The Brain, Nerves, and Vitamin D3

Vitamin D3, a healthy, varied diet and exercise are linked together in the formation of 'neurotrophic factors', which play a role in the formation of new nerves and the maintenance of neurons throughout the body.

That means that Vitamin D3 is essential to people in all walks of life, from the fetal stage and all the way to the grave- but especially in pregnant mothers, children, and teenagers/young adults who are studying.

Neurotrophic factors can also heal damaged nerves, and that means that brain injury and nervous system injury are something that you certainly can recover from, though it takes months and sometimes years for more severe injuries. NEW nerves form throughout life, from neural stemcells from spinal chord fluid.

Vitamin D3 is especially used in glial cells (6) to form nitric oxide synthase, one of the important hormones used in communication along nerves. Nitric oxide synthase is formed from L-arginine, and a major factor in sending signals between nerves, to the immune system, and to get blood vessels to dilate. It is an important part of the body's communication-wiring, and is aided best by b-complex vitamins (b12, b6, etc) and omega fatty acids from fish and olive oil that hasn’t been too broken down in cooking (cook with lower heat!).

Vitamin D3 is used by cells in the process of making glutathione, an enzyme that the body uses to protect itself from free radicals. Free radicals are chemical compounds that do not belong in the body, like certain metals such as mercury, lead, lithium, etc. Glutathione itself is the body's way of 'chelating', or purifying the blood and cells of contaminants. Even the breakdown of oxygen and food creates a slow wearing-down of cells. Basically the mitochondria of our cells break up the chemical form of what we take in for nutrition, and the leftover atoms in the blood can damage cells. That's what glutathione is there to remove, safely.

D3 causes neurons to create more 'tyrosin hydroxylase', which lowers the production of monoamines, the hormones that glial cells use to send signals to eachother. In a stressed brain there are too many monoamines formed, among them 'catecholamines', better known as 'fight or flight' hormones, which are adrenalin og noradrenalin. D3 can help sink high blood pressure if the person in question practices relaxation/meditation in the form of communication with the Holy Spirit, restful activities, eating a balanced, healthy diet, exercises gently throughout the day in short bursts, and comes out of the spirals of negative thought. Hope, faith and love are given by the Holy Spirit at work in the brain, and that’s where healing starts! God loves you, and wants to help you heal. <3