

VALORIZACIJA OTPADA OD HRANE U SVRHU SMANJENJA UTICAJA NA ŽIVOTNU SREDINU I ZDRAVLJE LJUDI

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Sažetak: Dio hrane se gubi duž lanca snabdijevanja, odnosno hrana se rasipa. Nadležne institucije procjenjuju da se više od jedne trećine od ukupne količine proizvedenih poljoprivredno-prehrambenih proizvoda u svijetu ne iskoristi u ishrani ljudi, već se oni rasipaju ili završavaju kao otpad. Uzimajući u obzir sve veći broj neuhranjenih ljudi u svijetu i iscrpljivanje prirodnih resursa, sistemi upravljanja otpadom od hrane uvršteni su među ciljeve usvojene u Agendi 2030. Prema usvojenim planovima, gubici hrane treba da se smanje za 50% do 2030. godine. Cilj ovog rada jeste da se pažnja svih zainteresovanih strana usmjeri na potrebu smanjenja gubitaka hrane i mogućnosti korištenja otpada od hrane kao sirovine za proizvodnju energije i finih hemikalija, te da se ukaže na mjere za ublažavanje nepovoljnih ekoloških i socijalno-ekonomskih posljedica uzrokovanih rješavanjem pitanja otpada hrane. Tokom pisanja ovog preglednog rada autori su analizirali veliki broj naučnih publikacija u međunarodnim i domaćim časopisima i izvještaje relevantnih domaćih i međunarodnih institucija. U radu je dato više prijedloga za upravljanje otpadom i rješenja kroz izradu novih proizvoda koji imaju dodatnu vrijednost. U zaključku rada navodi se da valorizacija otpada, uključujući sporedne proizvode iz lanca snabdijevanja hranom, predstavlja koncept održivog razvoja kojeg se svi učesnici u lancu snabdijevanja hranom trebaju pridržavati. Sporedni proizvodi nastali u prehrambenom sektoru mogu se iskoristiti kao sirovina za izradu novih prehrambenih proizvoda za ishranu ljudi i u proizvodnji stočne hrane. Ovi proizvodi su biomasa pogodna za izradu biodizela, biogasa i drugih energenata, te velikog broja finih hemikalija koje imaju primjenu u prehrambenoj, farmaceutskoj, kozmetičarskoj, hemijskoj i drugim granama industrije.

Ključne riječi: gubici hrane, otpad od hrane, ekološki i zdravstveni uticaji, valorizacija otpada

RECOVERY OF FOOD WASTE FOR THE PURPOSE OF REDUCING THE IMPACT ON THE ENVIRONMENT AND HUMAN HEALTH

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Abstract: Part of the food is lost along the supply chain, respectively food is wasted. Competent institutions estimate that more than one-third of the total amount of produced agricultural and food products in the world is not used in human nutrition, but is wasted or ends up as waste. Taking into account the growing number of malnourished people in the world and the depletion of natural resources, food waste management systems are included among the goals adopted in Agenda 2030. According to the adopted plans, food losses should be reduced by 50% until 2030. The aim of this work is to focus the attention of all interested parties on the need to reduce food losses and the possibility of using food waste as a raw material for the production of energy and fine chemicals, and to point out measures to mitigate the adverse environmental and social-economic consequences caused by solving the waste of food issue. During the writing of this review, the authors analyzed a large number of scientific publications in international and domestic journals and reports of relevant domestic and international institutions. The paper presents several proposals for waste management and solutions through the creation of new products that have added value. In the conclusion of the paper, it is stated that the valorization of waste, including by-products from the food supply chain, represents a concept of sustainable development that all participants in the food supply chain should adhere to. By-products created in the food sector can be used as raw materials for the production of new food products for human consumption and in the production of animal feed. These products are biomass suitable for the production of biodiesel, biogas and other energy sources, as well as a large number of fine chemicals that are used in the food, pharmaceutical, cosmetic, chemical and other branches of industry.

Key words: food losses, food waste, environmental and health impacts, valorization of waste