In southern Utah, paleontologist Karen Chin recently discovered fossilized dinosaur excrement (Geggel). This fossil helps to show the types of food dinosaurs in that area ate. Interestingly, this finding shows that dinosaurs ate flowering plants during the Late Cretaceous period, about 75 million years ago (Geggel).

Paleontologists don’t usually find information about dinosaur diets in their excrement; most of their research is from looking at dinosaur teeth. Molnar and Clifford note that both the form of teeth and an analysis of jaw mechanics will show both how – and what – dinosaurs ate (p. 194). They looked at ankylosaur fossils in Australia and also found samples preserved in a fossil’s guts. This is quite rare, as most often debris that’s found has entered the fossil’s body cavity after the animal has died (p.195).

Fastovsky et al (2009) state that dinosaur diets can also be determined from the shape and size of their abdominal regions (p.114). Looking at the pachycephalosaurs, these dinosaurs have a large ribcage – which would house a large stomach (or stomachs!) which would break down plants via bacterial fermentation (p.114).

References