

## SUMMARY

A recent SIU study funded by the Specialty Crop Block Grant Program of USDA-AMS through Illinois Department of Agriculture indicates more antioxidants in local produce.

Buying and consuming local fruits and vegetables close to harvest date provides more nutritional benefits from antioxidants in tomatoes, apples, grapes and blueberries.

The SIU study recommends daily consumption of local fruits and vegetables in regular diets for increased availability of health promoting phytonutrients.

Consumer awareness of superior nutrition from local produce will increase demand of local produce.



Blueberries are one of the most abundant source of antioxidants

## FOR MORE INFORMATION

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**SIU**  
CARBONDALE



 **Illinois**  
Department of  
**Agriculture**

SIU SPECIALTY CROP  
RESEARCH

## LOCAL PRODUCE

**FOR NUTRITION  
AND HEALTH**



**SIU SPECIALTY CROP  
GRANT ON LOCAL  
PRODUCE NUTRITION**

## SELECTING LOCAL PRODUCE FOR NUTRITION AND HEALTH

### TOMATO

Ascorbic acid and lycopene are two important antioxidants found in tomatoes. Chemical analysis of ascorbic acid and lycopene contents of field grown local tomatoes revealed that smaller size red tomatoes have higher lycopene values. Tomatoes, known for their lycopene contents, are helping protect consumers from cancer and cardiovascular disease.

Ascorbic acid content of locally grown tomatoes were also higher in total vitamin C contents. Fruit, harvested at a more ripe stage, had greater ascorbic acid concentrations.

Based on these results, a consumer should purchase locally sourced tomatoes (not having been placed in short-term cold storage) that were harvested at the red-ripe stage and eaten within a few days to maximize ascorbic acid and lycopene intake.

### BLUEBERRY

Blueberries are rich sources of antioxidants. Blueberries were found to contain highest antioxidants among all the fruits analyzed in our specialty crop project. The quercetin and resveratrol content of blueberries were higher than other local fruits in Southern Illinois.

### GRAPES

Grapes, rich in antioxidants, is dominated by the health promoting antioxidant resveratrol. Our results of resveratrol and total antioxidant contents of 3 local grape cultivar studies during 2012 and 2013 season show that grapes from local sources are better in total antioxidants and total resveratrol contents. Smaller grapes had higher resveratrol content.

### APPLES AND PEACHES

Apples and peaches were analyzed for total antioxidant and quercetin contents. Both apples and peaches had generally higher or equal antioxidants in locally harvested fruits in Southern Illinois than those available at retailers. Early harvested apples and



Local apples and peaches at early harvest are richer in antioxidants

peaches had higher antioxidant contents than late harvested ones. Therefore, consumers will obtain more antioxidants in early harvested apples and peaches. It is recommended to include more early harvested apples and peaches in the diet for deriving benefits of antioxidants.

At early harvest stages, these fruits are more tart, but offer opportunities to try new recipes that will improve taste of early harvested local peach and apples.

## ENJOY MORE LOCALLY AVAILABLE PRODUCE FOR BETTER HEALTH

### FURTHER INFORMATION

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