

Focus on fats

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Almost everyone knows that fats are the culprits in expanding waistlines and killer diseases, but scientific understanding of the roles of "lipids" -- fats and oils -- inside cells in the body got short shrift until launch of a major research project that is the topic of the cover story in the current edition of *Chemical & Engineering News (C&EN)*. The *C&EN* article focuses on a massive effort, little-known outside the scientific community, called the Lipid Metabolites and Pathways Strategy (LIPID MAPS).

C&EN Senior Editor Celia Henry Arnaud explains that [LIPID MAPS](#) is a 10-year, \$35 million effort sponsored by the National Institute of General Medical Sciences. Now winding down, LIPID MAPS's goals included identifying and measuring the complete complement of lipids within cells and gaining insight into their role in passing along the biochemical signals that orchestrate cellular functions.

The article describes a task in some ways more daunting than the well-known human genome project, since the number of lipids inside [cells](#) may, by some estimates, exceed the number of genes. *C&EN* discusses the technology being used in research on lipids, and explains how LIPID MAPS has fostered emergence of a new field of science, lipidomics. With lipids central to heart disease, cancer, arthritis, diabetes, and other diseases, the new knowledge may have far-reaching applications in medicine and health care.

More information: "Lipids Take Charge"
pubs.acs.org/cen/coverstory/89/8941cover.html

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