This paper studies the role of implicit questions in restricting the domain of exhaustivity implicatures. Geurts (2010) argues that multi-sentence discourse units, just like single sentences, give rise to exhaustivity implicatures, e.g. when an answer to a question consists of more than one sentence. However, most of the examples he provides also allow for an alternative explanation: the exhaustivity implicatures of individual sentences are processed with respect to implicit subquestions of the initial overt question, whereas the “discourse-level implicature” simply follows from the conjunction of sentence-level implicatures. We argue that this inference only goes through if the domain of the initial question is split up by the domains of the subquestions in an exhaustive way. If this condition is not met, the two approaches make different predictions. E.g. in (1), contrastive topicalisation indicates that each sentence addresses a subquestion: “How many apples did Klaus eat?” and “How many bananas did Klaus eat?”, respectively (cf. Büring, 2003).

Notice that the subquestions do not exhaust the domain of the initial question since there is no subquestion about the pears. Therefore the approach based on sentence-level exhaustivisation wrt. subquestions predicts no inferences about the pears, whereas Gricean reasoning at discourse level along the lines of Geurts predicts an exhaustivity inference: Klaus did not eat any pears.

(1) A: Wieviel von den Äpfeln, Bananen und Birnen hat Klaus gegessen?
   B: Äpfel hat er zwei gegessen. Und Bananen hat er vier gegessen.

We designed an experiment to compare these two approaches. Preliminary analysis of data from 4 participants collected in a pretest round suggests a pattern that supports exhaustivity at discourse level.