COLUMBUS, Ohio – It may seem counterintuitive, but adding fats to salads can actually make them healthier.

However, a study indicates that optimal nutrient absorption is achieved by adding naturally fatty foods such as avocados to salads or avoiding the use of fat-free salad dressings.

The findings were published in the Journal of Nutrition.

“This study confirms that it is absolutely essential to incorporate fat in the diet to efficiently absorb carotenoid nutrients such as lycopene and beta carotene,” said Dr. Steven J. Schwartz, a researcher at the Ohio State University Comprehensive Cancer Center – Arthur G. James Cancer Hospital and Richard J. Solove Research Institute (OSUCCC – James). He collaborated with OSUCCC researcher Dr. Steven K. Clinton in this study.

“We found that about three to five times more carotenoids were absorbed when study participants consumed a salad with avocados,” said Schwartz, who also is a professor in the College of Food, Agricultural & Environmental Sciences at Ohio State.

Carotenoids are a group of more than 700 compounds, including beta carotene and lycopene, which produce the red, yellow and orange colors found in many fruits and vegetables. These compounds have cancer-fighting antioxidant properties that can help reduce the risk of chronic diseases, Schwartz said.

But carotenoids, which are fat soluble, are often poorly absorbed in the absence of dietary lipids (fats and oils), Schwartz said. Their absorption is greatly improved when they are consumed along with dietary lipids such as those found in avocados, which are 17 percent fat, Schwartz said. Avocados are rich in the healthier, monounsaturated fats, which aid digestion.

“Previous studies at Ohio State have shown that we can get just as much benefit including full-fat dressing on salads,” Schwartz said. “The added fats enhance maximum absorption of fat-soluble antioxidants and carotenoids.”

The 11 study participants consumed a mixed salad or a tomato salsa, with and without
avocado or avocado oils, Schwartz said.

“These findings add a new perspective to previous studies by demonstrating the possibility of using a lipid-rich fruit instead of added fat/oil for enhancing carotenoid absorption,” Schwartz said. “Considering that avocados contain a large variety of nutrients such as vitamins, minerals and monounsaturated fatty acids, adding avocado fruit to carotenoid-containing meals as a lipid source can facilitate carotenoid absorption while offering additional nutritional benefits.”

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