February 15, 1950

Dr. John P. Hollis, Department of Botany, University of Missouri, Calumbia, Missouri.

Dear Dr. Hollis:

Our "alkali-hydrolysed" yeast nucleic acid is prepared as follows (according to Levene):

Dissolve log. "Yeast Mucleic Acid" (Schwarz Co.) in 90 ml H₂0 + 10 ml conc. NH₄0H. Place in Mason Jar or other stoppered vessel, and autoclave at 15 lbs. pressure for 60 - 120 minutes. The product can be conveniently neutralized by bubbling CO₂. It supposedly contains mixtures of free purine bases, nucleosides and some nucleotides, and has generally been satisfactory if not used in too high a concentration. Probably it would be better to distill most of the ammonia off before neutralizing it. I have often diluted the hydrolysed material with an equal part of unhydrolysed sodium "ribonucleate" to help assure that more complex compounds will also be represented in the mixture.

Sincerely,

Joshua Lederberg, Assistant Professor of Genetics