

MEDIA RELEASE

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Monkeys opt for low-fibre diet

BEIJING— Despite having an advanced stomach loaded with fibre-eating bacteria, snub-nosed monkeys avoid high-fibre food, says a new study in the journal *Current Zoology*.

Most wild animals choose foods high in protein because it is easy to digest. The problem for herbivores is that their sources of protein—plants and their leaves—are also high in fibre.

All mammals require bacterial assistance to digest fibre. Snub-nosed monkeys have developed a multi-chambered stomach containing large numbers of bacteria and fungi that break down fibre.

Wen Xiao and his team from Dali University in China's south analyzed the nutritional properties of leaves eaten by this monkey, and also leaves it avoids. The team found that snub-nosed monkeys select leaves according to the amount of fibre, and not protein, they contain.

“This seems surprising in light of the well-known ability of this species and its cousins to obtain nutrients from fibrous plants using fermentation”, says Xiao.

High-fibre food needs to spend a long time in the digestive system so it can be broken down by bacteria. The researchers say that while the first part of the digestive system of snub-nosed monkeys is good at breaking down fibre, the monkey and its stomach are simply not big enough to provide all energy this way.

Working out how much fibre food contains is challenging for animals, as fibre is odourless, tasteless and colourless. It is likely that the monkeys are assessing fibre when they start chewing on a leaf because tougher leaves have more fibre, the authors say.

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