

**What is in red below needs to be corrected on the web site b/c IGenex updated its tests.**

As of November 2015 we have determined that Deanna's ALS is caused by a bacterial infection, Borrelia, and at times co-infections. We believe that cases of ALS in others are also caused by these same types of bacterial infections and many of those diagnosed with ALS have told us they are testing positive for Borrelia. Our explanation of Borrelia's relationship to ALS is stated under latest developments Bacteria and Neurodegenerative diseases. **Now, there are several levels of treatment for ALS and other neurodegenerative diseases.**

**PLEASE NOTE that not all supplements are alike.** High quality supplements produce better results than low quality supplements for a variety of reasons. It's important to ensure that you purchase high quality supplements. **Some of the people taking the below supplements have purchased from the following companies:** Thorne, Life Extension and NOW. Your local wellness clinic should be able to provide you information on which brands are best.

**1. The Deanna protocol [DP]** start immediately while waiting results of # 2, below.

**The core DP:** is AAKG and GABA.

**AAKG:** is alpha Ketoglutaric acid to which arginine is added. Arginine is a base that neutralizes the acidity of AKG. Arginine causes vasodilation, hence lowers blood pressure it also lowers blood sugar. Since it causes vasodilation, it may have adverse effects on people with cardiac insufficiency. AAKG suppresses muscle symptoms, twitching and fasciculations. The dose varies from individual to individual and based on activity level. Start at a low level and increase quantity gradually until muscle symptoms are suppressed making you more comfortable.

**GABA:** is gamma amino butyric acid. It is the primary neuro inhibitory transmitter. It's lack causes muscle spasms and clonus. The amount one should take is determined by how much GABA one needs to take to make the clonus and spasms subside. Both AAKG and GABA can be found online I have no special information as which one is the best, other than to tell you to purchase high quality supplements.

Simplexa provides the core DP Plan in powder form and offers other versions of the DP Plan, with added substances that can be beneficial to the nervous system and the cells. The core DP Plan alone is sufficient to slow and/or stop the progression of the disease though.

Our research on ALS mice has determined that the DP Plan adds energy to cells in need, keeping them alive. We have also reported on 40 ALS patients whose ALSFRS-R scores of disease progression were below the level of those not taking the DP.

Since 2009 thousands of ALS patients and patients with other neurodegenerative diseases have reported suppressed symptoms on the DP.

Previously, we included other substances with the DP but subsequent research has not found these to be necessary. However, these substances can be helpful because they support the nervous system and the cells.

**2. The provocative antibiotics test** as delineated under our latest developments section of our site. The test should be done at IGenex and the test is called "**Borrelia LTP3 Co-infections CP3**"

**3. The pulsed antibiotic treatment plan**: Once the specific bacteria have been determined, then use this plan with antibiotics specific for the bacteria. This is also delineated under latest developments.

At times, there are patients that do not respond to the antibiotic treatment b/c other pathogens are present. The Cowden support Program [**CSP**] has been beneficial in these cases.