

The Ultimate RECYCLING: Coprophagy

From the Saint. Louis Zoo Nutrition Department

You might think the idea of animals eating their own “poo” is gross and disgusting, but for it’s a fact of life, *and* of nutrition.

Many animals – notably many rodents and members of the rabbit family as well as some fish, reptiles, lemurs, and even those cute koalas –re-ingest their feces to keep their gut happy and healthy, as well as to supply essential nutrients!



In the spring, the cuddly little rodent known as the pika smears its cecal (part of the gut) contents on the walls of its den to re-ingest and re-innoculate the gut with proper microbes after its long winter sleep. It also collects and stores up its foraged plant matter to dry into “hay” over the winter, thus supplying it with both the food and necessary supplements for the spring season.

Cecotrophes (those special little fecal packets loaded with nutrition!) contain higher levels of protein, B vitamins, vitamin K, some minerals, less fiber, volatile fatty acids for energy, as well as bacteria and even fungi to help keep the gut functioning properly. Koalas only produce them when weaning their babies – perhaps to transfer the “right” microbes to the youngster’s gut.



Horses and zebras have been observed re-ingesting their dung more often when their diets are of poor quality. Once they eat better plant matter, the behavior disappears.