

*Consumer Abstract*

Colon cancer, a disease largely attributed to environmental factors such as smoking and diet, is the second leading cause of cancer death in the United States. Current research supports the idea that diets high in antioxidants promote health and delay the onset of chronic diseases such as cancer and heart disease. Previous studies completed by Dr. Hong's research group have shown that consuming chocolate, a food high in antioxidants, can decrease blood lipids and cholesterol, thereby reducing the risk for development of heart disease. However, whether consuming chocolate can decrease the risk for developing colon cancer is not known. For this reason, Dr. Hong's research group plans to use a special animal model to determine if consuming chocolate can protect against the development of colon cancer. Animals will also be fed chocolate that has been exposed to heat to see if chocolate blooming (a condition when parts of a chocolate bar are stained white after exposure to heat, but is still safe for human consumption) affects the antioxidants in chocolate. These studies will help researchers to determine if consuming chocolate, both regular and heat damaged, can protect against the development of colon cancer.