

Apple in a Capsule!

# Pometin™

## The Key to Health and Longevity

*There is no doubt that a high intake of nutritious vegetables and fruits is healthy. Unfortunately, scientific studies rarely indicate any health promoting effects from use of multivitamins. The reason is probably that vegetables and fruits contain several hundreds of other substances besides vitamins and minerals, e.g. polyphenols and flavonoids.*

*Apples are especially rich in these compounds. Not surprisingly, epidemiological studies have linked the consumption of apples with reduced risk of some cancers, cardiovascular disease, asthma, and diabetes; even more so than other fruits or vegetables.<sup>1</sup> Recent research shows that pomegranate in particular have impressive health-bringing properties.*



- **Pometin contains two types of extracts with highly bioactive natural compounds**
- **The pomegranate extract is derived from the peel, the most nutritious part of the fruit**
- **The quercetin extract is of particularly high concentration and quality**
- **No ingredients, including the capsules, are derived from animal sources**

Externally pomegranate resembles an ordinary red apple, while the inside is another story. It is mainly the content of ellagic acid – a polyphenol that also exists in nuts – that has created an interest in the scientific community. Pomegranate extracts with a high content of ellagic acid have shown to inhibit inflammation<sup>2</sup>, virus and bacterial growth<sup>3,4</sup>, and dramatically enhance the activity of antibiotics<sup>5</sup>. Furthermore, pomegranate helps the liver to fight toxins. The extract is also a powerful anti-oxidant. In fact, it is even more potent than red wine and green tea<sup>7</sup>. Pomegranate extract can be used orally to protect the skin from free radical generating sun exposure and damage<sup>8</sup>.

A very interesting property of Pomegranate is that it diminishes the dangerous effects from LDL-particles (a.k.a. “bad cholesterol”). When this type of cholesterol attaches to the wall of your blood vessels atherosclerosis emerge, and the risk to suffer a heart attack or stroke is increased. However, in order to make this happen the cholesterol must be oxidised, and inflammation must

be present. Pomegranate inhibits these conditions effectively<sup>9-11</sup>. In fact, atherosclerosis that once was seen as a chronic disease has been reduced by 30% after three years of pomegranate juice drinking<sup>11</sup>. In this particular study, blood pressure was lowered. In other human studies this effect was seen already after two weeks use.<sup>12</sup>

Lately pomegranate has been covered extensively in the media due to new findings regarding its ability to fight cancers, in particular breast cancer<sup>13</sup> and prostate cancer<sup>14-16</sup>. Although at the present time there are mostly animal studies available, the data is nevertheless very impressive. Human studies have indicated a decrease in PSA concentration (a marker of prostate cancer), and that ellagic acid decreases the side effects from chemotherapy.<sup>16</sup>

Yet another interesting property of pomegranate is its ability to decrease the uptake of sugars from the intestines.<sup>17</sup> This means more stable blood sugar, with

less cravings.

Scientists also believe that pomegranate extract can inhibit osteoporosis and improve the depressive state in menopausal women,<sup>18</sup> and to inhibit osteoarthritis.<sup>19</sup> After researchers investigated several natural substances they concluded that pomegranate was the most effective substance for improving erectile response.<sup>20</sup>

Another substance found in apples that might be even more interesting than ellagic acid is a polyphenol called quercetin. It belongs to the flavonoids and is a natural colouring substance that can also be found in red wine, black tea and onions. It is suspected that the healthy effects from a moderate use of red wine are due to its content of quercetin.<sup>21</sup> In the Western world we eat about 15 mg quercetin daily, which corresponds to 750 ml of red wine, 50 grams of onion or 375 ml of tea<sup>22</sup>. Red apples, but not pomegranate, are another important source of quercetin. To get 15 mg of quercetin one needs to ingest almost ½ kg of apples.



In a large Dutch study it was found that there is a close relation between quercetin intake and cardiovascular disease<sup>23</sup>. A group of Finish researchers have been following 10,054 males since 1966. The leader of the project, Dr Paul Knekt, has concluded that the individuals who consumed the largest amounts of apples (especially apples with high quercetin content) had the lowest risk for cardiovascular disease<sup>24</sup>. Furthermore, the risk of cancer, asthma and diabetes type 2 was lower the more apples the men were eating<sup>24</sup>. In several ways quercetin works similarly to ellagic acid (anti-inflammatory, anti-oxidatively, blood pressure lowering), but quercetin also seems to affect the platelets, and thus decrease the risk of thrombosis<sup>24</sup>.

Another unique property of quercetin is to protect the body from the harmful effects induced by a high blood sugar.<sup>26</sup>

Furthermore, quercetin seems to protect the kidneys from damage. In rat studies the kidney damage from toxin exposure was dramatically decreased when quercetin was administered<sup>27</sup>.

Together with ellagic acid quercetin seems to protect against prostate cancer, but quercetin can also reduce the symptoms from prostatitis (inflammation of the prostate gland). This is an unpleasant condition that is difficult to treat otherwise. In a recent pilot study, an extract of quercetin was effective in treating pain from the female genitals<sup>29</sup>

**In conclusion, the old expression "An apple a day, keeps the doctor away" seems to be more appropriate than ever!**

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