


Nutrition remains a top priority in Ukraine despite the ongoing war: the fight against trans fats

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INTRODUCTION

Nutrition remains a critical priority in Ukraine, even in the midst of the ongoing war. One of the specific nutrition-related concerns that many countries, including Ukraine, have been addressing is the reduction of trans fats and especially the elimination of industrially produced trans fats in the food supply. Trans fatty acids (TFA), or trans fats, are either naturally occurring or industrially synthesised type of unsaturated fatty acids with at least one double bond in the trans configuration. Industrially produced trans fats are synthesised via the partial hydrogenation of vegetable oils, which results in a semi-solid fat that is often used as a cheaper alternative to butter, has a longer shelf life and imparts desirable texture to food products. This makes trans fats more commonly found in food products that contain high amounts of partially hydrogenated oils, such as margarine, shortenings, cookies, cakes, breads and other industrially prepared foods.

Developed and once widely used for their beneficial characteristics for the food industry, epidemiological evidence has since emerged on the association between regular consumption of trans fats and increased risk of non-communicable diseases (NCD), especially coronary heart disease. Approximately, 540 000 deaths each year may be attributed to intake of industrially produced TFAs.¹ High TFA intake increases all-cause mortality by 34%, coronary heart disease deaths by 28% and coronary heart disease by 21%.² This is likely due to their effect on increasing LDL (low-density lipoprotein, or 'bad') cholesterol levels while lowering HDL (high-density lipoprotein, or 'good') cholesterol levels.² Addressing NCD risk factors through regulatory policies has been among the most cost-effective interventions identified by the WHO, called NCD 'best buys'.³ Among these

SUMMARY BOX

- ⇒ Despite the ongoing war, nutrition remains a top priority in Ukraine.
- ⇒ In collaboration with the WHO, Ukraine remains steadfast in its mission to eliminate trans fats in the food supply as a measure to reduce non-communicable diseases in the country.
- ⇒ Ukraine has passed legislation on the monitoring and regulation of trans fats in foods, and WHO has been supporting the country in building laboratory capacity to achieve this goal.

best buys is the promotion of health diets via the reduction of trans fat intake and elimination of industrially produced trans fats in the food supply. Hence, WHO recommends that consumption of TFAs should be limited to a maximum 1% of total energy intake. Considering a 2000-calorie diet, this translates to 2 g TFA per 100 g fat/oil in food products.

Since 2018, WHO has recommended a set of strategic actions detailed in the REPLACE action package (Review, Promote, Legislate, Assess, Create, Enforce) to support countries in creating policies and implementing interventions to reduce and ultimately eliminate industrially produced TFA from the food supply.⁴ Through these actions, the WHO supports governments to ensure the prompt, complete and sustained elimination of industrially produced TFA from the food supply.

Recognising the detrimental health impact of trans fats and to answer the global call for TFA elimination in the food supply, the Ministry of Health in Ukraine has taken steps to control and limit the use of trans fats in food products. In 2020, Ukraine introduced regulations (Ministry of Health order no 1613 of 16 July 2020) mandating to limit the level of trans fat to less than 2g per 100g of total fat contained in food products intended for the final consumer and those intended for



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supply to retail, including electronic commerce. The regulation set the transition period for TFA regulations as 3 years and will be enforced on 3 October 2023. This legislation was also made to align with the European Union Commission Regulation 2019/649,⁵ which is a step forward towards EU–Ukraine integration process guided by the Association Agreement between the European Union and Ukraine, signed in 2014.⁶

Public awareness and acceptance

Raising public awareness about the risks of trans fats consumption is a critical component of Ukraine's efforts. A national omnibus survey in 2021 (2000 respondents) conducted by the Kyiv International Institute for Sociology revealed that 61% believe that their usual diets include trans fats.⁷ Moreover, 82% of the respondents supported the legislation on limiting the content of trans fats in industrial food production. There is thus strong support from the population to eliminate trans fats.

Challenges and progress

In February 2022, Russia launched a full-scale war in Ukraine. The negative effect of this war on the health system in Ukraine is immense. Healthcare in Ukraine was heavily impaired especially throughout the first 18 months of the war.⁸ This has resulted to health programmes to face mounting implementation barriers to ensuring good health of the population. The size of the humanitarian crisis caused by this war on various aspects of daily life in Ukraine is described in more detail elsewhere.⁹

While Ukraine has taken important steps towards TFA regulation, the ongoing war is adding challenges into the effective enforcement of the legislation. Monitoring and surveillance mechanisms are hampered by the scrutinised budgets and the lack of laboratory capacity to perform TFA analysis. Laboratory services, including procuring of necessary laboratory supplies, have become more difficult and expensive. Moreover, the number of laboratory-skilled workers has dropped due to migration or conscription processes. In some laboratories, equipment and supplies were sourced from Russian suppliers, which they are no longer able nor willing to continue doing business with.

Yet despite the ongoing war, the Ministry of Health in Ukraine remains committed to promoting nutrition and health and achieves a trans fat-free food environment. Hence, with the support of the WHO European Regional Office and the WHO Country Office in Ukraine, a series of activities were launched to assess and build laboratory capacity in the analysis of fatty acids, including TFA in foods in key areas in Ukraine. From November to December 2022, a series of consultative meetings were conducted online by WHO and state public health and food safety laboratories in Ukraine, which set the foundation for the development of a capacity-building programme for 2023 on fatty acid analysis, including trans fats in several cities in Ukraine. In April 2023, experts from the WHO European Regional Office visited

key laboratories for a more detailed needs assessment and to conduct in-person lectures and training on the analysis of fatty acids, including TFAs. An interlaboratory comparative test was performed among four state public health and food safety laboratories in Ukraine and a reference laboratory at the Instituto Nacional de Saúde Doutor Ricardo Jorge in Portugal. With the supported of WHO, all the participating laboratories successfully implemented the WHO protocol for the analysis of TFA in ready-to-eat foods. Building the capacity of these state laboratories on TFA analysis is one of the first steps towards effective monitoring of trans fats in the food supply.

In all the labs visited, the laboratory staff were immediately overwhelmed with emotions when the lab experts arrived. The visits made them feel supported, and the trainings provided them with a few days of focusing on science again, putting their worries of the ongoing war temporarily aside.

Future directions

Ukraine has the opportunity to build on its existing legislation and continue refining its regulatory framework by strengthening laboratory capacity for TFA analysis, developing effective enforcement strategies and expanding public awareness campaigns to successfully eliminating TFAs in the food supply. Ukraine has recently conducted a study, with support from WHO Europe, which aimed to collect data on TFA and salt content in about 120 food samples where TFAs may be present.¹⁰ The study engaged a few of the trained labs that performed their newly adopted functions greatly. While the final report is being finalised by the expert group, it can be used as a baseline before the legislation enforcement. This undertaking will further develop the practical capacity of the selected labs to analyse TFAs and demonstrate readiness for the compliance of the food chain suppliers. These activities also prepare Ukraine to apply for the WHO TFA Validation Programme for Trans Fat Elimination, which aims to recognise countries for having a normative framework in place to eliminate industrially produced TFA from their national food supplies. In 2024, on request from MOH, WHO is scaling up the capacity-building programme to five more public health labs that were equipped and prepared to take up TFA monitoring functions.

Addressing risk factors to tackle NCDs during wartime: conclusion

Ukraine's commitment to reducing trans fats demonstrates a dedication to protecting its citizens' health and well-being despite the ongoing war. WHO recommendations for NCD response in emergencies are limited predominately to medicines supplies, NCDs diagnostics and service provisions. Hence, by addressing NCD behavioural risk factors, Ukraine sets up an example for other countries during complex

emergencies. Tackling NCDs through policy development, implementation and enforcement in emergencies sets up a global precedent and demonstrates an incredible health system and a nation's resilience—be it tobacco control, school nutrition reform or trans fats elimination. These actions protect people's health and give a hope for the future.

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