



Basic Health Info

Meal Replacements for Weight Loss

By Chet Zelasko, PhD

People today are on the move, and convenience foods are more than a novelty—they're a necessity for consumers. But more than just convenience, consumers want high-quality replacements for meals. Chips, candy bars, and other snack foods are available; although they're convenient to eat on the run, they contain too much fat and sugar plus far too many calories when you're trying to lose weight or at least not gain more. Drive-thru restaurants offer convenience but also too many calories and too much fat. You can get salads from the drive-thru, but they're not easy to eat while traveling in the car and we do love to eat on the run.

Meal replacement food bars and shakes fill the niche for convenient foods with better quality nutrition. Food bars have been used by athletes for decades, but they were designed to replace energy, especially carbohydrates. They've evolved to provide better taste along with a better composition of nutrients. Today meal replacements occupy entire sections of grocery and health food stores. Even convenience stores offer meal replacements in bars and shakes.

Meal replacements, wellness bars, health bars, protein bars, and all the same categories in liquid forms such as shakes—how do you know which ones you should use? How can you determine which ones are best to help you to achieve your goals? In this Health Info, I'm going to give you information on how to select the right bars and shakes if you're using them as part of a weight loss program. I've put it into the four Cs of meal replacements: calories, composition, convenience, and cost.



Calories

Meal replacements have one distinct advantage over real foods: they're manufactured to contain a specific number of calories per serving size. Every bar or shake will contain the same number of calories as every other bar or shake of the same brand and flavor. There's no guesswork for the consumer, and when it comes to weight loss, that's a real benefit.

Some people graze their way to an extra 500 calories per day. They finish their child's cereal in the morning; just a spoonful or two. Then they finish half a donut in the office, eat a few fries from a friend's lunch, grab a handful of popcorn in the afternoon, and sample everything they prepare for dinner. By itself, each taste isn't that much, but put together, they add up over the course of a day. Using a meal replacement for a meal or a snack restricts caloric intake to the calories in the bar or shake as long as you don't taste everything else.

While bars and shakes vary in caloric content, a meal replacement should contain 180 – 300 calories. When used as a snack, cut the replacement (and its caloric content) in half.

Composition

Bars may be high carb, low carb, high protein, low fat, or balanced. Some contain nuts, organic fruits, even vegetable puree. One thing is sure: we have options in the 21st century when it comes to bars and shakes. The paleo and ketogenic diet phenomenon is still strong, and many people are obsessed with restricting carbohydrate intake in the quest to lose weight. The problem is that most products increase other nutrients that don't affect blood sugar. The major class of sweeteners in this category is sugar alcohols such as maltitol and xylitol; I don't believe they're dangerous, but they cause digestive problems for many people.

Let's look at the two primary types of bars and shakes: meal replacements and protein bars and shakes.

Meal Replacement Bars and Shakes

Meal replacements generally have a nutritional composition that's balanced, which means the proportion of carbohydrate to protein may range from 1:1 all the way up to 5:1. This type of bar includes energy bars used by athletes who exercise strenuously and need to replace the carbohydrates they use.

When you look at the carbohydrates, the sugar content may be higher proportionally than other foods you eat. Remember, the number of calories is controlled. Even if all the carbohydrate calories were from sucrose or fructose, it would be balanced with protein and fat and therefore would not affect blood sugar the same way as cookies or candy or other foods high in sugar and low in protein and fat.

Some meal replacements add vitamins and minerals, others do not. The last time I wrote about this topic, there were no government regulations that governed what constituted a meal replacement. That still stands; there's no mandatory addition of vitamins and minerals required. However there's now guidance from the U.S. Food and Drug Administration. Having read the guidelines, here is the section that applies to meal replacements specifically designed to be part of a weight loss program:

“A formulated meal replacement product for use in weight reduction replaces a traditional, higher calorie meal. If a manufacturer fortifies the meal replacement based on its caloric contribution, the meal replacement would not always provide the appropriate amounts of necessary vitamins and minerals that a traditional, higher calorie meal normally provides (1).”

Even though a meal replacement bar may only have 180–300 calories, they should have 30% or greater of the Daily Value for essential vitamins and minerals based on a diet of 2,000 calories per day. The reason is this: if a person were eating a 500-calorie meal, it would have higher amounts of nutrients than would a 300-calorie meal with the same foods. If someone is losing weight, they don't want the calories but they need the nutrients, so there should be a proportionally higher amount of vitamins and minerals in the meal replacement. Makes sense, doesn't it?

I think it makes sense to select bars and shakes for weight loss that have additional vitamins and minerals if you're on a weight loss program. In a year-long study that compared subjects who used a real food diet with those who used bars and shakes, people in the group that used real food were found to be deficient in some vitamins and minerals compared to the other group (2). This may not be a concern because you're probably going to take a multivitamin-multimineral; this illustrates why it's even more essential when your food choices and calories are restricted. Whatever you decide, make sure you read the bar and shake labels and make your decision based on your total dietary intake of vitamins and minerals from all sources.

One more thing to consider is the fiber content. If you were to eat a real meal, there would be fiber in the bread or other grains, the vegetables, or the fruit. If you're replacing a meal, you want some fiber (3 – 6 g) in the meal replacement, whether bar or shake, to get the equivalent in the real foods.

Protein Bars and Shakes

Protein bars and shakes are characterized by having a higher proportion of calories from protein than from carbohydrates or fats; they may or may not have additional vitamins and minerals. If they do, they will not have the complete nutrient profile compared to a meal replacement. While typically used by athletes who want additional protein to increase muscle mass, they've become popular for people using a low-carbohydrate approach to losing weight. Just make sure you know what you're getting in your protein bar or drink.

Most have a blend of protein sources using both dairy and soy protein. The advantage is that if you're lactose intolerant or allergic to soy, you can find bars and shakes with no dairy or soy. Just be sure to read the list of ingredients; if you see whey or casein, that's dairy.

Convenience

If there's one advantage to meal replacement bars and shakes, it's that they're convenient. You can pack them away in your briefcase, purse, car, or even in your pocket. You don't need to carry containers that need to be heated or microwaved; you simply open the package or pop the top, and you have a meal. Add a piece of fruit or some crunchy vegetables with it and you're done. No fuss, no muss.

Shakes that have to be mixed before use can be a little more challenging: you need a container and water to mix them in. Not a problem—either make them up in advance, or take a container of water with you and stir in the shake mix when you're ready. If you prepare them in advance, you can blend in your favorite fruit and eliminate the need for carrying around fruit as well. Here's a tip: mix your shakes the night before, pour them in your to-go container, and freeze them. Take them with you in the morning and by noon, you'll have a refreshing and slushy meal.



Cost

Meal replacements are a bargain when you consider they replace an entire meal. The cost varies from \$.99 to \$3.50 depending on whether you buy them on sale or pay full retail in a convenience store. When you consider the nutrition you get for the money spent, the \$.99 deals at fast-food restaurants that are full of fat and calories finish a distant second. Compared to a lunch entrée in a typical restaurant, you can get adequate nutrition, lose weight, and save money. That's a great deal!

Meal replacement bars and shakes can be an important component of your weight loss plan; they're a cost-effective and convenient way to limit calories and get a good distribution of nutrients.

But there's one more question that comes up: which is better, bars or shakes? There isn't a lot of research on this topic, but in one small study, subjects who ate bars that were nutritionally identical to shakes were less hungry a couple of hours later and ate less at their next meal (3). Keep experimenting to find the kinds of meal replacements that work best for you.

References

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Dr. Chet Zelasko is dedicated to helping men and women get healthy and fit. As a health and fitness consultant with a PhD in Exercise Physiology and Health Education from Michigan State University, he provides health information based on the most recent research and delivers it in a way that's easy to understand. Whether in person during seminars, in audio recordings, or in the written word, he makes sense out of the health news people hear so they can make better health choices and achieve optimal health. He's conducted research and been published in peer-reviewed journals. He is certified by the American College of Sports Medicine as a Health and Fitness Specialist and has taught in ACSM certification workshops throughout the United States; he also belongs to the American Society of Nutrition. Although Grand Rapids, Michigan, is home, he has presented seminars on health to groups all over North America, Mexico, and the Caribbean and has written extensively on the health benefits of a good diet, regular exercise, and targeted supplementation.

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