BIOCHEMISTRY

Premium Edit

Lipid droplets (LDs), ~~alias~~ also known as adiposomes or fat ~~body~~bodies, ~~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 19th century~~For a long time~~, LDs ~~was~~ were thought to be simply ~~as an inactive~~ inert lipid reservoirs ~~since it's earliest description in 19th century~~. However, the ~~D~~discovery of perilipin, an LD-associated protein that coats LDs in adipocytes, ~~makes researchers to~~ has challenged ~~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~~ transmembrane ~~-~~spanning domains, and a hydrophobic core that contains triacylglycerols (TGs) and sterol esters. TGs are ~~the key~~ neutral lipids required for LD~~s~~ formation in adipocytes. Studies have shown that the ~~D~~deletion of genes encoding enzymes responsible for neutral lipid synthesis—for example, diacylglycerol acyltransferase (DGAT)—eliminate~~s~~d LD~~s~~ formation in adipocytes.

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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.