Изучив все данные, и сделав сравнительный анализ на начало занятий и по окончанию учебного года нами были сделаны выводы:

– многие студенты, занимающиеся непосредственно кардионагрузкой на занятии заметили у себя повышенный аппетит после тренировки в течении дня, занимающиеся же только силовыми нагрузками – чувство голода не ощущали;

– при занятии кардионагрузкой, была отмечена более высокая выносливость во время занятия, восстановление после нагрузки происходило быстрее;

– во время силовой нагрузки отмечалось постепенное изменение рельефа тела. Вес тела изменился в большую сторону, на 1–2 кг в среднем, но в объеме тело уменьшилось. Это говорит о том, что мышцы занимают меньше пространства в теле по сравнению с жировой прослойкой. Аппетит так же был умеренно стабильный. Срывов в еде студенты не наблюдали;

– силовая нагрузка еще хороша тем, что мышцы работают и тратят энергию не только во время занятия, но и после, в течении двух дней. Активно восстанавливаются мышечные волокна, тем самым наш организм тратит больше энергии в покое, следовательно, и больше худеет. Что нельзя сказать о кардионагрузке, где организм тратит энергию только во время тренировки, а в дни отдыха энергия идет уже на восстановление.

Следовательно, за десять месяцев проведенного эксперимента можно отметить, что группа, которая занималась кардио, в среднем похудели на 1-1,5 кг, тем самым объём тела уменьшился незначительно. А вот в группе силовой нагрузки, наоборот прирост по весу был в среднем 0,5-1 кг, но объем тела уменьшился в сантиметрах и рельеф тела стал значительно красивее, тело стало более упругое, т.к. мышечная масса увеличилась, тем самым вытеснила, хоть и незначительно жировую прослойку.

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EDUCATING “GREEN CONSUMERS” FOR SUSTAINABLE DEVELOPMENT

ВОСПИТАНИЕ «ЗЕЛЕНОГО ПОТРЕБИТЕЛЯ» В ИНТЕРЕСАХ УСТОЙЧИВОГО РАЗВИТИЯ

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The article examines the opportunities for fostering green consumers in the Republic of Belarus in the interests of sustainable development. It is proposed to learn about the implementation of initiatives to open “green classes” in Minsk and to promote the “Green Consumption” project on the basis of general secondary education institutions. The article includes a project task designed for primary school mathematics lessons (3rd grade).

В статье рассматриваются возможности воспитания «зеленого потребителя» в Республике Беларусь в интересах устойчивого развития. Предлагается ознакомиться с реализацией инициатив открытия «зеленых классов» в г. Минске и продвижения проекта «Зеленое потребление» на базе учреждений общего среднего образования. Статья включает пример проектной задачи, разработанной для уроков математики в начальной школе (3 класс).

Keywords: environmental education, “green classes”, green consumption, sustainable development.

Ключевые слова: экологическое воспитание, «зеленые классы», «зеленое потребление», устойчивое развитие.

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People have never been as concerned about environmental issues, about the state of the environment, as they are today. The global challenges of our time – environmental pollution, climate change and social upheavals – have become evident to the general public.

There can be no doubt today that there is no future for humanity without the consistent implementation of sustainable development principles in the organisation of human life at all levels. However, the transition to sustainable development is a rather complex and long-term process. Its success depends on the constant interaction of many actors, including business circles, local, regional and national authorities, academia, civil society organisations, educational institutions, the media and churches [1].

Sustainable development means development that meets the needs of the present generation without compromising the ability of future generations to meet their needs [1]. Human responsibility for the environment is one of the factors of sustainable development. In this context, one of the areas of environmental education is the education of a “green consumer”. Green consumption is a way of life that is based on an awareness of the need to conserve natural resources and contribute to the preservation of the environment. The main objective of green consumption is to prevent the negative impact of the production, transport and disposal of products and goods by promoting new environmentally friendly technologies and by making consumers conscientious about the products they buy and understanding the relationship between their daily actions and their impact on the environment. Green consumption is not a new fashion, but a new lifestyle that needs to be introduced to the younger generation. Environmentally friendly lifestyles have become the norm in modern Europe, and we would like to encourage this trend in Belarus as well. It should be noted that the Republic of Belarus has actively supported the UN initiatives in the field of sustainable development from the very beginning. In 2004, the Presidium of the Council of Ministers of the Republic of Belarus approved the National Strategy for Sustainable Development of Belarus. The work on sustainable development is overseen by the National Commission for Sustainable Development under the Council of Ministers oversees.

The education of green consumers for sustainable development in Belarus is carried out through the operation of “green classes” and the implementation of the Green Consumption project on the basis of general secondary education institutions.

In 2019, for example, the first “green class” was created at the Primary School No. 29 named after the Senko brothers in Minsk, which was attended by 23 pupils. In 2020, there were already about 100 “green classmates” in one school. The 50th anniversary Green Class certificate was issued in 2021. The first Green Classroom Resource Centre was also opened at the Minsk Secondary School No 141. More than 1,300 children in 12 schools in Minsk, most of them in the Zavodskoy District, are currently studying in “green classes”.

The idea to create “green classes” in the Belarusian capital belongs to Ruslan Shaikin, director of the Centre for Environmental Education and Development, an ornithologist, educator, initiator of the Sokoliny wildlife sanctuary near Minsk, holder of the international title “Belarus Wildlife Defender – 2019” from the global conservation association BirdLife International. It was he who suggested setting up clubs for young supporters of nature, so that children could learn about and cherish nature from an early age. The goal is to educate a new generation with a high level of environmental culture. The project “Green Classrooms of the Belarusian Capital” is supported by the Minsk City Committee of Natural Resources and Environmental Protection and implemented by the Centre for Environmental Education and Development.

“Green classes” function as a system of environmental education activities and special events that are aimed at exploring, studying and preserving the natural environment. These are additional classes outside school hours, school-based and held through the schools, which are located mainly near natural areas: forest parks, ecological trails, water bodies and other natural sites.

“Green classmates” – the term adopted for the pupils and students of these schools – aim to spend as much time as possible outdoors connecting to nature. Each season of the year opens up opportunities for these children. E.g., in autumn they watch birds, study various trees, their fruits and seeds, build shelters for hedgehogs and invertebrates. In winter, green classmates are the best friends of birds. Everyone knows how to make a feeder and what kind of food to put in it. In spring, emphasis is placed on the study of plants, including those listed in the Red Book of Belarus. The pupils make field notes registering the arrival of the first migratory birds and watch how they build nests, practice navigating by natural objects, gather collections of minerals and rocks. Each season, even in winter, the children are engaged in a weekend hike, where, under the guidance of their teachers, they complete a small quest, gather around the fire, bake potatoes in coals, make fragrant tea and sing songs with a guitar [2].

«Green classes», according to teachers, give every child the opportunity to feel like an explorer and researcher of nature, comprehend its secrets and take the first steps in its conservation. In this way, attention is being shifted from gadgets and virtual reality to the natural environment. Such work is aimed at educating a new generation in the interests of sustainable development [2].

The project "Green Consumption" launched on the basis of the private educational institution «School Cool School» includes conversations, excursions, round tables, debates, problem-solving projects (see table 1) including the tasks on the following topics: *Waste* (paper, food waste, packaging), *Water*, *Energy*, *Transport*, *Nature*, *Shopping*, *Relationships*.

The implementation of this project is carried out by the primary school teacher, Director of the Private Educational Institution «School Cool School» Tatyana Viktorovna Frolova. The Department of Continuing Education of the Faculty of Advanced Training and Retraining (Head of the Department, Milana M. Michalevic, Senior Lecturer Larysa V. Victorka and Laboratory Assistant Volha Yu. Lazarava) have been providing advisory and technical assistance in the implementation and promotion of this project. Such interaction between university and school education contributes to the spread of healthy initiatives, ensuring the continuity of instruction and implementation of one of the principles of sustainable development – lifelong learning.

Let us consider a fragment of the implementation of the project *Green Consumption. Waste*, presented below. The project task was developed by primary school teacher Tatyana Viktorovna Frolova for a mathematics lesson in grade 3. The project task is summarised in Table 1.

Table 1 – Project task in mathematics "Wash or cut [a tree]?"

Task Title	Wash or Cut?
Subject	Mathematics
Grade	3
Task type	Reflexive + instructional.
Goals and pedagogical objectives (pedagogical intent)	1 – Teaching collaborative problem solving. 2 – Deepening the pupils' computing skills. 3 – Group cooperation of pupils. 4 – Environmental education.
Knowledge, skills and methods of action needed to solve the task	Third-graders have studied the multiplication table (in their second and third grades), with which you can calculate the value of numerical expressions, solve equations and inequations.
Planned result of instruction	1 – Each student will be able to assess their knowledge and skills within the subject material. 2 – Some pupils will be able to bridge knowledge gaps. 3 – The students will try out one of the ways of sharing responsibilities in the performance of a common task. 4 – All students will acquire knowledge about green consumption.
Method and form of evaluation	What is assessed: 1 – possession of subject knowledge and skills; 2 –- the ability to apply them to solve a specific practical problem.

1. Setting the project task.

We all have paper towels and napkins at home, at school, in the car. For this reason we have been increasingly refusing to use cloth towels. Paper towels absorb moisture quickly and efficiently, they are hygienic. And what are paper towels made of? Let's find out!

2. Solving the project task.

Assignment 1

There are various brands of towels in our shops. Calculate the purchase of paper towels if one person needs **7 pieces/ napkins per day** and **1 roll of paper towe**ls **per week**. We need to purchase paper towels **for 2 months** at the best price. There are three companies in the table, explain your choice (see Table 2).

Table 2 – Products range

Brand	Napkins	Paper towels	Delivery cost	Total cost
Soft Sign	1 pack (100 pieces)=2 BYN.	1 roll=5 BYN.	Free	
Zewa	2 packs (100 pieces each)=4 BYN.	3 rolls=9 BYN.	10 BYN.	
Aster	6 packs (100 pieces each)=8 BYN	8 rolls=20 BYN.	5 BYN.	

Paper is a natural material, biodegradable and recyclable. Unfortunately, the recycling option is not available for paper towels – they become damp and soiled after use, and this also makes them unsuitable for re-using.

According to UNICEF, over **5 mln tons** of paper towels are used annually. About **110 mln trees and 490 billion litres of water** are used to produce this amount of paper. Seems like too many resources spent for our convenience!

The work is done in groups of 6 people.

Assignment 2

It is suggested that we should replace paper towels and napkins with towels and napkins made from natural fabrics, which could be used, washed and re-used again.

What fabric shall we choose for the production of towels? Please bear in mind that the material should absorb moisture well and dry quickly. Let us consider a range of types of fabrics. **Waffle (honeycomb) fabric** is treated cotton, it has

even squares over the entire surface, which improves water repellency. **Linen** is stronger than cotton. Linen products are easily stored, linen fabrics can be washed at 90°C. Natural fabrics can be treated at high temperatures, which means that it is possible to ensure a high level of sterility along with the fact that these are reusable things.

The size and shape of kitchen towels and napkins is important. Housewives prefer rectangular pieces 40 by 70 or 30 by 60 cm. Rectangular towels are considered classic, round or oval towels are beautiful and have additional decorative potential.

Imagine that we are towel manufacturers. We have a piece of linen fabric 2x2 m. Design your towels and present the sketches. Determine the exact shape and size. How many towels will it make?

Assignment 3.

Design a kitchen towel. Decorate it. Read the care instructions for kitchen textiles.

How to care for kitchen textiles:

Stubborn stains can be removed by soaking towels and napkins in stain remover or bleach (choose an oxygenated type).

White and light-colored towels and napkins can be boiled to sterilize them.

Wash soiled kitchen textiles at high temperatures – hot water copes better with dirt and kills harmful organisms.

3. Reflection.

– Dear students, how did you cope with the tasks?

– Have you calculated the required quantity and cost?

– Was it interesting for you to do this work? What were the difficulties?

– Well done, you did a great job. I think our project can take part in the tender.

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ЛОШАДИ НА ВОЙНЕ

HORSES AT WAR

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Вот уже на протяжении нескольких тысячелетий животные сопровождают человека на войне. Люди используют их силу для перевозки различных грузов, ездят на них верхом, используют их в пищу или для переработки. Животные разделяют со своими хозяевами также все трудности военных действий, в т.ч. голод, лишения и болезни. Из всех животных, помощников человека на войне, первое почетное место, безусловно, принадлежит лошади.

For several millennia, animals have been accompanying humans at war. People use their power to transport various goods, ride them, use them for food or for processing. Animals also share with their owners all the difficulties of military operations, including hunger, deprivation and disease. Of all the animals that help man at war, the first place of honor, of course, belongs to the horse.

Ключевые слова: война, военное дело, кавалерия, колесница, всадник, рыцарь, лошадь, животноводство.

Keywords: war, warfare, cavalry, chariot, horseman, knight, horse, animal husbandry.

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Родиной современного коневодства является Великая степь Евразии. Первые попытки приручения лошадей предпринимались здесь еще в конце IV тысячелетия до н.э. Недавние палеогенетические исследования показали, что все современные домашние лошади являются потомками одной группы животных, живших около