## Nervous System

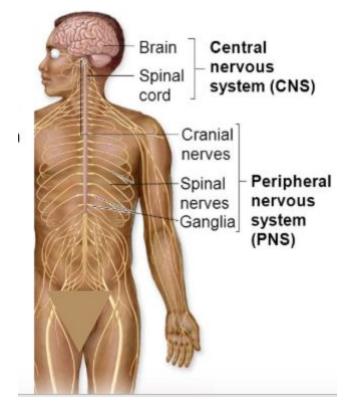
#### Role of the Nervous System

Our Nervous System interacts with the internal, remembered, and external worlds that we manifest in. Our nervous system is foremost impacted and scarred by systemic, institutional, societal, and communal oppressions, such as racism, sexism, homophobia, xenophobia, etc. This system is responsible for our general state of being and capacity to "control" our state of being, our capacity to survive, our resistance and resilience.

It does this by:

- Control & coordinate functions throughout the body
- Respond to internal & external stimuli
- Provide fast communication between body systems & parts

#### Parts of the Nervous System



### Central Nervous System

**Brain**: the home and storage warehouses of the information we gather in our lifetimes. The brain sends messages through the **spinal cord** to the peripheral nerves throughout the body that serve to control the muscles and internal organs. **Cerebrun**: the largest part of the brain, processes

information from the sense organs & directs signals to the brain stem.

**Neuron:** a nerve cell, a specialized cell in all animals carrying specific information that results in actions of organs and other body parts. When activated they transmit signals, which works like a stacked dominos, one falls and the rest slowly follow.

#### Peripheral Nervous System

Includes all of the nerves that branch out from the brain and spinal cord and extend to other parts of the body including muscles and organs. **Nerves:** carry messages messages back and forth between the CNS and the muscles, organs, and

senses in the periphery of the body (i.e., everything outside the CNS)

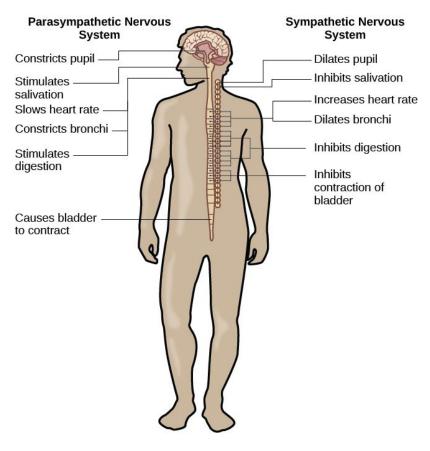
The peripheral nervous system itself is divided into two parts:



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# Nervous System

**Somatic nervous system:** system responsible for carrying sensory and motor information to and from the central nervous system, responsible for transmitting information. **Autonomic nervous system:** regulates activities that are involuntary, such as blood flow, heartbeat, digestion, and breathing.



The autonomic nervous system itself is divided into two parts: **Sympathetic Nervous System:** activated when we are faced with stressful or high-arousal situations, here is where our fight, flight or freeze responses live. The sympathetic system will trigger trigger a response by speeding up the heart rate, increased breathing rate, increasing blood flow to muscles, activating sweat secretion, and dilating the pupils.

**Parasympathetic Nervous System:** helps maintain normal body functions and conserve physical resources. Once a threat has passed, this system will slow the heart rate, slow breathing, reduce blood flow to muscles, and constrict the pupils. This allows us to return our bodies to a normal resting state.

#### What does fight, flight or freeze look like in our bodies?

Fight	Flight	Freeze
may look like: Hyperactivity, verbal aggression, oppositional behavior, limit testing, physical aggression, "bouncing off the walls"	may look like: Withdrawal, escaping, running away, self-isolation, avoidance 	may look like: Stilling, watchfulness, looking dazed, daydreaming, forgetfulness, shutting down emotionally 



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### Nervous System


#### **Decoding Medical Language**

component	meaning	example
Cephal/o	Head	Cephalgia (a headache)
Encephal/o	Inside the head (brain)	Encephalitis (inflammation of the brain) Anencephalic (born without a brain)
Mening/o	Membranes surrounding the brain and spinal cord	Meningitis (inflammation of the membranes)
Myel/o	Spinal cord	Myelogram (X-ray of the spinal cord)
Neur/o	Nerve	Neuroma (tumor) Neuritis (inflammation)
Dys	Difficult, painful, abnormal	Dyslexia (difficulty reading)
-cele	Hernia, abnormal protrusion of structure out of normal anatomical position	Meningomyelocele (protrusion of membranes and spinal cord)

#### Nourishing the Nervous System

Methods, techniques and therapies for nourishing the Nervous System through a holistic and intersectional lens:

- Living for the liberation of all beings through activism & being a part of collective healing
- Give yourself permission to just be
- Presence through movement, meditation, + sacred community
- Exercise + Rest! [Getting enough exercise makes your lungs stronger and better at giving your body the oxygen it needs. It also helps to boost your immunity.]
- Herbal medicine!!!



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- Herbal Actions for the Nervous System
  - Adaptogens: a small class of plants and herbs that help combat stress by restoring balance, increasing vitality and protecting against stressors.
  - Nervine Tonic/Trophorestorative: restore the proper function and structure of a tissue that has become damaged or debilitated due to chronic stress or illness. Ex: Cordyceps mushroom, Schizandra (Schisandra chinensis), Licorice (Glycyrrhiza glabra), Astragalus (Astragalus membranaceus), Codonopsis (Codonopsis tangshen), Reishi (Ganoderma lucidum)
  - Nervine Relaxant: our natural tranquilizers
     Ex: Lavendula off. (Lavender), Humulus lupulus (Hops), Melissa off. (Lemon Balm),
     Matricaria recutita (Chamomile), Stachys off. (Wood Betony), Scutellaria lateriflora
     (Skullcap), Passiflora incarnata (Passionflower), Tilia europaea (Linden), Lactuca
     virosa (Wild Lettuce), Piper methysticum (Kava Kava)
  - Nervine Stimulant: cause a direct stimulation of the nervous system, and not very often needed in our times of hyperactivity. Nervine stimulants support adaptogen, nervine, and other tonics function deeper and with harmony. *Ex:* Cola vera (Kola), Coffea arabica (Coffee), Camellia sinensis (Green/Black Tea)



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