

## **Long Run & Race Nutrition**

The following is a plan for getting about 45 grams of carbs per hour of whilst running. As discussed, if you are a 100-120 lb runner, then 45 grams should be sufficient, if 160-200 lbs than closer to 60 grams should work. Keep in mind that most gels (GU, Hammer, etc.) have about 22 grams of carbs per packet. I always use an estimate of about 20 since it is hard to squeeze everything out of the packet. The chews/chomps/etc. have about 5 grams per chew. Again, check the product to see how much each chew has and adjust the plan below to meet your need. Also, keep in mind that all the Gels have various amounts of potassium and sodium so you will need to make sure that you are not getting a lot more of these than you need. I recommend that you vary which nutrition you take since the carbs used in each will metabolize at different rates. The best gel according to most running gurus is the ones that contain the “maltodextrin” as the main source of carbohydrates. The reason is that this carb is broken down in the liver and therefore has a more “lasting” effect where as those with fructose (I refer to them as the sugar from fruit) go directly into the blood stream as digested. If they go directly to the blood stream then that will trigger an insulin requirement to break them down into useable energy and thus the sugar high and crash effects. That is why you need to be careful on how much of the other things you take at one time...I like to sip it as I go along so not to have to much. Remember you will always need to take water with the Gels. The amount of water will depend on the on the Gel you are taking (read the label to find out how much is needed) and what your own body needs as well. Some will need a lot more water than others simply because they will sweat much more and that water will need to be replaced. Lastly, some Gels will contain “caffeine” which for some of us that is good and others not so much. That is why we emphasize that you start now practicing what works and once you find that, stick with it. I tend to tweak each year to find something that will work just a bit better but once I get into the long miles, I stick with one routine.

Then you have sports drinks. Most sports drinks provide approximately 15 grams of carb per 8 ounces of fluid or depending on how you mix them if you do that from powder. “DO NOT” use the sports drink as the water for the chews or gels. Instead, as mentioned

earlier, use the sports drink as an alternative to a chew or a gel. Again, I can't say it enough...you'll want to add in water according to the conditions and to meet your body's needs. Begin your nutrition routine about 15 minutes prior to running with about 8 ounces sports drink. This will be about 15 grams carbs and then start with your first gel or chomp after running for about 15 minutes.

As I discussed there are ways to make this simple rather than carry around all these packets and trying to remember what to take when, I normally carry 4 bottles. Two bottles of water, one sports drink, and one with all the gels that I'm going to need for that day. So if I'm running 3 hours, than I have one bottle that has 4 gels in it mixed with water, one bottle of sports drink, and two bottles of water. If the run is longer, I just add more gels to the gel bottle and strengthen the sports drink that you use. You can always get more water along the route that we will provide or at a race as well. As mentioned this morning, there are other powdered drink mixes that you can get as well and most work just as well as the gels in most cases. Again, what you want to look for is a variety of different carbs and not of the same ones. Some will break down into the energy you need to keep running sooner than others so by varying the type, you will be assured that you are getting an energy you need all the way through your run. Remember as well that all of us are different in how we handle these carbs so you will need to experiment with what works best for you. Some may not be able to handle the gels or chews and may need to try other forms of carbs such as fruit, pretzels, or other products. You just need to figure out how well these work for you and then find out how much of each of them you will need and how often. Some of the fruits for example will go directly to the blood stream and so you will need to adjust for that time lapse as well.

Another question that gets asked often is if you need to take salt supplements. I would say that for most of us additional salt is not required. Our diets contain more than enough salt even for running and sweating a lot such as I do. However, if you are vegan for example, then perhaps you may need to consider some salt (sodium) supplement.

The following is a sample plan for getting about 45 grams per hour starting at 15 minutes into the run (remember to take the 15 grams before as well):

15 minutes – 2 energy chews (10 grams)

30 minutes – 1 energy gel (20 grams)

45 minutes – 2 energy chews (10 grams)

1 hour – 1 energy chew (5 grams; hourly total: 45 grams of carb)

1 hour, 15 minutes – 1 energy gel (20 grams)

1 hour, 30 minutes – 2 energy chews (10 grams)

1 hour, 45 minutes – 4 ounces sports drink (7.5 grams)

2 hours - 4 ounces sports drink (7.5 grams; hourly total: 45 grams of carb)

2 hours, 15 minutes – 1 energy gel (20 grams)

2 hours, 30 minutes – 2 energy chews (10 grams)

2 hours, 45 minutes – 1 energy chew (5 grams)

3 hours – 2 energy chews (hourly total: 45 grams of carb)

3 hours, 15 minutes – 4 ounces sports drink (7.5 grams)

3 hours, 30 minutes – 1 energy gel (20 grams)

3 hours, 45 minutes – 4 ounces sports drink (7.5 grams)

4 hours – 2 energy chews (10 grams; hourly total: 45 grams of carb)

4 hours, 15 minutes – 1 energy gel (20 grams)

4 hours, 30 minutes – 2 energy chews (10 grams)

4 hours, 45 minutes – 1 energy chew (5 grams)

5 hours – 2 energy chews (hourly total: 45 grams of carb)

5 hours, 15 minutes – 4 ounces sports drink (7.5 grams)

5 hours, 30 minutes – 1 energy gel (20 grams)

5 hours, 45 minutes – 4 ounces sports drink (7.5 grams)

6 hours – 2 energy chews (10 grams; hourly total: 45 grams of carb)