

## **Autism**

The European Laboratory of Nutrients and Vitamin Diagnostics study and treat autism spectrum disorders in cooperation with the Autism Research & Treatment Center. The center follows the diagnostic guidelines proposed by the DAN. Below you will find the approach in diagnosing impairments in autistic children which is followed by our medical staff

### ARTC Approach:

The Autism Research & Treatment Center was founded to help patients with Autism to reach a better state of health and to accelerate development. To do this we analyse the body status of essential nutrients and try to make it more optimal by changing dietary habits and/or by using supplements. Also we try to analyse toxic influences (substances/harmful micro organism) and if present we try to reduce them. ADHD is common in Autism. It was found that the same tests and approach is useful in ADHD.

This approach by itself is already valuable in most patients. In combination with other methods (education etc) the effect is probably better than the separate effects. Of course the method is not effective in every person. In order to improve the percentage of success we follow the newest scientific developments worldwide by reading scientific articles, participating in scientific meetings and by doing practical research ourselves.

For patients it is possible to follow the following programs:

- The intensive program, including the optimal laboratory testing panel which also contains blood withdrawal. On the base of this program we are able to perform research.
- If blood withdrawal is a problem there is a less optimal program to bypass taking blood.
- Additionally it is possible to perform a partial program with limited laboratory testing: economic panel, screening test or separate tests.

We do not advice to use dietary changes and supplements without proper testing, but we are aware of the fact that under certain conditions dietary changes and supplements are helpful.

Our approach is to analyse the specific situation in every patient and to measure the effect of the specific treatment. This is the best approach to each specific patient. It avoids usage of less effective measures and gives direction to necessary measures including their specific needed quantity.

### The optimal program consists of the following tests (prices can be found below):

#### Blood:

- Vitamins (19), (trace)-elements, (essential) fatty acids: These are all essential nutrients needed for many important physiological functions such as energy production, detoxification and immune system function. Some are important in the inflammation process.
- MDA: Indicator of free radical pathology.
- Glutathion: important antioxidant which works together with other antioxidants (some vitamins/trace-elements) to counteract free radicals which occur during inflammation.
- Sulphate (total/free): Has important controlling/protection/detoxification function.
- Neurotransmitters: control brain function.
- Ferritine: Determines iron storage.
- EGOT: Function• test of vitamin B6.
- Uric acid: Abnormal levels may be present in special subgroups.
- Food allergy IgG4/IgE panel: Determines acute/delayed allergy to 96 foods.

#### Urine:

- Amino acids: determines essential/protein/metabolic amino acids, gives information on the gut flora, function of several vitamins (such as B6)/minerals (such as magnesium) and protein digestion (peptides: anserine/carnosine).

- Organic acids: determines toxic metabolites of yeast/bacteria, metabolites of amino/ fatty acids and gives information on energy production and function of some vitamins/minerals.
- Peptides: detects improper digestion of protein, increased absorption/degradation of peptides from milk products (casomorphin) and wheat (gliadomorphin).
- Kryptopyrrol: determines dysfunction of vitamin B6/ zinc.
- Indican: indicates abnormal gut flora.
- Sulphur metabolites: determines sulphate wasting and presence of (toxic) metabolites: sulphites, thiosulphate and isothiocyanate.
- D-glucaric acid: determines toxic load.
- Uric acid: abnormal levels may be present in special subgroups.

Stool: yeasts/aerobic/anaerobic flora including sensitivity testing, digestion, immunoglobulins, and blood.

Hair: (trace) elements, toxic metals

Other tests can be added if indicated: for a complete list call.

The procedure for patients is as follows:

- Phone and ask for ARTC to make an appointment for a (telephone) consultation.
- Call us at the time of appointment (or come to our office if agreed upon) to discuss the history and the tests to be performed.
- The samples to perform the tests including instructions are sent to you (at our office the blood withdrawal is mostly performed directly afterwards).
- Send materials to the laboratory.
- After receiving the tests are performed. We will send you the results when they are ready, including an interpretation report.
- After receiving the reports you make a second appointment to discuss the results and suggested therapy to determine the follow up therapy.
- Perform therapy and register changes in condition (fill in registration form). Consider contact if anything is not moving properly.
- Make a new appointment 4-6 month later for general check up, including repeating the abnormal tests.