The obesity epidemic in the U.S. puts physicians in a tight spot. In their efforts to break through on this stubborn chronic health condition, they may get questions from patients about taking dietary supplements to lose weight or maintain weight loss. But they should be aware that over-the-counter weight loss products are neither reviewed nor approved by the Food and Drug Administration (FDA) for safety or efficacy, and medical ethics prohibit doctors from recommending them.

Following are highlights from an article published in the *AMA Journal of Ethics*® (@JournalofEthics) by Melinda M. Manore, PhD, RDN, emeritus professor of nutrition in the School of Biological and Population Sciences at Oregon State University, and Megan Patton-Lopez, PhD, RDN, associate professor of public health at Western Oregon University.

Using the hypothetical case of a 42-year-old Latina with a high body mass index and a history of dieting for weight loss, the authors explored three crucial facts about over-the-counter products, as well as how physicians can support by promoting culturally and individually sensitive weight-management strategies backed by science.

**Unknown safety and efficacy**

The FDA “does not review or approve nonprescription, over-the-counter dietary supplements for safety or efficacy and does not require certification of substance purity on labels, although it does require listing of all ingredients,” the authors noted.

Supplement manufacturers sometimes add adulterants—such as sibutramine, fenfluramine, laxatives and diuretics—to spur weight loss, even though it’s illegal to do so.
Research on over-the-counter weight loss supplements shows that these products “have little efficacy and pose potentially serious risk of harm,” the authors wrote. “Clinical studies for weight-loss supplements typically include only one or two ingredients in a trial, lack a control group, are not double-blinded and require lifestyle changes.”

Learn more with a CME course on dietary supplements from the AMA and FDA.

Five drugs are now approved by the for long-term weight management in adults: orlistat, phentermine/topiramate, naltrexone/bupropion extended release, liraglutide and semaglutide. Find out more with JN Learning™ video, “Pharmacotherapy for Obesity.”

**Questionable ingredients**

Weight-loss supplements typically rely on one or more of four mechanisms, the authors noted: Blocking carbohydrate or fat absorption, increasing metabolism and “fat burn,” changing body composition, or suppressing appetite.

The problem is that their ingredients aren’t well studied and, at higher intakes, may be unsafe. For example, consuming more than 400 mg per day of caffeine can cause insomnia, irritability, heart palpitations and anxiety.

Other substances similarly appear to be safe at low levels, but over-the-counter products are not required to list their total contents, so consumers can never be sure how much they are getting in a dose or a serving.

The May 2022 issue of *AMA Journal of Ethics* further explores underregulated supplements.

**What to recommend instead**

“Weight loss and management are challenging in our current environment of readily available energy-dense foods and a sedentary lifestyle,” the authors wrote. “Telling the patient to ‘eat less and exercise more’ does not work.”

More to the point, there is no magic formula for weight loss, they noted, and research has shown extreme weight loss approaches do not work for most patients and can even slow metabolism. Measured approaches are more effective.
“Almost any diet that reduces energy intake will produce weight loss if followed. Explaining dynamic energy balance and the many factors that contribute to one’s body weight will help reduce patients’ guilt about past weight loss failures,” the authors wrote. “Clinicians should emphasize moderate, achievable weight loss and health goals and the importance of lifelong healthy lifestyle changes over quick, dramatic weight loss.”

Find out what doctors wish patients knew about healthy eating.