



### RESVERATROL IS THE MOST POWERFUL ANTIOXIDANT

Resveratrol is a polyphenol that found in the skins of red grapes, some berries, and other plants. This substance is produced by plants as an immune response to protect against different kinds of damage:

- Drought
- Freezing
- Ultraviolet rays
- Fungi and bacteria

It is **one of the most powerful antioxidants.** According to many researchers, this antioxidant has anti-inflammatory effects on humans. Resveratrol helps to maintain youthful and healthy eyes, brain and protects the heart and blood vessels.





#### "FRENCH PARADOX"

Everyone has heard of the health benefits of moderate consumption of dry red wine. The French have a low death rate from heart attacks and strokes, despite smoking and intake of big amount of fat. With a local diet rich in saturated fat, the rate of cardiovascular disease and cancer is significantly lower than in other regions.

The "French paradox" is a phenomenon when red wine in small quantities and moderate consumption helps to prevent cancer and vascular and heart diseases. It has been proven that the leading role in this paradox is played by Resveratrol.





### SIRTUINS ARE ENZYMES FOR A LONG LIFE

Sirtuins (Silent Information Regulator 2 (Sir2) proteins) are enzymes found in all organisms, from bacteria to humans. It is assumed that Sirtuins regulate the processes of aging, transcription, apoptosis (programmed cell death), resistance to stress and also responsible for the lifetime. The beneficial properties of resveratrol are associated with its ability to activate the Sir2 enzyme.

Sirtuins were associated with longevity 20 years ago. The biology professor Leonard P. Guarente from the Massachusetts Institute of Technology in Cambridge (USA) discovered that the lifetime of yeast was significantly increased, when the gene encoding the Sir2 enzyme were added to it.





# SWISS-MADE NATURAL TRANS-RESVERATROL

The grapes have become the most famous association for Resveratrol. However, its concentration in grapes and grape seeds is insufficient for medical use for industrial purposes. The highest concentration is observed in the root of the Japanese Knotweed (Polygonum Cuspidatum). It is the source of resveratrol in Swiss Energy products.

In addition, there are two forms of Resveratrol: Transand Cis-isomer. Trans-form is a biologically active. This isomer is used in Swiss Energy products.



Japanese Knotweed (Polygonum Cuspidatum).



### HOW RESVERATROL SLOWS DOWN THE AGING PROCESS

Resveratrol has been continuously studied since 2003. Recently, was discovered that Resveratrol extends the life of yeast cells by an average of 70%. Scientists have found that genes expression in yeast cells were similar to human's ones.

Studies have shown that there are a number of factors that contribute to long life. These are, for example: low glucose and insulin levels, stable weight of body, stress resistance, regular exercise and normal body temperature. To date, it has been established that restricting calories in the diet is the only scientifically proven way to slow down the aging of the body.

The use of Resveratrol as a dietary supplement induces gene expression, which is also reduces calorie intake. Thus, it can be said that continuous use of Resveratrol has an effect similar to caloric restriction in the diet. Imitation of a low-calorie diet occurs. This mechanism allows us to assert that Resveratrol helps to slow down aging.





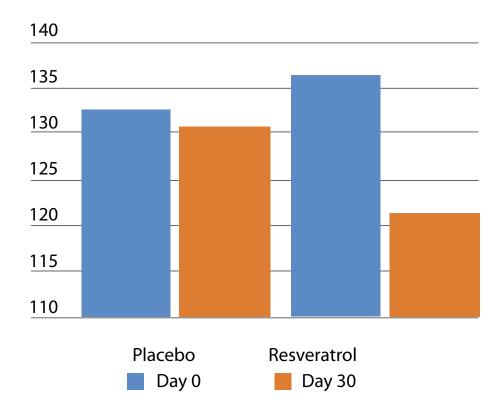
#### RESVERATROL SUPPORTS THE CARDIOVASCULAR SYSTEM

In many clinical studies, Resveratrol has shown beneficial effects on most cardiovascular diseases, including vascular atherosclerosis, hypertension and heart failure.

Studies have shown that taking resveratrol in doses greater than 150 mg / day reduces blood pressure due to the following effects:

- Increasing the concentration of nitric oxide
- Reduction of oxidative stress
- Increasing high density lipoproteins (good cholesterol)
- lowering low density lipoproteins (bad cholesterol)

Effectiveness of resveratrol in decreasing of blood pressure in men with obesity





#### RESVERATROL IN DIABETES

Resveratrol has a positive effect not only on type 2 diabetes, but also on insulin-dependent type 1 diabetes. There are evidences that resveratrol helps with diabetes. It works in three ways:

- Normalizes blood glucose levels
- Keeps beta cells from chronic destruction
- Suppresses insulin resistance of cells

Heather Hausenblas, PhD, in her research paper "Antihyperglycemic Effects of Short-Term Resveratrol Use in Patients with Type 2 Diabetes", has confirmed the rather strong antidiabetic effect of Resveratrol.

Compared to baseline, resveratrol treatment significantly reduced systolic blood pressure (129 versus 121), glucose level (9.7 versus 7.5), HbA1c (8.6 versus 7.60), and insulin (10.2 versus 5.4). In addition, HDL (high density lipoproteins level) were significantly increased (41.40 versus 46.15) from baseline levels.

| Indicator            | Before | After |
|----------------------|--------|-------|
| Blood pessure, mm Hg | 129    | 121   |
| Glucoselevel, mmol   | 9,7    | 7,5   |
| Insulin, mIU         | 10.2   | 5.4   |
| HbA1c, %             | 8,60   | 7,60  |
| HDL level, mg / dl   | 41,40  | 46,15 |



### RESVERATROL AGAINST CANCER

Resveratrol is a polyphenolic compound that, according to experts, helps to defeat cancer (brain tumors, cancers of the breast, intestine, prostate, and others).

Then, the Sloan-Kettering Memorial, America's largest cancer treatment organization, conducted research on the anti-inflammatory effect of Resveratrol on precancerous cells. It is known that the COX-2 enzyme activates hormones (eicosanoids) that cause inflammation in the cell, which leads to changes in its DNA and transformation into cancer. In the above study, **Resveratrol confirmed the complete prevention of COX-2 enzymes, in simple terms, turned off the enzyme.** 

The biochemical and molecular properties of resveratrol indicate its effectiveness against precancerous or cancerous cells. The anticancer efficacy of resveratrol includes:

- Stopping the cell cycle;
- Suppression of cell proliferation;
- Induction of apoptosis and cell differentiation;
- Reduction of inflammation and angiogenesis



# PROLONGS OF YOUTH OF THE BRAIN

In 2008, researchers at Weill Cornell Medical College at Cornell University reported that using a resveratrol diet significantly reduced the formation of plaque in the brains of animals similar to Alzheimer's disease and other brain diseases associated with aging. In mice, Resveratrol reduced the amount of plaque in the brain by about 90%.

In humans, taking resveratrol could theoretically reduce the formation of amyloid plaques, which are associated with age-related changes in the brain. Researchers suggest that one of the mechanisms of this process is the binding of copper ions by resveratrol.





# YOUTH AND BEAUTY OF THE SKIN

#### This effect is realized in several ways:

- 1. **Resveratrol inhibits hyaluronidase,** an enzyme that breaks down hyaluronic acid, which is the main moisture-retaining component of the skin. A high moisture content is essential for the proper formation of keratinocytes.
- 2. Resveratrol effectively inhibits collagenase, an enzyme that breaks down collagen in our skin. Collagen makes up to 70% of the structural elements in the skin. Its fibers are located throughout the entire skin. In the inflammation process and when exposed ultraviolet radiation, collagenase is activated. Accordingly, collagen degradation also increases. With a lack of collagen, the skin loses its firmness and elasticity.
- 3. Resveratrol has an inhibitory effect on the enzyme elastase, which breaks down the second main protein in our skin elastin. Even in small doses, resveratrol inhibits elastase activity, which is especially important in summer, with high sun activity.





# RESVERATROL SWISS ENERGY MADE IN SWITZERLAND!

#### **Resveratrol:**

- Prolongs life and fights aging
- Supports struggling against cancer
- Supports to control diabetes
- Contributes to cardiovascular system
- Prevents aging of the brain
- Improves skin condition
- One of the most powerful antioxidant





(Polygonum Capsidatum Extract, 50% - 250 мг)



# Natural Trans-Resveratrol 250 MF

(Polygonum Capsidatum Extract, 98% - 255 мг)



# RESVERATROL COMPLEX IS A POWERFUL COMBINATION OF ANTIOXIDANTS

#### **Red Wine Extract**

- has antioxidant properties
- normalizes the content of blood lipids
- has an anti-inflammatory effect on the vascular wall

#### Green tea extract

- has a beneficial effect on the brain
- has a cardioprotective effect
- slows down the aging of cells
- breaks down fats and promotes weight loss

#### Grape seed extract

- fights free radicals
- reduces the risk of developing cardiovascular diseases
- supports the collagen structure and prevent its destruction
- prolongs youth

#### Acerola extract

- natural source of vitamin C
- also contains provitamin A, vitamins B-group, iron, magnesium, potassium, calcium and phosphorus
- protects the body from premature aging
- supports immunity



| Polygonum Cuspidatum Extract | 50mg |
|------------------------------|------|
| Red Wine extract             | 50mg |
| Green Tea Extract            | 50mg |
| Grape Seed Extract           | 50mg |
| Acerola Extract              | 50mg |





#### **CONTACTS:**

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