

# Abstract

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## Choline: an essential nutrient for public health.

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**BACKGROUND:** Choline was officially recognized as an essential nutrient by the Institute of Medicine (IOM) in 1998. There is significant variation in the dietary requirement for choline that can be explained by common genetic polymorphisms.

**DISCUSSION:** Because of its wide-ranging roles in human metabolism, from cell structure to neurotransmitter synthesis, choline-deficiency is now thought to have an impact on diseases such as liver disease, atherosclerosis, and, possibly, neurological disorders. Choline is found in a wide variety of foods. Eggs and meats are rich sources of choline in the North American diet, providing up to 430 milligrams per 100 grams. Mean choline intakes for older children, men, women, and pregnant women are far below the adequate intake level established by the IOM.

**CONCLUSION:** Given the importance of choline in a wide range of critical functions in the human body, coupled with less-than-optimal intakes among the population, dietary guidance should be developed to encourage the intake of choline-rich foods.

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