

# Feeding and Fasting in Alaska Native Children with CPT1A Deficiency

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Recently a high incidence of a specific carnitine palmitoyltransferase 1A (CPT1A) polymorphism has been identified among Alaska Native newborns. CPT1A is a liver enzyme that regulates the change from glucose to fat oxidation during periods of fasting. The consequences of the polymorphism are unknown. Previously described mutations in the CPT1A gene that decrease its activity are associated with fasting induced hypoglycemia. We conducted medically supervised fasting studies in 5 young children from the Norton Sound area in Alaska. Two of the 3 developed significant hypoglycemia suggesting this polymorphism can be associated with the classic symptoms of CPT1A deficiency. Understanding the morbidity and/or mortality associated with this polymorphism gives us a unique opportunity to intervene with treatment and education strategies that can improve the health of Alaska Native children.

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## DATE:

December 17, 2009

## TIME:

1:30 PM Refreshments  
2 - 3 PM Lecture

## LOCATION:

OHSU  
School of Nursing, 144  
Founders Auditorium

