

The VCS (Visual Contrast Sensitivity) test is a vision screening test that can be used to identify the potential presence of neurotoxins in the body. These neurotoxins negatively impact the body's neurological functioning and often lead to long-term, biotoxin-induced illnesses.

<u>It is an indicator of neurologic function in the visual system</u>. It does not test a person's ability to see clearly such as the Snellen eye chart but rather tests the brains ability to differentiate between the



lighter colors and darker colors. Those with biotoxin illness are generally unable to discern the lines as well as someone without a biotoxin illness. Approximately 92% of people with a biotoxin illness will fail the test.

The test has been advocated by Dr. Ritchie C. Shoemaker, MD in conjunction with the work of H. Kenneth Hudnell, Ph.D. as a screening test which may help determine whether or not one's chronic health problems are caused by biotoxins. The test itself has been around for

many years and was used by optometrists in the past for other purposes.

Biotoxins are created from numerous sources. These may include dinoflagellates, cyanobacteria, mold and fungi (Aspergillus, Penicillium, Stachybotrys, and others), ciguatera toxins from seafood, Borrelia burgdorferi (the causative agent implicated in Lyme disease), Babesia microti (a common Lyme coinfection) and others. Once these organisms enter the body, they produce biotoxins which can be a significant factor in the symptoms often seen in chronic illnesses.

The VCS test is a series of 90 patterns, 45 viewed by each eye, which will either have an up/down, tilted right, or tilted left series of lines represented at varying levels of contrast. When each image is displayed, the user then provides their perception of the direction of the pattern. People that have biotoxic-illnesses will often show a deficit on this test in that they will not see certain patterns that one without a biotoxic-illness would be able to recognize correctly.

A positive VCS test, combined with an exposure to biotoxins or biotoxin-producing organisms and a symptom picture involving multiple body systems, may provide the necessary information to lead one to a diagnosis. Though the test does not diagnose any specific illness, it is a useful screening tool that may show the potential exposure to neurotoxins. The results may be a signal to discuss further diagnostic options with your practitioner. If the VCS test reveals a deficit, a specific protocol, which may be of value to those with neurotoxin-mediated illnesses, may be appropriate.