Starch grains found on grinding stones suggest that prehistoric man may have consumed a type of bread at least 30,000 years ago in Europe, US researchers said.

The study, published Monday in the Proceedings of the National Academy of Sciences, suggested that processing starch grains, possibly grinding them into flour, was a widespread practice across Europe, contrary to popular belief that the Paleolithic man was primarily a meat eater.

Grains recovered from grindstones and pestle grinders at three sites in Italy, Russia and the Czech Republic appeared to come mostly from starchy cattails and ferns, which researchers said would provide a significant source of carbohydrates and energy.

"The wide size range and the different morphologies of the starch grains recovered (at two of the sites) suggest that they were used for grinding more than one plant species and possibly for other purposes," they added.

In order to be properly digested and realize its full nutrient value, the flour would have to be cooked after undergoing multi-step processing, including root peeling, drying and grinding into a flour likely usable for making flatbread or cakes.

For their study, researchers analyzed traces of wear and residue on grindstones and other tools by microscope, and conducted experimental reconstruction of how the tools functioned.

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