Nut Roasting Benefits: Antioxidant levels of nuts increases after roasting

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The chemical reaction that darkens a batch of roasting peanuts also boosts the amount of antioxidants they contain, according to a new study in the journal *Food Chemistry*.

Many varieties of nuts have long been known to be a good source of antioxidants and other nutrients -- especially peanuts, walnuts, pecans, and holiday chestnuts.

Jack Davis of the Department of Agriculture roasted batches of peanuts at 300 degrees Fahrenheit for up to 77 minutes. During roasting, the nuts darkened as the Maillard reaction -- the same process that browns cooked meat -- caused proteins and sugars to react and form a variety of new compounds.

The darker the color, Davis found, the more antioxidants. Roasting for ten peanuts increased levels of antioxidants by 22 percent. The skins of the peanuts contained the high levels of antioxidants -- twice as much as the peanuts themselves.

"As peanut skins are primarily a by-product of peanut processing, this data suggests that this low value material could readily function as a natural antioxidant in foods," said Davis.

Davis suspects that this result may apply to other kinds of nuts -- but did not comment about whether he plans to roast any chestnuts this holiday season.

More information: pubs.acs.org/journal/jafcau

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