High Streptococcus/Lactobacillus Ratio Revealed in Autistic Adult

Aurélie Razafindralambo and Hary Razafindralambo*

University of Liege, Gembloux Agro-Bio Tech, TERRA Teaching and Research Centre
Avenue de la Faculté 2B, BAT 140, B-5030 Gembloux BELGIUM

* Corresponding Author
Phone: +32 81 62 21 48
Email: h.razafindralambo@uliege.be

1 Present Address: Institute of Neuroscience, UCLouvain, Avenue E. Mounier 73, B-1200 Brussels, Belgium

Autism is today considered as an epidemic disease, owing to the great increase of the number of children diagnosed for this neurodevelopment disorder, 1/150 now against 1/10000 years ago. Individuals suffering from Autism-Spectrum Disorders (ASDs) are generally characterized by impairment in communication skills, and stereotypical behavior troubles. Incomplete digestion of gluten and casein, leaky gut syndrome and low gastric acid secretion are among autism specific causes. The use of probiotics has been suggested for possible treatment of ASDs because of the existing relationship between gut and mental health [1]. In a recent report case, we have shown the positive effect of the nutritherapy approach for solving digestive troubles in an autistic individual with intolerance to gluten [2], and without pathogenic mutation on main autistic genes (CNTNAP2 and NRXN1). In order to get insight into the gut composition - autism relationship in probiotics for the same person, his microbiota has been analyzed and compared to those of 3 non-autistic members of his nuclear family by using the latest 16S rRNA technology (microzoo analysis, The Netherlands). It has been revealed that the Streptococcus-Lactobacillus ratio was particularly 50 to 1000 times higher in the autistic’s gut compared to individuals with normal communication skills.

References: