The latest greatest NEW science in health is our Endocannabinoid System and our GutBiome.

It's just now being taught in medical education. So --- I'm learning brand new things and I want to share them with you. Remember it's new, we're all learning, and the new knowledge is evolving rapidly. I hope this handout will help explain what CBD oil and Hemp Oil are and how they may help us.

- Lisa Roberts, CNM, NP, Femme Care, November 2019

What's an Endocannabinoid System?

We all have one. The basics are a 4 step process:

- Step 1. We all make <u>cannabinoids</u> "endo" means we make it ourselves.
 - Current research has identified 2 endocannabinoids that we make
 - 1. Anandamide
 - 2. 2-AG (2 arachidonoyl glycerol)
- Step 2. We have <u>receptors</u> on lots of cells in our body. The majority of these <u>receptors</u> are found in the brain and the gut. As an embryo, the brain and gut are together, then they separate and we thought that was then end of that, but it isn't. There continues to be an incredible amount of communication happening between the brain and the gut via our Endocannabinoid System. Remember the saying "trust your gut?"
- Step 3. Our Endocannabinoids go to the receptors and the receptor allows the endocannabinoid into our cells. A <u>signal</u> is then created and either <u>signals</u> inside the cell or goes out and <u>signals</u> in the body.
- Step 4. We then make an enzyme to break down the signal so it doesn't keep signaling.

What is Hemp Oil?

Hemp Oil is made from the Hemp plant. It contains over 100 <u>phyto</u>cannabinoids. Phyto means plant. Plant (phyto) cannabinoids from hemp work in our body much like our own <u>endo</u>cannabinoids. Our receptors allow them in our cells and a signal is created.

What is CBD oil?

Cannabidiol. It is only ONE of the over 100 phytocannabinoids in Hemp Oil. When most people buy or use CBD oil they are actually using Hemp Oil. Buying an oil that contains ONLY CBD in most cases isn't as good as buying a full spectrum Hemp Oil. If you read the label it usually says Hemp Oil on the back.

Why isn't CBD isolate (by itself) better?

The best way I've found to explain this is to compare Sea Salt versus Table Salt. Sea Salt contains over 80 minerals. Only one of those minerals is Sodium. We all know Sodium by itself or too much Sodium isn't good for us. However, Sea Salt is rich in lots of minerals and is good for us, our cells, and helps balance out the Sodium at a helpful level rather than harmful level. Hemp Oil is better for us than CBD oil if our Endocannabinoid System isn't working right.

What is Hemp Oil good for?

- 1. Chronic Pain
- 2. Mood anxiety, depression
- 3. Gut health such as IBS irritable bowel syndrome
- 4. Insomnia

Why would I need Hemp Oil?

- 1. Some of us don't make enough Endocannabinoids
- 2. Some of us make too many enzymes and break down the signal too rapidly
- 3. Some of us do both we don't make enough and we break it down too rapidly

How can I test my Endocannabinoid System to see if it's working?

You can't. They are testing it in the scientific labs but testing isn't yet available at the clinical level. But I believe it will be someday. Just like the hormone pioneers initially worked with symptoms until saliva testing was developed. Saliva testing improved results by 50%. For now we have to work with symptoms and quality Hemp Oil to know if it's your Endocannabinoid system.

How do I know if Hemp Oil will work for me?

Get a good quality Hemp Oil and take it for 2 weeks. If it helps – it's your Endocannabinoid System. *If it doesn't help?*

- 1. It's not your Endocannabinoid System or
- 2. You're not using a good product

What dosage of Hemp Oil should I try?

Dosing is all over the place. There are no standards. It could be anywhere from 10 mg to 1500 mg.

What about Quality?

Quality really, really matters. I recommend Thorne Hemp Oil because it is organically grown and properly tested to make sure it has exactly what it is supposed to and MOST IMPORTANT OF ALL – it is tested to make sure it doesn't have anything it shouldn't have in it such as contaminants or THC.

What Hemp Oil do I recommend?

Thorne Hemp Oil+

How do I take it?

- Take one capsule a day for 2 weeks
- Figure out what time of day you need to take it so you are awake in the day and sleeping at night. It's 50/50 meaning 50% of people have to take it in the morning so they sleep better. The other 50% have to take it at night to sleep better. For pain, gut health, and mood again figure out the time of day that helps your symptoms the most.
- After two weeks you can try taking one in the morning and one at night if you need. Most people are helped with one capsule a day.

