PALMITOYLETHANOLAMIDE (PEA)

NOT *JUST* FOR PAIN!

WHAT *IS* PALMITOYLETHANOLAMIDE?

"Palmitoylethanolamide (PEA) is a food component known since 1957. PEA is synthesized and metabolized in animal cells via a number of enzymes and exerts a multitude of physiological functions related to metabolic homeostasis. Research on PEA has been conducted for more than ***50 years****, and over* ***350 papers*** *are referenced* ***in PubMed*** *describing the physiological properties of this endogenous modulator and its pharmacological and therapeutical profile."*
Source

After reading that, check out what you find on WebMD! This just shows you how bias those who control Internet information are; how in bed they are with the medical-industrial complex; Big Pharma, prescription drugs, etc. Do you see how we are being manipulated? Next slide please!

Courtesy of WebMD – an informational source we are supposed to trust when it comes to vetted and scientifically based information:

"Palmitoylethanolamide (pea) is a chemical made from fat. It is found naturally in foods such as egg yolks and peanuts, and in the human body.

PEA can bind to cells in the body and reduce pain and swelling.

PEA is used for different types of pain, fibromyalgia, osteoarthritis, multiple sclerosis (MS), carpal tunnel syndrome, autism, and many other conditions, ***but there is no good scientific evidence to support many of these uses.***" Source

PEA & OVERALL HEALTH

IMPRESSIVE!

PALMITOYLETHANOLAMIDE: A NATURAL COMPOUND FOR HEALTH MANAGEMENT

All nations which have undergone a nutrition transition have experienced increased frequency and falling latency of chronic degenerative diseases, which are largely driven by chronic inflammatory stress. Dietary supplementation is a valid strategy to reduce the risk and severity of such disorders. Palmitoylethanolamide (PEA) is an endocannabinoid-like lipid mediator with extensively documented anti-inflammatory, analgesic, antimicrobial, immunomodulatory and neuro protective effects. It is well tolerated and devoid of side effects in animals and humans. Pea's actions on multiple molecular targets while modulating multiple inflammatory mediators provide therapeutic benefits in many applications, including immunity, brain health, allergy, pain modulation, joint health, sleep and recovery. Pea's poor oral bioavailability, a major obstacle in early research, has been overcome by advanced delivery systems now licensed as food supplements.

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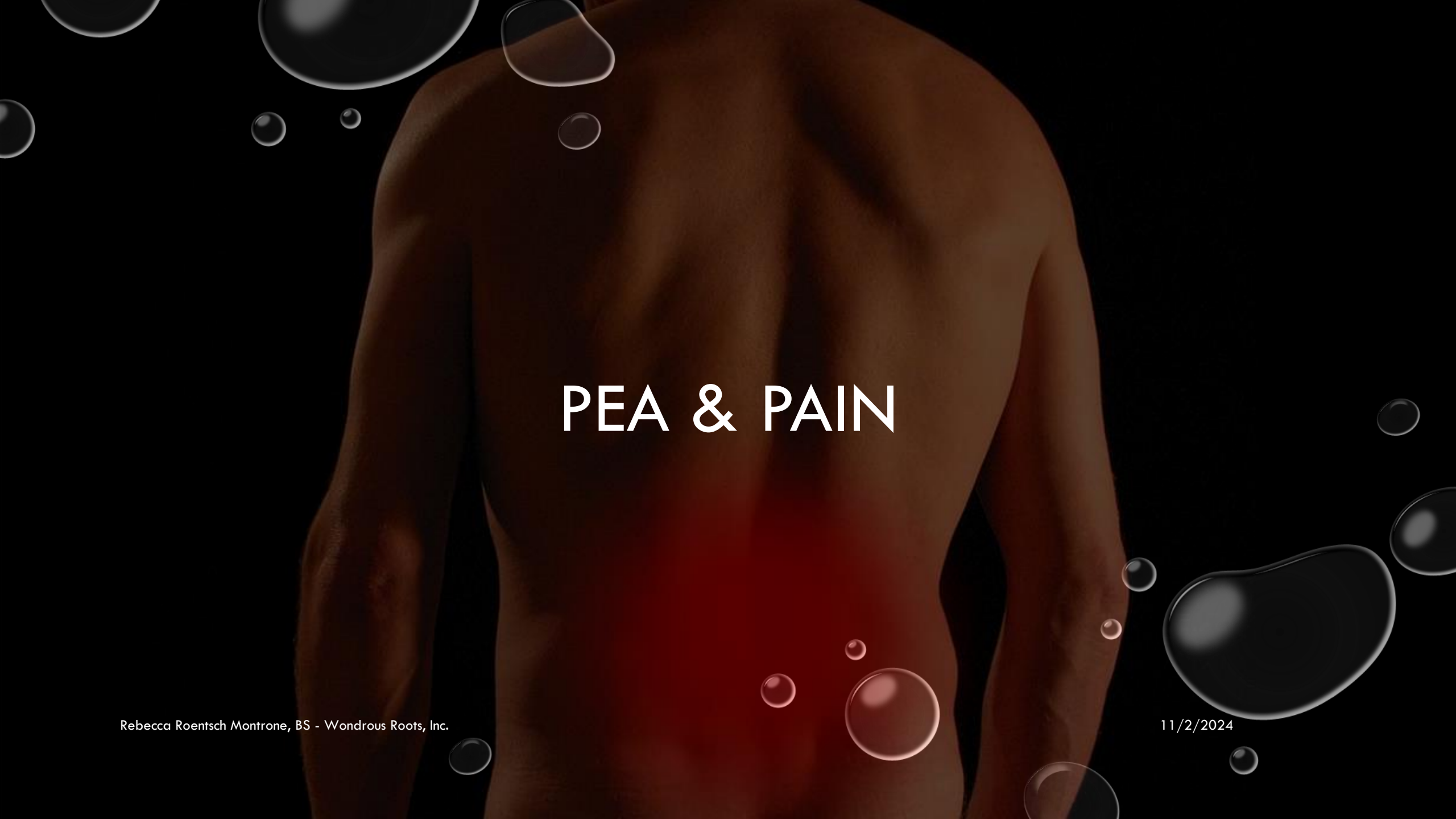
11/2/2024



PEA & PAIN

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PALMITOYLETHANOLAMIDE IN THE TREATMENT OF CHRONIC PAIN CAUSED BY DIFFERENT ETIOPATHOGENESIS

Abstract objective. To assess the efficacy and safety of palmitoylethanolamide (PEA), an endogenous fatty acid amide belonging to the n-acylethanolamines family, in reducing pain severity in patients with pain associated to different pathological conditions. Methods. This was an observational study con ducted on 610 patients who were unable to effectively control chronic pain with standard therapies. PEA (600 mg) was administered twice daily for 3 weeks followed by single daily dosing for 4 weeks, in addition to standard analgesic therapies or as single therapy. The primary outcome measure was the mean score pain severity evaluated by the numeric rating scale. Safety was also evaluated. Results. PEA treatment significantly decreased the mean score pain intensity evaluated in all patients who completed the study. The PEA effect was independent of the pain associated patho logical condition. Pea-induced decrease of pain intensity was present also in patients without concomitant analgesic therapy. Importantly, PEA showed no adverse effects. Conclusions. In this study, PEA was effective and safe in the management of chronic pain in different pathological conditions.

MORE ON PEA & PAIN

- Therapeutic utility of palmitoylethanolamide in the treatment of neuropathic pain associated with various pathological conditions: a case series
- Effectiveness of palmitoylethanolamide (levagen+) compared to a placebo for reducing pain, duration, and medication use during migraines in otherwise healthy participants-a double-blind randomised controlled study
- Palmitoylethanolamide for the treatment of pain: pharmacokinetics, safety and efficacy
- Palmitoylethanolamide in the treatment of chronic pain: A systematic review and meta-analysis of double-blind randomized controlled trials
- Palmitoylethanolamide in add-on to alpha lipoic acid for control of symptoms of diabetic peripheral neuropathy
- Classical and unexpected effects of ultra-micronized PEA in neuromuscular function

AND MORE…

- LEVELS OF BIOACTIVE ENDOGENOUS LIPIDS AND HEALTH-RELATED QUALITY OF LIFE IN CHRONIC IDIOPATHIC AXONAL POLYNEUROPATHY
- PALMITOYLETHANOLAMIDE IN THE TREATMENT OF CHRONIC PAIN: A SYSTEMATIC REVIEW AND META-ANALYSIS OF DOUBLE-BLIND RANDOMIZED CONTROLLED TRIALS

PEA & CBD

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11/2/2024

PALMITOYLETHANOLAMIDE: A POTENTIAL ALTERNATIVE TO CANNABIDIOL

The endocannabinoid system (ECS) is a widespread cell signaling network that maintains homeostasis in response to endogenous and exogenous stressors. This has made the ECS an attractive therapeutic target for various disease states. The ECS is a well-known target of exogenous phytocannabinoids derived from cannabis plants, the most well 9 characterized being δ-tetrahydrocannabinol (THC) and cannabidiol (CBD).

There is a demand for alternative compounds combining similar effects with a robust safety profile and regulatory approval. Palmitoylethanolamide (PEA) is an endocannabinoid-like lipid mediator, primarily known for its anti-inflammatory, analgesic and neuroprotective properties.

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11/2/2024

PEA & GUT HEALTH

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11/2/2024

GUT HEALTH, PEA, AND YOUR ENDOCANNABINOID SYSTEM

There's a system that, until recently, has been helping us digest our food without us even knowing! This recently discovered system, the endocannabinoid system, may be just as vital to your body as your microbiome, particularly in supporting gut health. There's a fatty acid called palmitoylethanolamide (PEA) that your body naturally makes to interact with your endocannabinoid system that can be a key player in supporting gut health as well.

5 WAYS YOUR ENDOCANNABINOID SYSTEM AFFECTS GUT HEALTH

Your endocannabinoid system connects your gut and your brain. In fact, some scientists believe it is the main communication channel between your gut and your brain. This is because they use the same language and hardware, made up of special receptors and neurotransmitters. Their messages flow through the same neurons. Although this language and hardware appears elsewhere in the body, the gut and the brain use it to a much greater degree because of the functions they share.

- Leaky gut
- Motility
- Inflammation
- Stress
- Weight loss

THERAPEUTIC POTENTIAL OF PALMITOYLETHANOLAMIDE IN GASTROINTESTINAL DISORDERS

When the gastrointestinal (GI) effects of PEA are discussed, it must be pointed out that it affects intestinal motility but also modulates gut microbiota. This is due to anti-inflammatory, antioxidant, analgesic, antimicrobial, and immunomodulatory features. Additionally, PEA has shown beneficial effects in several GI diseases, particularly irritable bowel syndrome and inflammatory bowel diseases, as various studies have shown, and it is important to emphasize its relative lack of toxicity, even at high dosages.

PEA & THE BRAIN

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11/2/2024

EFFECTS OF PALMITOYLETHANOLAMIDE ON NEURODEGENERATIVE DISEASES: A REVIEW FROM RODENTS TO HUMANS

"Namely, attention has been paid to the effects of PEA in counteracting neuroinflammatory conditions and in slowing down the progression of diseases, such as Alzheimer's disease, Parkinson's disease, Huntington's disease, frontotemporal dementia, amyotrophic lateral sclerosis, and multiple sclerosis. Literature research demonstrated the efficacy of PEA in addressing the damage typical of major neurodegenerative diseases."

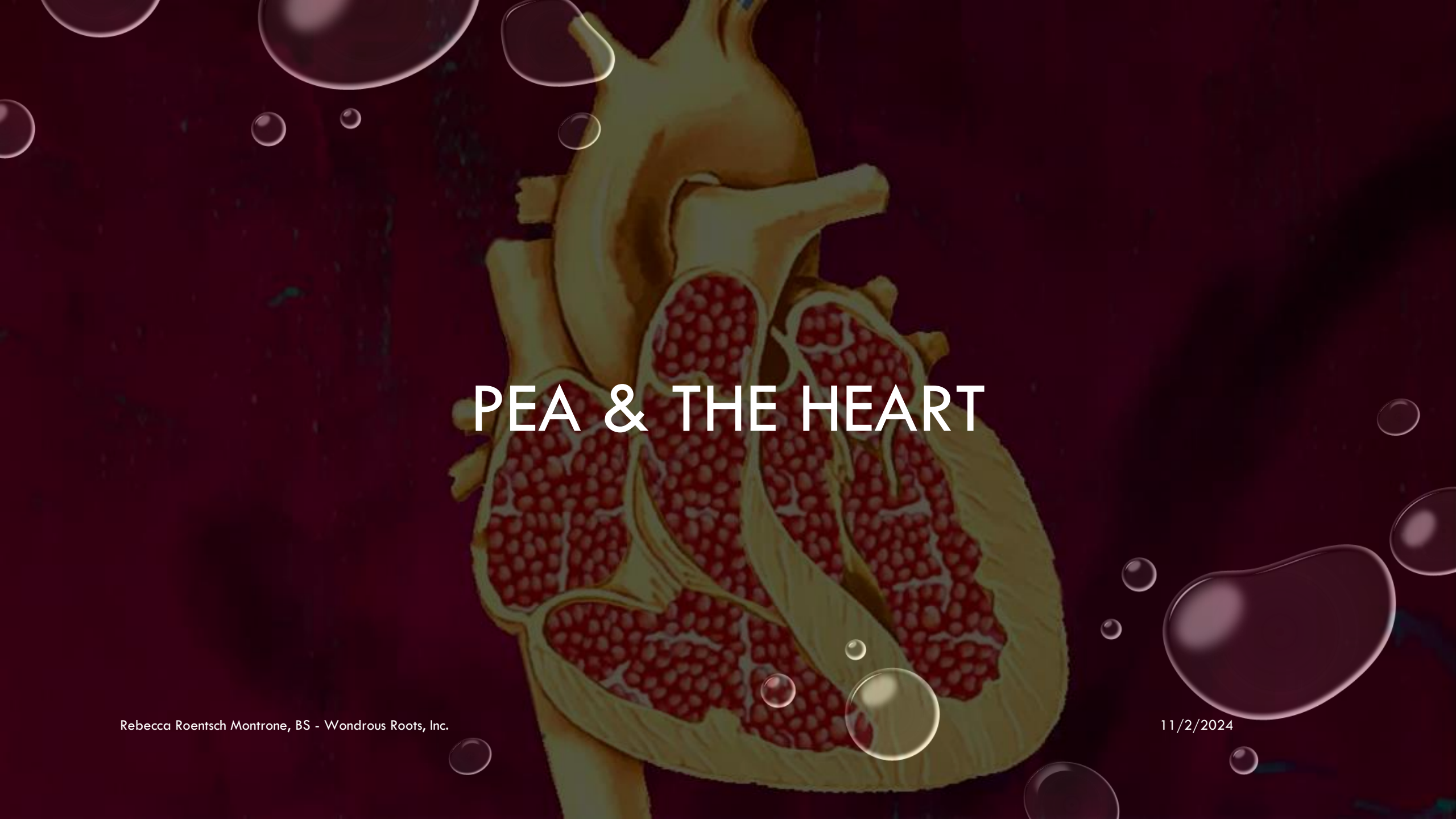
CLASSICAL AND UNEXPECTED EFFECTS OF ULTRA-MICRONIZED PEA IN NEUROMUSCULAR FUNCTION

Here, we reviewed published literature and summarized the main targets of the palmitoyl-ethanolamide, along with its unique possible mechanisms for restoring correct functioning of the central nervous system. Moreover, we have highlighted a less-known characteristic of palmitoylethanolamide, namely its ability to modulate the function of the neuromuscular junction by binding to acetylcholine receptors in different experimental conditions. Indeed, there are several studies that have highlighted how ultra-micronized palmitoylethanolamide is an interesting nutraceutical support for the treatment of pathological neuromuscular conditions, specifically when the normal activity of the acetylcholine receptor is altered.

Rebecca comments: think myasthenia gravis

MORE ON PEA & BRAIN HEALTH

- Palmitoylethanolamide protects against the amyloid-b25-35- induced learning and memory impairment in mice, an experimental model of alzheimer disease
- Ultra-micronized palmitoylethanolamide: an efficacious adjuvant therapy for parkinson's disease
- Oral palmitoylethanolamide treatment is associated with reduced cutaneous adverse effects of interferon-β1a and circulating proinflammatory cytokines in relapsing-remitting multiple sclerosis
- N-palmitoylethanolamide prevents parkinsonian phenotypes in aged mice
- Therapeutic effect of palmitoylethanolamide in cognitive decline: A systematic review and preliminary meta-analysis of preclinical and clinical evidence



PEA & THE HEART

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11/2/2024

PALMITOYLETHANOLAMIDE PROMOTES A PRORESOLVING MACROPHAGE PHENOTYPE AND ATTENUATES ATHEROSCLEROTIC PLAQUE FORMATION

"Conclusions- the present study demonstrates that palmitoylethanolamide protects against atherosclerosis by promoting an anti inflammatory and proresolving phenotype of lesional macrophages, representing a new therapeutic approach to resolve arterial inflammation."

PEA & WEIGHT LOSS

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11/2/2024

PALMITOLEOYLETHANOLAMIDE IS AN EFFICIENT ANTI-OBESITY ENDOGENOUS COMPOUND: COMPARISON WITH OLEYLETHANOLAMIDE IN DIET-INDUCED OBESITY

The results indicate that POEA is able to improve health status in diet-induced obesity, decreasing weight, liver steatosis, inflammation, and dyslipemia. The action of POEA was found to be almost identical to that of OEA, which is an activator of the nuclear peroxisome proliferator receptor alpha (pparα), and it is structurally related to POEA. These results suggest that the dietary administration of either POA or POEA might be considered as nutritional intervention as complementary treatment for complicated obesity in humans.

PALMITOYLETHANOLAMIDE PROMOTES WHITE-TO-BEIGE CONVERSION AND METABOLIC REPROGRAMMING OF ADIPOCYTES: CONTRIBUTION OF PPAR-A

"The potential role of brown and beige adipose tissue against obesity has been recognized. Browning, or beiging of white adipose tissue (WAT) is associated with the remodeling of adipocytes and the improvement of their metabolic and secretory functions. Here, palmitoylethanolamide (PEA) restore the plasticity of brown and white adipocytes impaired in mice on a high-fat diet (HFD)."

"We identify pea and ppar-α activation as the main mechanism by which pea can rewire energy-storing white into energy-consuming brown-like adipocytes via multiple and converging effects that restore wat homeostasis and metabolic flexibility."

PALMITOYLETHANOLAMIDE PREVENTS METABOLIC ALTERATIONS AND RESTORES LEPTIN SENSITIVITY IN OVARIECTOMIZED RATS

The current study demonstrates anorexic and fat-losing effects of a chronic treatment with PEA in ovariectomy-induced model of mild obesity. The recovery of the impairment of leptin and its receptor signaling and the increase of glucose tolerance after PEA treatment in OVX rats supports our finding and is consistent with the correction of leptin resistance in ovx-induced obesity in rats.

PEA AND COLD ‘FLU

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11/2/2024

PALMITOYLETHANOLAMIDE: A NATURAL BODY-OWN ANTI-INFLAMMATORY AGENT, EFFECTIVE AND SAFE AGAINST INFLUENZA AND COMMON COLD

Palmitoylethanolamide (PEA) is a food component known since 1957. PEA is synthesized and metabolized in animal cells via a number of enzymes and exerts a multitude of physiological functions related to metabolic homeostasis. Research on PEA has been conducted for more than 50 years, and over 350 papers are referenced in pubmed describing the physiological properties of this endogenous modulator and its pharmacological and therapeutical profile. The major focus of PEA research, since the work of the Nobel laureate Levi-Montalcini in 1993, has been neuropathic pain states and mast cell related disorders.

However, it is less known that 6 clinical trials in a total of nearly 4000 people were performed and published last century, specifically studying pea as a therapy for influenza and the common cold. This was done before Levi-Montalcini's clarification of pea's mechanism of action, analyzing the role of PEA as an anti-inflammatory agent. We will review in depth these studies, as the results support the effectiveness and safety of PEA in flu and respiratory infections.

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11/2/2024

Wait A MINUTE! What did WebMD tell us about PEA & the lack of scientific studies?

PEA is used for different types of pain, fibromyalgia, osteoarthritis, multiple sclerosis (MS), carpal tunnel syndrome, autism, and many other conditions, ***but there is no good scientific evidence to support many of these uses.***”

What would happen if people knew about using PEA for all of these big health issues?

- WE CAN'T PATENT IT
- WE CAN'T FORCE PEOPLE INTO DOCTOR'S OFFICES TO GET IT
- THEY WON'T NEED OUR PRICEY PRESCRIPTIONS
- WHILE TREATING ONE OF THEIR PROBLEMS THEY'LL GET HEALTHY IN OTHER WAYS, TOO
- THEY CAN USE IT TO STAY HEALTHY IN THE FIRST PLACE
- THEN THEY MIGHT NOT NEED US
- THEN WE MIGHT GO BROKE!

PEA & SOME OTHER APPLICATIONS

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11/2/2024

PALMITOYLETHANOLAMIDE (PEA) – A MEDICAL FOOD FOR FIBROMYALGIA (AND ME/CFS?)

"PEA demonstrates a variety of properties in animal model studies that suggest it might be helpful in fibromyalgia and/or chronic fatigue syndrome (ME/CFS). Animal and laboratory studies suggest PEA has neuroprotective properties, can reduce glial (microglia and astrocyte) activation, inhibit astrocyte death (astrogliosis), and reduce inflammation by inhibiting histamine and tnf-a release in mast cells and by blocking cyclooxygenase-2 (COX-2) and inducible nitric oxide synthase (inos) synthesis."

COVID-19 AND LONG COVID

"PEA produced a "significant reduction in inflammation" and may help reduce coagulation in COVID-19 patients. A long COVID trial of uncertain rigor found that PEA plus olfactory training help improve the ability to smell in long COVID more than olfactory training alone suggesting that PEA have have reduced neuroinflammation."

PEA & ENDOMETRIOSIS

EFFECT OF ULTRAMICRONIZED-PALMITOYLETHANOLAMIDE AND CO-MICRONIZED PALMITOYLETHANOLAMIDE/POLYDATIN ON CHRONIC PELVIC PAIN AND QUALITY OF LIFE IN ENDOMETRIOSIS PATIENTS: AN OPEN-LABEL PILOT STUDY

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PRODUCT

This is the product I am carrying and recommending to my clients. There are many good choices out there. I like this one because of the reputation of the brand and because it is ultra-micronized, which is the form of PEA that has been demonstrated to be most effective for various conditions.

THANK YOU

I hope this information has been helpful!

www.wondrousroots.org

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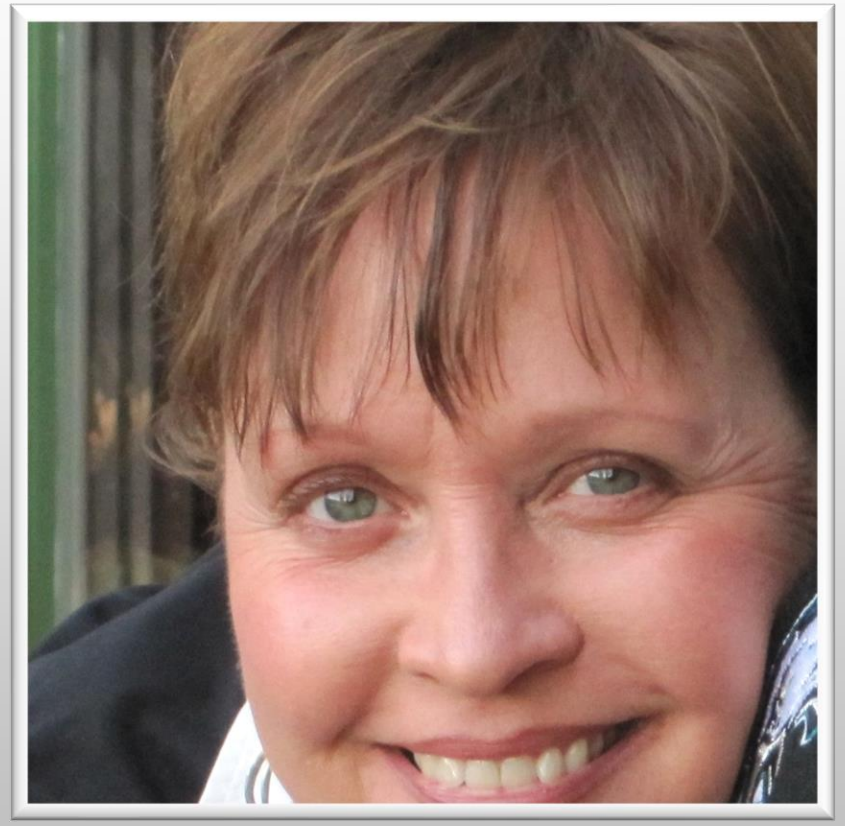

"Don't go with the flow, go with the know!"