



**Upper Arlington  
Preventative Primary Care**

**Whole Food Choices versus Liquid Meal Replacements**

*Steven T. Devor, Ph.D., FACSM*

*Exercise Physiology, Upper Arlington Preventative Primary Care*

Are you attempting to lose weight? Or perhaps even gain weight? Maybe your goal is to increase your overall muscle. Or simply to increase your energy throughout the entire day. One thing we know that can be traced through all of these goals is that people often feel like they have no time to eat a proper meal.

If you believe the deluge of advertisements, liquid “meal replacers” or “complete nutritional drinks” like Boost, Ensure, and many others are the all-in-one answer. And many believe they can help with the nutritional, weight loss, or weight gain goals people often have.

Most of these shake-like beverages were originally designed for people that were quite sick or weak and therefore could not manage their daily nutritional intake with solid food. These sorts of beverages were utilized primarily in hospital or clinical settings. Additionally these beverages are frequently used for very overweight or medically obese people in physician-supervised weight-loss programs. Other types of drinks and shakes were originally developed for athletes who were seeking “high-energy” performance boosting nutrition.

In recent years many of these liquid meals have been very slickly targeted and marketed toward the general public, both young and old, athletic and non-athletic. While many of these drinks would be healthier snacks than a candy bar or bag of chips, most Americans simply do not need them as any sort of supplement to their daily nutritional intake.

Simply said, there is absolutely nothing transformative or magical about these types of drinks. Typically they contain just milk protein, water, many forms of added and processed sugar, vegetable oil, thickeners, and flavoring agents, plus added vitamins and minerals. Below we will take a closer look at some of the frequent claims made on the labels of these types of beverages.

**“Energy drink”:** The term energy simply means calories. There are typically 250 to 375 calories per bottle (or can) in most bottled drinks of this kind. That is not enough calories for a true nutritionally balanced meal, but it is a lot of extra calories to be consumed as a snack. One-quarter to one-half of the calories in most drinks come from various added and processed sugars (not naturally occurring sugars like those found in fruits and vegetables).

**“High-protein”:** When a bottle is labeled this way the beverage typically contains 10 to 20 grams of protein (compared with approximately: 8 grams in a cup of milk, 10 grams in a cup of plain yogurt, or 7 grams in an extra-large egg). However, most Americans obtain more than enough protein in their daily food intake. And protein by itself will not build additional muscle. Further, it is far better to obtain your protein from natural whole food products.

**“Complete nutrition”:** These bottles frequently supply 15 to 50 percent of most vitamins and minerals, but contain few if any of the other potentially beneficial substances found in whole unprocessed foods, like the carotenoids in fruits and vegetables. In addition, most brands of these beverages contain no fiber, which is so important for gut health.

**“Easy and convenient”:** While this claim may be true, what could be easier (and far healthier) than picking up a piece of fresh fruit (banana, apple, some grapes or strawberries), or baby carrots, or cut up vegetables, or a cup of yogurt.

**“Doctor-recommended”:** Some physicians may advise certain meal replacement drinks for patients who are undergoing chemotherapy, have serious illnesses, or simply cannot consume enough whole solid foods. But rarely are these beverages physician recommended for others. Indeed, recently the American Geriatrics Society recently warned against the overuse of such meal replacement drinks and shakes. Specifically, the statement was: “Unintentional weight loss is a common problem for medically ill or frail elderly. Although high-calorie supplements increase weight in older people, there is no evidence that they affect other important clinical outcomes, such as quality of life, mood, functional status or survival.”

In conclusion, individuals with certain medical conditions may find some level of benefit in meal replacement drinks and shakes. But they should always ask for advice from their physician about specific products. If you are healthy and find yourself frequently reaching for nutritional beverages and shakes instead of real whole food meals that is a course of action that is not recommended. There is simply no substitute for whole unprocessed foods. Generally speaking, if it grows in the dirt, eat more of it every day.