EATING BEFORE TRAINING

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During the build phase of training, higher intensity and longer workouts require more glycogen for fuel and what you eat the in the few hours before training is essential so that you have adequate fuel to train. This is especially important when you have two daily training sessions. A perfectly timed and portioned pre-training meal or snack can replenish fuel depleted from a previous training session, provide early morning fuel, and supercharge you for training later in the day.

Metabolically speaking, there are two distinct time periods for pre-training meal timing: 2-4 hours before and 30-60 minutes before. Often when you eat is a matter of practicality and scheduling.

2-4 hours before

Eating carbohydrate 3 to 4 hours before training does elevate blood insulin levels and favor the use of carbohydrate as a fuel. But because larger portions are tolerated, you do keep blood glucose levels nice and steady. Plenty of research indicates that eating at this time improves training.

Eating three hours before training, while a safe interval for race day, it is not as likely to happen during a regular training week. However, if the opportunity presents itself, you can have a nice sized meal or snack will plenty of digestion time. Liver glycogen stores are fully restocked, sending glucose into your bloodstream when training, and you can even top off your muscle glycogen stores. It also can stave of hunger during harder training sessions.

Try to consume the upper limits of your tolerances for the full performance benefit. For every hour that you allow yourself some quality digestion time, consume just under half a gram of carbohydrate for every pound that you weigh (about 1 gram per kilogram of weight). If a 160-pound (73 kilogram) athlete could consume 240 grams of carbohydrate. It could be a mix of liquid and solid carbohydrate sources, depending on your tolerance. Cereals with soy or dairy milk, juice, fruit, could comprise much of your carbohydrate intake. Small amounts of low fat protein can also be included, but try to keep fat intake low as this will slow down digestion time.

Eating two hours before training would take the recommended carbohydrate amounts down to 150 g for the same athlete. It is even more important that easily digested food be part of your snack closer to training. Breakfast shakes, smoothies, and sports supplements can be part of the mix at over 50 g of carbohydrate per serving.

30-60 minutes before exercise

Real life often requires that you consume some fuel 30 to 60 minutes before training. Rising in the early morning hours to train often requires a quick bite or gulp before heading out. Scheduling can also result in a large time gap between the last meal and the start of a training session, when hunger and limited fuel become an issue. You may also find it helpful to eat closer to longer training sessions for the carbohydrate boost and performance benefit and simply need the calories because your energy needs are very high during your current training cycle. You are most likely to derive a performance benefit from eating 30 to 60 minutes before training if you have not eaten for four hours or more.

You are likely aware that consuming carbohydrate in the 30 to 60 minutes before training does produce a marked increase in blood glucose and insulin levels prior to training. And there can be a small, but short-lived drop in blood glucose during exercise. Most athletes experience no ill-effects from this drop which quickly corrects itself, and there are plenty of studies that show a performance improvement with this eating strategy.

Some athletes are carbohydrate sensitive right before exercise, and a few simple strategies can help them tolerate a snack at this time. You can actually have a slightly higher dose of carbohydrate. While many athletes may consume 50 grams or more from a gel, energy bar, or concentrated drink, aim for over 70 grams to offset the drop in blood glucose. Some easily digested products may have a lower glycemic index and work well for the athlete, though whole, low glycemic foods may not be the most practical choice from a gastrointestinal perspective.

Another important strategy to keep in mind is that consuming a carbohydrate-containing sports drink during early on when training maintains blood glucose levels (insulin secretion markedly declines during exercise), correcting any blood glucose dips, and also gives you the best start in hydrating during the training session.

Some pre-exercise meals/snacks

3-4 hours before

Pancakes, 4 medium
Fruit topping, ½ cup
Syrup, ½ cup
Juice, 8 ounces

2-3 hours before

Cereal, 1.5 ounces
Banana, 1 large
Juice, 8 ounces
Toast, 2 slices
Jam, 2 Tbsp.

2 hours before

Fruit smoothie:
Yogurt, milk, fruit
Energy bar

1 hour before

1 Energy bar or 1 Gel or 12 to 16 oz High Carbohydrate Supplement