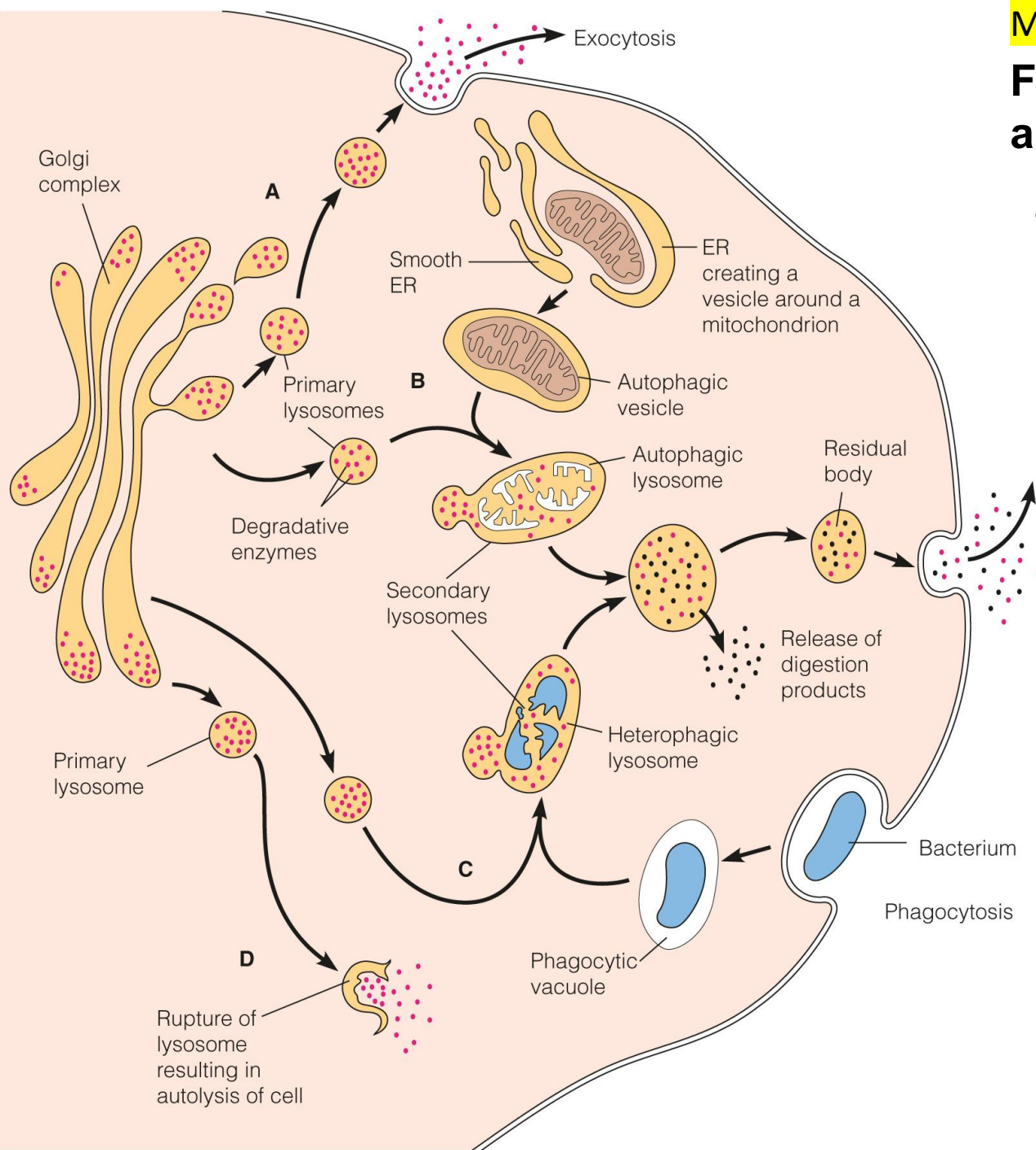


Formation of primary and secondary lysosomes and their role in cellular digestive processes:



- The lysosomal particles budded from the Golgi complex, known as **primary lysosomes**, are essentially bags of degradative enzymes, including proteases, nucleases, lipases, and carbohydrate-cleaving enzymes.

- The primary lysosomes that bud from the Golgi can take several pathways.

Path A: Exocytosis—transport of enzymes to outside of cell.

Paths B and C: Phagocytosis—formation of phagocytic lysosomes for digesting organelles (**autophagocytosis**) or ingested matter (**heterophagocytosis**).

Path D: Autolysis—destruction of the cell itself.