

La ciencia y la tecnología pueden servir para ayudar a la conservación del medio ambiente. Algunos ejemplos son la predicción de incendios forestales, el reciclaje de determinados materiales o la utilización de fuentes de energía alternativas.

Es decir la tecnología en general, en la que están incluidas tecnologías de la informática, las comunicaciones, y la industria en general, no ha escatimado esfuerzo para poder desarrollarse rápidamente, pero en la mayoría de los casos, a costa del deterioro del medio ambiente en los que estamos incluidos nosotros como seres humanos.

Las tecnologías de la información (TI) tampoco pueden quedar ajenas a esta preocupación y todos los agentes involucrados en su desarrollo, implantación o utilización deben hacer todos los esfuerzos posibles para mitigar el impacto que se tiene en el medio ambiente.

Hoy en día las Tecnologías de la Información no pueden permanecer ajenas a la enorme problemática existente en el medio ambiente: contaminación, calentamiento global, efecto invernadero, etc. La iniciativa Green IT pretende contribuir de forma sustancial al cuidado y mantenimiento de los ecosistemas naturales. Dentro de las políticas que se siguen en Green IT, una de las más importantes es la que promueve un aumento de la eficiencia energética de los equipos electrónicos, pues las fuentes de energía eléctrica son una de las principales causas del increíble aumento de la huella contaminante en el planeta.

El mundo científico sensibilizado y preocupado en preservar este gran ecosistema llamado Tierra, ha renovado en los últimos años su interés por la historia natural y las ciencias naturales, si bien deben intensificarse las investigaciones que recaben información sobre lo que ocurre en el medio ambiente, y las encaminadas a encontrar soluciones alternativas ecológicamente idóneas, utilizando para ello tecnologías de avanzada.

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THE EFFECT OF ENERGY DRINKS ON HUMAN BODY

In today's fast-paced lives people need vigor to keep up with their demanding schedules and lifestyles. All of us periodically have serious physical and mental stress. Often such that a glass of juice or a cup of coffee not to bring cheerfulness and good mood. Therefore, increasingly popular, especially among young people, gaining the so-called "energy drinks". An energy drink is

a type of beverage containing stimulant drugs, usually including caffeine, which is marketed as providing mental and physical stimulation. Do you know that at times, energy drinks can be quite dangerous?

Before turning to the main question of this report, the survey was conducted among the students of our University. The survey involved 58 people aged 17 to 20 years. Students responded to three questions:

- Have you ever drunk energy drinks?
- For what reason?
- What is brand that drink?

As a result, approximately 64.9% of respondents (37 people) ever tasted energy drink. The goal that chased the students were different, for example, overcome the drowsiness and fatigue, increase working capacity before the exam, as well as just to taste. “*Red Bull*” is the most frequently used name brand among students.

“*Red Bull*” comes from Thailand energy drink. *Dietrich Mateschitz*, Australian businessman, founded the Red Bull Corporation in 1987. And now, it is produced in more than 100 contries aroud the world.

The composition of Red Bull contains caffeine, taurine, B vitamins (B3, B5, B6, B12), sucrose, and glucose. To produce Red Bull Sugarfree, sugars sucrose and glucose have been replaced by the sweeteners acesulfame K and aspartame/sucralose.

Caffeine is a well-known ingredient added in drinks that causes addiction. Caffeine is basically a brain stimulant that makes your brain more active by blocking certain other messages coming from nervous system. Its too dangerous for the human body because it allows your body to do extra work that it can handle and eventually, putting even more pressure of the nervous system.

Taurine is an amino acid that affects the metabolism. It is an inhibitory neurotransmitter and has the ability to stabilize nerve cell membranes, making it a useful treatment for epilepsy and other excitable brain states.

All energy drinks including *Dinamit*, *Red Bull*, *Burn* and several others all contain many of the following toxic ingredients.

Aspartame is a multi-potential carcinogen, even consumed daily at 20 milligrams per kilogram of body weight. It increases the incidence of malignant tumours in rats.

Acesulfame-K(Potassium) represents one of the food additives used for sweetening aliments and drinks. It is approved by the *FDA*, but there are several potential problems correlated with consumption of this food additive. Even though there are many studies that attest its safety, acesulfame potassium is still suspected of causing benign thyroid tumors.

High fructose corn syrup causes insulin resistance, diabetes, hypertension, increased weight gain, and not to mention is manufactured from genetically modified corn.

Consuming more than two cans of *energy drink* a day, on a frequent basis can lead to various health problems.

Things to be careful:

1. Combining an energy drink and alcohol is an extremely unhealthy practice and one which can have several harmful effects on the body.
2. People with heart disease should avoid these types of drinks.
3. Pregnant women should always stay away from these drinks as the high caffeine content can result in various birth complications, miscarriages, etc.
4. Overdose of these drinks may also lead to kidney problems, stomach problems and muscle pain.
5. Fellow sportspeople are advised no to confuse (or substitute) drinks like "*Red Bull*" with rehydrating sports drinks.

To study changes in the human condition after taking *energy drink*, conducted experiment involving three volunteers ranging in age from 17 to 30 years old, who were asked to drink the energy drink "*Red Bull*".

Using the *Microlife tonometer*, the indices of blood pressure, the number of heartbeats per minute before and after the reception of the energy drink were determined.

In addition, changes in the well-being of the subject determined by them subjectively are recorded. According to the results of the experiment it was established before the use of *the energy drinks*, the blood pressure and the pulse of the subjects were within the normal range. The norm for a person age 16 to 45 years is blood pressure *120/80 mm* and pulse *60-80 beats per minute*.

After using beverage, the parameters of blood pressure and pulse changed in participants at the experiment in 2 participants at the experiment at the age of 24 and 30 years, the increase in blood pressure and pulse increase in heart rate. Subjectively all participant in the experiment noted the appearance of insomnia, participant number 2 whose blood pressure after taking the drink increased from *115/80 mm* to *140/90 mm* noted the appearance of a headache.

The data detained are explained by the content of caffeine in to energy drinks, which as neurostimulator activated the central nervous system. As a result, cardiac activity of all participants in the experiment and heartbeats increased.

The survey show, that energy drinks don't give energy, they only open energy channels of our body. As a result, people consume there inter resources, which leads to nervous over excitation and depletion. Regular consumption of

such drinks actually leads to exhaustion irritation, insomnia, depression, nervous, breakdown. *Energy drinks* are fine when consumed in moderation.

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AFFINITY DESIGNER

Nowadays we're living in the world of technologies and you can never be sure when and what knowledge will be useful for you. It occurs that it doesn't matter what profession you have, because one day you'll find out that you need to do something that is not involved into the sphere of your professional skills, but you have no idea how to do it. And it even doesn't matter who you are: a programmer, a designer, an engineer, a manager or a teacher. As my future profession is connected with web-design, so I need to know a lot about various programs, especially graphic programs that are based on creating vector illustrations. So I've analyzed such programs as Adobe Illustrator, Sketch, CorelDRAW, Photoshop and came up to the conclusion that Affinity Designer is an app both for vector and raster designing. Affinity Designer is easy, super-fast and intuitively understandable. Everyone who has ever opened a vector program will be able to start creating using AD faster than ever. If you're working on branding, concept art, print projects, icons, UI, UX or web mock-ups then this software offers a decent alternative to Adobe Illustrator or Adobe Photoshop and Sketch. It won the Apple Design Award in 2015.

Whenever words like "vectors", "illustration" or "creative professionals" are used, Adobe's creative suite of apps are probably one of the first set of tools that comes up to your mind. For any application its UI is crucial to its success or failure. However, if you take a look at Illustrator or Photoshop their user interface isn't that comforting for beginners. This is exactly where Affinity Designer makes its first big impression. The user interface of Affinity Designer is everything you'd expect from a modern app. While there is a big similarity with the workspace from Illustrator, the user interface is more beginner friendly and very intuitive. The software takes a more visual based approach rather than features being hidden deep inside menus.

The way we interact with software is increasingly changing. With the advent of touch based interactions on our smart phones and tablets, track pads on notebooks have become a common interaction mechanism. It's