



DEVELOPMENT OF METHODS FOR OBJECTIVE EEG ANALYSIS OF BRAIN ACTIVITY INDUCED BY SUGAR, SALT, FAT AND THEIR SUBSTITUTES

Are you familiar with the off-taste of light products? Taste is a mysterious area with important, yet unanswered questions such as: “Do we taste calories”?

The project goal is to create tasty light products to help limit the obesity epidemic. According to WHO more than a billion people are overweight which includes both adults and many children. The Food Industry’s response to the obesity epidemic was to produce a number of low fat and sugar food products. This enabled the consumer to eat the same food while consuming fewer calories. However, an investigation conducted by the Food Administration shows that people tend to consume extra-large servings of light products. Thus, light products might not be a treatment against obesity.

A solution to the obesity epidemic requires a more thorough understanding of the brain’s response to varying salt, sugar and fat levels. Brain recordings offer the ability to describe what we can register with our senses. In contrast, traditional food ingredient selection is only based on physical and sensory analysis methods. EEG records the summed activity of the neurons on the scalp and helps us understand the complex brain processes behind taste identification.

The idea behind the project is to utilize EEG methods to optimize salt, sugar and fat substit-

uents to assimilate the non-light counterpart. The ultimate goal is to create light-products which produce a similar physiological affect as their non-light counterparts. We want to cheat the brain.

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