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We Eat 7,000 Plant Species! 20 Only in a Big Mac!

Diet and globalization

The Big Mac combination may be an insidious caloric bomb loaded with starches and oils, but a new research of the plants that people around the world eat has found it, if you can believe this, as a symbol of a varied diet brought by globalization! The team from the University of Calgary and Stellenbosch University in South Africa has made a phylogenetic analysis of what we eat (how are the plants we consume related). "Generally speaking, we eat very broadly from the tree of life. Others have looked at the sheer number of plant species we consume but nobody has ever examined whether the plants we eat are clustered in certain branches. It turns out that they are not," said plant evolutionary ecologist, Jana Vamosi of UC. The study published in the journal "BioScience" analyzed over 7,000 plant species consumed by people, in order to incorporate them into an evolutionary tree. It appeared that we consume plants from a remarkably high number of families. A simple fast-food meal (like a McDonald's Big Mac, French fries and a cup of coffee) includes from potatoes and tomatoes, originated in South America, to mustard, cucumber, sugar cane and sesame originated in India, onions and wheat originated in the Middle East, sunflower from North America, beet (if sugar came from it), lettuce, cabbage and poppy from Europe and coffee from Ethiopia, a total of 20 various plant species from all corners of the world. "That a single meal contains about 20 species is impressive, given that some human societies - those that are largely unaffected by current globalization trend - commonly include only 50 to 100 plant species in their entire diet," wrote the authors. They omit to signal that the bulk of the Mac contains the abhorrent starches and plant oils, causing so many health issues. "Certainly, including many fruits and vegetables in your diet is something that has been encouraged by nutritionists for some time. However eating carrots and celery, for example, provides you with nutrients from the same plant family, as do apples, pears, apricots, peaches, raspberries and blackberries. Indeed broccoli, kale and cauliflower are actually a single species," Vamosi said. "Eating lots of different produce might not actually provide you with a phylogenetically diverse diet, and whether that's important for providing maximum nutritional value remains to be seen." Still, the authors signal that globalization and industrial-scale agriculture gradually standardize diets all around the world. "Individually we are probably eating a greater range of plant species than our ancestors, but the loss of indigenous knowledge and regional cuisines may mean that as a species our diet is becoming increasingly focused on a few plant species, and indeed a few varieties of those species," said coauthor John Wilson. "The fact that we do eat so broadly indicates that we enjoy many different flavors and combinations of flavors and also indicates that many plants that we don't eat likely have some sort of culinary value that we just haven't discovered yet. Maintaining plant diversity ensures that we will continue to have the current flavors that we enjoy available to us and will also preserve other potential food sources into the future," said Vamosi.