

The measurements were carried out on a Varian 220 FS Double Beam AA atomic absorption spectrometer equipped with a hollow cathode lamp specific to the corresponding element.

Scientific novelty and practical value of the results:

Atomic absorption analysis is used to determine about 70 elements. The gases and some non-metals whose resonance lines lie in the vacuum region of the spectrum (wavelength less than 190 nm) are not defined. So, using this rather sensitive method, we conducted the studies listed above for the presence of such important trace elements as Calcium, Zinc, Magnesium and Ferrum. Because their lack of medicines, or conversely excess, can significantly reduce the therapeutic effect of the drug, or lead to undesirable effects. After analyzing the DFUAT data on the content of these components in the drug substance, established over the past 5 years, we compared the results of our reference studies and determined whether our researched raw materials meet the quality standards.

Research results: During the course of the work, the definition of the vitamin and mineral composition of the preparations was made: Ketia Pharma Inc. (Mega Lifesciences), Vitiron Suscasp (Мерфа). According to the results of work, it can be concluded that the content of calcium, zinc and iron in the investigated substances meets the standards of the SPU.

We also carried out a quantitative analysis of the solution of activated carbon on Zinc, Lead and Kuprom.

For DFU, zinc should contain no more than 0.0025%, Lead not more than 0.001%, Copper no more than 0.0025%.

The experiments conducted by us showed the following results: Zn = 0.019%, Pb = 2.3%, Cu = 0.003%

Consequently, we can conclude that there is a clear excess of the content of the Lead in the solution. All other metrics are within acceptable limits.

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**ОРГАНІЧНІ ПАРФУМИ ПРОТИ СИНТЕТИЧНИХ
АРОМАТИЗАТОРІВ**

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ORGANIC PERFUME AGAINST SYNTHETIC FRAGRANCES

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Did you know that over 60% of what you apply to the skin, the largest organ in your body, is absorbed into your bloodstream? 95% of chemicals in most commercial flavors - synthetic compounds derived from oil and natural gas, ie petroleum products. On average, 80% of the aromatic compositions consist of these chemicals, and in some cases, the 100% ratio can be synthetic.

They can cause allergies, migraines, asthma attacks, nausea, skin rashes and many other dangerous situations.

To protect trade secrets, FDA companies refuse to label all aromatic ingredients on the label, so consumers can not rely on labels to know what hazards can hide in a bottle of perfume. This gives companies the opportunity to freely add some flavors to sensitizers, potential residual hormones and hazardous chemicals. Some of the most famous ingredients that cause terrible problems are:

- Parabens are commonly used synthetic preservatives in many flavors, they can inhibit the synthesis and release of hormones.

- Phthalates - this popular ingredient is usually highly concentrated in most commercial perfumes. Known carcinogen, can cause damage to the liver / kidneys, birth defects in girls and boys.

- Synthetic musk. Studies have shown that several types of synthetic musk can not only break hormones, but also leave traces: fatty tissue, breast milk, fat, umbilical cord blood, samples of fresh and sea water, air, sewage and sediment. So why synthetics? Many artificial perfumes contain natural essential oils, but usually it is a small percentage. Despite the fact that natural essential oils are very expensive and rare in contrast to synthetic, there are certain notes that you simply can not extract from natural compounds. This means that the synthetic tasting library is enormous and less restrictive than natural, which gives perfumery companies more opportunities to create products.

Consumers become more educated and interested in chemicals in our personal hygiene products and are looking for safer alternatives.

Natural flavors are essential oils and isolates derived from botanical ingredients that are collected from the ground such as: flowers, fruits, juices, seeds or skin of the plant, as well as bark, foliage, roots, resin or wood of certain trees, and not from laboratory (synthetic).

Without hard chemicals, natural flavors are more environmentally friendly than our synthetic analogues, whose chemicals can be an environmental problem.

Organic perfumes and fragrances for sensitive skin that smell the same way as your favorite fragrance can be difficult to find.

Effect on health and environmental benefits of natural and organic fragrances:

1. The use of natural essential oils, rather than synthetic substances to create the aroma, brings emotional and physical healing properties, such as a sedative, energy-saving, relaxing or toning mood.

2. Organic perfumes do not contain ingredients grown with chemicals, pesticides or toxins that can cause negative skin irritation and damage to the environment.

3. Synthetic odors from petrochemicals can cause migraine, nausea and irritation of the lungs.

4. Unlike perfumes containing synthetic products, natural perfumes are not tested on animals.

6. Unnatural perfumes mask the skin, while organic and natural perfumes create an individual, more personal smell from the owner.

8. In 2010, the campaign For Safe Cosmetics showed that the average synthetic aroma contains up to 14 potentially harmful chemicals for which brands are not required by law.

Spirits are popular today, because they not only help you fight the smell of the body, but also increase your moral spirit. They can help you beat stress and cure insomnia!

So, the next time you wear perfume, remember that it will not only calm you, but you will feel better.