



Smokers' aid - SmAid® is a two-phase nutritional supplement mixture. The two phases are packaged in a separate capsule and in separate containers

The two SmAid® capsules contain nutritional supplements that can be used to supplement the smoker's body with more minerals and vitamins and strengthen the immune system against the development of damage.

What are these active substances and what is their role in maintaining health?

Phase 1

Herbal extracts

- Pomegranate (*Punica granatum*) extract



Pomegranates are a favourite fruit of the Middle East, and some historians believe that the apple plucked by Eve in the Garden of Eden was also a pomegranate! The extract produced from its seeds contains a powerful antioxidant compound called ellagic acid, which is also good at neutralising free radicals.



- Resveratrol



Resveratrol is also an antioxidant polyphenol produced from grape seeds. Its action is similar to that of apple polyphenol, so together it provides even more effective protection against free radicals.

- Black garlic extract (ABG10+)



The cardiovascular protective effects of garlic have been known for thousands of years. Smoking is extremely damaging to our heart and vascular system. Black garlic is a fermented version of regular garlic, with higher levels of S-Allyl-Cysteine (SAC), the substance responsible for its protective effects. ABG10+ is a trademarked product of the Spanish company Pharmactive and has been clinically proven effective (<https://pharmactive.eu/>)

- Chinese pine bark extract



The bark extract of *Pinus Eliottii*, a pine species indigenous to China, contains high concentrations (95%) of active substances called proanthocyanidins, which have powerful antioxidant properties that help to counteract the damaging effects of free radicals.



- Apple-polyphenol



Polyphenols are natural antioxidant compounds that can be used effectively to neutralize so-called "free radicals" that are often carcinogenic and cause severe damage to cells and tissues of the body. Tobacco smoke is rich in oxidative, carcinogenic compounds (free radicals). Apple polyphenol, produced from apples, is one of the most powerful antioxidants known to date, with an extremely high ORAC (free radical scavenging capacity) value (17,000), and therefore provides effective protection against free radical damage

Minerals

- Zinc

Zinc is an essential mineral for our body, which must be provided by our diet, our body cannot produce it. It is responsible for the functioning of several enzyme systems that are vital for the normal functioning of the body. It is included in our formulation because of its powerful antioxidant, anti-ageing, anti-bone and immune system boosting properties.

- Selenium

Selenium is a vital micronutrient for our body, it has a strong antioxidant effect and is good at fighting free



radicals and also contributes to the normal functioning of the thyroid gland. The loss of appetite and weight loss that is common in heavy smokers is often due to thyroid problems.

- Copper

Adequate copper intake is also important for the proper functioning of our body. It contributes to the normal functioning of the nervous system and is involved in normal iron transport. It also contributes to the normal pigmentation of hair and skin and the normal functioning of the immune system. It is also involved in the maintenance of normal connective tissues and helps protect cells against oxidative stress.

- Iodine

In most cases, the source of iodine is drinking water, but in many cases, near-surface or tap water from rivers does not contain enough iodine, so constant supplementation is strongly recommended! It contributes, along with selenium, to the normal functioning of the thyroid gland and the nervous system. It is also involved in the body's normal energy-producing metabolic processes and contributes to the maintenance of normal skin condition.



Vitamins

- Vitamin A (Retinol)

Almost the first damaging effects of smoking are seen in the mucous membranes of the mouth and throat, and longer-term smoking is associated with skin damage and wrinkling. Vitamin A helps maintain normal mucous membranes and skin. It also contributes to the normal functioning of the immune system and to the maintenance of normal vision.

- Vitamin B complex

The B vitamin complex is made up of vitamins B1, B2, B3, B5, B6 and B12, as well as biotin (B7) and folic acid (B9). These are so-called "water-soluble" vitamins, which means that we need to keep taking them because our body cannot store them and unused amounts are excreted. Smokers always need more vitamins than non-smokers (smoking "eats" the vitamins), so for them, a continuous intake of this group of vitamins is very important! What is the role of each B vitamin?

- Vitamin B1 (Thiamine)

contributes to the normal functioning of the nervous system and heart and to the maintenance of normal psychological function.



- Vitamin B2 (Riboflavin)

contributes to the normal functioning of the nervous system, the maintenance of mucous membranes, red blood cells and skin and normal vision, as well as protecting cells against oxidative stress and reducing fatigue.
- Vitamin B3 (Niacin)

is involved in normal energy-producing metabolic processes and contributes to the normal functioning of the nervous system. It also helps maintain normal mucous membranes and skin and psychological functions. It also contributes to the reduction of fatigue and tiredness.
- Vitamin B5 (Pantothenic acid)

is involved in normal energy-producing metabolic processes and contributes to the normal synthesis and metabolism of steroid hormones, vitamin D and certain neurotransmitters, reducing fatigue and tiredness.
- Vitamin B6 (Pyridoxine)

is also involved in normal energy-producing metabolic processes and contributes to the normal functioning of the nervous system. It is also involved in normal protein and glycogen metabolism, contributes to the maintenance of normal psychological function, the formation of red



blood cells, the normal functioning of the immune system and the regulation of hormonal activity.

- Vitamin B12 (cyanocobalamin)

is also involved in normal energy-producing metabolic processes and contributes to the normal functioning of the nervous system. It also contributes to normal homocysteine metabolism, which is essential for the prevention of certain inflammatory processes and the maintenance of normal psychological function.

- Vitamin B7 (Biotin)

contributes to the maintenance of normal hair, skin and mucous membranes and normal functioning of the nervous system. Involved in the normal metabolism of micro- and macro-nutrients.

- Vitamin B9 (folic acid)

folic acid plays a role in cell division, normal amino acid synthesis and maternal and fetal tissue growth during pregnancy. Adequate folic acid intake is essential for all women expecting or planning a child and this is especially true for women who smoked before becoming pregnant! It contributes to normal blood formation, normal homocysteine metabolism and proper immune system function.



- Vitamin D3

Since one of the consequences of smoking is bone damage, it is very important for smokers to have an adequate supply of vitamin D. A relative vitamin D deficiency is common in today's civilised societies (not enough sun exposure, use of strong sunscreens, "sunbathing" in the shade, etc.) and this affects bone health and bone regeneration. A minimum daily intake of 2,000 NU of vitamin D is therefore highly recommended as vitamin D contributes to the normal absorption of calcium and phosphorus, normal blood calcium levels and the maintenance of healthy bones. It also plays a role in the normal functioning of the immune system, which is very important for smokers.

Phase2

This capsules provides the essential and perhaps most important vitamin for smokers :

- Vitamin C

at a high dose of 500 mg per capsule. The reason is why it has been put in a separate capsule, because the required daily amount would not fit in SmAid Phase-1 capsules, and also because of its powerful antioxidant effect it could have potentially damaged the other active ingredients in the capsule.



Scientific studies have shown that smoking 'eats' vitamin C, (one cigarette burns about 100 mg of vitamin C,) which is also a water-soluble vitamin. This vitamin needs to be constantly replenished, which is used up to neutralise oxidative carcinogenic substances in the smoke.

Vitamin C's primary role (due to its powerful antioxidant effect) is to neutralise oxidative substances in smoke that damage cells and tissues, but it is also essential for many other physiological processes.

As a major contributor to the normal functioning of the immune system and normal collagen formation, through this, it helps the maintenance of normal blood vessels, skin, bones, teeth and gums. It enhances the absorption of iron. Moreover it contributes to normal nervous system function and to the maintenance of normal psychological functions.