R.J.Reynolds Tobacco Company Winston-Salem, N.C. 27102 (919) 741-5000



January 20,1989

Dr. Robert I. Krieger Worker Health and Safety Unit California Dept. of Food and Agriculture 1200 N Street Sacramento, CA 94271-0001

Dear Robert:

Enclosed please find several reprints which you should find helpful in response to questions raised during our recent telephone conversation.

As background information on the radioimmune assay for nicotine and /or cotinine I've enclosed a copy of a paper by Vunakis et al from a recent IARC publication dealing with measurement techniques for passive smoking. It has been suggested to me that the commercially available kits may not be as sensitive as those described in this publication. Hence, you may find that the radioimmune assay technique may not be sufficiently sensitive for your planned investigations.

Accordingly, enclosed is a copy of a paper from our laboratory by Riley Davis reporting a gas chromatographic method for determining nicotine and cotinine in serum. I've enclosed two other recent papers dealing with analysis of cotinine in body fluids as additional background information.

Also enclosed is a copy of a proposed ASTM Method for nicotine determination in indoor air which was developed in our laboratory. You will need to verify what the nicotine concentrations are in your experiments as nicotine has been reported to be released into indoor air subsequent to its initial adsorption onto furniture, walls, etc.

Much of Repace's work has been criticized by members of the scientific community. Rather than send you these publications I've enclosed a review paper prepared by Meridian Corp.for OSHA which includes a discussion of Repace's publications. If I can be of any further help I may be reached at 919-741-4376.

Sincerely yours,

Charles W. Nystrom

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Senior Staff R&D Scientist