

There are lots of challenges and opportunities for marketing services in hospitality industry, as their activity in most cases is built on intangible things, but they are very significant and valuable for companies and their clients.

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PHENYLTHIOCARBAMIDE SENSITIVITY AS A COST-EFFECTIVE GENETIC TEST FOR STATE OF HEALTH ASSESSMENT

A taste sensitivity to phenylthiocarbamide is one of the classical human genetic markers. Phenylthiocarbamide (PTC) is felt bitter in some individuals (tasters) and tasteless in others (non-tasters). The ability to sense this substance is highly correlated with the ability to sense other bitter compounds of natural origin, many of which are toxic and some are very useful. Most studies indicated monogenic nature of sensitivity to PTC, and this was proved by molecular genetics.

PTC is of great interest from the medical point of view, since a number of associations of taster status with human diseases is determined. In this connection, sensitivity to PTC defined in the young age may be a predictor of a number of pathological conditions, including genetically determined (multifactorial), which development in individuals in the risk group can be prevented by optimally selected environmental factors. Cheapness and availability of this type of testing appear attractive in the way of diagnostic. The following examples illustrate the diversity of associations of sensitivity to PTC. In particular, early studies ascertained the inhibitory activity of PTC regarding tyrosinase. In particular, among non-tasters there were more individuals with pathology of the thyroid gland as compared with tasters. In one of the studies it was shown that the frequency of PTC non-tasters among individuals with idiopathic and symptomatic epilepsy was higher than in the control. In another study non-tasters were more frequently found among patients with schizophrenia, although according to other authors, this relationship was not confirmed. A higher threshold of sensitivity as to PTC and to sucrose of schoolchildren was associated with a higher risk of dental caries. Among adults non-tasters there was indicated an increased inclination to obesity. Among children with obesity there were 72% of non-tasters, while among children with normal weight – only 28%. At the same time non-tasters as compared with tasters were less susceptible to malaria and they had less high level of anxiety. The connection between sensitivity to PTC and rheumatoid arthritis was studied, but was not proved.

Our research has shown that among Ukrainians about 22% individuals can not feel bitter taste of PTC. Early determination of PTC sensitivity status can be useful and cheap tools in the prognosis of different health conditions in humans, in the case of its associations in specific populations, including the population of Ukraine.