



Medical Marijuana  
Awareness Webinar

# CANNABIS & FIBROMYALGIA

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Harvest



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# WELCOME!

- **Setting Boundaries & Disclaimers**

- ▶ The purpose of this group is to provide a safe, supportive and judgment free zone where we can advocate for and discuss medical cannabis, as well as local and state resources.
- ▶ It is best to always discuss with your physician before making any medical decisions about your health. The goal of this group is to engage with the community and to help educate Medical Cannabis through discussion.

No matter our background, we are all coming together as medical cannabis advocates, patients, students and researchers.

# FIBROMYALGIA: WHAT IS IT?

## A result of many characteristics:

- May be an effect of hindered pain signaling.  
Either: (Backes, 2017)
  - Total central sensitization to pain signaling, which is a defect in neurotransmitter release
  - An obstruction of pathways that the brain uses to inhibit pain signaling
- Possible result of dysfunction in the body's response to stress
- *Possible Endocannabinoid Deficiency, according to Dr. Ethan Russo*

## A rheumatic disorder characterized by:

- Chronic Pain
- Joint and Muscle Stiffness
- Chronic Fatigue
- Insomnia
- Headaches
- Digestive issues
- Anxiety
- Cognitive issues

# FIBROMYALGIA

## NATIONAL PAIN REPORT FINDINGS

4 out of 10 fibromyalgia sufferers felt their medical doctors are not knowledgeable about the condition

45% fibromyalgia sufferers feel their family and friends do not take their fibromyalgia seriously

Nearly **half** stated their fibromyalgia symptoms started at a fairly young age (between **18-34**)

Only **11%** were diagnosed with fibromyalgia **within the first year** of symptoms

**44%** said it took **5+** years before they were diagnosed with fibromyalgia

# EFFICACY

2006	Germany's University of Heidelberg evaluated the analgesic effects of oral THC in nine patients with fibromyalgia over a 3-month period. Subjects in the trial were administered daily doses of 2.5 to 15 mg of THC and <i>received no other pain medication during the trial</i> . Among those participants who completed the trial, <i>all reported a significant reduction in daily recorded pain ...</i>
2011	A study researching the effectiveness of cannabis on treatment of Fibromyalgia's <i>symptoms found noteworthy reduction of pain and/or stiffness, improvement in insomnia, and feeling of well-being and just ability to relax</i>
2014	<ul style="list-style-type: none"><li>• Survey conducted by The National Pain Foundation of over 1,300 fibromyalgia patients. <i>Nearly one third (30%) reported having used medical cannabis.</i> (Anson, 2014)</li><li>• Of the more than 390 survey participants who had used cannabis, compared to FDA-approved pharmaceuticals, <i>far more people reported cannabis as being effective.</i></li></ul>
2016	The National Center for Complementary and Integrative Health performed two studies with 72 participants
2018	Israeli Study performed by several research hospitals and universities focused on patients those diagnosed with fibromyalgia who had been using licensed medical grade cannabis as prescribed by their physician. <i>Patients were taking relatively low doses of the drug, less than 1 gram per day; study feedback was vastly positive when debriefed on their experiences with medical cannabis.</i> Patient feedback included the following statements: "I returned to be the same person I was before," "This is a miraculous treatment,". This study's successful first assessment of the impact of medical cannabis on fibromyalgia symptoms, this does merit the need for further studies on the effects of medical cannabis on chronic pain disorders.
2020	Fibromyalgia is a chronic health condition characterized by widespread, severe musculoskeletal pain that affects an estimated 5–7% of the global population. Due to the highly comorbid nature of fibromyalgia, patients with the disorder often respond poorly to traditional pain treatments. <i>Recent studies suggest that patient response may be more favorable to alternative analgesics, such as cannabis.</i>



# THE ENDOCANNABINOID SYSTEM



## THE HUMAN ENDOCANNABINOID SYSTEM

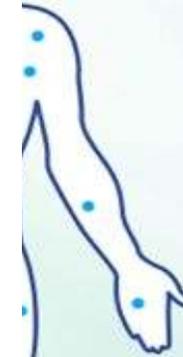
***CBD, CBN and THC fit like lock and key into existing human receptors.*** These receptors are part of the endocannabinoid system which impact physiological process affecting pain modulation, memory and appetite plus anti-inflammatory effects and other immune system responses. The endocannabinoid system comprises two types of receptors, CB1 and CB2, which serve distinct functions in human health and well-being.

CB1 receptors are primarily found in the brain and central nervous system, and to a lesser extent in other tissues.



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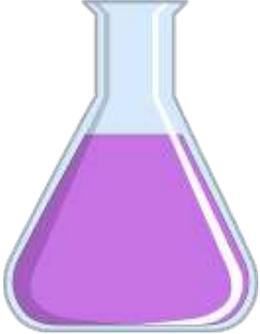


associated with the immune system.

source: [www.the-human-solution.org](http://www.the-human-solution.org)



# HOW CANNABIS WORKS



Endocannabinoid's  
[Brain derived]  
Foods: Omega 3s - Omega 6s  
Anandamide [AEA]

Phytoendocannabinoids  
[Plant derived]  
Buds, Tinctures, Extracts  
THC, CBD, CBN, etc

Synthetic Cannabinoids  
[Pharmaceutical Labs]  
Patent Synthesized Compound  
THC Only - Marinol



Endocannabinoid  
[Brain receptors]  
CB1, CB2, etc

***The endocannabinoid system [ESC] regulates a variety of physiological processes including appetite, pain and pleasure sensation, immune system, mood and memory.***

# CANNABIS HELPS *YOUR* BODY PRODUCE IT'S OWN MEDICINE

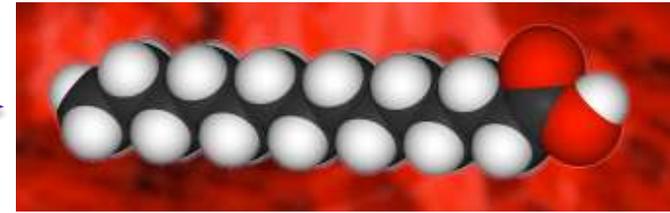
## Endocannabinoids



Endocannabinoid's  
brain derived



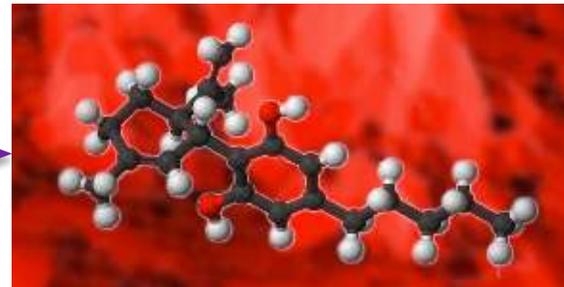
Phytocannabinoids  
plant derived



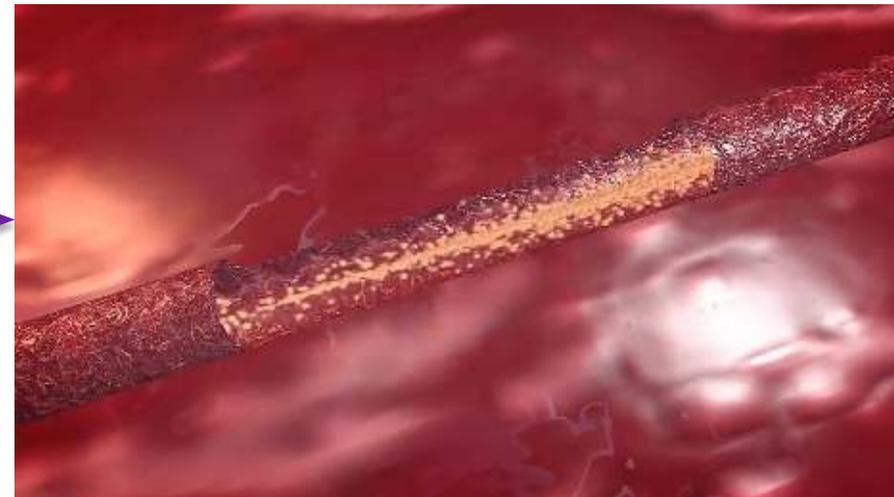
FATTY ACIDS



NEURONS



LONG CHAIN FATTY  
ACIDS



# WHAT IS MEDICAL CANNABIS/MARIJUANA ?

## **CBD - Cannabidiol**

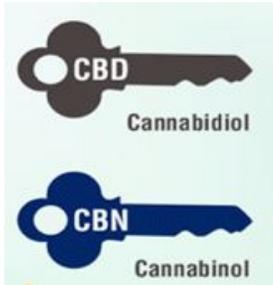
Non-Psychoactive cannabis component – Also found in Hemp

## **THC - Tetrahydrocannabinidiol**

Psychoactive cannabis component

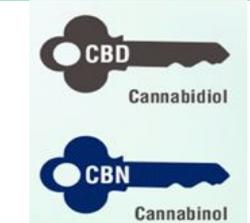
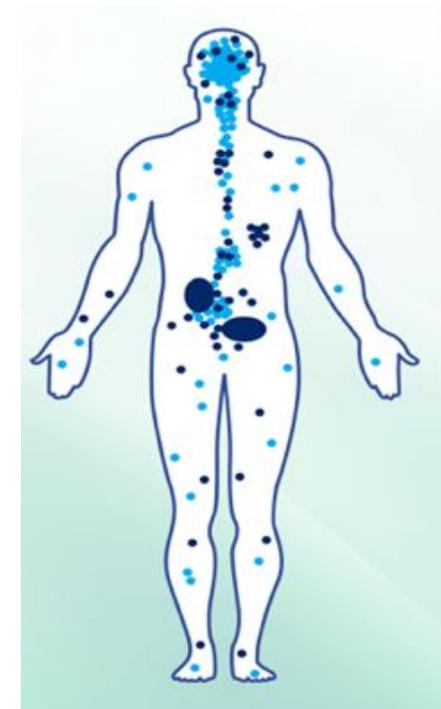
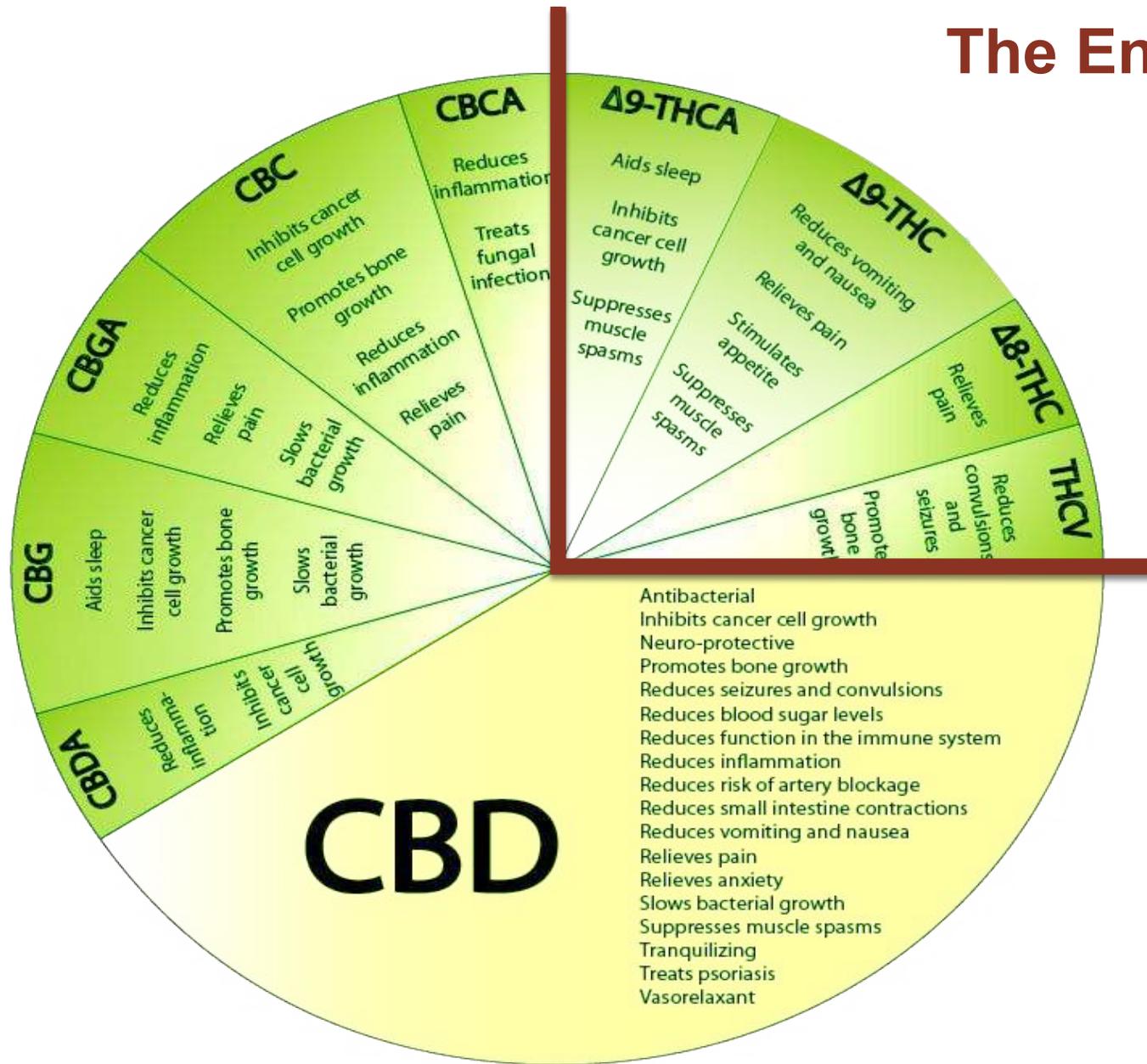


# CBD in Hemp & Cannabis



# The Entourage Effect

THC



# HEMP vs MARIJUANA - *The Plant*

## HEMP CANNABIS SATIVA



## MARIJUANA CANNABIS INDICA



# Cannabinoids

- Narrow leaves

Hindu Kush

Mazar-i-Sharif

Alghan Kush

# Terpenes

- Better suited for colder climates

# Your Biology, Dosing, Consumption Method

Sativ



# WHAT ARE TERPENES?

- Terpenes are the most common natural chemicals in nature.
- Found in flowers, spices, fruits, vegetables and essential oils

- ➔ Endocannabinoid System - Highway
- ➔ Anandamide - Driver
- ➔ Cannabinoid - Passenger (CBD/THC)
- ➔ Terpenes navigate/shapes the Cannabis journey like a GPS

## Terpenes In Cannabis



**Alpha-Pinene**  
**Flavors:** herbal, woody, rosemary  
**Effects:** bronchodilator, anti-inflammatory, topical antiseptic, memory-aid



**Caryophyllene**  
**Flavors:** pepper, spice, wood, cloves  
**Effects:** antidepressant, analgesic, antibacterial, antifungal, antianxiety, gastroprotective



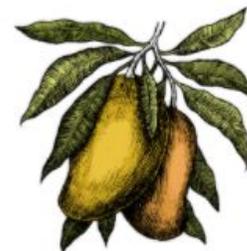
**Humulene**  
**Flavors:** earthy, woody, spicy, hops  
**Effects:** anti-inflammatory, anticancer, antibacterial, appetite suppressant



**Limonene**  
**Flavors:** citrus fruit/rind (lemons, oranges)  
**Effects:** anti-depressant, anti-bacterial, anti-carcinogenic, immunostimulant



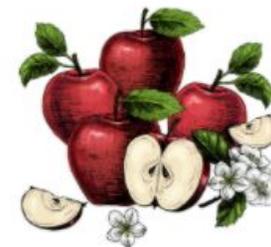
**Linalool**  
**Flavors:** floral, citrus, orange, terpy, waxy, rose  
**Effects:** bronchodilator, antianxiety, anti-inflammatory, analgesic, anticonvulsant



**Myrcene**  
**Flavors:** musky, balsam, cloves, earthy, minty, peppery  
**Effects:** anti-inflammatory, anti-carcinogenic, sedation, antidepressant,



**Ocimene**  
**Flavors:** sweet, herbal, woody  
**Effects:** antiviral, antifungal, antiseptic, decongestant, antibacterial, energetic



**Terpinolene**  
**Flavors:** herbal, fresh, woody, pine, citrus, sweet  
**Effects:** anticancer, antibacterial, antifungal, sedative, antioxidant

# MYRCENE



**🔔 AROMA**  
Cardamom  
Cloves  
Musky  
Earthy  
Herbal

**🌡️ VAPORIZES AT**  
332°F (167°C)

**🧠 POTENTIAL EFFECTS**  
Sedating  
"Couchlock"  
Relaxing

**🧪 POTENTIAL MEDICAL VALUE**  
Antioxidant  
Treatment of:  
• Insomnia  
• Pain  
• Inflammation

**+ ALSO FOUND IN**  
Mango  
Lemongrass  
Thyme  
Hops



# CARYOPHYLLENE



## AROMA

Pepper  
Spicy  
Woody  
Cloves

## VAPORIZES AT

266°F (130°C)

## POTENTIAL EFFECTS

Stress Relief

## POTENTIAL MEDICAL VALUE

Treatment of:

- Pain
- Anxiety
- Depression
- Ulcers

## ALSO FOUND IN

Black Pepper  
Cloves  
Cinnamon



# $\alpha$ -PINENE



## AROMA

Pine

## VAPORIZES AT

311°F (155°C)

## POTENTIAL MEDICAL VALUE

Treatment of:

- Asthma
- Pain
- Ulcers
- Anxiety
- Cancer

## POTENTIAL EFFECTS

Alertness  
Memory Retention  
Counteracts some  
THC effects

## ALSO FOUND IN

Pine Needles  
Rosemary  
Basil  
Parsley



# Top Cannabis Strains for Fibromyalgia

## Is Cannabis Medicine?

A survey of 1,339 people with

## FIBROMYALGIA

conducted by

The National Pain Foundation and NationalPainReport.com , revealed that those who have used marijuana to treat their symptoms find it significantly more effective than any of the three drugs approved by the Food and Drug Administration to treat the disorder.

@Cannabisstrains

The following marijuana strains have been quite effective:

- Harlequin (Sativa)
- Critical Mass (Indica)
- Granddaddy Purple (Indica)
- Girl Scout Cookies (Hybrid)
- Bubba Kush (Indica)
- Blueberry (Indica)
- Blue Dream (Hybrid)
- Cannatonic (Hybrid)



# STANDARD DOSING FORMS

• Sublingual Drops/Tinctures

- Inhalation Vape Pens
- Capsules
- Topical's
- Sprays
- Edibles
- Flower
- Crumble & Shatter
- Suppositories



# STANDARD DOSING

FORM	TIME TO WORK	EFFECTIVENESS	COMMENTS
SUBLINGUAL DROPS/TINCTURE	15-40 Min	4-6 Hours	Taking cannabis in through the mouth under your tongue, absorbs via the digestive system or blood vessels in the mucous membranes in the mouth.
VAPE PEN	Almost Immediately	2-4 Hours	Electronic vaporizing device Inhaling through the lungs
CAPSULES	30 min - 2 hours	5-8 Hours	When taking cannabis in through the mouth, it enters the bloodstream after being digested or broken down in the stomach and absorbed into the digestive system.
EDIBLES	15-40 Min	4-6 Hours	Gummies, brownies,dots, cookies, et al
TOPICALS	Almost immediately	1-2 Hours	A topical medicine is applied to the skin directly 'on top' of the place where it is needed.
TRANSDERMAL PATCH	10 min - 1 Hour	8 - 72 Hours	A topical medicine is applied to the skin directly 'on top' near the neck, inside of legs, top of hands/feet, back of neck
SPRAY	Almost Immediately	2-4 Hours	Absorbs via the digestive system or blood vessels in the mucous membranes in the mouth.
FLOWER	Almost Immediately	1-5 Hours	<b>REQUIRES A FL STATE FORM</b> Inhaling through the lungs <b>2.5oz/35 days: 4oz in possession</b>
CRUMBLE SHATTER	Almost Immediately	1-6 Hours	Inhaling through the lungs

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# HARVEST




**FLORIDA'S GIFT**  
**MODERN FLOWER**  
 Hybrid

**EFFECTS:** soothing, relaxing, calming  
**FLAVORS:** earthy, fruity, pine

Florida's Gift is a hybrid of Florida's most popular strains, Florida's Gift is a hybrid of Florida's most popular strains, Florida's Gift is a hybrid of Florida's most popular strains, Florida's Gift is a hybrid of Florida's most popular strains.

**MODERN FLOWER** **HARVEST**



**RollOne Pre Rolls \$9**  
 Locally Grown in Florida

**HARVEST**




**WHITE CHRISTMAS**  
**MODERN FLOWER**  
 Hybrid

**EFFECTS:** uplifting, relaxing, soothing  
**FLAVORS:** citrus, earthy, peapony

White Christmas is a hybrid of Florida's most popular strains, White Christmas is a hybrid of Florida's most popular strains, White Christmas is a hybrid of Florida's most popular strains, White Christmas is a hybrid of Florida's most popular strains.

**MODERN FLOWER** **HARVEST**



**STAR STOMPER**  
**ROLLONE - GROWN LOCALLY RIGHT HERE IN FLORIDA**  
 Hybrid

**EFFECTS:** relaxing, euphoric, uplifting  
**FLAVORS:** sour grass, alcohol

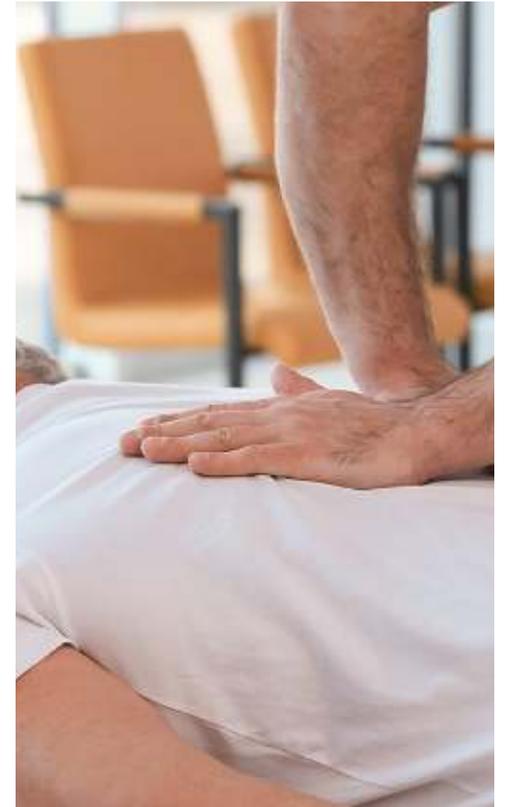
Star Stomper is a hybrid of Florida's most popular strains, Star Stomper is a hybrid of Florida's most popular strains, Star Stomper is a hybrid of Florida's most popular strains, Star Stomper is a hybrid of Florida's most popular strains.

**RollOne** **HARVEST**

# BALANCED LIVING: A SENSE OF RESTORATION & CONTROL

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- Talk Therapies
- Alternative treatments such as Acupuncture
- Lifestyle and Dietary changes
- Meditation and Mindfulness
- Basic Self-Care



# GROUP DISCUSSION

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