

Laboratory investigations showed normal values for C1 esterase inhibitor, immunoglobulin (Ig) E, C3, and C4, as well as for differential blood counts, coagulation, liver function tests, electrolytes, and autoimmune screens. Immediate hypersensitivity reactions can range from urticaria to angioedema or anaphylaxis. Several drugs such as penicillins, angiotensin-converting enzyme inhibitors, or opiates can cause angioedema via IgE-dependent or -independent pathways.

The most common adverse effect of clopidogrel is gastrointestinal discomfort (1); however, hematologic disorders such as thrombotic thrombocytopenic purpura (2), membranous nephropathy (3), aplastic anemia (4), and reversible ageusia (5) have been reported recently. Although adverse reactions are generally rare, clinicians should be aware that clopidogrel may have severe cutaneous adverse effects.

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CALORIC INTAKE, NOT CARBOHYDRATE OR FAT CONSUMPTION, DETERMINES WEIGHT LOSS

To the Editor:

I was delighted to read the publication by Westman et al. in the July 2002 issue of the *Journal* (1). Their findings confirm that which I had previously reported (2–4), including the little effect of a very low carbohydrate diet on body weight or fat mass after 2 to 3 months on the diet. Although the diet was truly a low-carbohydrate, high-fat diet (comprising 23 g of carbohydrates, or 6.4% of the calories on an average diet of 1447 kcal/d; and 98 g of fat, or 882 calories, which is 61% of the total caloric intake for the day), it is the reduction in total caloric intake that is responsible for weight loss. Because the average caloric intake reported in the study was 1447 kcal/d (reference, 801 to 2322 kcal/d) and the estimated caloric intake entering the study was 1905 kcal/d (an estimate that I consider relatively accurate since the mean entry weight of subjects enrolled in the study was 191 ± 24 lbs), then the caloric deficit was 400 to 450 calories per day, which would result in 0.8 to 0.9 lbs of weight lost per week, regardless of fat intake. On further review, the authors reported a 10.3% (19.7 lbs) weight loss during the 6 months, meaning that subjects lost the expected weight per week predicted by their reduction in caloric intake. My research has shown that the reduction in caloric intake is the primary determinant of weight loss, independent of the percentage of calories consumed as protein, carbohydrate, or fat.

The reductions in lipid levels were of interest, because they reflect a minor decrease in total cholesterol levels from 214 ± 35 mg/dL to 203 ± 36 mg/dL (in most participants), and in

low-density lipoprotein (LDL) cholesterol levels from 136 ± 32 mg/dL to 126 ± 34 mg/dL. Although the raw data were not presented, it is clear that the total cholesterol level fell by an average of only 11 mg/dL, while the LDL cholesterol level dropped by an average of only 10 mg/dL. The majority of any perceived benefit occurred during the first 3 months, which is also consistent with what I have reported (4). Furthermore, only 1 subject had a cholesterol level <195 mg/dL while following the prescribed low-carbohydrate, high-fat diet. As I have also shown (4), any initial improvement in serum lipid levels for subjects following high-fat diets later disappeared as subjects remained on the diet. This is in contrast to the effect seen when subjects followed caloric restriction and either low- or moderate-fat diets. These subjects not only showed weight reduction, but also persistent reductions in cardiovascular disease risk factors as well as lipid levels (2–4).

The results of the study by Westman et al. confirm my earlier findings that reduction in total caloric content is the key to weight reduction and subsequent control, and that the effect of either high-fat or highly refined carbohydrate diets can blunt the potential benefits obtained with caloric restriction.

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