

## TECHNOLOGICAL OPPORTUNITIES OF FOOD PRODUCTS AND FOODS, LEADING TO INCREASE HAPPINESS AND INCREASE COMPETITIVENESS IN NICH TOURISM

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### INTRODUCTION

Development of new technologies and development of technological capabilities of meals and food provides new opportunities to improve metabolism in the human body. In parallel, the process will restore the overall metabolism and result to applying healthy life style and smart economy (Petrova, 2013; Dimitrova, 2018; Yosifov, 2018). The technological capabilities of food combined with a recreational motor activities build the personal Wellness culture (Dimitrova, 2017; Chipeva, 2019; Yosifov, 2019; Dimitrova, 2019; Donev et al., 2019). The aim is to activate the enzymes and hormones of joy and happiness in the endocrine glands and to lead to the prevention and improvement of physiological processes in the body (Dimitrova, 2020). These possibilities of the active substances in the products have characteristic irreplaceable indicators which at certain technological levels and concentrations can support the metabolic functions and activate the centres of the organism (Trendafilov et al., 2013). The complexity of the processes and decomposition of nutrients is a complex process for any organism and the effect consists in the combination and concentration of active substances in foods that can activate the hormone of happiness to meet expectations and deliver joy to perceptions (Dimitrova, 2019a). This perfect process would be of interest to tourists and niche tourism only if the technological capabilities of food products and their active substances are mastered. Health, according to the World Health Organisation (2006), is the basis of health prevention, which leads to a "state of complete physical, mental and social well-being", namely niche tourism seeks not only prevention of human health but also its transformation in part of the health product in tourism leading to competitive ability. Widely, health tourism or health tourism is defined by the UN World Tourism Organisation (UNWTO) as a visit to resort destinations in order to improve the physical well-being of the tourist (Dimitrova, et al. 2021). These creative possibilities of natural resources, mineral resources and climate in combination with the technological activities of nutrients in products and the concentration of their enzymes would improve the health of the tourist and would provide recreational satisfaction from the niche tourist product.

### METHODOLOGY

Even before 2500 the Greek physician and philosopher Hippocrates shared that "what we eat determines our mind." Getting happiness in tourism is always at a high price and is accompanied by a high degree of service culture, which leads to increased competitiveness and hence the price of the product (Ribov, 1997). Improving the technological processes, their innovation is related to the preservation of the active substances in the product at such a concentration that they are easily absorbed by the digestive tract and do not lead to side effects. Under the influence of active substances from food in the endocrine glands hormones "endorphins-synthesised in the pituitary gland" are synthesised which stimulate the vital forces of the body and metabolism and they are the reason for the accumulation of happiness. Endorphins are the cause of protection under stress for lack of appetite to stimulate the elimination of heavy radicals and for high spirits. The balance between positive and negative emotions is also due to dopamine and norepinephrine. They lead to the secret of strengthening the body's defence and stimulating health. Here is the serotonin "happiness hormone" which plays a major role in metabolism and regulation of negative emotions and mental state of the body. It is synthesised by consuming a number of herbs and

mushrooms, vegetables, fruits and cereals. This monoamine neurotransmitter is located in the central nervous system and transmits impulses from cell to cell through membrane receptors, forming an energy charge that is transmitted to the receptors on the cell membrane where the charge is amplified. Synthesis of serotonin is due to light, metabolic processes and the enzyme monoamine oxidase, which leads to anti-depressive mood regulating the activity of the digestive tract, blood clotting, brain cell activity. Concentrated products such as chocolate enhance serotonin in metabolic processes, mainly through L-tryptophan "an essential amino acid found in protein foods" and regulate its smooth breakdown from sugars to fats. The technological capabilities of the various products lie in the concentration of essential amino acids and their accumulation in the body. The concentration of the essential amino acid tryptophan in different foods is different (see Table 1).

**Table 1.** Tryptophan content in food products in milligrams (mg) per grams (100g) of product, source: <https://bg.wikipedia.org>

№	Food product	Tryptophan mg/100g
1.	Soy	600
2.	Walnuts	420
3.	Sesame	370
4.	Almonds	630
5.	Mushrooms	130
6.	Black caviar, mollusks	960
7.	Banana	45
8.	Tomatoes	33
9.	Eggs	200
10.	Fruit	27

The concentration or accumulation of high levels of serotonin can also lead to side effects and lethargy, so its regulation is essential. It can be achieved by consuming healthy foods and dishes technologically prepared on the basis of compliance with the correct methods by not evaporating moisture from the products and preserving the active substances in them. The question arises as to how sugars will be broken down in the human body, how they will be taken from what foods, what is the immunological concentration and how many free radicals are available. Numerous studies are done on the basis of certain methodologies and comparable results prove that who consumes chocolate or sweet products and foods has a constant appetite. However, this is not the case with honey, it excites other metabolic groups where the sugars of honey, especially fruit sugar, have a different effect on the cells, breaking down more evenly and not causing hunger but satisfaction. Honey dramatically raises blood sugar levels, keeps it for a long time and has the ability to gradually reduce its concentration. This leads to satiety due to low levels of insulin in the blood. From this it is concluded that the correct dosage of the concentration of sugars and trace elements is the basis of a proper diet and achieving satisfaction. The opposite feeling is hypoglycemia lowering blood sugar levels and starvation dissatisfaction. Foods rich in sugars quickly saturate the body but also quickly starve, this is also the case with the rapid synthesis of insulin in the pancreas, the presence of exhaustion and the onset of various levels of diabetes. Lowering blood sugar levels and insulin synthesis are indicators of regulating metabolism. The possibilities of the active substances in various foods and herbs are indisputable. Such is the strong essential plant fennel - wild fennel (*Foeniculum vulgare*) and its active ingredients in the essential oil of fennel as anethole oil with aniseed taste. These essential oils lower blood sugar levels and flush out free radicals.

In Mediterranean cuisine and in different recipes where with a combination of different products such as yogurt and garlic as in tarator the effect is striking, we must note that yogurt must be fermented in the Republic of Bulgaria with natural bacteria *Lactobacillus bulgaricus* "lactobacillus bulgaricus". Everything else is a matter of recipe, concentration and "mastery" skills, which can neither be preserved nor transmitted, but a matter of feeling and love. The technological characteristics of both the food products and the culinary dishes of the Bulgarian national cuisine and its Balkan taste rise to the panagia "silent water", as the basis is compliance with recipes and proper production of various breads and dishes. So in order to have good levels of serotonin that we need for the brain and to be able to work, it is necessary

for it to enter the nervous tissues through the barrier blood-brain barrier of the brain. This entry is made only by glucose, and the brain itself must obtain the necessary amounts of tryptophan, phenylalanine, leucine, isoleucine, valine, but in the presence of more fruit carbohydrates. Or performance and satisfaction is not based on most carbohydrates but on most serotonin in the brain. Where the human body receives best through honey and the glucose synthesised by it may be the basis for the entry of serotonin into the human brain.

## RESULTS

The technological ability of food to affect hormones is the basis for ensuring happiness. Through active substances and biotechnological processes, nutrition has reached dogmatism and its violation leads to confusion and imbalance. There is no way to achieve satisfaction if we do not want it ourselves and receiving and achieving happiness through others would lead us astray. It is wrong to eat meat - foods rich in saturated fats as much as we like them because it produces high insulin resistance and hence fat deposits. This is not the case with fish - foods rich in monounsaturated fatty acids have low insulin levels. Achieving high levels of mental satisfaction is based on low insulin levels, while achieving levels of physical satisfaction is based on high insulin levels. So achieving happiness is part of exercise and sun with good hormonal results and rich in monosaccharide foods (Paans et al., 2018). We are not talking about foods that are rich in carbohydrates, they are dangerous to health and lead to heart disorders and increased insulin levels.

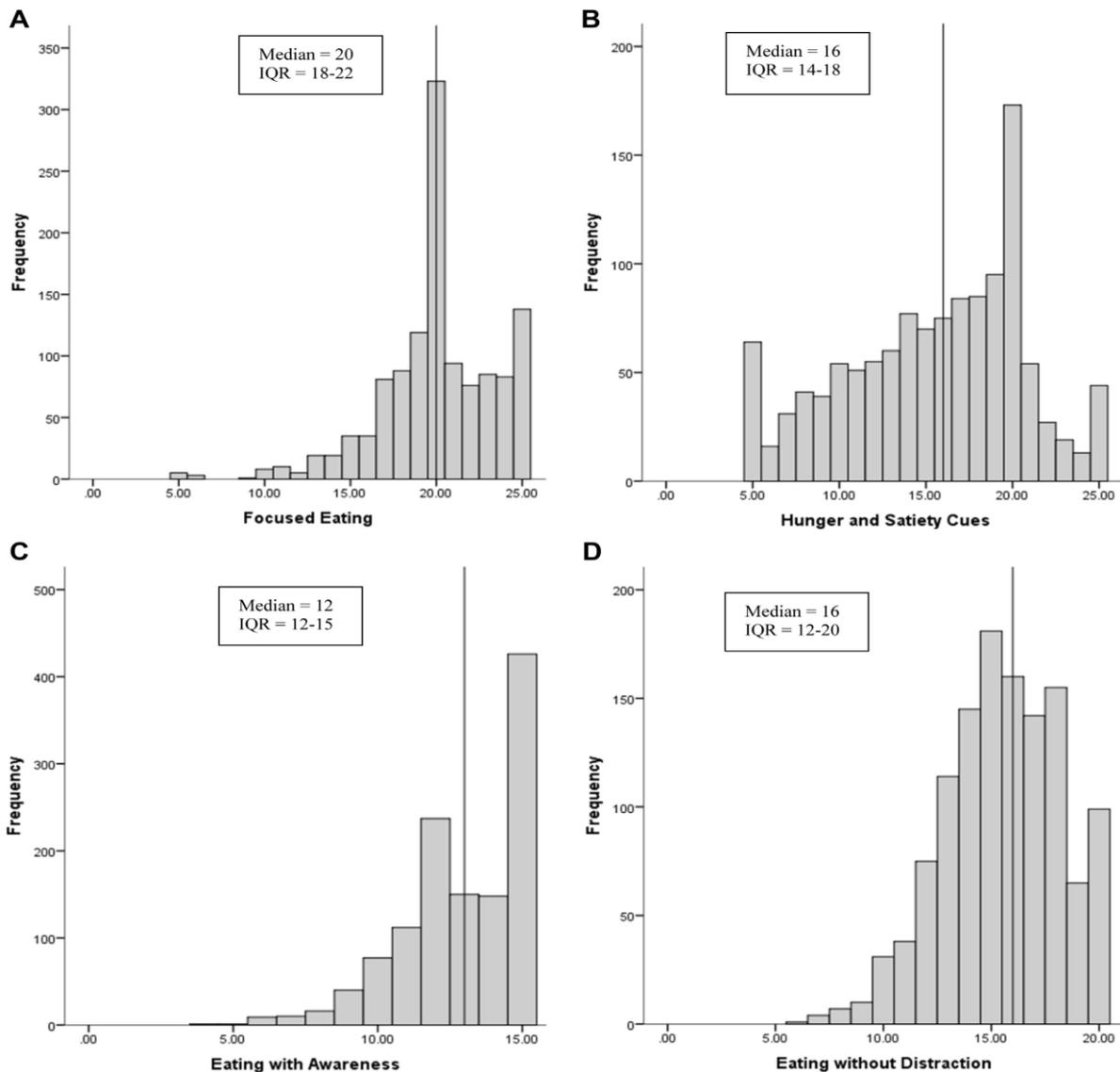
When achieving spiritual satisfaction, harmful foods are overcome through volitional processes and abstinence from overeating. Happiness is not always good and turning it into overeating and overeating can have negative consequences. Stress and emotional state are also the basis of lowering blood sugar, which changes the hormonal balance and a person experiences hunger. Satisfaction with the product of niche tourism is not an easy task and achieving happiness is a combination of mind, body and spirit that are bound by faith, hope and love. It has long been proven that the human body needs up to 3.5 mg / kg per day. of the essential amino acid tryptophan or for 85 kilograms of body weight about 300 milligrams per day. The experimental results should be aimed at improving the technological regime for the production of dishes as well as the use of such food products with the required concentration of active substances. Niche tourism is also interested in the prevention of the environment that is able to provide the necessary comfort and hygiene in food consumption (Ribov, 2007). This would stimulate the depressed state of the person, would overcome the stress and would direct him to prevention and health therapy. Increased overweight and improper diet with poor quality dishes and non-compliance with technological recipes and non-preservation of active substances in mechanical and heat treatment are the basis of the impossibility to improve niche tourism products. The tourist behavior, the psyche, the health attitude for proper nutrition, the culture of eating - eating habits and the culture of service are also important here. The basis for increasing demand and increasing quality and competitiveness is the preventive intervention and improvement of nutrition by observing the technical characteristics of food products and the use of such innovative equipment and technological units that are first low energy and secondly in technological processing to retain the active substances. These indicators are necessary and sufficient to overcome stereotypes and create an opportunity to innovate the niche tourism product and achieve higher competitiveness of supply.

This is also the way and the practical tools for overcoming obesity and mental disorders and creating a new policy in niche tourism that is at the level of the citizens of the European Union (EU).

The main question is how the active substances from foods such as magnesium, calcium and iron will be absorbed from the blood, how much active fiber is supplied when consumed and what concentration of tryptophan is in the protein to ensure a healthy diet striving for happiness and competitiveness. With high tryptophan activity are almonds with 600mg / 100g product almost double the amount of active substance, as well as vitamin E which help protect the heart muscle by reducing blood clotting and lowering bad cholesterol (LDL).

Technological recipes that include this product would not only improve the quality of dishes but would also increase their demand. In the scale of careful nutrition, studies show different indicators, with the

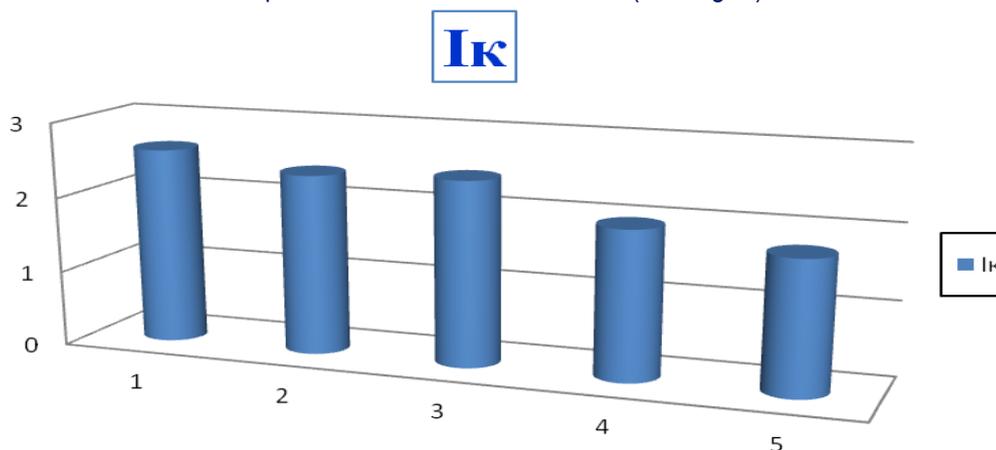
scale of nutrition without distraction (D), with a comparative index = 0.97. (Laura Winkens et al., 2018) (see Fig. 1):



**Figure 1.** The scale of careful feeding in 1227 adult Dutch aged 55 and over. (A) Focused nutrition. (B) Hunger and satiety. (C) Nutrition with awareness. (D) Feeding without distraction. Source: <https://www.researchgate.net/publication/324465032>

Innovations need considerable effort. At the heart of any innovation is the idea of change, and both environment and conditions are needed for its successful implementation. In order to establish ourselves in niche tourism with our national cuisine in the world cuisine, the criteria of health and appropriateness must be maintained and the emphasis must be on the natural way of processing food and preparing meals. When offering culinary products, their health and healing properties should be evident, as well as the desire to prevent the formation of carcinogenic cells and reduce cholesterol (Polimenov, 2014). The tastes of the dishes must correspond to a certain state of mind and temperament of the consumer. Therefore, sensory perception in supply is essential and the richness of language, its colour and sensory perception in supply must be used. Words must create, describe the superb component of the perfect dish that has an appealing focus and harmony of flavours. Meals should be inimitable and served with finesse (Dumoulin, & Flipo, 2011).

This is the path that should lead us to a more popular tourist destination for niche tourism. It is the right approach in offering the experience in the technologies of food production, monitoring of tourist behaviour and its perceptions as well as the preventive health psychology of the tourist or health prevention that would put us on a new competitive level (Winkens et al., 2019). The deeper one goes into the structure of the niche tourism product, the answer to the main question is sought, namely, how foods affect the hormonal metabolism in the brain and the active substances with their characteristics are a factor coordinating lifestyle. In questionnaires for quality control of culinary products in the production unit hot kitchen, such innovative technological operations are implemented and applied in the production, which facilitate the key technological processes and reduce costs. The "fifth level" restaurant lacks a strategy and production program on which to rely to reduce costs and increase quality. Therefore, the coefficient of competitiveness is the lowest /  $I_k$  / (see Fig. 2)



**Figure 2.** Coefficient of competitiveness /  $I_k$  / based on quality and price of the restaurant product in "Innovations in Restaurant management."

The level of competence would improve the quality of the products, which is essential for a healthy and rational diet. Implementation in the production of innovative technological equipment in technological processes leads to improved quality and preservation of nutrients and aromatic substances of products in culinary products, in such treatments of the digestive system are delivered valuable nutrients in active form. This innovative culinary model, offered in the traditional Bulgarian recipes for the processing of semi-finished products with machines and technologies in technological and thermal processing, as in depth and surface everything is achieved at a strictly defined temperature for a certain time and pressure. Each recipe must ensure the freshness of nutrients and their caloric content. Dishes in culinary processing must have a specific color, aroma, juiciness and pleasant taste, in direct exposure to the olfactory and gustatory reception to excite the appetite and be accessible. The combination of the flavours of semi-finished products in pickling and technological processing with herbs and antioxidants such as resveratrol (found in red grape skins, in some herbs, blueberries and seeds) leads to the production of modern national culinary assortments with good organoleptic qualities (taste, aroma and others.). Dishes in culinary processing must have a specific colour, aroma, juiciness and pleasant taste, in direct exposure to the olfactory and gustatory reception to excite the appetite and be accessible. The specific tastes of the Bulgarian national dishes lead to the activation of enzymes, secretion of digestive juices and attraction of consumers.

## DISCUSSION

The technological characteristics of food and food products are the future determining the good healthy nutrition and the psychophysical emotional state of the tourists. Niche tourism products are able to fully meet the expectations of tourists to meet their perceptions and create satisfaction from wherever they are sought. The path to overcoming obesity (Gibson et al., 2016) and focusing on healthy prepared foods goes through the introduction of innovative food preparation facilities in niche tourism products. Overcoming inertia is essential and is a leading catalyst in servicing the new Wellness tourist (Polimenov, 2018). The achievements will be constructive and will be focused on new technologies that preserve the

technological characteristics and qualities of food products. These considerations prove that the basis of a healthy diet is the desire to overcome obesity, which leads to the supply of more nutritious food in niche tourism.

## CONCLUSIONS

Supply of quality niche tourism products is the basis for increasing demand and increasing competitiveness. The main role is played by the technological characteristics of food and food products and the preservation of the active substances in active concentration. This is the basis of the proper metabolism of nutrients in the human body, the elimination of free radicals and the reduction of insulin levels. This is not an easy task for niche tourism products.

However, the following conclusions can be drawn from the analysis:

1. The new realities provide an opportunity to offer niche tourism products fully compliant with modern science and technology;
2. We can have competitive niche tourist products only in compliance with the standards of cost optimisation through the introduction of innovations (Ribov, 2003);
3. Implementation of experimental studies in practice will prove the causal link and will lead to the improvement of the working tools and its environmental friendliness.

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