LEAD: Cesar Chavez, the leader of the United Farm Workers, plans to end his fast Sunday at an outdoor mass at the union's compound here, a spokeswoman announced today.

Cesar Chavez, the leader of the United Farm Workers, plans to end his fast Sunday at an outdoor mass at the union's compound here, a spokeswoman announced today.

If the 61-year-old labor leader is able to continue his fast until Sunday, he will have gone 36 days without food. Mr. Chavez, who has consumed only water, began his fast July 17 to protest the use of certain pesticides on California table grapes and to call attention to the union's boycott of the grapes.

Dr. Fidel Huerta, Mr. Chavez's physician, repeated fears about the union leader's condition and said he was not sure whether Mr. Chavez could continue the fast until Sunday, said Lorena Parlee, a spokeswoman for the union.

"Cesar's condition has deteriorated," Dr. Huerta said. "He's increasingly experiencing nausea, vomiting and cramping."

Dr. Huerta has been urging Mr. Chavez for days to break the fast. Mr. Chavez has lost more than 27 pounds. His body has consumed all of his fat deposits and is now burning muscle tissue, doctors have reported.

"All of his systems are being affected by the fast," Ms. Parlee said.