Dr. Susannah French is well acquainted with the impacts that human ecotourism has on iguanas. French previously published a study showing that Galápagos marine iguanas (Amblyrhynchus cristatus) get stressed out from human activity: as human disturbances increased, they mated less and had more elevated stress hormone levels and weakened immune systems. Furthermore, a 2011 paper from another group found that Northern Bahamian rock iguanas exposed to tourists ate diets rich in sugary liquids and, sometimes, garbage, which caused gastrointestinal problems.

The new research with collaborator Dr. Charles Knapp helps paint a more complete picture of how ecotourism impacts iguanas by focusing on their metabolism. Compared to iguanas from remote locations they found that the tourist-fed iguanas had the largest and longest-lasting spike in blood sugar, indicating that they were the least able to regulate their blood glucose levels, which the team attributes to a lifetime of sugary snacks. French says that comparisons to diabetes are premature, however. “We can’t give it a syndrome or a name yet, and we don’t know the long-term health ramifications.” Further research will hopefully elucidate the extent of the threat feeding poses, she adds.

“I think this is an important model that allows us to test for these effects because this is going on for wildlife across the planet. . . in other tourist settings,” lead study author and Utah State University physiological ecologist Susannah French tells The Scientist.

Read the entire article from The Scientist.