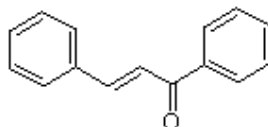


***BASIC DIFFERENCES BETWEEN CITRUS FLAVONOIDS AND FLAVONOIDS
FOUND IN COLORED BERRIES***

Citrus fruits contain characteristically biflavons and kalkons,



C01484

but lack anthocyanidines that characteristics of coloured fruits, also its glycosides, the anthocyanines.

On the other hand, in most citrus fruits the vast majority of the radicals connected to the flavon basic structure are methoxy (-OCH₃) groups, that translates into hydrophobic characteristics of the molecule. It means disadvantage in water solubility, therefore bioavailability, indicative of weaker antioxidant effects. (Naturally, there are a small number of flavonoids containing OH radicals, e.g. naringenine.)

The coloured berry fruits also contain a great amount of proanthocyanidins, that considered bipolymeres and their free radical scavenger and antioxidant effects are significant. The other important fact is that citrus fruits typically contain aglycons (flavonids not connected to sugar component) and minute amount of glycosides (flavins connected with glucose) that diminishes water solubility (hydrophobic character).

In summary, citrus fruits contain a smaller spectrum of flavonides than in coloured fruits.

It is possible that a citrus fruit or a product made of citrus contain equal or higher concentration of total polyphenol than another type of fruit concentrate, but this total polyphenol content represents significantly fewer kind of compounds, that compromises the physiological effect, taking into consideration that these compounds synergetically facilitate the effect of the other compounds. In addition, their chemical characters ensure a higher level of bioavailability.

The characteristics of a product is described by polyphenol content is less informative than description by antioxidant power, since it characterizes not only the polyphenol content but more importantly, its efficacy.

Flavin7[®] is a powerful antioxidant, “Red Bioflavonoid Complex” that has made from red coloured berries which contents resveratrol also. Flavin7[®] is organic and does not contain any additional ingredients (sugar, yeast, corn, preservatives ...ect.), Non-GMO.