

**Whole Person Pain Care:
Modifiable Pain Factors**

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EAT
Nausea/vomiting, IBS/ID, appetite, metabolism, visceral pain, diarrhea

Sleep
insomnia, sleep apnea, nightmares, circadian rhythm

Relax
Anxiety, panic episodes, trauma, stress, high blood pressure, ADHD

Protect
inflammation, autoimmunity, cancer, osteoporosis, chronic pain

Forget
memory loss, extinction of aversive memory, cognitive well-being

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**Whole Person Pain Care:
The Therapeutic Order**

Tertiary Care
HIGH FORCE INTERVENTIONS
PHARMACOLOGICAL SUBSTANCES USED TO HALT PATHOLOGY

Specialty Care
NATURAL SUBSTANCES USED TO RESTORE + REGENERATE

Patient-aligned Care Team
CORRECT STRUCTURAL INTEGRITY

Foundational
SUPPORT + RESTORE WEAKENED SYSTEMS
STIMULATE SELF-HEALING MECHANISMS
REMOVE OBSTACLES TO HEALTH AND ESTABLISH THE FOUNDATION FOR OPTIMAL HEALING.

Note: the level(s) of entry in the Therapeutic Order for individual patient care are selected to prioritize delivery of safe and effective care, the prevention of suffering and further degeneration, respect for patient preferences and values, and the preservation of life.
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People with Chronic pain experience lower Quality of Life and increased risk for Mental health problems and social isolation.

A Multimodal approach to pain may not always be addressed in the healthcare setting.

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Pain:

"An unpleasant sensory and emotional experience associated with, or resembling that associated with, actual or potential tissue damage"

Raju, S. N., Carr, D. B., Cohen, M., Finerup, N. B., Flor, H., Gibson, S., ... Vadez, K. (2020). The revised International Association for the Study of Pain definition of pain: concepts, challenges, and comparisons. *Pain*, 162(5), 1578-1592.

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Gatchel describes Biopsychosocial Pain:

"The unique way each individual perceives pain and its severity, how it evolves, and the effectiveness of treatment depend on a constellation of biological, psychological, and social factors"

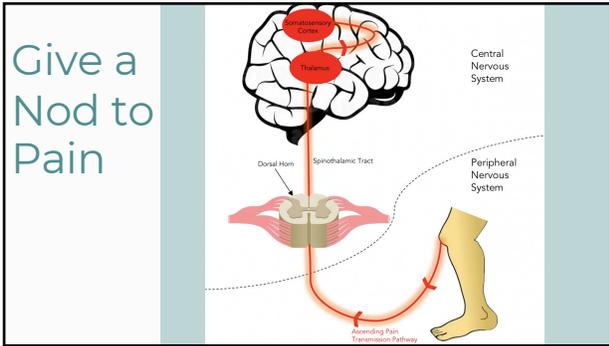
Biology
What's wrong with my body?
How can I Take better care of my body?

Psyche
How do I cope?
How can I develop stress resilience?

Social
Do my relationships support me?
Cultivating Healthy Relationships

Kerns, R. D., Pillemer, E. J., Lee, A. W., & Rosenberger, P. H. (2011). Implementation of the veterans health administration national pain management strategy. *Journal of Pain and Symptom Management*, 41(4), 635-642.
Rosenberger, P. H., Pillemer, E. J., Lee, A. W., & Kerns, R. D. (2011). VA National Pain Management Strategy: implementation of stepped pain management. *Pain Practice*, 11(1), 37-42.

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Modifiable Pain Factors

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BUILDING physical health

- Genetics
- Food/sleep
- Lifestyle
- Drug effects
- Social history

Biology
What's wrong with my body?

How can I Take better care of my body?

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BIO

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EAT
Nausea/vomiting, IBS/D, appetite, metabolism, visceral pain, diarrhea

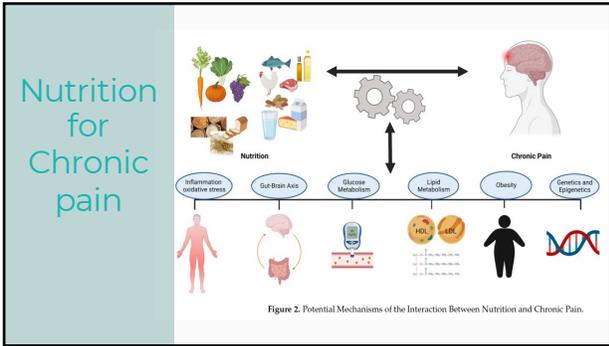
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Food is Medicine

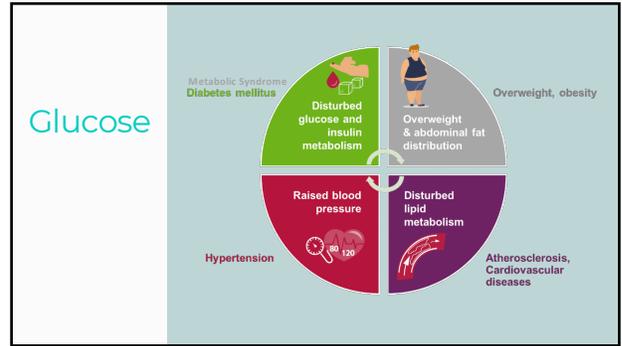
All plants contain non-nutritive chemicals that have effects on health!

Part of the environment that shapes us

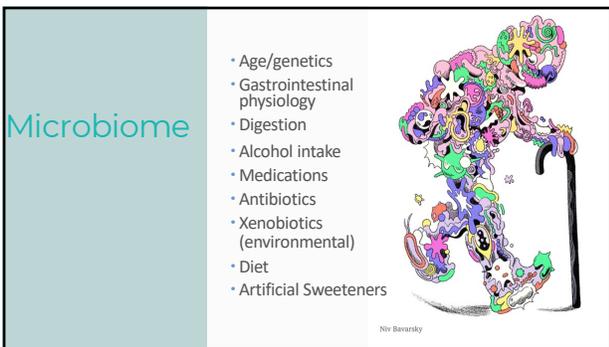
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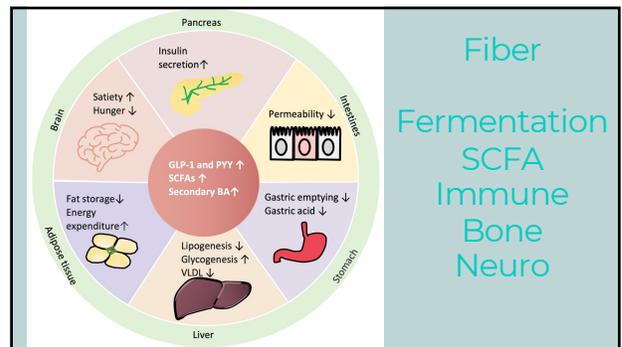
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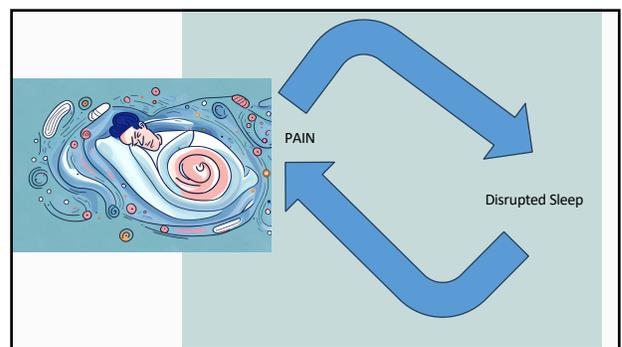
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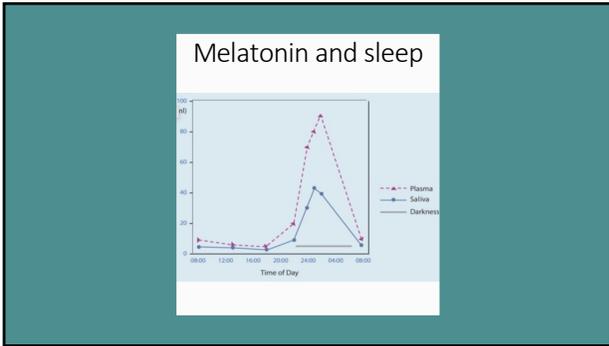
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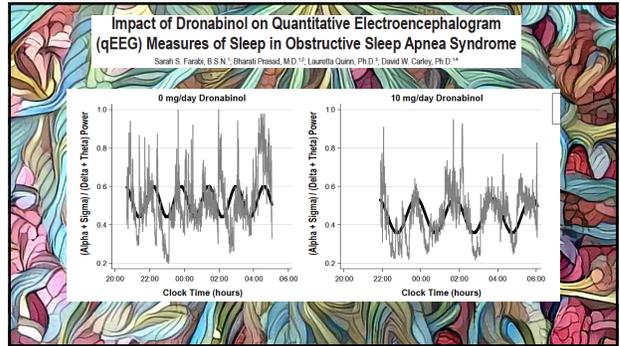
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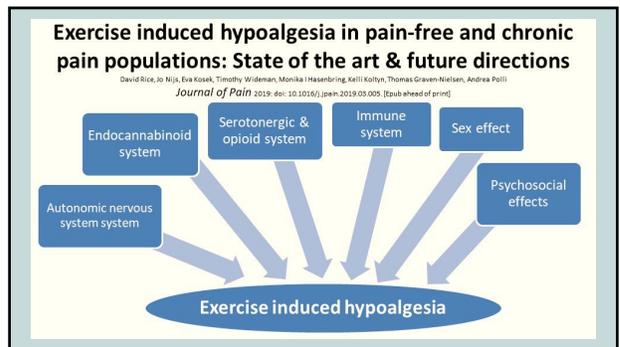


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Activity

Adaptation
 Prescriptive Movement
 Proper biomechanics

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Psyche

Psychological factors are associated with pain becoming chronic in 83% of cases

Feeling awareness
 Acceptance of feelings
 Feelings can magnify or reduce pain
 Helplessness

Psyche
 How do I cope?
 How can I develop stress resilience?

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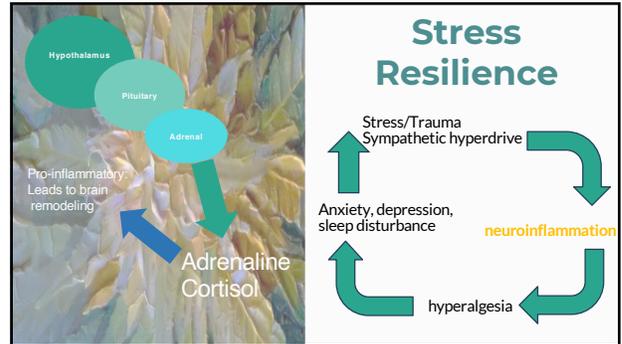
Impacts of Toxic Stress on the Body/Mind

- Prolonged elevations of adrenaline and cortisol
- Increase in pro-inflammatory cytokines
- Changes in Brain Structure
- Changes in Brain Function

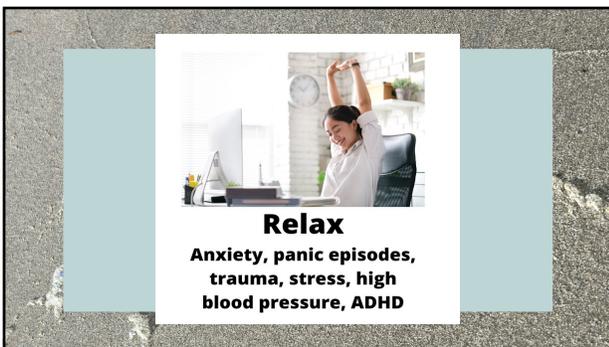
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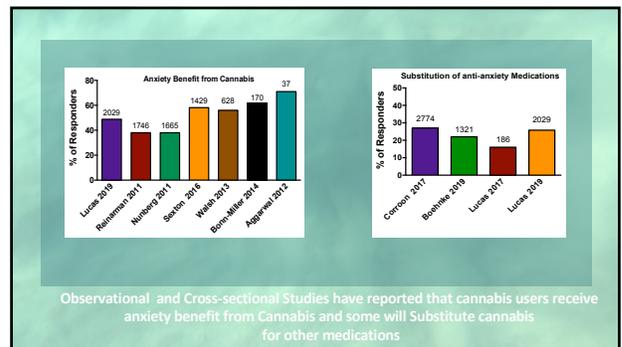
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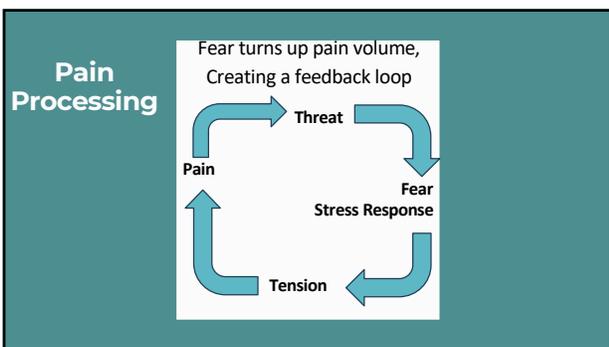
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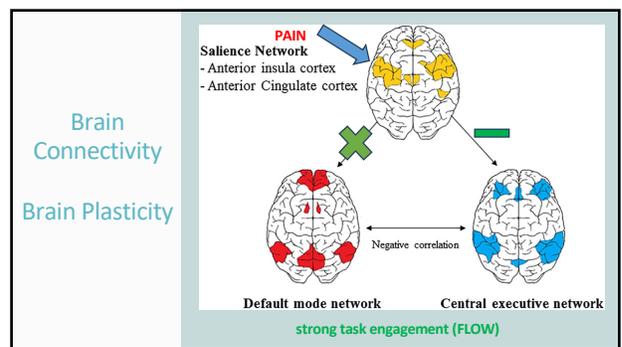
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Breaking the Cycle

Breathe In

Hold

4
seconds

Hold

Breathe Out

The magic breath

Mindfulness

Music

Massage

Singing

Water

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Rumination



Personality
Anticipation
Catastrophizing
Coping skills

Possible Causes of Rumination

Obsessive Compulsive Disorder (OCD)

Depression

Anxiety

Stressful Events

Phobias

Traumatic Life Events

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Mental Energy

Once per day:
More meaning
More happiness
Resilience
Reframing



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Social

Family
Colleagues
Friends
Community
Therapy

Social

Do my relationships support me?

Cultivating Healthy Relationships

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Living with Chronic Pain

Loss of social connections, roles
Relational conflicts
Loneliness
Depression, Isolation

Building Social Ties

Reduce pain
Improve Quality of Life

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Somatic Experiences

Combining mindful awareness with movement and sensation to reclaim Body/mind balance

To open the senses for deeper insight and healing

To tap into body sensations and increase interoception

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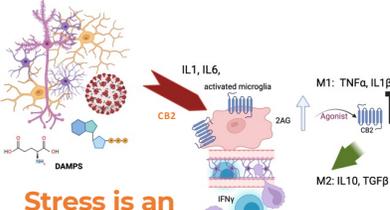
Protect
inflammation,
autoimmunity, cancer,
osteoporosis, chronic pain

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Central Sensitization

Complex interactions between nervous/immune systems: hypersensitivity

Microglia and Neuroinflammation



Stress is an amplifier

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Anti-inflammatory Herbs/Foods



- Ginger
- Curcuma Longa
- Boswellia serrata
- Cannabinoids
- Flavonoids
- Polyunsaturated fats

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Spice it up!



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Nutritional Supplements and Botanicals

- Vitamin D
- B12
- Methyl folate
- Alpha lipoic acid
- Glutathione
- Cannabis
- Turmeric
- Boswellia

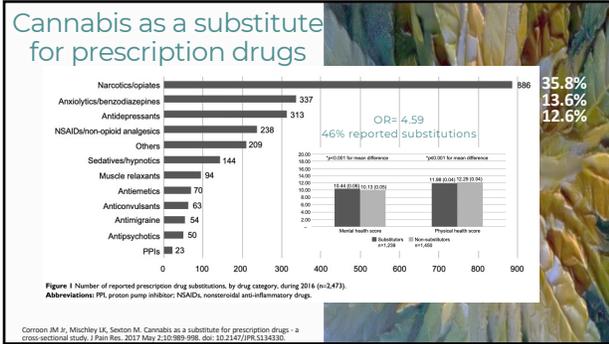


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Forget
memory loss, extinction
of aversive memory,
cognitive well-being

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Cannabis, Pain and Opioid tapering

Subject	AGE	Diagnosis	MME		VAS (average)	
			Before	After	Before	After
Male	72	Failed back surgery syndrome	220	40 (8-wk)	9/10	4/10
Female	66	Chronic LBP	42.5	0 (4-wk)	7/10	0/10
Female	66	Failed back surgery syndrome	30	0 (4-wk)	7/10	3/10
Male	73	Spinal stenosis/radiculopathy	135	30 (8-wk)	7/10	5/10
Female	50	Cervical Spondylosis	69	22.5(4-wk)	5/10	4/10
Male	61	Failed Back surgery syndrome	120	15 (4-wk)	8/10	5/10

Average change in pain score = 3.6. Average decrease in MME= 85.58%

Retrospective Chart Review

Characteristic	Overall sample (n = 2998)		MMPR = 0 (n = 2534)		MMPR = 1 (n = 464)	
	Mean (SD)	Range	Mean (SD)	Range	Mean (SD)	Range
Age	60.76 (0.26)	22-97	60.58 (0.28)	22-97	61.79 (0.66)	24-90
MMME	33.69 (1.19)	0-11640	32.52 (1.13)	0-7907.39	39.46 (4.36)	0-11640
White	85.16%		84.80%		87.06%	
Female	61.81%		61.44%		63.79%	
MMPR	15.16%					

13 quarters: July 2016-Aug 2019
 Exclusion for cancer-related pain:
 • N=2998
 • 15.5% received a medical cannabis authorization

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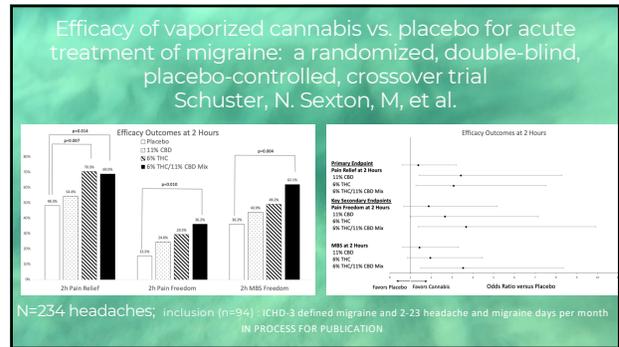
Cannabis and Pain

Cannabis and cannabinoids for the treatment of people with chronic noncancer pain conditions: a systematic review and meta-analysis of controlled and observational studies
 Emily Stockings^{1,2}, Gabrielle Campbell¹, Wayne D. Hall^{1,2}, Suzanne Nelson¹, Dino Zagari¹, Rakin Rahman¹, Brian Munoz^{1,2}, Michael Farmer¹, Megan Weier¹, Louise Ongphiphadhanakul¹

91 studies
 > 30% pain reduction
 > Unlikely to be a monotherapy

Multidisciplinary care with physical and psychological therapy better than medication alone: more effective

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Pitfalls for Patients

THC vs CBD?

Conflicts of interest: salespersons

Shifts in potency (10x)

Break-through Pain
 Vape: 1 puff every 10 min
 mints: 1 to give relief 4 hrs. of relief

20:1 CBD:THC

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THC potency

More is not better!

Wallace MS, Marcotte TD, et al. Secondary Analysis from a Randomized Trial on the Effect of Plasma Tetrahydrocannabinol Levels on Pain Reduction in Painful Diabetic Peripheral Neuropathy. *J Pain.* 2020;21(11):11-12.

Sexton M, Stockton K, et al. Evaluation of Cannabinoid and Terpenoid Content: Cannabis Flower Compared to Supercritical CO2 Concentrate. *Planta Med.* 2019 Mar;84(4):234-242. doi: 10.1055/s-0043-119161. Epub 2017 Sep 19. Entium in Planta Med. 2019 Mar;84(4)

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Risks/Side Effects

- Risk of exacerbating dizziness/balance
- Cardiovascular effects
- Cognitive effects
- Drowsiness / Disorientation
- To inhale or not
- What is the “addiction” potential?
- DDIs
- Type of administration
- Product selection



"Remind me, is this medicinal or recreational weed?"

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