

## **Bioavailability and Metabolism of Flavonoids**

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Flavonoids are one of the largest nutrient families known to scientists, and include over 6,000 already-identified family members. Some of the best-known flavonoids include quercetin, kaempferol, catechins, and anthocyanidins. This nutrient group is most famous for its antioxidant and anti-inflammatory health benefits, as well as its contribution of vibrant color to the foods we eat. Flavonols are distributed ubiquitously among different plant foods whereas appreciable amounts of isoflavones are found in leguminous plant-based foods. Flavonoids have shown promising health promoting effects in human cell culture, experimental animal and human clinical studies. They have shown antioxidant, hypocholesterolemic, anti-inflammatory effects as well as ability to modulate cell signaling and gene expression related disease development. Low bioavailability of flavonoids has been a concern as it can limit or even hinder their health effects.

**Background:** In terms of nutrient richness, we get far more flavonoids from plants than from animals, and in particular, vegetables and fruits can be especially nutrient-rich in this type of phytonutrient.

**Methods:** Published literature and journals from different sources

**Key Words:** Absorption, Bioavailability, Flavonoids and Metabolism