

Лимонная кислота: скорлупа частично растворилась. С необработанной стороны наблюдается активное разрушение поверхности скорлупы куриного яйца, поверхность рыхлая, образование пены за счёт активного выделения углекислого газа. С обработанной стороны поверхность яйца более твердая, протекание реакции менее выражено, поверхность более твёрдая.

Уксусная кислота: скорлупа частично растворилась. Верхний слой яйца стал мягкий на ощупь, осадок отсутствует. Бурное выделение углекислого газа. Присутствует пенообразование.

**Заключение.** Производство зубных паст в наше время очень сложный процесс, за ним стоят многочисленные исследования и знание стоматологов. Современный мир не может обойтись без этого средства, которое помогает поддержать гигиену полости рта. Зубная паста – это не только гигиеническое средство, но и ещё компонент культуры. Поэтому пришлось время выяснить какая паста всё-таки лучше в результате этого исследования.

Альтернативу фабричным зубным пастам могут составить пасты собственного приготовления. Однако могут смутить запах и вкус таких паст, хотя они будут более экологичными и натуральными.

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## **«ZERO WASTE» MOVEMENT IN THE REPUBLIC OF BELARUS**

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The presented research work is dedicated to the theme of the worldwide Zero Waste movement, a fashionable eco-trend, which calls for conscious and responsible consumption.

The aim of the work is to study the possibilities of producing less garbage and go to waste-free lifestyle in modern society.

To achieve this aim we set the following objectives:

1. To identify and characterize the basic principles and approaches of Zero Waste movement.

2. To study the opportunity of using Zero Waste principles in Mogilev

The subject of the research is Zero Waste movement. The object is the possibility of living Zero Waste lifestyle in the Republic of Belarus[5].

The novality of the research is determined by the fact that Zero Waste movement appeared not long ago and is only gaining its popularity both in Belarus and abroad. There are very few works dedicated to the topic of Zero Waste. And one can hardly find any works about Zero Waste movement in Belarus. Besides, we decided to study this topic on the example of Mogilev and on the example of our school and my family in particular.

Zero Waste is a fashionable eco-trend, which calls for conscious consumption. To the masses the concept of zero waste was brought by Bea Johnson, the author of the bestseller "House without waste". The book provides a simple 5R methodology with detailed practical tips for household waste disposal: "Refuse, Reduce, Reuse, Recycle and Rot"[3].

Living a zero-waste lifestyle in Belarus is challenging. Wherever you are, it takes time and patience to work out a new model of consumer behavior. Getting creative is what can help you in finding your own way to zero waste living. After studying the statistics I decided to make an experiment. Its purpose is to find out how hard is it to go to waste-free lifestyle and if it's

even possible. Within two weeks my family tried to live by the principles of "zero waste". We sorted out waste", refused and reused unnecessary stuff, changed plastic bags for reusable eco bags, bought products in bulk, composted food waste and reused old clothes.

During the experiment we faced a number of difficulties and advantages of living Zero Waste. The difficulty arose with the purchase of fruits and vegetables. We decided to use cotton ecobags. But the sellers were constantly arguing because the cotton is not visible. The decision was to use polyester "fruitbags". Another problem is that it is impossible to find them in Mogilev. You can buy them only via the Internet. But in many shops, supermarkets and department stores sellers still refused to weigh the goods without explanation. In such a situation, it is necessary to clarify that the law does not prohibit the purchase of goods in its packaging, and sellers do not have the right to refuse. (The document "Sanitary and epidemiological requirements for organizations involved in the sale of food products" (Chapter 7), approved by the Ministry of Health on August 28, 2012 No. 132, said: "It is forbidden to dispense food products into the customer's dirty containers and recycled paper [4].

But still in our everyday life there are a lot of plastic products that we use every day. These are plastic brushes, toothpastes, tubes from creams, shampoos, shower gels and other hygiene products. The problem arose with expired medicines. There are no special containers for collecting unwanted medications. At the state level this question is, unfortunately, not yet resolved.

In addition to the experiment that we conducted during two weeks, we also made a questionnaire for

pupils in our school and we have found some people who have an idea about the principles of the current "zero waste" and experience of their realization in life. 95% of them supported the idea of Zero Waste movement.

Our experiment proved that it is realistic to significantly reduce the amount of waste generated by each family and reduce the amount of waste that goes to landfills. All of the respondents answered that they started their zero waste lifestyle with first and most easily implemented of the principle – "refuse". That is, in each questionnaire were present description of the products, which in the first place, refused the Respondent. This is, basically, packages, plastic products, cartons and so on. All of them confirmed that they had replaced the packs on reusable bags.

All wrote that they reuse old stuff. They take it out to the cottage or use for rags, and also pass on to the poor people[1].

All said that there were containers for sorting waste. Two of them wrote that put the batteries into special boxes in the shops, department stores and supermarkets. Two of the respondents confirmed that they had replaced the cosmetics and household chemicals by eco-friendly counterparts such as products (scrubs, cosmetics, etc.) One of the respondents shared the difficulties he faces in everyday life. In particular the difficulty is to buy foods in bulk in the city.

The second part of the questionnaire shows the tips which were given by the respondents how to use Zero Waste movement at school. All respondents shared their thoughts and recommendations how to use zero waste tips in school. During the writing of this research paper, I came to the conclusion that the main problem lies in the lack of awareness of the population in matters of sorting and recycling of waste.

An experiment carried out in research work has shown that it is quite realistic to reduce the amount of garbage produced by one family and thereby reduce the amount of waste disposed of and incinerated in a landfill. And for this there is no need to do extra effort. It is enough to first of all refuse from plastic bags and this will already be a big step towards conscious consumption. The survey of respondents also showed that the principles of zero waste can be followed in the conditions of large cities. The project intends the environmental component. The main goals are:

1. To collect plastic caps in special containers that are installed in commercial and other buildings.

2.To transfer recyclables to recycling companies for a fee.

3.To help sick children and adults at the expense of funds received from the sale of recyclable materials (purchase of medicines and medical equipment). In Mogilev, public caps collection points can be found in the time cafe "Sky", cafe "Hmel" and department store "Materik" (a representative office of Siberian Wellness).

During our experiment I noticed a lot of advantages of living zero-waste lifestyle. Refusing unnecessary bags and packages products, we greatly reduce the amount thrown in the bin. And also decreased our "packet with packets".

Also, the economy of the family budget grew, as I reduced purchases of unnecessary things. Previously, I could go to the mall, buy a bunch of goods. And then all this lay in the closet, I did not use anything. As a result, I understand: I don't need so much, it affects the environment, it's expensive. Costs have changed for the better. Zero waste is a rejection of rash consumption. As a rule, there are harmful products (bars, chips, soda, sauces) in plastic package. We began to think about whether we need this thing or not, reduced the number of spontaneous purchases. For example, the replacement of all shower gels on coal-tar soap, which perfectly cleanses the skin and also is a natural antiseptic. I can't say that zero waste is expensive. Of course, first you invest: you buy bags, a bottle for water. But they are reusable, so you immediately start saving on packaging.

Clothing has received a second life from other hosts, and we got rid of unnecessary things.

A positive outcome to the implementation of the list of products in daily practice.

We have got the skills of saving resources. For example, turning off water while brushing teeth, turning off of lighting if the space is not used.

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## НЕКОТОРЫЕ ОСОБЕННОСТИ УТОЧНЕНИЯ ОСНОВ ТЕОРЕТИЗАЦИИ И ФОРМИРОВАНИЯ ЭКОНОМИЧЕСКОЙ КУЛЬТУРЫ ОБУЧАЮЩЕГОСЯ

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Экономическая культура имеет важное место в обществе и жизни ребенка.

Экономическая культура один из важных факторов в воспитании личности обучающегося, возрастосообразно уточняющего качество развития и достижений.

Чаще всего уровень жизни отдельного человека зависит от качества формируемых идей и смыслов экономической культуры и воспитания экономической грамотности у возрастосообразно развивающейся личности.

Чем выше уровень экономической культуры в обществе, тем лучше данное общество функционирует. Самый лучший способ оптимального управления качествам экономической культуры в обществе – это возрастосообразное внедрение основ