

## BIOCHEMISTRY

Formatted: Line spacing: 1.5 lines

### Premium Edit

Lipid droplets (LDs), ~~alias also known as adiposomes~~ or fat ~~bodybodies~~, ~~has been found to have are~~ ubiquitously ~~presence-present~~ in lipid-overloaded cells ~~in eukaryotes ranging from across~~ yeast to mammals. ~~Since their earliest description in the 19<sup>th</sup> century~~ ~~For a long time~~, LDs ~~was were~~ thought to be simply as an ~~inactive-inert~~ lipid reservoirs ~~since it's earliest description in 19<sup>th</sup> century~~. ~~However, the Dd~~ discovery of perilipin, an LD-associated protein that coats LDs in adipocytes, ~~makes researchers to has~~ challenged ~~d the understanding this view of LD as lipid storage~~. LDs ~~is are~~ now recognized as a dynamic organelles ~~comprised composed of a monolayer~~ phospholipid ~~monolayer, with an embedding~~ embedded ~~of with a lot of many~~ proteins without ~~across-trans~~ membrane-~~spanning domains~~, and a hydrophobic core that contains triacylglycerols (TGs) and sterol esters. TGs are ~~the key~~ neutral lipids required for LDs formation in adipocytes. ~~Studies have shown that the Dd~~ deletion of genes encoding enzymes responsible for neutral lipid synthesis ~~—for example, diacylglycerol acyltransferase (DGAT)—eliminatesd~~ LDs formation ~~in adipocytes~~.

**Comment [A1]:** I have made this change because “inert” rather than “inactive” is used in the technical sense to mean without active chemical/biological properties. Please let me know if your intended meaning was different.

**Comment [A2]:** The phrase “a lot of” lends a rather casual tone to a written article and is therefore best avoided in scientific papers. “Many” is not just an appropriate but also a concise alternative.