

UNDERSTANDING LONG COVID

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Long Covid Symptoms – Partial List

Headache, Neck Pain, Back pain

Dizziness

Fatigue

Cognitive disorders (“brain fog”)

Heart Palpitations

Difficult breathing

Loss of sense of smell

Loss of sense of taste

MANY OTHER SYMPTOMS with duration more than 90 days after acute phase

An Energy Crisis in Your Brain

Every cell in your body has numerous microscopic organs – *organelles*. Some of the most important organelles are the *mitochondria*. These are essential in the process of turning glucose and oxygen into energy – a process called *cellular respiration*. Recent research findings indicate that the COVID-19 virus disrupts these organelles of cellular respiration – a process called *mitochondrial hijacking*. Mitochondrial hijacking can cause an energy crisis in anywhere in your body, including your nerves and brain. This energy crisis can continue long after the acute COVID infection has passed. So, mitochondrial hijacking can cause or worsen many of the symptoms of long COVID such as brain fog, dizziness, fatigue, and loss of the sense of smell. **Stefano, 2021; Sun, 2022**

Responding to the Energy Crisis: Breathing Exercises

Breathing exercises are valuable under any circumstances. When there is an energy crisis in the brain, they make a great deal of sense.

Alternate nostril breathing is a yogic breathing exercise that has been shown to benefit brain function in a number of scientific studies. Exhale completely. Close your right nostril (by gently pressing the right side of your nose with a finger), and fully inhale through the left nostril. Close your left nostril, and fully exhale through the right. With your left nostril still closed, fully inhale through the right. Close your right nostril and fully exhale through the left. Continue in this fashion, changing nostrils on exhalation. Focus your awareness on breathing slowly and deeply in a rhythm that feels natural. This exercise has meditation-like benefits for the brain. Begin with 10 breaths, increasing repetitions according to comfort. Try for at least 3 minutes per day.

For additional exercises, please attend my community course, “Breathing Exercises for Optimal Brain Function”.

Stancak and Kuna, 1994; Telles et al, 2013; Garg et al, 2016; Telles et al, 2017

Responding to the Energy Crisis: B-Complex

Cellular respiration requires several of the B vitamins. Particularly important in cellular respiration are B1 (thiamine), B2 (riboflavin), B3 (niacin), and B5 (pantothenic acid). Previous research has indicated a probable role for the B vitamins in recovery from concussion. Like long COVID, concussion is another energy crisis in the brain.

Food sources of the B-complex include animal foods such as fish. Good plant sources include brown rice and other whole grains.

If you are on any medication, consult with your doctor or pharmacist before taking B-complex supplements.

Hoane et al, 2005; Goffus, et al, 2010

Responding to the Energy Crisis: Co-Q

The molecule co-Q (aka coenzyme Q-10, ubiquinone) is critical for cellular respiration. The mitochondrial hijacking caused by COVID-19 interrupts your cells' ability to manufacture this molecule. Therefore, it makes sense to increase co-Q in your diet. This is especially important if you are on statins, which also disrupt co-Q manufacture. Fish, nuts, seeds, broccoli, and avocados are good food sources of this nutrient.

If you are on medication, please consult with your doctor or pharmacist before taking co-Q in supplement form.

Gaby, 2010; Tan and Barry, 2017

Long Haul COVID-19 Brain Fog and Chiropractic: A case report.

Patient: 59-year-old photographer

Symptoms: Reading causes headaches
Difficulty in following recipes used for many years

Exam: Simple testing of short-term memory and attention caused frustration to the point of tears; vertebral and cranial dysfunctions noted.

Results: After 3 chiropractic adjustments over a period of 18 days, reading tolerance was improved to the point where she was able to read an entire book in two days without headaches or any other ill effects. Recipes were easier to follow. Testing of short-term memory and attention provoked no tears or any other sign of frustration. Home care included alternate nostril breathing.

(Masarsky & Todres-Masarsky, 2022)

Long Haul COVID-19 Olfactory (Sense of Smell) Disturbance and Chiropractic: Case Report

Patient: A 58-year-old real estate agent.

Symptoms: Fatigue
Dry Mouth
Brain Fog
Sense of Smell: Able to detect most aromas 1-2 sniffs, then aroma disappears. Notices a “house on fire” odor at random intervals.

Exam: Patient rates her sense of smell as “1” on a scale where “5” is normal and “0” is no sense of smell. Multiple vertebral and cranial dysfunctions noted.

Results: After 10 adjustments over a 6-week period, patient rated her sense of smell at 2-3, and was able to detect aromas for as many as 4 sniffs in a row. The “house on fire” odor had transformed into a “burnt popcorn” odor. Dry mouth and fatigue were now at pre-COVID levels.
(Masarsky and Todres-Masarsky, 2022)

Long Haul COVID-19 Shortness of Breath, Memory Loss and Throat Pain

This 79-year-old patient was seen approximately four months after hospital admission for COVID-19. Her long haul problems included shortness of breath, problems with memory, and a feeling similar to “razor blades” in her throat.

At her first visit, short term memory score was slightly below normal (reverse digit span 4). Breathing capacity was low (FVC = 1.7 liters).

Chiropractic adjustments and reflex work for the throat muscles was combined with tongue-throat exercises to be done at home. After six visits over a period of four weeks, the patient reported improvement in her memory, breathing, and throat. Breathing capacity was improved (FVC = 2.3 liters). Short term memory score was within normal limits (reverse digit span = 5).

Masarsky & Todres-Masarsky, 2023

HELP US LEARN MORE

For those of us in complementary and alternative health care professions such as chiropractic, carefully described case reports are the vital first step in learning how we can help long haulers. I have stated the importance of this in a 2021 publication. If you know anyone with long haul COVID-19, please invite them to get in touch with us regarding our research program:

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