

Abstract:

It is well known that berry fruit have certain health benefits and folkloric usage is documented. Scientifically, blackcurrants have long been regarded as having considerable health benefits, due to their high levels of vitamin C. Other health benefits include antioxidant activity. Blackcurrants have exceptionally strong antioxidant activity in vitro and perform well in a range of different assay systems. The strong antioxidant activity is due to high levels of phenolics, including anthocyanins, although vitamin C makes an important contribution. When investigating health benefits of a crop it is important to determine the activity and composition of the raw fruit but also to analyse the form in which the fruit is usually consumed. Blackcurrant antioxidants appear to be very stable and remain active after processing into juice, wine and jam. It is also important to determine what happens to these components once they are ingested and whether they get to a site of action that is critical to have a protective effect. Currently there is limited data on the bioavailability of flavonoids, particularly the anthocyanins present in blackcurrants. There is also limited data on blackcurrants in clinical trials, to get conclusive proof of their health benefits. One trial examining the effects of consumption of berries on antioxidant potential and diene conjugation in low-density lipoprotein (LDL) particles in vivo has shown only small positive differences. The challenge for the coming years is to advance our scientific understanding to a stage where we will be able to make specific health claims for the fruit, and food or nutraceutical products containing blackcurrants.