

Absorption	Direct absorption and excretion of Anthocyanin 3-O- $\beta$ -rutinosides as the intact forms	Blackcurrant Anthocyanin (D3R and C3R)	8 Healthy men volunteers (60 -72 kg body weight), between 26 and 57 years of age	Orally administered D3R and C3R are directly absorbed and distributed to the blood and excreted into urine in humans.	Matsumoto H et al
	Absorption and excretion of Anthocyanins	Blackcurrant extract including anthocyanins	5 males (20-45 yrs)	Anthocyanins are absorbed and excreted metabolized	Tony K. McGhie et al
	Anthocyanin absorption from the stomach	Blackcurrant Juice containing Anthocyanins	29 subjects	Anthocyanin glycosides can be rapidly absorbed from the stomach after ingestion by a process that may involve bilitranslocase, and they enter the systemic circulation after passing through the liver.	Tony K. Mc Ghie et al
	Anthocyanin absorption in plasma and urine	Blackcurrant Juice containing Anthocyanins	Four 27-year-old volunteers (2 females and 2 males), with a mean body mass index of 20.8 (range 19.4-22.8kg/m <sup>2</sup> )	C3G, C3R, D3G, D3R were founded in human plasma. Anthocyanins and "anthocyanin-like" compounds were determined in the urine.	J Environ et al
	Metabolism of Polyphenols and absorption in colon, plasma and urine	Blackcurrant Juice containing Anthocyanins	10 healthy male and female subjects, age 22-36 yrs	The quantitative results derived in this study indicate that the majority of ingested polyphenols from the blackcurrant juice are subjected to metabolism in the colon. Following the ingestion the complex polyphenol pattern of the blackcurrant juice is metabolically reduced to a small number of conjugates and metabolites present in plasma and urine, apart from the small amounts of anthocyanins absorbed and excreted.	Andreas R. Rechner et al