Reproducibility of the ALCAT Test

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A total of 12 patients were tested for each of 50 foods in duplicate or triplicate samples (with one subject tested in duplicate on two separate occasion four days apart) yielding a total of 1, 147 data points for paired comparisons of reproducibility.

ALCAT Test scores are generated by comparing the degree of shift between the test histogram (containing a test allergen) vs. a control histogram (identically treated but without test allergen) expressed in terms of percentage scores. Percent scores of 9% and below are considered negative; scores of 13% and above are considered positive; 10-12% are equivocal. By comparing all possible paired scores for reproducibility on the basis of positive to positive; negative to negative; and when one of the scores are in the equivocal range and the other score is within 4%, it was found that 94.94% of the scores reproduced.

Note: Professor P. Potter and I conducted a limited trial in November, 1994, to evaluate the reproducibility of the ALCAT Test results following a previous trial in 1993, where deficiencies were identified and subsequently corrected. Samy Puccio processed the Sera collected from various patients and staff. No information was made available to him with regard to their medical histories. Blood samples were done in duplicate or in triplicate. In one patient, the blood sample was repeated 4 days later.

We found a high degree of reproducibility between positive and negative results. Of interest was that there was an increasing number of positive foods depending on whether the subject was (in order) normal, had hay fever (allergic rhinitis), asthma, or symptoms of IBS (Irritable Bowel Syndrome). The two patients with gastrointestinal symptoms had a dramatic improvement in their symptoms following an elimination diet constructed with the aid of the ALCAT Test. The other subjects were not subjected to any dietary intervention.

The ALCAT Test is a novel test for food hypersensitivity, and warrants a further and serious examination.