To acquire all blood diet, vampire bats lost genes for bitter taste

Vampire bats have lousy taste. But they’re not bitter about it.

According to research published today in Proceedings of the Royal Society B, vampire bats — the only mammals to feed exclusively on blood — have significantly reduced taste receptors for bitterness. The findings are surprising because bitterness in nature is often an indicator of poison and most animals rely on their taste receptors to avoid it.

Researchers believe the vampire bat’s reduced ability to taste bitterness is the result of specific gene sequences getting garbled and trashed as the animals’ highly specialized diet evolved.

The team sequenced genes responsible for taste receptors in all three vampire bat species as well as 11 other species of bat. Compared to fruit- and insect-eating bats, vampire bats had significantly fewer functioning taste receptors for bitterness. The vampire bats also had higher amounts of pseudogenes, or non-functioning DNA debris, where the “bitterness” genes should have been located.

Read the full, original story: Vampire bats’ blood diet numbed their taste buds