Popular scientific project description for project funded by Ekhagastiftelsen

Popular scientific project description is to be submitted within 2 months of project grant.

Application number:	2015-76	
Project title:	Research into nutritive value and anticancer properties of	
	blueberry and raspberry fruit from biodynamic, organic and	
	conventional production	
Receiver of grant (name,	Warsaw University of Life Sciences	
address):	Nowoursynowska 166	
	02-787 Warsaw	
	Poland	
Contact / project manager:	Prof. Ewa Rembiałkowska	
Project start (yyyy-mm-dd): *	2016-04-01	
Project end (yyyy-mm-dd): *	2018-03-31	
By Ekhagastiftelsen granted sur	n:	1.280.000 SEK

Project description: (max 150 words)

Demand for organic and biodynamic foods is driven by consumers' perception that they are more nutritious and health-beneficial. At the same time available research results on this topic are limited and inconclusive. The aim of our project is therefore to examine whether agricultural production methods determine nutritional quality and anticancer activity of raspberry and blueberry fruit. Fruit samples will be collected from biodynamic, organic and conventional farms and analysed for a wide range of health-promoting bioactive compounds (i.e. vitamins, polyphenols, carotenoids). In addition, anticancer properties of berries will be tested *in vitro* using human colon cancer cells. Colorectal cancer is the fourth most common cause of cancer related mortality globally, proven to be strongly associated with diet. Confirmation of the anticancer effect of the studied organic and biodynamic fruit may bring important information for the consumers, but also contribute to the current strategies of prevention and treatment of cancer.

^{*} Dates for project start and end should be the dates for which the grant is received (Not dates for total project if longer than period for which grant is received)