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## **Foods and supplements – is the focus on prevention or treatment?**

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We all know the famous quote by Hippocrates “Let food be thy medicine, and medicine be thy food”, but the way we perceive our food has changed drastically in the meantime. Under the influence of globalisation and technological advancement, many aspects of our lives have changed immensely, and when it comes to our diet, these changes were not all good. We start to think of the health component food has only when our health is at risk. Yet, studies have shown that around 90 % of people advised to change their lifestyle after a serious medical event such as a heart attack fail to do so. Chronic diseases are and will continue to be the major burden to our society and they ask for a life-long commitment to our diet. We need actions that are more explicit, because basic recommendations for a healthy diet and a lifestyle are simply not enough. The number of new products, especially in the segment of functional foods and dietary supplements, accompanied with new technologies might be the solution we need.

**KEY WORDS:** *functional foods; supplements; prevention; treatment; new technologies*



## The occurrence and movement of salmonellosis in the city of Zagreb during the period from 2007 to 2017

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The aim of this study was to estimate the number of salmonellosis in the city of Zagreb during 2007-2017, according to official reports of communicable diseases, as well as seasonality, risk groups, the length of carrier state, and the most common sources of infection. According to the official reports of communicable diseases that need to be reported pursuant to the Protection of Population from Infectious Diseases Act and epidemiological questionnaires, a retrospective study was conducted. In the observed period, the total number of sick persons from salmonellosis was 4,733. The most severe clinical manifestations (including death) of the illness have not been recorded. The greatest peak of salmonellosis with 996 official reports was registered in 2008, and the smallest in 2017 with 143 reports. *Salmonella enteritidis* was the most frequent isolate. The most representative were age groups 20-39 years, followed by senior age groups from 60 years and above. Mostly there were single, sporadic cases, while family outbreaks were registered in a smaller number of cases. The vehicles of infection were sweets, chicken, egg meals, barbecue meat, and dairy products. Salmonellosis represent the leading cause of alimentary toxic infections in the city of Zagreb. Despite the significant decline in salmonellosis in the observed period, further specific measures need to be implemented for suppressing salmonellosis. There is need for greater education of employees who work with food (preparation, production, and distribution) through a course of hygienic minimum.

KEY WORDS: *alimentary toxic infections; education; Salmonella enteritidis; seasonality; vehicle*

## Contamination of leafy vegetables with protozoan cysts from local markets in the Osijek area during two seasons

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While the consumption of nutrient-dense fresh, raw vegetables is one of the basic principles of a balanced diet, if contaminated whilst growing in fields, during harvesting, or handling, processing and distribution, raw vegetables may be the source of a food-borne disease. We conducted a screening of pathogens in raw, green-leafy vegetables, primarily consumed as salads, from two local markets located in the city of Osijek, Croatia. Samples of lettuce, cabbage, and kale were collected each month from both markets during March and June in 2017 and 2018. A total of 32 samples were analysed using the procedure described by Said (2012). Four samples were positive to protozoa cysts. Contamination was higher in 2017 (37.5 %) than in 2018 (4.2 %), which can be attributed to a large difference in climate (rain seasons). Lettuce samples were contaminated at a much higher rate (23.1 %) in comparison to kale (11.9 %) or cabbage samples with no parasite elements found. Seasonal variations in contaminations showed that the month of May was the most critical; half of all contaminations were detected during May. The results show that fresh vegetables from local markets need to be monitored closely for parasites to avoid food-borne diseases. Seasonal variations and climate should be considered when planning inspections.

KEY WORDS: *cabbage; food-borne diseases; kale; lettuce; parasite; source of contamination*

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