

Role of Grapes in Ranger Syrup



The latest candidate in the quest for cancer-fighting foods or nutrients is a chemical in grapes that researchers say prevents cell-damaging mutations, blocks the development of tumors, and inhibits the growth and spread of cancer—at least in mice.

Resveratrol is one of several hundred compounds being studied for their cancer-fighting potential, and a number of these occur naturally in foods. In addition to grapes, resveratrol is found in at least 70 species of plants, including peanuts and mulberries, according to the report in the January 10 *Science*.

So far, the experiments by University of Illinois scientists show that resveratrol inhibited cancer development in mouse cells in laboratory dishes and reduced the number of skin tumors in mice without causing any obvious toxic reactions. If it still shows promise after additional tests in animals, it eventually could be tested in people, although that is likely to be years away, Dr. Greenwald says.

Until then, the wisest approach is to stick with the NCI's recommendation to eat plenty of vegetables and fruits, including grapes. And, while an occasional glass of wine probably won't hurt and may in fact be healthful, these findings aren't an endorsement to start drinking if you don't already.

Even if they have a rather high amount of sugar, any individual should not avoid grapes, as they are a complete source of health and can prevent or fight extremely severe diseases. Loaded with vitamins, minerals and other nutritive and beneficial naturally occurring compounds, grapes are recommended even in the most drastic diets.

Grapes are excellent sources of vitamins A, C, B6 and folate, containing almost all the beneficial minerals (potassium, calcium, magnesium, iron, selenium, phosphorus in high amounts and zinc, manganese and copper in smaller amounts). They are also loaded with proteins and fibers. But what makes physicians and scientists praise grapes so much is especially linked to the natural pigments found in these fruits: the flavonoids. Flavonoids are red, blue or violet pigments that confer the same color to the plant or fruit, therefore they are mostly found in red or blue-violet grapes, rather than in white grapes.

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Flavonoids are a class of naturally occurring plant compounds that function as antioxidants. They are plant pigments and even if they are not labeled as essential nutrients, they enhance the processing of vitamin C, which is itself a powerful antioxidant. Flavonoids are also needed to maintain capillary walls and protect against infections. Deficiency of flavonoids may lead to easily bruising.

Flavonoids are extremely potent anti-oxidants. Antioxidant properties of the natural pigments fight against molecular oxidation by the free radicals; this is why they are called anti-oxidants. In our body an infinite number of chemical reactions take place every day.

A part of the chemical changes in the cells that use oxygen give birth to free radicals, which are harmful for the cells and the organism. An excessive amount of free radicals interact with the DNA or parts of the other cells in the body and may damage them. But the antioxidants counteract and neutralize these organic “enemies.”

This is why grapes can protect the cells and prevent serious diseases such as cancer (which is mostly caused by the damaged DNA) or heart disorders (that are caused by the oxidized cholesterol that blocks the arterial walls.) They are also extremely beneficial against vascular disorders, general aging process of the body and age related disease etc.

In conclusion, all we have found out until now about grapes is that they are anti-cancer, anti-infective and anti-inflammatory potent factors, prevent and decrease symptoms of all types of cardiovascular disorders, from mild to severe stages. Due to their anti-oxidant properties, grapes also protect body cells from being damaged and slow the aging process, helping us to fight against all kinds of age related diseases, such as the ones that affect our mental ability (like Alzheimer's disease or dementia) or eye-vision disorders (like myopia, glaucoma, age-related macular degeneration etc.)

The most two potent flavonoids found in grapes are: quercetin and resveratrol. Quercetin flavonoid is responsible for most of the extremely efficient effects of grapes intake mentioned above. However, resveratrol is as potent a flavonoid as quercetin, as it also helps fighting against or treating cardiovascular disease. Moreover, a scientific study published on April this year in the Journal of Agricultural and Food Chemistry showed that resveratrol can reduce risk stroke with 30%. This results from the flavonoid's ability to clear blood vessels and improve blood flow to the brain.

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Another scientific research found resveratrol beneficial against prostate, lung, liver and breast cancer. The anti-cancer property of the multipotent flavonoid lays in its power to inhibit cancerous cells involved in the initial and progressive stages of cancer.

The most recent study on the benefits we get from grapes has been carried out on July 24 by a team of scientists from Biochemical Investigation Service at the Ramon and Cajal Hospital in Madrid. They showed that red grape juice is extremely beneficial against inflammatory markers and high cholesterol levels that lead to heart disease.

They stated that their research showed that the anti-oxidants that had so beneficial effects upon the “bad” cholesterol and inflammatory factors in the subjects' bodies are “probably polyphenols, which are likely to be responsible for the observed effects of red grape juice consumption on antioxidant capacity.

But the results are in agreement with other studies that have linked red wine consumption, polyphenol-rich green tea or pine bark extracts to improved cardiovascular risk factors. Dietary supplementation with concentrated red grape juice exerts hypolipidaemic, antioxidant, and anti-inflammatory actions in both healthy subjects and patients with end-stage renal disease. These effects may be considered to be beneficial for the prevention of cardiovascular disease.”

Besides all the vitamins and nutrients they are loaded with, grapes were found in June this year likely to provide a source of melatonin, the sleep hormone. If this will be ascertained by further scientific studies, that grapes will become one of the main remedies used to treat sleep disorders.

The research was carried out by a medical team of Italian experts from Milan's Istituto di Virologia Vegetale (Institute of Vegetable Virology). Their trials showed that red grapes intake leads to an increase in the melatonin levels in humans' bodies. But how could grapes contain melatonin as long as plants do not sleep? This was the weirdest thing to be explained. However, the scientists formulated a hypothesis according to which the same hormone may be produced by plants in order to keep them from all kinds of plant diseases.

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GRAPE FRUIT

- ❖ Grapefruit is a subtropical acid fruit, probably developed from a cross between an orange and a shaddock, a citrus fruit with thick skin, many seeds, almost no juice, and a very sour taste.
- ❖ Grapefruit often has a reddish brown colour over the normal yellow. This citrus fruit combines tanginess and sweetness.

Nutritional Value

- ❖ Fresh grapefruit is low in calories and is a good source of flavonoids, water-soluble fibers, potassium, vitamin C and folic acid.
- ❖ Grapefruit is very rich in citric acid and their salts.

Health Benefits

- ❖ Grapefruit, like other citrus fruits, has been shown to exert some anticancer effects.
- ❖ Grapefruit pectin has been found to possess cholesterol-lowering action similar to that of other fruit pectins.
- ❖ Normalizes hematocrit levels (refers to percentage of red blood cells per volume of blood).
- ❖ When taken before bedtime, grapefruit is conducive to a sound sleep.
- ❖ Helps prevent constipation and stone formation.
- ❖ Excellent aid in reducing fevers from colds and flu.
- ❖ Good for any hardening of the body tissue, such as of the liver and arteries.