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Detox Diets Provide Empty Promises

The theory that our bodies are full of dangerous environmental toxins that can be purged has now gained widespread acceptance and international promotion. Hundreds of detoxification diets are available in the United States, Canada, Europe, and Australia from pharmacies and health food stores, the Internet, and women's magazines.

Cell cleansing, immunity rejuvenation, skin revitalization, body flushing, colon decontaminating, and liver purging are among the myriad of descriptors applied to these detox diets. They are advocated by those who contend that indulgence in the traditional food supply and exposure to environmental pollutants and naturally occurring toxins and their by-products contribute to lack of well-being, weight gain, acute disease, and chronic health problems.

Detox approaches generally focus on but restrict fruit and vegetable intake, prohibit animal protein consumption, and promote the intake of extracts and unorthodox recipes. These approaches are contrary to scientific consensus and medical evidence and are not consistent with the principle that diets should reflect balance, moderation, and variety. The scientific basis for these kinds of stringent diets is lacking, and adherence to these regimens may mask clinical presentations or delay diagnosis of a health-compromising illness.

Despite the absence of sufficient scientific merit and medical evidence on the safety and efficacy of these programs, detox dieting has been a recurrent theme in many traditional health systems in various cultures for thousands of years. There are thousands of testimonials that describe experiences of less bloating (actually the result of eating less food), clearer skin (improved hydration), decreased headaches (reduced alcohol and caffeine), and reduced bad breath (potential "sweet" ketosis).

It is not surprising that individuals following a detox diet report feeling better and more energetic—these results reflect a negative energy balance rather than elimination of toxins. A heightened drive state and even a sense of euphoria often accompany the initial stages of this sort of regimen. However, the suggestion that elimination of noxious agents is enhanced because of this regimen is categorically unsubstantiated and runs counter to our understanding about human physiology and biochemistry.

Healthy adults appear to happily survive, and may well feel better, as a result of any approach to reduction of caloric intake and simplification of what may have been a "poor diet." This observation must not lead us to conclude that there is a causal linkage between a "detox" routine and health.

Like other fad diets, the rather grim limitations of detox regimens do not appear to support compliance in most individuals we have seen clinically, which is probably for the best. What amounts to protracted starvation and nutrient insufficiency

may ironically slow metabolic rates and breakdown of fat stores, and while an antioxidant-rich diet is probably a desirable goal, the negative impact of protein and calorie deprivation and other possible sequelae likely far outweigh whatever beneficial effects may accrue.

During our interviews on this topic with CNN and CBS, we have emphasized that healthy adults, even overweight adults, have been endowed with extraor-

inary systems for elimination of waste and regulation of body chemistry. Our lungs, kidneys, liver, gastrointestinal tract, and immune system are effective in removing or neutralizing toxic substances within hours of consumption.

Are these detox diets dangerous? Certainly, says the medical community, there may be significant health risks associated with these kinds of regimens. They should not be followed by people who are undergoing growth and development, such as children and adolescents, pregnant or breastfeeding women, older adults who may have impaired renal or hepatic function, those with heart disease or diabetes, those with irritable or functional bowel disorders, those who are struggling with chronic illness, who may suffer from protein calorie malnutrition, anemia, or malabsorption (such as gastric-bypass or eating-disorder patients), those who may be on "blood thinners"—all may be subject to significant adverse reactions or interactions on the typical detox vegetable/fruit and water regimen.

The bottom line is that a more healthful lifestyle includes eating a variety of foods from the basic food groups while staying within energy needs, increasing daily intake of fruits and vegetables, whole grains, and nonfat or low-fat milk and milk products, and participating in physical activity every day, as outlined in the 2005 *Dietary Guidelines for Americans*. ●

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