



Eating Right, Swimming Faster Conclusion Example

First, I'd like to start off by stating I am not a Doctor, Registered Dietician or a nutritionist. I am a swim Coach brining awareness to the benefits of fueling for a competitive swimmer. My Primary goal here is to inform you, the parents on the needs of fueling as you are the front line to the athlete. It all starts at home. When the parent's buy in then the athlete will buy in.

Athletes need carbs, do not let the latest diet craze influence the way your athlete is fueled. You are dealing with an athlete who is NOT just a normal non-athletic individual. Your Athletes must understand this. The work starts at the dinner table. Your dinner table.

Getting your nutrition right is key for athletic success. The right meal and the right snack choices every day will significantly improve your athlete's performance in training and competition. The benefits look like:

- Train harder for longer
- Recover quicker between training sessions
- Race faster at competition

Not only that, but you will stay healthier throughout the season, which means fewer training days and competitions missed through sickness. I see this happen all the time with athletes not fueling properly and trying to meet the demands of training.



Let's look at an example of what can happen to a Competitive swimmer that is under fueling their body through the week.

I'm going to start with a basic understanding of what **Basal Metabolic Rate (BMR)** is

BMR Definition: Your Basal Metabolic Rate (BMR) is the number of calories you burn as your body performs basic (basal) life-sustaining function. Commonly also termed as Resting Metabolic Rate (RMR), which is the calories burned if you stayed in bed all day. In either case, many utilize the basal metabolic rate formula to calculate their body's metabolism rate. (*Garnet Health July 1 2016*)

So let's pick two subjects:

1. A 5'-10" Male, 14-16 years old, weighing 145-175lbs
2. A 5'-4" Female, 13-15 years old, weighing 108-130

Using a **Basal Metabolic Rate** calculator found on *Garnethealth.org* we can conclude the following:

The male athlete wakes up and just going about his normal everyday routine will burn 1650 calories

The female athlete wakes up and just going about her normal everyday activity will burn 1500 calories

Let's take a look at the scenario of an under fueled athlete. This would be where they are not taking in enough calories of the proper fueling during the right daily time schedule.

Here is our male athlete (we have added a 120 min practice session Calorie burn)

Male Athlete- Burn 700-850 Cals per hour for this example we are using a 2 hours					
Day of week	Calorie Intake	BMR Cal Burn	120Min practice burn	Tot. Burn BMR + Training	Net(-) or Gain(+)
Monday	2800	1650	1500	3150	-350
Tuesday	2800	1650	1500	3150	-350
Wednesday	2800	1650	1500	3150	-350
Thursday	2800	1650	1500	3150	-350
Friday	2800	1650	1500	3150	-350
Saturday	2800	1650	1500	3150	-350
Sunday	2800	1650	1500	3150	-350
				By end of week we are behind	-2450
* Senior 1 and Senior 2 are burning more then this average.					

Here is our female Athlete (we have added a 120 min practice session Calorie burn)

Female Athlete- Burn 700-850 Cals per hour for this example we are using a 2 hours					
Day of week	Calorie Intake	BMR Cal Burn	120Min practice burn	Tot. Burn BMR + Training	Net(-) or Gain(+)
Monday	2200	1500	1500	3000	-800
Tuesday	2200	1500	1500	3000	-800
Wednesday	2200	1500	1500	3000	-800
Thursday	2200	1500	1500	3000	-800
Friday	2200	1500	1500	3000	-800
Saturday	2200	1500	1500	3000	-800
Sunday	2200	1500	1500	3000	-800
				By end of week we are behind	-5600
* Senior 1 and Senior 2 are burning more then this average.					

What can we take away from this? There is a deficit. This deficit is NOT conducive for a Competitive Swimmer. Now, couple this with a swimmer that might not even be fueling properly. Which we have learned proper fueling through our

Square Meals-Gold Value 3 Part Series. Imagine this swimmer was favoring Proteins over Carbs and that his or her plate had more Proteins then Carbs. Unlike the picture of the **Swimmers Plate** we went over in the series.

In this above case, the readily available glucose from carbs is low as well as the stored glycogen. And, as each day goes by more and more glycogen depletion occurs. Starting to sound like we might becoming Glycolic.

Parents, this is just in one week! What about the next week? Now, here is the real eye opener. *When do we normally have swim meets?* Friday, Saturday and Sunday, the end of the week!! *Are these athletes really set up to compete?* **NO!** But, bless their souls they go out and try! And, bless the coach’s souls because we go all in for our athletes.

Being a competitive swimmer is a lifestyle much different then a normal individual. Parents, you must buy in. You must see the big picture. When you are prepared and make substantial changes at the dinner plate, school meal snacks, during training nutrition and post training nutrition your athletes will buy in.

Let’s look at an example of what can happen to a Competitive swimmer that **IS fueling their body through the week.**

Male Athlete

Male Athlete- Burn 700-850 Cals per hour for this example we are using a 2 hours					
Day of week	Calorie Intake	BMR Cal Burn	120Min practice burn	Tot. Burn BMR + Training	Net(-) or Gain(+)
Monday	4000	1650	1500	3150	850
Tuesday	4000	1650	1500	3150	850
Wednesday	4000	1650	1500	3150	850
Thursday	4000	1650	1500	3150	850
Friday	4000	1650	1500	3150	850
Saturday	4000	1650	1500	3150	850
Sunday	4000	1650	1500	3150	850
				By end of week we are behind	5950
* Senior 1 and Senior 2 are burning more then this average.					

Female Athlete

Female Athlete- Burn 700-850 Cals per hour for this example we are using a 2 hours					
Day of week	Calorie Intake	BMR Cal Burn	120Min practice burn	Tot. Burn BMR + Training	Net(-) or Gain(+)
Monday	3700	1500	1500	3000	700
Tuesday	3700	1500	1500	3000	700
Wednesday	3700	1500	1500	3000	700
Thursday	3700	1500	1500	3000	700
Friday	3700	1500	1500	3000	700
Saturday	3700	1500	1500	3000	700
Sunday	3700	1500	1500	3000	700
				By end of week we are behind	4900
* Senior 1 and Senior 2 are burning more then this average.					

These athletes are more than ready to train and compete on weekends. Now, I understand you might be thinking they will gain weight. Well, for starters that's not a bad thing. Secondly, if they are gaining muscle mass weight that's not a bad thing either. (**Senior 1 & Senior 2 swimmers will have a greater caloric burn in their 2 hours due to the regular intensity of the workouts. Avg. 150 calories more or up to 200 more*)

If we fuel properly and stay within the tracks, all our athletes are going to be rewarded with a healthier life, better training sessions & ***faster swimming!***

In closing, meeting with a Dietician for individual specific needs is always recommended. The information here is strictly to bring greater awareness to fueling for a competitive swimmer.