

*Consumer Abstract*

Alcoholic liver disease (ALD), a condition in which the liver of alcoholics becomes fatty and inflamed, may lead to liver cancer and is a major health problem in the U.S. Continual consumption of alcohol alters liver methionine metabolism and this may contribute to ALD. The objective of this project is to determine the effects of environmental factors, such as diet, on liver methionine metabolism and the development of ALD. To investigate this relationship, Dr. Esfandiari's research group will study the mechanism of liver injury in alcohol-fed mice with abnormal liver methionine metabolism. Liver tissue from ALD patients before and after treatment with S-adenosylmethionine (SAM, a derivative of methionine) will also be examined.