THE MONASTIC NUTRITIONAL CYCLE

Outside the walls of monasteries, there was often a moat or a large pond in which carp were raised for food. The fish thrived on the effluent that was discharged from the monastery. Intestinal bacteria in the effluent produced vitamin B_{12}; indeed, this vitamin is not present in green plants and the primary source of B_{12} in our diet is always from bacteria, usually in the digestive tract of animals. B_{12} produced by the bacteria gets into milk, meat and fish and finally into us.

The monks thrived as a component of the sewage-carp-human cycle.

Some years ago, an attempt was made to use dried Milwaukee sewage sludge, "milorganite" as an ingredient for animal feeds to supply vitamin B_{12}. The attempt was stopped by the FDA.

The attached page from a book that I wrote in 1952 contains a speculation on the Seri Indians. The report by McGee was found by me in the attic of an old house that we purchased in 1950.

THOMAS H. JUKES

Bill Reilly

Julian asked me to write this after the discussion on May 11 1987

Tom