Correlating Energy and Pain

by JRW Dubois

Pain is a universal experience for humans. Be it physical, psychological, emotional or spiritual, everybody feels pain.

Pain involves the human immune system, the nervous system, the psyche, the brain and the mind. It's felt in all parts of the body, except the brain, hair, and finger/toe nails.

It's commonly thought that pain is a signal which originates at the site of a bodily injury and travels to the brain through the nervous system. In fact, the pain signal travels back from the brain to the site of the injury after the brain receives the initial signal from the injury.

Sometimes, the brain will send pain signals to parts of the body without receiving a signal that something is wrong, as in people with fibromyalgia. Other times, the pain signal is sent correctly, but fails to stop sending, even though the injury has healed, like people with phantom limb pain.

Sending and receiving these signals throughout the body requires energy, just as our muscles need a small jolt of energy to operate.

When an injury occurs, a signal goes from the site of the injury to the brain which sets off a series of reactions throughout the body. One of those primary reactions is to send a pain signal back to the site of the injury immediately, to alert the person that some form of action is needed right away – which is often fight or flight. This all happens in a tiny fraction of a second, so it feels like the pain originates at the injury site.

In reaction to an injury, and the resulting pain, the body goes into action. The heart rate of the injured person rises immediately to accommodate their higher state of alertness and readiness.

For example; when a person is in a minor automobile accident, the heart will begin to race and the body will immediately start producing adrenaline and endorphins. The adrenaline gives the body extra strength to escape the danger, and the endorphins calm the body to prevent shock and allow the person to think clearly. Both can wear off relatively quickly once the danger has passed.

Once the body is out of danger and is able to calm down again, it's not uncommon for people to have an increased appetite. They have used up a significant amount of energy and need to replenish.

Without further danger or threat, and with time to recover, people can quickly return to normal.

What happens when the pain is chronic?

Some chronic pain has no clearly defined source(s) and, as a result, may not be treatable. Other chronic pain has clearly defined sources, yet still cannot be treated. This is 24/7 pain, lasting six months or more – sometimes decades – which requires 24/7 energy.

Imagine waking up in a state of 'reaction to pain' each day. The body has been using energy to fight pain all throughout the night while sleeping. Waking up, itself, takes further energy.

I normally wake up around 6:30 AM with near zero energy. It takes a huge effort to sit up in bed, then reach down to pick up my track pants, and put them on. Now, I have to sit on the bed and rest for a minute before standing and heading for the washroom. I'm not exaggerating about my exhaustion.

Walking to the toilet is the next huge effort, and I stagger. Then, after going, I remain sitting, resting for a minute or so. The next huge effort goes into lifting myself off the seat and standing up straight. Then I rest while standing for 30 seconds or so, balancing on the towel rack and preparing to walk into the kitchen. Next, I depart for the kitchen, balancing myself on walls, counters and chairs along the way. COFFEE!

I also usually wake between three and 5 AM to take my analgesics. Otherwise, I may not even be capable of getting out of bed at 6:30 AM. Then, once the washroom work is done, I make coffee and smoke some cannabis. In 10 or 15 minutes, I'm able to get on with my day.

Most days, I start with a hot bath, just after coffee and cannabis. This is where I'm able to eliminate the majority of my pain.

It's possible that I could stop taking all analgesics, if only I could float in hot water 24/7 – hardly practical. As I float my head and neck in the hot water, I'm keeping as motionless and relaxed as I can, yet my heart is racing, pulsing refreshed blood throughout my body.

The energy of the hot water, and the floating position of my head and neck, combined with relaxing my body and mind, are sufficient to reduce my pain from 8 or 9, down to 2 or 3.

Another energy that affects pain levels comes from food. A nutritious diet can provide a surprising amount of clean energy to help battle chronic pain.

Living with chronic pain doesn't allow for a lot of meal preparation time. I've found it best to purchase frozen pre-made dinners, cereals, and fruit. Just be sure the frozen dinners and cereals are as healthy as you can find. I would not advise that you buy the cheapest frozen dinners. Instead, look for companies known for more nutritious foods and read the ingredients before you purchase. This will take practice, but it's well worth it for your overall health. Buy the more simple, basic cereals with whole grains and fibre and add your favourite fresh fruit. The greater the amount of processed flavourings in cereals, the harder they are to digest. Try unsweetened granola or raw grain cereal with almond milk and real maple syrup – wow.

Good food is food that is easy to digest. You can imagine; eating a big, greasy hamburger, with a fried egg, two slices of processed cheese, four pieces of bacon, and all the rest of the regular toppings and condiments, along with fries and gravy, a large soda, and a couple of chocolate chip cookies for dessert – this meal might take some time to digest.

Digesting the burger meal not only takes a lot of time, it also takes a lot of energy. The processed beef patty alone, fried in grease, will take nearly as much energy to digest as it provides. Add the other ingredients and you could end up losing energy after digestion.

Every morning, for breakfast, I enjoy a protein shake. The product I've used for over fifteen years is 100% plant based, non-GMO, vegan, sweetened with stevia, and provides 100% of the nutrition our bodies need throughout all the food categories. The protein is derived from organic; pea protein, sunflower seed protein, and pumpkin seed protein. Raw, plant based proteins are much easier to digest than processed and fried meat proteins. That means you end up with a much greater energy gain from plant based proteins and the digestive process takes less time as well.

Another bodily benefit to eating plant based proteins is, they help to balance the bodies pH levels. Researchers from the <u>University of California in San Francisco</u> (https://www.sciencedaily.com/releases/2015/02/150212183253.htm) concluded from studies that diets high in acid from red meat and other animal products can influence the risk of chronic kidney

disease and kidney failure. They also found that individuals who consume high-acid diets are three times more likely to develop kidney conditions.

The human body is designed to naturally maintain a healthy balance of acidity and alkalinity.

If the body become too acidic, it will re-establish its pH balance automatically, by taking calcium from the bones. If this happens over several years, a person could develop brittle bones and Osteoporosis. Plant based proteins are not acidic, they are more alkaline.

Fresh fruits and raw vegetables work the same way. They're nutritious and pH friendly, with vitamins and natural sweeteners in the right proportions. They're quick clean energy for the body. And, they're easy to prepare.

Frozen fruits are also good to mix into smoothies and cold beverages. Little or no nutrition is lost by freezing fruit and the flavors come through as good as fresh fruit when either is blended.

The protein shake that I drink every morning provides 50% of the daily recommended intake of nutrients, balances my pH, and provides me with the clean energy that my body demands.

Another important factor in restoring our body's energy is sleep. But, people living with chronic pain use up energy while sleeping. Some nights aren't so bad, and I can wake with a bit of energy. Other nights leave me with no energy what-so-ever upon waking. Those are the harsh mornings described earlier.

This is where cannabis helps. The correct blend of cannabis can put me to sleep for several hours, leaving me feeling more refreshed. The cannabis works like endorphins, it calms the body.

The only other analgesics I currently take are extra strength acetaminophen @ 500mg, and extra strength ibuprofen @ 400mg, simultaneously. They can take 40-50 minutes to work. Cannabis fills the gap.

The pills have daily recommended limits which I refuse to go over. So, I'm able take up to four of each of the pills each day and remain below the daily limits. The pills claim to last 4-6 hours, but hardly ever work that long. Again, cannabis fills in for that final hour or so.

If something goes wrong – I forget to take my pills, I'm away from home without my pills, I don't wake up between 3-5 AM to take my pills, I don't eat when I take my pills, I take the wrong pills, I take too many pills, etc., – that's when the pain reaches 8 and 9. Cannabis relieves the pain within five minutes of inhaling and lasts for 60-90 minutes. With cannabis, there is no wrong dose. Small doses for small pain and large doses for 24/7 chronic pain.

Cold is another way to zap the body of energy. Chronic pain sufferers often feel worse when it's raining, cold, and windy as compared to when it's sunny and warm outside. The warmth of the sun provides relief from pain by causing the muscles to relax, as opposed to cold which causes the muscles to tighten.

The sun provides energy to relieve pain, just like the energy of the hot water in the bath, and the energy from nutritious foods, and the energy from good sleep, and the energy which comes from the loving words and selfless support of family and friends too.

Music has a profound effect on levels of energy and pain in the body. The heart rate can be increased and decreased simply by increasing and decreasing the rhythm of music while listening. The volume

of music also affects energy levels in the body, as anyone who's attended rock concerts will tell you. We even use loud music/alarms to wake ourselves, and we sure feel that energy.

While floating in the tub, I often listen to relaxing instrumental piano or older rock classics, depending on my mood. If it's relaxing piano music, I remain still. If it's an old favourite rock tune, I'll rock my head back & forth, left & right, up & down – all perfectly timed with the song, of course. This makes for a fun, gentle, neck exercise in the tub. The gentle exercise can be energizing, while loosening the muscles.

Relaxing is important when living with chronic pain. It's very hard to relax when a person is worried, frightened, anxious, angry, confused or depressed. This is another example of being robbed of energy which could be put towards battling chronic pain. It's easy to say, 'oh relax, just stop worrying', but it's not such an easy thing to do. Finding peace of mind becomes crucial.

Each individual person will have a different way to find peace of mind. I won't go into describing all the ways to find peace, calm your mind, and learn to relax in your life, but I will say, it's really important to find a way that works for you.

Doctors and lab techs may have found a way to numb pain with energy. From the Mayo Clinic website, "A spinal cord stimulator (SCS) device is surgically placed under your skin and sends a mild electric current to your spinal cord. Thin wires carry current from a pulse generator to the nerve fibers of the spinal cord. When turned on, the SCS stimulates the nerves in the area where your pain is felt. Pain is reduced because the electrical pulses modify and mask the pain signal from reaching your brain."

Sounds good, but surgery is required to implant a test device prior to a second surgery to permanently fasten the device. More surgery will be required to replace the batteries. If anything moves out of alignment, becomes detached or damaged, more surgery will be required to repair, replace or remove the device. More surgeries mean more risks.

As mentioned earlier, if a person is in a minor automobile accident, the body will start producing adrenaline. The adrenaline provides a huge boost of energy to the body. A product is available which works the same as adrenaline, called Epinephrine. It's also know as an EpiPen or Epinephrine autoinjector with a chemical that narrows blood vessels and opens airways in the lungs. These effects can reverse severe low blood pressure, wheezing, severe skin itching, hives, and other symptoms of an allergic reaction. Epinephrine is also used to treat exercise-induced anaphylaxis.

I've never heard of any form of adrenaline that can be taken to increase energy for chronic pain sufferers. Cannabis does the same job as endorphins, so what does the same job as adrenaline? Could we put adrenaline in tablets, liquids, skin patches or sprinkle some in my cannabis?

It takes a lot of energy to battle chronic pain 24/7. Let's remember, there are no weekends off, no vacations, no stat holidays and no time off for good behaviour with chronic pain.

If you're suffering with chronic pain, you will need as much energy as you can muster mister or sister.