электростатического ориентационного взаимодействия и ионного обмена. Обнаружено [1], что катионы  $Cu^{2+}$  сорбируются шлаками с идентичной поверхностью с емкостью шлакового сорбента 0,1 г/кг. Пересчет  $C_{Ra}$ =90,6 Бк/кг фракции <0,63 мм шлака «АрселорМиттал» в массовую концентрацию дает значение 0,0025 мкг/кг, что гораздо меньше емкости алюмосиликатных шлаков по металлоионам. Это служит косвенным доказательством возможности осуществления сорбции шлаками ЕРН.

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# POPULATION FOOD HABITS AND THE IMPACT ON THE NATURE OF NUTRITION OF THE ECOLOGICAL ENVIRONMENT (UA-CIV)

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Although some would prefer to ignore this topic, every food we eat has an impact on the environment! To produce food, you have to use water, energy, manufacture its packaging ... You also have to transport the food to stores, sometimes for hundreds of kilometers, then store it in refrigerators. environmental impacts are distributed throughout the food chain, it is during agricultural production that they are greatest: between 50 to 70% of greenhouse gas emissions. So the food choices we make every day have a significant impact on the environment.

The good news is that even small changes in what we buy and eat today can add up to real environmental benefits, including fewer toxic chemicals, reduced emissions from global warming, and conserving our ocean resources. In other words Econutrition establishes a link between environmental factors and human health, and consists in particular of studying the interactions between agriculture, ecology and human nutrition. Food choice approaches are used to improve and diversify diets.

The article considers the main points of the peculiarities of the population's nutrition and their ecological impact in such countries as Ukraine and Côte d'Ivoire. The choice of countries is determined by birth and residence and relocation for the purpose of study.

Food systems must function within the limits of environmental constraints to avoid disastrous consequences for the biosphere.

Ukrainians have moderate financial and physical access to food according to world statistics. Forced to spend 50-55% of their monthly budget on food, they consume too much fat and sugar, and too little fruit, vegetables, food and fish. The large volumes of purchased food and food, especially meat, are seen as a reflection of prosperity. In order to analyze the current situation with nutritional patterns, a survey was conducted among some students. The results show that food is purchased from supermarkets regardless of its ecological status, and nearly half of students adhere to a meat-based diet.

Most respondents are unwilling to change their type of plan. The average Ukrainian produces 250 to 300 kilograms of waste per year; and that number is expected to increase. At that, up to 60 percent of municipal solid waste is made up of organic waste, including food waste. The current methods of waste management in Ukraine - the simple collection of mixed waste and disposal in landfill - have a negative impact on the environment. Therefore, the problem requires immediate attention. Therefore in 2019, FAO launched a pilot project in two cities in Ukraine - Kiev and Lviv - to help the Ukrainian government reduce municipal food waste management in line with the national waste management strategy and relevant policies.

In doing so, FAO partnered with the All-Ukrainian Environmental League to study the municipal solid waste management practiced in the two cities. FAO and the All-Ukrainian Environmental League focused on the reduction of food waste in households and food businesses and the improvement of food security situation of vulnerable groups in Kyiv and Lviv through an educational program and food recovery

and redistribution activities. It was estimated that food waste makes from 20 to 55 per cent of all solid municipal waste. The findings were used to feed recommendations for the government of Ukraine, local authorities, and non-governmental organizations to advance the municipal solid waste management system.

Thus, we can assume that in the future the pressure on the environment from food production and consumption will increase in Ukraine. There is now a need to work on preventing food loss and educating people on how they can reduce their food footprint through minor behavior changes.

As for the Ivory Coast, a country located on the south coast of West Africa, is undoubtedly a major producer and exporter of agricultural products, the sector is characterized by the extent of its production systems.

In fact, the pressure has greatly increased on natural resources and more particularly on the forest. The agricultural sector employs 46% of the workforce and supports two-thirds of the population, which is why the expansion of the agricultural sector is one of the main causes of the reduction in forest cover. Most of the time, Ivorian farmers still use the techniques of slash-and-burn agriculture to clear land and cultivate it. Too intensive agriculture can harm the environment by contributing to the pollution of water and soil, the depletion of resources and the destruction of habitats and biodiversity, less intensive agricultural systems, making reasonable use of inputs.

For example, while the Ivory Coast is the world's largest producer of cocoa beans and Africa's third largest producer of coffee, with an average annual production of 1,200,000 tonnes, or 41% of the world cocoa supply and nearly From 1.8 million 60 kg bags of coffee beans, the cocoa tree is a very complicated plant, which only grows in certain areas around the equatorial forests, which is also the case for coffee. It requires a lot of water (it takes 2400 liters of water to make 100 g of chocolate), a very special care ... As a result, today, the cultivation of cocoa and coffee puts great pressure on ecosystems. In recent years, with the incredible increase in demand for cocoa, prices have taken off. As a result, more and more small producers are adopting cocoa,

abandoning their traditional crops, and above all, destroying the equatorial forests in order to be able to plant cocoa.

In addition, the impact of livestock on the environment is also present and especially recorded in the north of the country. At the level of traditional extensive breeding, often transhumant, this impact is located, as soon as there is concentration of the herd, at the level of the soils (denudation and compaction of the soils to evolve towards an often irreversible laterization) and of the vegetation ( reduction of the herbaceous layer and development of scrub). The degradation of plant resources is also greatly amplified by bush fires which affect nearly 30% of the population.

territory. Conversely, intensive peri-urban systems (short-cycle species such as pigs and poultry) generate large quantities of excreta which, left in nature and in waterways, are permanent sources of pollution. However, the negative environmental impact of livestock remains far below that of agriculture.

We provide an overview of our thesis using the example of Ukraine and Cote d'Ivoire and explore how the complex relationships within food systems that affect public health could be better understood through the environmental nutrition model.

Given the intrinsic relationship between environmental science and nutritional science, it is imperative that public health embraces environmental nutrition as the new frontier of research and practice and begins to concertedly focus on the new discipline of environmental nutrition, which seeks to comprehensively address the sustainability of food systems. It is impossible to shift to vegetarian diet completely, as it would mean the need to further expansion of agricultural lands, which are almost totally involved in active production either in côte d'ivoire or Ukraine, or ban the exportation of food products to provide internal needs. However, there is a range of actions able to bring considerable benefits both for humans and our environment. The first and easiest is to buy local and seasonal food; buy as much food as you can eat; buy and cook food in moderate volumes to prevent spoilage during storage; buy fewer products in cellophane and plastic packaging; adapting the diet to age and physical activity during

the day make the diet as vegetal as possible: simply excluding beef from the diet to achieve a 42% reduction in footprint.

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# ФОРМУВАННЯ ЕКОЛОГІЧНИХ КОМПЕТЕНТНОСТЕЙ У МАЙБУТНІХ ЛІКАРІВ ПРИ ВИКЛАДАННІ МЕДИЧНОЇ ХІМІЇ

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Хімічна наука за час свого існування сприяла значному розвитку суспільства завдяки створенню великої кількості синтетичних речовин. Однак, у середині двадцятого століття стало очевидно, що використання деяких синтетичних токсичних речовин призводить до значної деградації екосистем і істотного погіршення здоров'я людини. Бурхливий розвиток промисловості, виробництво електроенергії та зростання використання всіх видів транспорту викликають забруднення навколишнього середовища. За даними ВООЗ, стан здоров'я населення на 20-30% залежить від екологічної обстановки. Тому боротьба із забрудненням навколишнього середовища є однією з найважливіших проблем суспільної охорони здоров'я. Вирішення цієї проблеми має на меті не тільки збереження природних ресурсів для подальшого економічного і соціального розвитку людства, але найголовніше — забезпечення сприятливих умов життя та попередження шкідливого впливу забруднення довкілля на здоров'я населення [1].