripterygium wilfordii hook F

- Do I recommend this?
 - NO!
- However, it should be studied further, purified, and the benefits and potential side effects defined better

Herbal Therapies:

Echinacea

- From the cone flower (*Echinacea purpurea*)
- Used to treat colds and flu
 - Though refuted in larger medical studies
- Increases immune system activity
- Can worsen lupus
 - Series of lupus patients at Johns Hopkins Hospital got worse while taking Echinacea
 - 2 patients required strong chemotherapy for lupus nephritis

Herbal Therapies: Echinacea

- Never take Echinacea



Folk medicine biological therapies:

- Vary from culture to culture
 - Botanicas = Stores common in Latin cultures
- **Rattlesnake capsules**
 - Reports of lupus patients getting Salmonella poisoning
 - Reports of deaths in other patients



Manipulative and Body-Based:

- **Chiropractic therapy**
 - No lupus studies
 - Lupus does not affect joints of the spine
- **Massage therapy**
 - May help ↓ stress and muscle spasm pain
- Colonic irrigation and cleansing



Manipulative and Body-Based: Colonic irrigation and cleansing

- Belief: “toxins” in colon are unhealthy and cause disease
- Fluids are used to clean out the colon
- There are NO studies for ANY disease to show benefit



Manipulative and Body-Based: Colonic irrigation and cleansing

- Potential dangers in lupus
 - Dehydration
 - Bowel perforation
 - Increased risk of infection
- Do I recommend this?

Manipulative and Body-Based: Colonic irrigation and cleansing

- Potential dangers in lupus
 - Dehydration
 - Bowel perforation
 - Increased risk of infection
- Do I recommend this?
 - NO!

ENERGY THERAPIES

- Attempt to manipulate energy fields in and around the body
 - **Qi gong**
 - Studies show ↓ arthritis and neck pain
 - **T'ai chi**
 - Studies show ↓ pain from fibromyalgia and osteoarthritis
 - **Reiki**
 - 2011 Cancer study = ↓ pain/anxiety, ↑ sleep
 - **Therapeutic touch**
 - Studies show ↓ pain and anxiety
 - Magnetic therapy



ENERGY THERAPIES:

Magnetic therapy

- Help with pain 30 - 35% of the time



WHOLE BODY SYSTEMS: Traditional Chinese Medicine

- Thousands of years old



WHOLE BODY SYSTEMS: Traditional Chinese Medicine

- Thousands of years old
- Theory: Improper flows of energy through the body → disease
 - Opposing forces of **yin** and **yang**
 - Proper balance is essential



WHOLE BODY SYSTEMS: Traditional Chinese Medicine

- Thousands of years old
- Theory: Improper flows of energy through the body → disease
 - Opposing forces of yin and yang
 - Proper balance is essential
- Combines:
 - Diet
 - Chinese herbs
 - Massage
 - Meditation
 - Acupuncture
 - Tai chi



Traditional Chinese Medicine: Chinese Herbs

- Lupus nephritis = deficiency of kidney yin or liver-kidney yin
- At least 8 studies performed in lupus nephritis
 - Better results when used in combination with conventional medicines
 - Fewer side effects in the Chinese herb + conventional medicine groups
 - Vast majority of studies = in Chinese medical journals
 - No large, well done studies done in Western journals

Traditional Chinese Medicine: Chinese Herbs

- Potential downsides
 - Herbs do have medicinal effects on the body
 - Side effects reported =
 - Severe kidney disease
 - Anemia
 - Heart problems
 - No agency regulates quality
 - A Chinese study studied 430 samples
 - From Taiwan hospitals, medical centers and herb stands
 - 1/3 adulterated with Western medicines

Traditional Chinese Medicine: Chinese Herbs

- Do I recommend using Chinese herbs?



Traditional Chinese Medicine: Chinese Herbs

- Do I recommend using Chinese herbs?
 - NO!



Traditional Chinese Medicine: Chinese Herbs



- Summary
 - Need larger, better studies critically assessed internationally by lupus experts
 - If found to be helpful and safe, need to be regulated to ensure high quality products

Traditional Chinese Medicine: Acupuncture

- Affects the flow of energy (qi)
- Restores balance of yin and yang
- Some studies show benefits for pain and arthritis



Traditional Chinese Medicine: Acupuncture

- Lupus studies
 - 2008 study for fatigue and pain showed no benefit
 - Study was small
 - Chinese study showed benefit for discoid lupus
 - Only 15 patients
 - No placebo group
- Rheumatoid arthritis studies
 - The best study = no benefit

Traditional Chinese Medicine: Acupuncture

- What is my recommendation?



Traditional Chinese Medicine: Acupuncture

- What is my recommendation?
 - “Depends”
 - Lack of proven benefit vs expense makes it hard to recommend
 - However, it is safe, and some arthritis studies suggest benefits to decrease pain

WHOLE BODY SYSTEMS:

Ayurveda

- India
- Thousands of years older
 - Older than traditional Chinese medicine
- Belief = Imbalance of body's life forces → illness



WHOLE BODY SYSTEMS:

Ayurveda

- India
- Thousands of years older
 - Older than traditional Chinese medicine
- Belief = Imbalance of body's life forces → illness
- Combination of:
 - Diet
 - Herbs
 - Massage
 - Meditation
 - Yoga
 - Fasting
 - Internal cleansing



Ayurveda: Yoga

- A Hindu healing system
- Many different forms
- Includes:
 - Breathing control
 - Simple meditation
 - Holding body in specific postures



Ayurveda: Yoga

- No lupus studies
- Beneficial studies in **fibromyalgia**
 - Especially “**Yoga of Awareness**” or “**Kundalini yoga**”
 - Decreased pain
 - Improved mood
 - Decreased fatigue



Ayurveda: Yoga

- Do I recommend this?



Ayurveda: Yoga

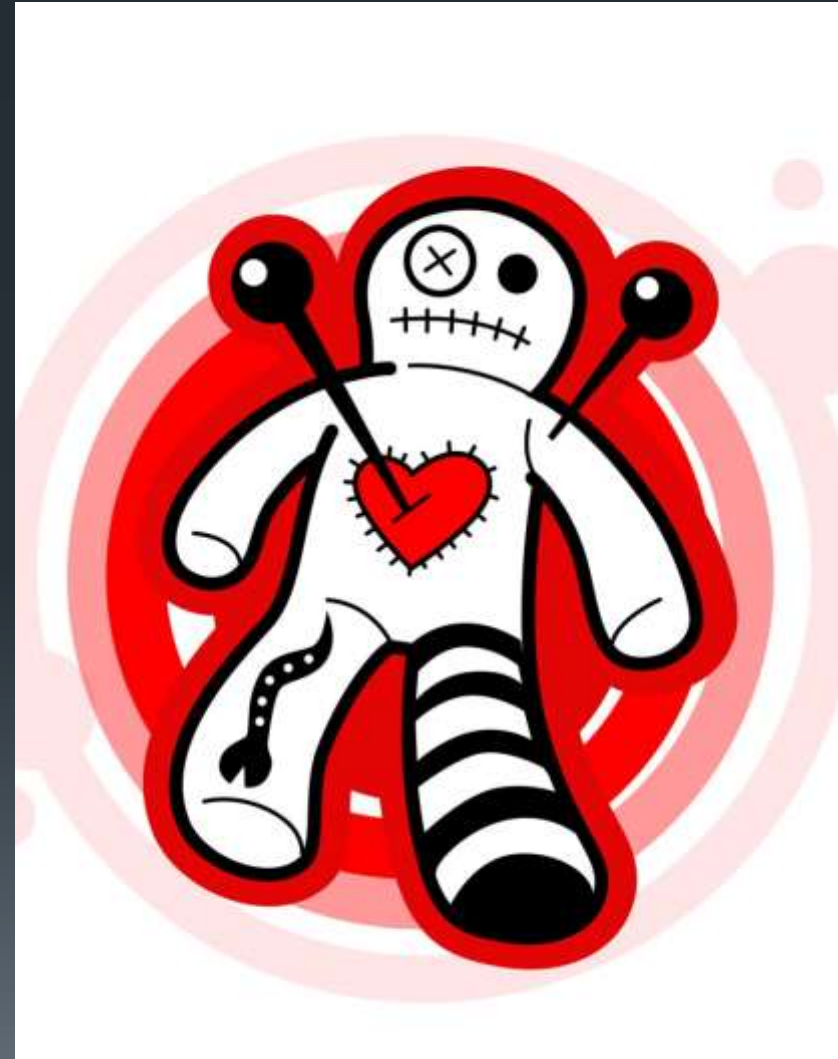
- Do I recommend this?
 - YES
 - Especially for lupus patients who also have fibromyalgia
 - “Yoga of Awareness” or “Kundalini yoga”



WHOLE BODY SYSTEMS:

Witchcraft

- Use of magical and supernatural powers



WHOLE BODY SYSTEMS:

Witchcraft

- One case of severe lupus nephritis
 - Filipino witch doctor
 - Removed a curse put on her by previous boyfriend
 - “Cured” a few weeks later



WHOLE BODY SYSTEMS: Witchcraft

- Do I recommend this?



WHOLE BODY SYSTEMS:

Witchcraft

- Do I recommend this?
 - No!



WHOLE BODY SYSTEMS:

Homeopathy

- *Homeo*
 - Greek for **like**
- *-opathy*
 - Greek for **disease**
- “Like cures like”
 - If something causes problems or a disease when given in large doses
 - It may cure the disease when given in tiny doses



WHOLE BODY SYSTEMS:

Homeopathy

- No lupus studies
- 6 studies in fibromyalgia
 - All the studies had major study design flaws
 - Therefore, no proof of benefit



WHOLE BODY SYSTEMS:

Homeopathy

- Do I recommend this?



WHOLE BODY SYSTEMS:

Homeopathy

- Do I recommend this?
 - NO



WHOLE BODY SYSTEMS: Naturopathy

- Emphasizes prevention and treatment of disease through healthy lifestyle



WHOLE BODY SYSTEMS: Naturopathy

- Emphasizes prevention and treatment of disease through healthy lifestyle
- Combines:
 - Herbs
 - Homeopathy
 - Physical Therapy
 - Mind body therapy
 - Exercise
 - Diet
 - Stress reduction



WHOLE BODY SYSTEMS:

Naturopathy

- How to choose a naturopathic (or integrative medicine) doctor
 - Graduated with a degree from a recognized institution
 - N.D. (doctor of naturopathy)
 - N.M.D. (doctor of naturopathic medicine)
 - Currently licensed by the ruling state or national agency
 - Carries malpractice insurance
 - Member in good standing with a professional organization for naturopathic doctors
 - The office and doctor's manners are professional
 - Doctor provides diagnoses, treatments and has reasonable expectations of results of treatment
 - Keeps accurate records
 - Willing to send notes to your other doctors



Never take in lupus summary

- Mung bean and alfalfa sprouts
- Melatonin (if male)
- Any herbal supplements
 - Echinacea
 - Anything that “boosts” or “supports” the immune system
- Folk medicine pills
- Colonic cleansings



:Probably helpful in lupus summary

- Biofeedback
 - Especially for Raynaud's
- Stress reduction techniques (page 4)
- DHEA
- Vitamin D supplements



Possibly helpful in lupus summary

- Prayer, meditation, hypnosis
- Omega-3 fatty acid foods
 - Fish, flax seed, walnuts
- Olive oil in diet
- Low fat, low calorie diet
- Vitamin D rich foods
- Alcohol in moderation
- Massage
- Qigong, Tai chi, Reiki, therapeutic touch
- Acupuncture
- Yoga



Probably not helpful, but safe

- Chiropractic therapy
- Magnetic therapy
- Witchcraft
- Homeopathy

Help Us Solve
The Cruel Mystery

LUPUSTM

FOUNDATION OF AMERICA
DC/MD/VA CHAPTER