



Usefulness of Elderberry Fruit as Functional Food

Sigrun Chrubasik, Institute of Forensic Medicine, University of Freiburg, Freiburg, Germany

Pharmacological and clinical studies indicate that products from elderberry fruit are useful for the treatment of diseases and the maintenance of health. This, however, requires an adequate daily dose of the active principle of elderberry fruit. Dose-finding studies have not yet been carried out for the different indications. Most promising are elderberry products for viral infections and diseases associated with oxidative stress including arteriosclerosis, diabetes, hyperlipidemia, cancer, etc. Temperature, oxygen, and light are destroying active principle in elderberry juice. This has to be taken into consideration when preparing elderberry functional food. Addition of vitamin C may help to protect from oxidative degradation. The starting material has to be free of leaves and stems because these contain toxic lectins causing intoxications (acute gastrointestinal and neurologic symptoms). Unlike intoxications with solanin, elderberry intoxications had a benign outcome so far...

The presenter's comments included references to 15th century Swiss monks preparation of elderberry by added oil, honey, vinegar and ethanol, as ethanol concentrates the elderberry's active principle. The presenter admitted that science does not know all of elderberry's active principles and that their accurate measurement is difficult. Current methods tend to over or under estimate antioxidants, for example.

In clinical application of the presenter's summary of indications, in the case of elderberry fruit products she leans toward an error of overdosing vs. underdosing, since the potential negative consequences are minimal. In other words, elderberry juice tends to purge the digestive system, and people typically stop ingesting it when that happens, so that the potential detrimental consequences of consuming too much elderberry is unlikely. In any case, all known overdoses, or intoxications, have been benign, long-term neutral/harmless.