LETTERS

Dear Editors and Readers,

Effects of 12- and 24-Week Multimodal Interventions on Physical Activity, Nutritional Behaviors, and Body Mass Index and Its Psychological Predictors in Severely Obese Adolescents at Risk for Diabetes
Fall 2010, page 29

The approach taken in the current obesity article by James J Annesi, MD; Ann M Walsh, MS, RD; and Alice E Smith, MS, MBA, RD is so different than our observations gleaned from a quarter-century of experience treating obesity that some useful insight might be gained by comparison. Their essential conclusion from their carefully described and well-executed study is that a major treatment effort focusing on diet and exercise as the key treatment modalities failed to reduce weight meaningfully in a group of morbidly obese adolescents. Because the concepts of diet and exercise reflect conventional thinking about a problem whose treatment is rife with difficulty, we propose that they are describing a treatment approach whose basic premise is flawed.

The concept that obesity is the result of nutritional ignorance, while appealing, has no more demonstrable validity than does the supposition that poverty results from an inability to count money. Each, however, provides the comforting opportunity to busy ourselves in teaching rather than in understanding a more disturbing causality.

It is axiomatic in medicine that etiologic diagnosis is antecedent to treatment. Otherwise, we end up treating cough instead of Gram-positive bacterial pneumonia, or do not differentiate the shortness of breath of pulmonary embolism from that of anxiety. The question not addressed by Annesi et al (and by many others) is *Why* these children became obese, understanding that this is not to be confused with *How* they became obese. In what ways do their obese patients differ from demographically similar adolescents who do not significantly overeat? As we point out in our article in the Spring 2010 issue of *The Permanente Journal (TPJ),*[1] with very rare exception, no one is born fat. Thus, the age at which weight gain first begins is a useful start in the differential diagnosis of the physical sign of obesity. Family history is also important, not because of genetics, but because it allows us to see how others in the same household have responded to life's stresses, whether internal to the family or external to it.

In a number of places Annesi et al hint at these stresses ("… self-concept, general self, and overall mood" and "Physical activity has also been shown to improve low mood, which is associated with obesity in adolescents") but avoid exploration. Their conclusion thus rings particularly true: "… and attention to participants' self-concept and mood may be important treatment considerations." Indeed, the psychoactive benefits of eating for the treatment of various levels of depression are profound. These benefits underlie the fact that almost every single "diet pill" has been a stimulant that has had antidepressant activity. So too, physical activity has antidepressant properties, just as inactivity is a commonplace marker for depression.

It is not our intent to engage in a polemic, sportive though that is in topics of difficulty and uncertainty. Rather, we propose that readers interested in the origins and treatment of obesity go to the *TPJ* Web site and review the Pre-Program Questionnaire (www.thepermanentejournal.org/files/Obesity/Preprogram-Questionnaire.pdf) that we have developed and used in San Diego during the past quarter-century. Having a few obese patients fill out that questionnaire at home will provide the information base underlying the needed new direction of our approach to obesity. Nutrition and arithmetic are both important subjects, but the one is no more relevant to the treatment of obesity than the other is to the resolution of poverty.

The change in direction that we propose will undoubtedly be resisted because it significantly raises the performance bar for those choosing to be involved. The article by Annesi et al has merit because it illustrates the ineffectiveness of the usual approach to obesity. Hopefully, it will lead to explorations of other possible treatment approaches for obesity that incorporate awareness of the benefits of overeating in unconsciously treating problems that are unrecognized, often distant, and almost never explored. Additionally, those approaches must incorporate an understanding of the benefits of obesity, which are not at all in conflict with the manifest risks of obesity. Indeed, in biological systems, the simultaneous existence of varying levels of opposing forces is the norm of all our control systems. ❖

Vincent J Felitti, MD, FACP
Retired Internist from the Department of Preventive Medicine, Clairemont Mesa Medical Office, San Diego, CA; Senior Editor for *The Permanente Journal*

Reference

1. Felitti VJ, Jakstis K, Pepper V, Ray A. Obesity: problem, solution, or both? Perm J 2010 Spring;14(1):24-30.

Dear Editor,

Congratulations to Dr Felitti and colleagues for publication of the article "Obesity: Problem, Solution, or Both"[1] in the Spring 2010 issue of *The Permanente Journal (TPJ)* as well as continued success for their weight loss program in San Diego. I believe that readers of *TPJ* and individuals contemplating participation in similar programs might appreciate a different perspective, evidence, and context regarding the use of Very Low Calorie Diets (VLCD) for weight management.

1. Caloric restriction strategies for weight loss using less than 1000-1200 calories daily should only be undertaken with supervision of a physician or other clinician with significant expertise. Marked fluid and electrolyte shifts can occur and result in complications such as potentially life-threatening arrhythmias, syncope and hypotension. Many individuals will experience side effects such as fatigue, constipation, and cold intolerance.
2. Evidence-based practice guidelines from the National Institutes of Health[2] discourage use of diets providing less than 800 calories daily. Studies comparing diets of 800 calories daily or more to diets of less than 800 calories daily show that sustained weight-loss outcomes are similar, though risk and side effect profile are increased with diets using less than 800 calories daily.[3]
3. Metanalysis of VLCD meal replacement programs indicate mean weight loss of 17.9 kg (16%) at six months,[4] significantly lower than that reported in this study. Recent work has elucidated counterregulatory biologic mechanisms that decrease weight loss accrued from caloric restriction over time.
4. Weight regain after use of VLCD and similar programs are rapid and substantial. More than 50% of accrued weight loss is likely to be regained within two years after program participation.[3,4] Individuals contemplating these programs need to understand the high likelihood of weight regain, and that long-term participation in behavioral group treatment, continued use of meal replacements, and high levels of physical activity are the best strategies to mitigate this risk.
5. Overall costs and "cost per pound lost" is much higher in VLCD program as compared to other noninvasive strategies for weight loss.[5] This is because of the need for medical supervision, laboratory monitoring, and purchases of food products, all services generally excluded (whether appropriately or not) from health insurance benefit packages. ❖

Keith Bachman, MD
Clinical Lead for Kaiser Permanente's
Care Management Institute
Weight Management Initiative

References

1. Felitti VJ, Jakstis K, Pepper V, Ray A. Obesity: problem, solution, or both? Perm J 2010 Spring;14(1):24-30.
2. Practical guide: Identification, evaluation, treatment of obesity and overweight in adults [monograph on the Internet]. NIH Publication No. 00-4084. Bethesda, MD: National Institutes of Health, National Heart, Lung, and Blood Institute, North American Association for the Study of Obesity: 2000 Oct [cited 2010 Jul 28]. Available from: www.nhlbi.nih.gov/guidelines/obesity/prctgd_b.pdf.
3. Tsai AG, Wadden TA . The evolution of very-low-calorie diets: an update and meta-analysis. Obesity (Silver Spring) 2006 Aug;14(8):1283-93.
4. Franz MJ, VanWormer JJ, Crain AL, et al. Weight-loss outcomes: a systematic review and meta-analysis of weight-loss clinical trials with a minimum 1-year follow-up. J Am Diet Assoc 2007 Oct;107(10):1755-67.
5. Tsai AG, Wadden TA. Systematic review: an evaluation of major commercial weight loss programs in the United States. Ann Intern Med. 2005 Jan 4;142(1):56-66.

Response:

We are pleased to respond to Keith Bachman, MD's comments on our recent description of our extensive experience with treating obesity in the Southern California Permanente Medical Group San Diego area. Dr Bachman's comments represent the usual views about treating obesity, a serious problem that is generally not handled easily or well.

1. *There is no question that unsupervised Very Low Calorie Diets (VLCDs) are dangerous, which is the point we made with our example of the Irish Hunger Strikers. Indeed, Optifast is not even available by prescription, but only in physician-supervised programs. Because we actively supplement with potassium, and monitor weekly, our impression is that our patients on an absolute fast supplemented with Optifast have fewer electrolyte problems than patients taking prescription diuretics.*

As separate and minor issues, distinctly fewer bowel movements are the natural consequence of not eating. Cold intolerance and fatigue will be experienced by a few as commonplace stress responses to not being able to de-stress by eating, but most patients report increased energy levels

and reduced asthma attacks and other allergic processes. The psychophysiology of this improvement has not yet been described.

Our San Diego Positive Choice Program, developed as the result of many years experience, differs markedly from the program supplied by the manufacturer of Optifast. That program, although safe and well intentioned in our opinion, does not adequately pursue the psychological underpinnings of obesity, thus needlessly limiting the effectiveness of their product. Dr Bachman accurately notes this limitation in his Point 3.

2. *Considering the approach usually given to treating obesity, the National Institutes of Health caution is appropriate to most of these circumstances. However, with capable medical supervision of electrolyte balance and related biomedical matters, risk is not an issue, as we have illustrated in our 30,000 cases. Our experience with treating these patients over 25 years demonstrated that maintaining weight loss has nothing to do with calorie intake in the weight-loss phase. Maintenance is totally a function of what is accomplished or not accomplished in the accompanying program, which needs to be psychodynamically (not nutritionally) oriented. This point has further been demonstrated by those patients who have been able to eat their way out of bariatric surgery, as we illustrated by the quote in our article, "The antidote [sic] to bariatric surgery is Karo Syrup."*[1]
3. *The whole point of our article centers on our having outcomes better than usual. That said, weight loss in any program is a function of patient compliance, which is a function of the support provided by the program. This, in turn, will be a function of how well the issues underlying any given patient's obesity are understood, by the program and the patient. This is not an easy concept to grasp if one persists in misunderstanding the caloric origins of excess poundage as the crux of the problem. That misconception mistakes mechanism for cause, a common error. We believe that our better-than-normal outcomes are the result of the support from our program, in conjunction with the VLCD.*
4. *Indeed, rapid regain sometimes occurs, and is a blight in some programs, just as it sometimes occurs after bariatric surgery. The question is why does it occur in these instances? How do these individuals differ from those who do not regain? The answer to this question has absolutely nothing to do with calorie intake in the weight-loss phase, a point made clear in our article. It is the program that is the key determinant of long-term outcomes. Our program has been slow in development because we repeatedly tripped over counterintuitive aspects of obesity, such as the hidden benefits of obesity and the consequent threat of major weight loss to many individuals.*
5. *This statement does not incorporate the cost savings to our patients in not buying any food or caloric beverages for 5 months. Thus, while our cost-neutral charge to the patient is approximately $2500 for the Program, including Optifast for 5 months and the Maintenance Program for the next 12 months, when corrected for food not purchased and dinners not eaten out, the actual net cost for most people will be only a few hundred dollars for a 17-month Program. On the other hand, to the degree that a person on a VLCD is also eating on the side, the economic costs of failure will indeed be high. The major reduction in office visits that we documented during and in the year subsequent to the Program are an additional benefit, either to the patient or to the health care system. Beyond this, the details of insurance programs other than Kaiser Foundation Health Plan were not examined.*

Although we believe we made these points clearly, we also understand that they lie sufficiently outside conventional thinking about obesity that they perhaps need restatement in different ways. To that end, one of us (AR) has extended an offer to Dr Bachman to again visit the San Diego Positive Choice Program to see in action what we are describing.

Any major revision of commonly held ideas is difficult, uncomfortable, and sometimes threatening. The philosopher, Eric Hoffer, explored this problem well in his small monograph, The Ordeal of Change.[2] *In that regard,* The Permanente Journal *offers us all in Kaiser Permanente an important sounding board for the introduction of new thinking into an old problem that is obviously getting worse in the face of usual approaches, even though those approaches are supported by august governmental agencies.* ❖

Vincent J Felitti, MD, FACP;
Kathy Jakstis; Victoria Pepper, RD;
Albert Ray, MD

References

1. Felitti VJ, Jakstis K, Pepper V, Ray A. Obesity: problem, solution, or both? Perm J 2010 Spring;14(1):24-30.
2. Hoffer E. The ordeal of change. New York: Harper and Co; 1952.