



The Challenge Around Ketosis

If you think you're in ketosis because you've decided to will and grunt your way through a carb-limited diet, think again. It's not that easy even if you sacrificed day in and day out.

Glucogenic amino acids, those that can be converted to glucose, such as alanine, glycine and cysteine are prevalent in most protein sources we consider to be high biological value (BV). High BV protein sources are those typically associated with high anabolic support and maximum tissue nitrogen retention and regeneration, including whey, beef, egg, pork, fish and turkey. Reducing protein intake and elevating dietary fat intake is a common solution that supports a low-carb intake if ketosis is the goal. It can work.

However, if your goal is maximum power and muscle as an athlete, the question you must ask: Is it an effective option to eliminate high BV protein from your diet and still maintain and build lean muscle amid intensive training? This is good question that has not been convincingly answered. My opinion based on data interpretation and long intense personal experience in the bodybuilding arena is an emphatic NO!

Escalating dietary fat intake with the right sources is certainly a viable option, as long as the carbohydrate intake is limited at the same time. This facilitates ketosis and spares protein for anabolism. It may be enough for sedentary folks; but it won't be enough if you are lifting heavy weights or pushing your body to other physical extremes.

Nevertheless, monitoring one's macronutrient intake to meet daily demands, which can range considerably for each individual based on genetic variance, sleep, stress, exercise changes/intensity, nutrient density, and meal frequency, is a monumental task that usually fails due to lack of knowledge and experience. For those looking to achieve a ketogenic state, staying in the zone and in full cognitive and physical function is a daunting task often riddled by downturns in energy substrate availability.

If you are training hard to build muscle or in extensive endurance programs, glycogen restoration is a MUST as a post-workout endeavor. If you don't glycogen restore and maintain daily requisite protein, then expect to perform short of maximum. I've been there and can tell

you with absolute certainty if you are not fully glycogen loaded you can't perform even if you're only lifting singles for a maximum bench or squat. I've squatted in excess of 7 x 45 lb plates on each side of a bowing bar (>710 lbs) glycogen depleted, I wouldn't even be able to get that bar off the rack, let alone perform the squat. That full muscle belly generates significant turgor pressure from within on a lift that produces physical support from head to toe and this means not just energetic support. If maximum lean muscle and power is the goal, protein intake will be needed far beyond that allowed by the strict ketogenic program; and as for carb intake, you have to find a way to maintain muscle glycogen in countering proportion to your usage.

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