

spicy flavor profiles tend to strengthen because of the mouth heat, while floral and fruity profiles will not be so bright [4].

Systematical approach to degustation is vital to make any reasonable conclusion about the wine quality, readiness for drinking and ageing potential.

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#### IS VIRUS A FRIEND OR A FOE?

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***Abstract:** The article gives an overview of nature of viruses, models of virus mutation. It indicates some ways of transferring of viruses among humans and provides a brief information on adaptation of viruses for people’s needs.*

***Keywords:** virus, multiplication, genetic material, genetic shift, genetic drift.*

I would like to start the article with a question. Are viruses really harmful? Actually, most of them aren’t harmful at all and some of them are even useful for human beings because they help in the evolution of living organisms. It’s only some viruses that sometimes go out of order and cause diseases. Nowadays, we often use the word “virus”, but does anyone know how viruses that once infected only animals now threaten the lives of people?

In order to start talking about this interesting topic, first of all we should understand what a virus is. Actually, the answer is quite simple. A virus is a non-cellular form of life that can multiply inside cells. They are dangerous both for animals, plants and for people as well. I have tried to answer the question about

harmfulness of viruses quite quickly, and it was a bit simple, further information about nature of viruses will be more complicated.

There are two ways a virus can be mutated enough for infection of non-native organism: genetic shift and genetic drift. [1]. After multiple replications, there occurs error in the genetic materials of the virus, most of the errors are not favorable for adapting to the environment and they quickly vanish, but some might be more resistant and adaptable forming new types of the virus against which humans have no immunity. Such process is called genetic drift [2].

To continue, imagine a flask in which there is a virus with an ability to replicate itself every second. It takes the virus 24 hours to completely fill the flask up to the brim. How long would it take to fill the same flask by 50%. The correct answer would be 23 hours 59 minutes 59 seconds, and the flask will be 50% filled in last one second. That's why viruses are too dangerous because they don't show any sign of a problem until it's too late to take any precautions. Everything can change in just a few minutes.

There is another way a virus can get mutated. Sometimes a single cell in an organism can be infected by two different viruses and there occurs a mixture of two different genetic materials of two different viruses in the same host cell. When the two different genetic materials of two different viruses mix, a new mutated virus is formed against which humans or other organisms have no immunity. Such phenomenon is called genetic shift.

It would be logical to provide basic information how viruses can get into our body. Actually, viruses can penetrate into the human body in many ways, but I will highlight the two main ones. The airborne pathway. If a sick person sneezes or coughs, an infection flies out along with the spit, and accordingly infects people around. The second way is more complicated. It's a contact method. Its essence lies in the fact that after a person sneezes, coughs and covers his mouth with a hand, a huge number of viruses attach to it. The patient touches objects, which will be later touched by many other people who might itch their noses or mouths, or just rub eyes, and thus bring viruses into their bodies [3]. Furthermore, everything becomes worse when you realize that some pathogens can show high resistance to the external environment. In other words, a person can become infected by contacting a contaminated surface even several weeks after it had been touched by a previous carrier of the virus.

To sum up, I would like to say that everything is not so bad as it may seem at first glance. People tend to find positive aspects in everything and viruses are no exception to it. For example, viruses, especially bacteriophages, are widely used in genetic engineering. Moreover, the genetically engineered bacteriophages can be used as antibiotics [4]. Is a virus a friend or a foe? I believe, it will take a long time for people to find an answer to the question.

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## **ВОЕННО-ПРИКЛАДНАЯ ФИЗИЧЕСКАЯ ПОДГОТОВКА КАК СРЕДСТВО ПОВЫШЕНИЯ ФИЗИЧЕСКОЙ И МОРАЛЬНО-ВОЛЕВОЙ ПОДГОТОВЛЕННОСТИ СТУДЕНТОВ АГРАРНОГО ВУЗА**

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**Аннотация:** В статье рассматривается актуальная проблема военно-прикладной подготовки студенческой молодежи. На основе проведенного исследования было выявлено положительное влияние военно-прикладных средств на уровень физической и морально-волевой подготовленности студентов в процессе занятий физической культурой и спортом.

**Ключевые слова:** военно-патриотическая направленность, студенты, прикладные виды спорта, физическая и морально-волевая подготовленность.

В соответствии со стратегическими целями государства по обеспечению стабильного и устойчивого социального развития, укрепления обороноспособности страны разработана новая Военная доктрина, которая решает задачу подготовки молодежи к службе в Российской армии.

В тоже время в Федеральном законе «О физической культуре и спорте в Российской Федерации» отмечается, что в силу своей специфики спорт и физическая культура обладают огромным потенциалом для формирования хорошей физической подготовки, необходимости развития физических качеств с целью успешного выполнения воинского долга в рядах Вооружённых Сил Российской Федерации.

Цель исследования - выявить военно-прикладные средства физической культуры и военно-прикладные виды спорта в вузе и оценить их эффективность.

Объект исследования – военно-прикладная физическая подготовка студенческой молодежи.