



**RESEARCH &
DEVELOPMENT**

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Dear Sharon:

There is a small amount of cholesterol in the Meal Replacement Shakes due to the milk-based whey protein, calcium caseinate and protein isolates. A small amount of cholesterol is carried over with these proteins. For comparison, one large egg contains approximately 200 mg of cholesterol while a cup of whole milk contains approximately 35 mg of cholesterol. A teaspoon of butter contains approximately 10 mg of cholesterol.

The most important point is that the fact that small amounts of cholesterol in our diets such as in Meal Replacement Shakes are not unhealthy and do not contribute significantly to the cholesterol in our blood. The primary source of cholesterol in the bodies of most individuals is cholesterol synthesized within our bodies. Much misinformation still persists in spite of the current evidence and available information.

A small portion of people are termed "cholesterol sensitive" because their blood cholesterol levels rise very high in cholesterol (for example, fatty meat). In the great majority of people, the amount of cholesterol does not affect blood cholesterol. Furthermore, it is not cholesterol that clogs arteries, but foods high in saturated fats. The American Heart Association is not concerned about the cholesterol in eggs, and one should not be concerned about the amount of cholesterol in the Meal Replacement Shake which is one-fifth the amount of a single egg. The American Heart Association has concluded that it is appropriate for people to eat eggs once per week.

With respect to your question about fructose and sugar in our bars, our bars are exceedingly well-balanced for overall nutrition. Our diet should consist of carbohydrates: protein: fat in a ratio of approximately 40:30:30, near or identical to the ratio present in our bars. This is the ideal ratio of calories that our bodies require.

May I point out that the amount of fructose in these bars is less than is found in a typical serving of fruit: pears, peaches, apples or bananas. For example, a typical serving of many fruits contains four to six grams of fructose. Honey contains almost 14 grams of fructose per 30 grams serving, while a 12-ounce soft drink contains about 10 grams of fructose. An average banana contains about 10 grams of fructose. The Fruit and Fiber Bar contains about 10 grams of fructose. Common sources of fructose include sucrose, honey, molasses, high fructose corn syrup and vegetables.

Much misinformation exists regarding fructose. Fructose is fructose regardless of the source. High fructose is derived from corn starch and is approximately a 50:50 mixture of fructose and glucose (varying from 42% to 50% fructose). Sucrose (table sugar) is what is called a "disaccharide" that consists of glucose and fructose linked together.

High fructose corn syrup now represents a major source of added sugars in our diet and is also a major source of calories. This is primarily due to the increased consumption of soft drinks, fruit drinks and other processed foods which contain added high fructose corn syrup as the sweetening agent.

The consumption of small amounts of fructose as found in fruits, vegetables and AdvoCare products is not associated with any harmful health effects. However, consumption of high amounts of fructose (as for example, over 25% of total calories) can lead to health problems. This level of consumption is almost invariably associated with the consumption of large amounts of soft drinks, fruit juices and beverages to which large amounts of high fructose corn syrup have been added. Typical problems may include gastrointestinal disturbances as well as an increase in serum triglycerides.

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increased production and decreased turnover. Modest intake of fructose is associated with improved liver function, reduced post-prandial insulin and glucose, and a lower triglyceride to HDL cholesterol ratio, indicating improved insulin sensitivity.

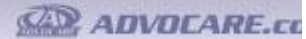
Based upon the above comments, please remember that consumption of fructose in moderation is the key to beneficial effects. Again, fructose is fructose regardless of the source. Fructose as with anything we consume can be a problem when consumed in excess. AdvoCare does not use ingredients that are unsafe or inappropriate. I hope this clarifies the issue and that you will have absolutely no reservations about consuming AdvoCare products.

I sincerely hope this addresses the question and any concerns.

Best wishes.

Sincerely yours,

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your original message to ...

Dr. Stohs-

I had a customer ask why we had cholesterol in our shakes. I'm sure it must have something to do with the good cholesterol our bodies need but I would like to have a more professional opinion than just mine to give her. If you could help with this, I would appreciate it.

Also, I have also had several people ask me why we have high fructose corn syrup and sugar in many of our bars when we are suppose to be a nutritional company. Is it possible to sweeten our bars with a healthier form of sweetener? Would also appreciate your thoughts on this. Thank you for your time.

Sharon Dilla