Table 2
More Vitamins, Antioxidants and Phytonutrients in Fresh vs. Store-Bought

Results	Reference
"Grocery Vegetables - Time from Field to Consumer: 5-14 days. During that time, the following occurs: 1. Vitamin C degrades 2. Degradation B vitamins 3. Lost of antioxidants 4. Decrease in protein 5. Potential for human contamination via packaging and handling 6. Increase in some natural toxins (exceptions: tomatoes and red sweet peppers picked unripe, increase vitamin A as they ripen off the vine, but decrease in Vitamin C."	Reasons Fresh Vegetables are More Nutritious than Store-Bought, website
vitamin C of spinach stored at 7.5 degrees C (refrig), 3 days=27% loss, 5 days=38% loss, 7 days=55% loss	Influence of Preharvest and postharvest environment on nutritional composition of fruits and vegetables, Kader, 1988, p18-32, book: Horticulture and Human Health...
Results showed major losses at the end of both periods, in comparison with broccoli at harvest. Thus, the respective losses, at the end of cold storage and retail periods, were 71-80% of total glucosinolates, 62-59% of total flavonoids, 51-44% of sinapic acid derivatives, and 73-74% caffeoyl-quinic acid derivatives. Slight differences in all compound concentrations between storage and retail sale periods were detected.	J Agric Food Chem. 2003 May 7;51(10):3029-34. # Vallejo F,# Tomas-Barberan F,# Garcia-Viguera C Health-promoting compounds in broccoli as influenced by refrigerated transport and retail sale period.
Fresh-refrigerated green beans lost >90% vitamin C after 16 days of storage. Linear decreases in vitamin C were found in most fresh-refrigerated vegetables.	Journal of Food Science, vol 64, issue 5, p929-936, 1999
changes in the concentration of vitamin C, p-coumaric acid, caffeic acid, quercetin, B-carotene, and TRAP (radical trapping antioxidant potential) in lettuce initially and after 3 and 7 days storage in air or under MAP (modified atmosphere packaging - bagged lettuce) at ~5 degrees C - refrig showed that 1) TRAP value of air and MAP decreased 36% and 33% during the first 3 days and 2) TRAP down 42% and 45% by 7 days.	Effect of acute ingestion of fresh and stored lettuce on plasma total antioxidant capacity and antioxidant levels in human subjects, British Journal of Nutrition, 2002 vol 88:615-623
B-carotene and vitamin C content decreasd dramatically with air and MAP, reaching one half initial values after 3 days and almost disappearing after 7 days.	Effect of acute ingestion of fresh and stored lettuce on plasma total antioxidant capacity and antioxidant levels in human subjects, British Journal of Nutrition, 2002 vol 88:615-623
our present results clearly show that ingestion of fresh lettuce increases the antioxidant capacity of plasma in healthy subjects, whereas the same lettuce stored for 3 days under MAP conditions fails to to modify plasma antioxidant defences. - fresh lettuce consumption significantly increased plasma TRAP values (about 30%), but MAP stored lettuce did not induce any changes in plasma TRAP...and our results show that the increase of plasma levels of caffeic acid, p-coumaric acid and quercitin mirror the increase in plasma antioxidant capacity.	Effect of acute ingestion of fresh and stored lettuce on plasma total antioxidant capacity and antioxidant levels in human subjects, British Journal of Nutrition, 2002 vol 88:615-623
broccoli was film wrapped for 7 days at 1 degree C to simulate transport and distribution and kept at 15 degrees C for 3 days to simulate retail sale period - results showed major losses at the end of both periods in comparison with broccoli at harvest - 71-80% of total glucosinolates, 62-59% of total flavonoids, 51-44% of sinapic acid derivatives, and 73-74% cafeoyl-quinic acid derivatives.	health promoting compounds in broccoli as influenced by refrigerated transport and retail sale period, j agric food chem 2003 51(10):3029-34