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*Healthy and Nutritious Spud*

For the past few years I have grown a large garden with many varieties of potatoes. The summer of 2009, I took some of my harvest to the local Farmers' Market. It was there that the following scenario arose: Would you be willing to give up a bowl of creamy, white mashed potatoes for a bowl of purple or red mashed potatoes, just because they are more nutritious? Well, if you answered 'no' you might be interested in the results of this project, because I found that colored flesh potatoes are more nutritious than white fleshed. The two nutrients I tested for were phenolics and protein. I could test for these two relatively easily and both are important, as phenolics have antioxidant activity and protein is an important dietary requirement, although some sources are healthier than others. To conduct this experiment, I chose 28 different, freeze-dried, potato cultivars that had been ground to a powder. The phenolic and protein extraction processes were done separately, using specific buffers and reagents. The samples were put in cuvettes and calibrated in a spectrophotometer, which measures the light that passes through the sample and then shows an optical density reading. These readings were recorded and graphed, using standard curves for both phenolics and protein. The conclusion is that, although, purple or red mashed potatoes may not look all that appetizing with brown gravy – this project showed they are more nutritious.