

Overblown Reports Distort Obesity Risks

With the fruits of seasonal overindulgence slowly settling about the nation's collective middle, news that obesity might be less injurious than previously supposed would come as welcome exculpation. This is precisely the tone in which many newspaper and magazine stories have reported two recent scientific papers. Both papers conclude that "desired" weights with which doctors and insurance companies have been working for the past 20 years are at least 15 pounds too low and that there are hitherto unrecognized health risks associated with extreme leanness. Is it really time to throw away the diet sheets and normal gustatory restraint? "The man in the street certainly deserves to know that 'desired' weights have been underestimated by 10 to 15 pounds," says Alfred Harper, chairman of the National Academy of Sciences Food and Nutrition Board, "but we're not just brushing aside all that has been said about the health hazards of obesity. It's unfortunate that this is the way the story has been widely presented in the press."

Theodore Van Itallie, professor of medicine at Columbia University, New York, agrees with this cautionary remark: "It is doing the American public a disservice to imply that being obese is not hazardous to health," he told *Science*.

What, then, has been the cause of the recent fervor? "The problem," explains Reubin Andres, author of one of the two recent papers, "is that the charts of 'desired' weights that everyone has been using for so long were based on biased data." "Arm-chair concoctions" is how Ancel Keys, author of the second paper, describes the list of recommended weights. "Unfortunately, those tables have been reprinted by the thousands and are widely accepted as the gospel truth," he adds.

The charts had been produced for actuarial purposes by the Metropolitan Life Insurance Company in 1959, on the basis of information supplied by their clients. This gospel is being challenged by scientists who believe the data may be faulty. It seems that many potential customers underreported their weight, knowing that high weights carried a penalty. "The fact that the data came only from people who were accepted by the company also must have skewed the data base," suggests Andres, who is a professor of medicine at Johns Hopkins University. A new set of figures is due to replace the 1959 charts, and this one, worked out by the Society of Actuaries and the Association of Life Insurance Medical Directors of America, will erase the bias.

The charts were constructed so as to pinpoint the weight at which there is minimum mortality for different specific body builds. It is easy to see how the 1959 figures would

have been swung toward underestimates of most healthy weights, but it is less clear why the charts missed the significantly raised mortality at weights below but close to average, a point that was spotted by both Keys and Andres. "Ill people often become thin, and this could obviously give a false impression of the hazards of normal leanness," observes Andres. "But even if you select out those people who are thin through illness, you still see elevated mortality at the lower end," he claims. Another researcher in the field comments: "Is low weight causing health problems, or is it reflecting them, possibly at the subclinical level. It's difficult to be sure."

Some of Keys's statements are more bullish about the innocuousness of obesity than simply saying that the shape of the minimum mortality curve should be redrawn. "In the

absence of hypertension, overweight is not a risk factor at all" in cardiovascular disease, the University of Minnesota professor says. "This is just shifting the data around," remarked one nutritionist. "The dangers of obesity haven't changed," adds Robert Olson of the St. Louis University Medical School and editor of *Nutrition Reviews*. "The causal link between obesity and hypertension, late-onset diabetes, gall bladder problems, and certain cancers is firmly established and is not challenged by these latest studies," he says.

George Bray, who edits the *International Journal of Obesity* at the University of California, Los Angeles, stresses the particular dangers of obesity starting in early life. "The longer someone is obese, the greater will be the adverse medical effects," he states. "I think perhaps Andres did not take enough account of the issues of overweight in people under 40 years of age."

Van Itallie speaks for most of his colleagues when he says, "It's clear that we will have to be more flexible in what we think of as being obese." He warns, however, that although healthy weights might be slightly higher and have a wider range than is currently stated, "the dangers of obe-

sity accelerate the further you move away from the average."

Andres, like his colleagues, is unhappy about the way his results have been "misinterpreted," but, he says, "if you insist that people are to be responsible for their health you must try to give them the facts."

The facts are that the revision of "desired" weights suggested by Keys and Andres brings the percentage of officially obese middle-aged Americans from 70 percent (based on the 1959 charts) to around 50 percent. This is still a problem of great magnitude. —ROGER LEWIN



Pickwickian obesity

So gross he could hardly breathe, the Fat Boy from Pickwick Papers would remain firmly in the obese category.