BECOMING FAMILIAR WITH ELABFTW

NEUROSCIENCE GROUP

The abstract reported below is taken by **"Salivary Transcriptome and Mitochondrial Analysis of Autism Spectrum Disorder Children Compared to Healthy Controls" (https://doi.org/10.3390/neurosci5030022)**

Imagine you participate to this experiment and you are using elabFTW as electronic notebook.

1. Define the main resources categories for this experiment and insert the corresponding entries;
2. Define an experiment category and an experiment template by using the resources you inserted.
3. first

Abstract

Autism rates have been reported to be increasing rapidly in industrialized societies. The pathology most often combines neurological symptoms associated with language and social impairments with gastrointestinal symptoms. This study aimed to measure differences in oral metatranscriptome and mitochondrial health between ASD children and neurotypical USA and Colombia ("Blue Zone") children. In addition, this study aimed to determine whether using prebiotics and probiotics would change the oral microbiome and mitochondrial health of ASD children. Buccal swabs and saliva samples were obtained from 30 autistic individuals (USA) at three intervals: prior to intervention, post-prebiotic, and post-probiotic. In addition, a subject component who were neurotypical, which included individuals from the USA (30) and Colombia (30), had buccal swabbing and salivary sampling performed for metatranscriptomic and mitochondrial comparison. Significant differences were observed in the temporal data, demonstrating shifts that interventions with probiotics and polyols may have precipitated. Particular bacterial strains were significantly more prevalent in the autism group, including a strain that reduced neurotransmitter levels via enzymatic degradation. This supports the hypothesis that the microbiome may influence the occurrence and degree of autism. Verbal skills increased in six of the 30 ASD subjects following xylitol and three more after probiotic supplementation, according to both parental reports and the subjects' healthcare providers.