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The Editor comments

OF WHAT SIGNIFICANCE STATISTICS?

We have been pleased to note that a greater appreciation of the usefulness and value of statistics is gradually evolving in the scientific community. Perhaps the greatest impetus for this awakening comes from the field of clinical testing. By applying proven, reliable statistical methods, test data which on first glance appeared to lead to certain conclusions have been shown to be of highly dubious worth; conversely, in other cases, the opposite sometimes has been true. And more recently, the same or similar mathematical principles have been applied to the disciplines of analytical chemistry, bacteriology, and pharmacology, to name just a few.

The utilization of this valuable tool has been fostered in a number of ways. Many colleges are offering introductory and even advanced courses in statistics to regular day students, and evening lectures to those who wish to further their education while engaged in full-time employment. A number of larger industrial concerns have made arrangements for in-plant lecture courses by qualified instructors so as to provide their employees with the opportunity to study the fundamentals of this subject. And many of our ambitious colleagues, armed with one or two textbooks on statistics, have gained a reasonably good grasp of the principles, solely through home study.

Unfortunately, however, some workers have become overly enthusiastic following their introduction to this science. Like a child with a new toy, they employ it with neither discrimination nor discretion. It is our opinion that if the data obtained from a certain study are too meager to warrant publication, then dressing up the results with mathematical trimmings will not transform the material into a first-rate manuscript. Furthermore, it is not necessary to belabor the obvious. If in an experiment with 50 mice, all 50 died, statistics generally will add nothing to the interpretation.

For the most part, however, the science of statistics has proven to be a very worthwhile aid with much of the work currently in progress both in university and industrial laboratories. We confidently expect that as it becomes better known and understood, it will come to serve us even more, and will take a prominent place among the other indispensible tools of the pharmaceutical scientist. The more prudently statistics are applied, the sooner this day will come.

Edward S. Feldmann