



# **Pain Management with Nutrition and Herbs**

**Charles George VA Medical Center**

**Veteran Pain Management Class**

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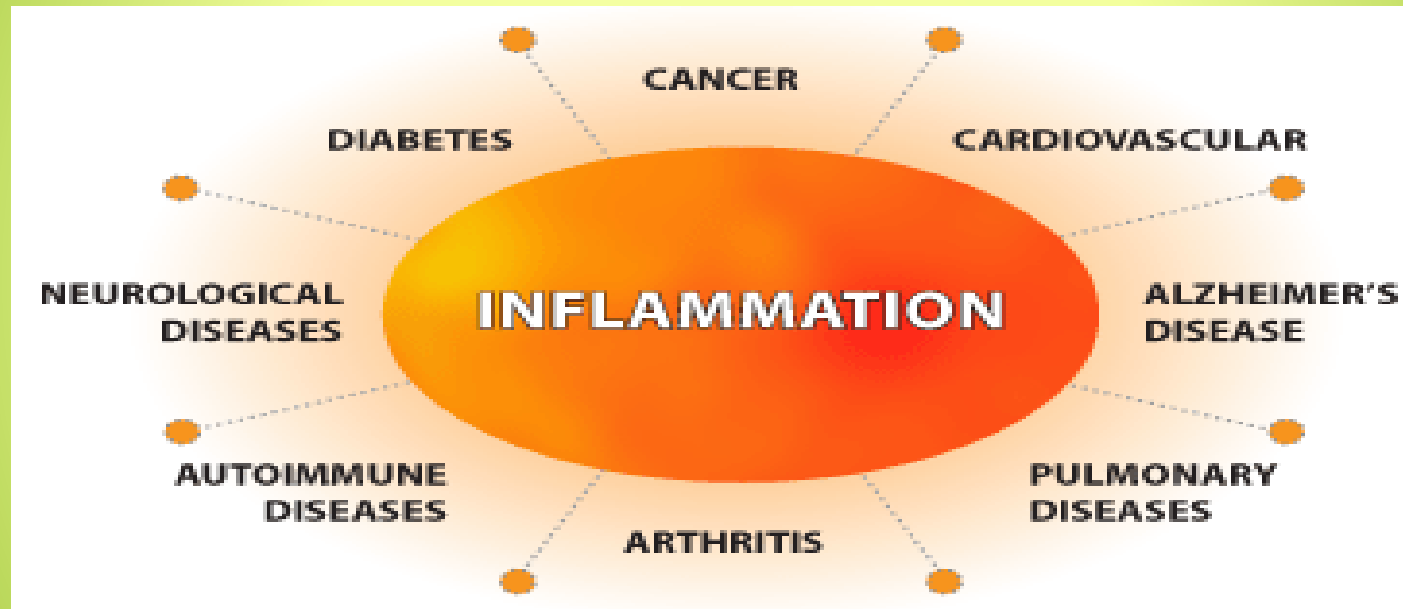
# Inflammatory Response

- **Pain:** Chemicals that stimulate nerve endings are released, increasing sensitivity.
- **Redness:** increased blood flow to site
- **Immobility:** loss of function
- **Swelling:** caused by accumulation of fluid
- **Heat:** increased blood to area makes it feel warm to the touch



# Inflammation

- **Acid state** results from inflammation and oxidation. Humans need to be more **Alkaline**.



- **Chronic inflammation** is linked to metabolic syndrome, insulin physiology and other digestive and pain related conditions

# Pain and Inflammation

- Pain and inflammation are normal body self-protection processes.
- Inflammation normally aids in providing the body with a protective process to aid in healing.
- Chronic inflammation causes further inflammation and becomes self-perpetuating causing damage to our body.

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





# The Mindset of Pain

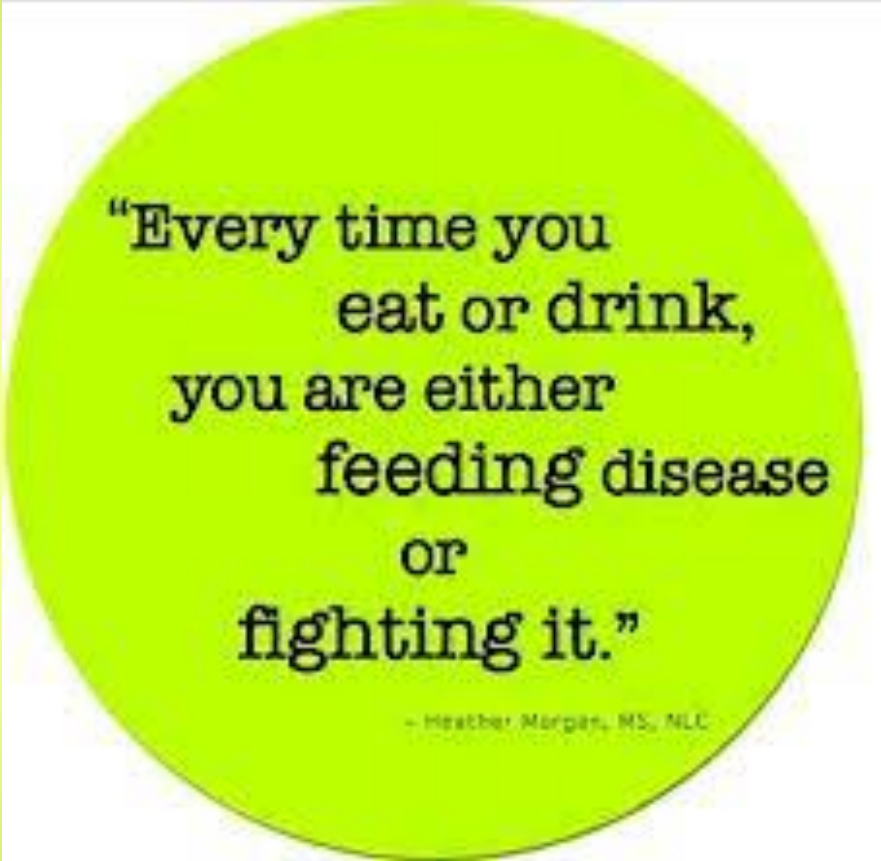
- How we think about pain provides the basis of our cycle of pain responses. (Pain Pathways)
- Depression, anxiety, stress and anger increases our pain sensitivity and pain responses.
- How we think about nutrition and our dietary choices affects the cycle of inflammation and pain. (requires a change in life style)
- Exercise and natural endorphins (in the brain) change our response to pain.



# Weight: Pain and Inflammation

- Weight puts extra stress on joints, muscles, ligaments and increases wear and tear.
- Every pound of weight you lose equates to four pounds less stress and pressure on your knees.
- Body fat is not inert, it is living tissue which can produce hormones and chemicals which increases inflammation and pain.





"Every time you  
eat or drink,  
you are either  
feeding disease  
or  
fighting it."

- Heather Morgan, MS, NLC

# Digestive System

- Normal GI Flora: Bacteria in our GI system is a key component of our immune system and the inflammatory response.
- Hormones, antibiotics and GMOs in our food chain can kill normal flora.
- Candida (yeast) overgrowth
- Carbohydrates feed yeast
- Pro-biotics to replace and maintain the GI floral. Kefir, Yogurt, Kimchi, Sauerkraut, Pickled Vegetables, or Pill Supplements.





# Gluten ? and Your Pain

- Wheat, Barley and Rye products have gluten.
- Seek whole grains (to reduce Gluten)
- Use long cooking grains and whole grains
- Alternatives to Wheat include:  
Quinoa, Buck Wheat, Rice,  
Oats, Corn, Millet, Amaranth, etc.
- Try one month of being  
gluten free to see if your  
pain is reduced.



# Chia: **Ancient Super-Seed**

- The ancient seeds of the Aztecs and Mayans have been used since 3500 BC. **Chia** comes from the Mayan word for “strength”. Considered magical for increasing stamina and energy over a long period of time.



# Chia: Ancient Super-Seed

- More calcium than milk, one ounce provides 18% of your daily calcium needs.
- More omega-3 fatty acids than salmon
- Provides 42% of daily fiber needs in one ounce, and provides supplemental protein (3g per Tbsp.)
- Delivers maximum amount of nutrients with minimum calories (at least 1 ounce daily)
- Adds in weigh loss (1 tbsp. in 8 oz. fluid-let stand 10-15minutes before meals), hydration, and is high in antioxidants to reduce inflammation.

# Turmeric (Curcumin) + Black Pepper (Piperine)

- A spice common in Indian cooking
- Suppresses inflammatory process
- Related to ginger, another anti-inflammatory.
- Potent anti-inflammatory, antioxidant, and perhaps has anticancer properties.
- Backed by 2000+ studies for effectiveness





# Turmeric (Curcumin) Benefits

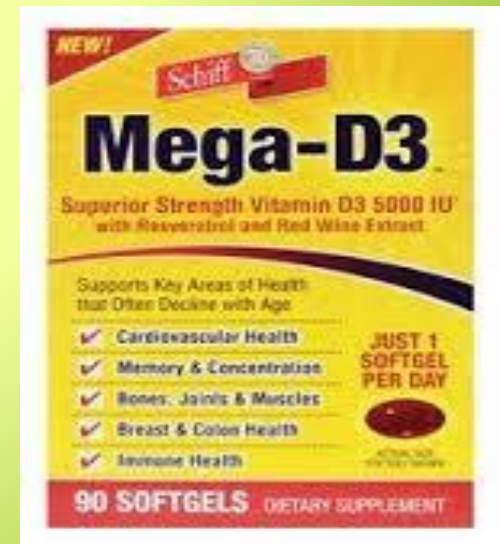
- Improves Brain Function and nerve conduction
- Lowers cholesterol and lipids
- Helps to regulate blood sugar, blood pressure
- Heart disease by decreasing blood vessel damage.
- Decreases blood clotting (use with caution with Coumadin or blood thinners)
- Reverses and serves to protect the liver from damage, cirrhosis.



# Vitamin D3

- Low levels linked with increased levels of chronic pain.
- People with chronic opioid use have been found to need twice the dose of medication.
- Benefits the heart, memory, bones, joints, muscles, skin, inflammatory bowel (Crohn's), fibromyalgia, nerve pain, nervous system.

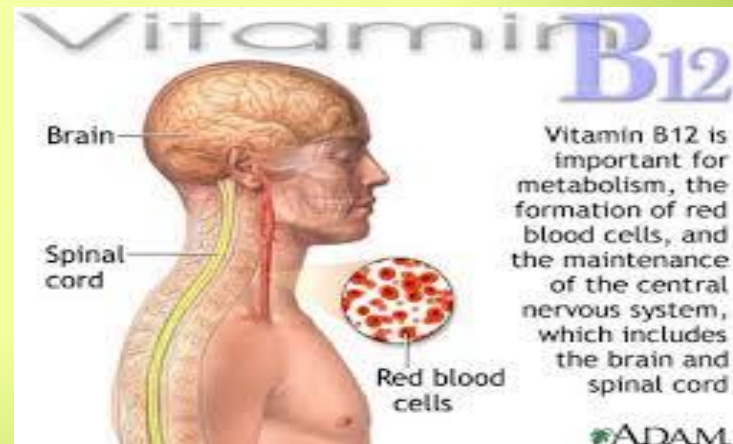
[www.ncbi.nlm.nih.gov](http://www.ncbi.nlm.nih.gov)



# VitB-12 and B Complex

- Decreases inflammation
- Effective for neuropathic pain (neuropathy)
- Effective for joint pain, bursitis
- Avoid overuse (200 to 500mg per day)
- Excess dosing can cause liver damage.
- Seek as Cyanocobalmin-methylcobalamin form for Vit-B12
- Inhibits pain pathways

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



# Cinnamomum Cassia



Cinnamon 1000mg daily, or one teaspoon

# Omega-3 Fatty Acids

- Back pain, headaches, nerve pain, autoimmune conditions.
- Potent in decreasing inflammation
- Suppresses the production of cytokines and enzymes that erode cartilage.
- Sources: Chia seeds, fish oil supplements, salmon, herring, sardines, rainbow trout, omega-3 fortified eggs, ground flax seed, walnuts, soybeans, flax seed oil.

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

(Has blood thinning properties, affects blood sugar)





# Magnesium (Malate)

- Involved in over 300 chemical processes in our body.
- Treatment for leg cramps and restless leg
- Deficiency feeds the fire of inflammation.
- Shown to remove Aluminum from the brain.

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





# Glucosamine / MSM / Herbs

- Glucosamine supplements have some of the best data for joint pain, osteoarthritis
- Combined with chondroitin for added benefit
- MSM reduces osteoarthritis
- Beneflex / Instaflex (new)



Serving Size 3 Capsules	
Servings Per Container 30	
Amount Per Serving	% DV
Glucosamine Sulfate	1500mg †
MSM (Methylsulfonylmethane)	500mg †
White Willow Bark Extract (Standardized To 15% Salicin)	250mg †
Ginger Root Extract 4:1	250mg †
Boswellia Serrata Extract (Standardized To 65% Boswellic Acid)	125mg †
Turmeric Extract 25:1 (Standardized To 95% Curcuminoids)	50mg †
Cayenne 40M H.U.	50mg †
Hyaluronic Acid	4mg †
† US RDA not established	

# Anti-inflammatory Properties

- Bromelain: an enzyme which occurs in pineapple
- Green Tea: anti-inflammatory, antioxidant, natural fluoride
- R-Alpha-lipoic Stabilized Acid: Diabetic neuropathy, nerve pain, potent nerve antioxidant, decreases blood sugar levels (use with caution)



# Anti-inflammatory Properties

- Blueberries: Anti-inflammatory, reduces joint swelling and osteoarthritis – gout pain
- Extra Virgin Olive Oil:  
“good” monounsaturated fat, works like an NSAID
- Capsaicin: Derived from chili peppers, soothes pain



# Apple Cider Vinegar with Mother

- Reduces and regulate blood sugar, adds in weights loss. ( 1-2 tbsp. daily diluted/honey)
- Decreases cholesterol and blood pressure.
- Treatment for leg cramps, restless leg pain
- Fights infections, and reduces yeast overgrowth (human alkaline state)
- Good for acid reflux and heartburn pain.
- Approved for treatment of arthritis and other joint pain by the National Arthritis Foundation



# Foods To Avoid

- Saturated Fats: Fats from animal sources and from some animal products
- Coconut oil, palm oil, palm kernel oil,
- Choose organic dairy products, lean cuts of meats and avoid Nitrates
- Trans Fats: check labels (avoid word hydrolyzed) FDA allows 0.5mg per serving
- Simple and Refined carbohydrates (Sugar) causes an increased process of inflammation



# Sweeteners

- **Avoid:** Aspartame (Amino Sweet) converts methanol to formaldehyde and formic acid in our body, Splenda discovered from pesticide research.
- **Avoid:** High Fructose syrup (read labels)
- **Use:** Stevia, Monk Fruit, Agave, Honey, Raw Sugar



# High Fructose Corn Syrup

- Significant Risk of Weight Gain and Obesity
- Increased risk of Diabetes Type 2
- Hypertension and Elevated “Bad” Cholesterol
- High Fructose Corn Syrup and Liver Damage
- Unregulated exposure to Mercury

The dangers of high fructose corn syrup are numerous and severe.

# Generic Measureless Method

## How to judge quantities.

- 1 Fist, clenched = 8 OZ
- 2 Hands, cupped = 1 cup
- 1 Hand, cupped =  $\frac{1}{2}$  cup
- 1 Palm of hand = 3 OZ
- 2 Thumbs together = 1 Tablespoon

# Read Labels

## Most Valuable Consumer Tool

- Caution with ONE word labeling “fat free”, “sugar free”
- If you cannot define a word, neither can your body “chemicals listed on labels”.
- Preservatives are good for shelf life not bodies.
- Substitutes for sugar / fat are not more healthy
- Avoid “hydrogenated or hydrolyzed” products.

# Closing Comments

## “Pain Management with Nutrition and Herbs”

**Contents** of this presentation are intended for information purposes only! **You are encouraged to make informed choices about your nutrition / diet, and the use of herbs and vitamin supplements.** Always inform your health care providers of your use of vitamins and herbal supplements which can interact with your RX or have an effect like your RX medications. **Overuse or improper use of vitamins and supplements can have undesired health outcomes!**



# Your Choice



**versus**

