

# THE TRUTH

## ABOUT LOW CARB HIGH FAT DIETS

**3 TRIED AND TESTED FUELING  
STRATEGIES THAT WILL  
CRUSH THE COMPETITION**



A study by Runners Inc.

## WHY SHOULD YOU CARE?

Dear Runner,

Training and racing without the right fuelling strategies is a complete waste of your valuable time.

There's only one thing, and be honest with me:

Can you make sense off all the available studies, stories and advice out there?

I'll be totally honest with you:

At one point I was in the dark and had no idea anymore...

About what to eat or drink as part of my preparation for a race.

High carb...

High fat...

No carb...

No fat...

And everything in between.

As a runner I am ALWAYS looking for ways to improve my overall performance.

Training, gear and nutrition are key components.

Especially about nutrition there are just too many opinions.

Some come from scientists, many from runners.

To make things worse: they all have a different opinion.

Let's get The Truth out there for once and for all...

Are you looking for ways to improve your running performance by applying scientific, yet practical fuelling strategies?

Do you want to have your personal view on the high fat versus low carb discussions? Enabling you to decide what works best for you. Not the scientists or highly opinionated runners (that often are just adding noise to the matter...).

How would you like to have a balanced and structured nutrition plan? Knowing exactly what to eat and drink in preparation for your race?

Let me share with you my personal insights and experience with fuelling strategies that are not only well-founded, but also enhance performance of marathon and ultra marathon runners.

These strategies help you become a **Super Charged Running Machine**. 😊

To your success,

Jeroen

## How Do I Know?

The past decade I have tried and tested every possible variation of the different diets for runners: high fat, low carb, keto and even the cave man diet. As a runner, I wanted to have a couple of burning questions answered:

*“What sort of nutrition makes me a faster and stronger runner on race day?”*

*“What nutritional habits support my hard training regime and facilitates a speedy recovery?”*

*“What eating and drinking habits can I apply in daily life?”*

Since weight plays a crucial role in running up and down mountains and being fast on the flats, I wondered: *“How can I manage my weight, without losing strength?”*

Let me tell you this...

I figured it out and MASTERED the art of pre-race nutrition.

No more energy highs or lows. No more stomach problems.

No more confusion about what diet is best.

A nourished feeling all day long.

Let get busy...

# FOOD

# Fight

---

**Low Carb High Fat**

**High Carb Low Fat**

## WHY EVERYBODY IS WRONG

The versus-discussion is just plain stupid (hope you don't feel offended now...). Low versus High. It's not a battle. It's not about what's good and what's bad. As a runner you always have to ask yourself this key question:

*"What can I do to achieve my running goals and dreams?"*

This relates to everything that can make you a better runner: gear, training, mental prep, nutrition. Carbs. Fats. It's fuel, nothing more, nothing less. It's fuel that has to support you in boosting your performance. Being your best on race day.

More on this later...

Let's first have a look at the High Carbohydrate and High Fat Theories. Below summary has been previously published on the [TrainingPeaks website](#).

### THE HIGH CARBOHYDRATE THEORY

In the 1960's it was discovered that carbohydrate plays an important role in fatigue. It was also discovered that carbohydrate intake during exercise can improve endurance capacity. Essentially, when carbohydrate is available, endurance is improved. When consecutive days of hard training are performed, carbohydrate will reduce symptoms of over training. There are many studies to support these observations and it is further supported by a clear physiological mechanism: At high exercise intensities (>80 percent of maximal oxygen uptake; VO<sub>2</sub>max), carbohydrate is the main fuel, regardless of the diet.

## THE HIGH FAT THEORY

Our bodies are adapted to carbohydrate because the Western diet contains a relatively large amount of carbohydrate. Therefore, we have become more dependent on carbohydrate as a fuel. If we adapt to a diet that is high in fat and low in carbohydrate over the course of many weeks, our bodies adapt and will become better at oxidizing fat. There are several studies that show that a low carbohydrate diet result in increases in fat oxidation. Some of this is simply because the body is now depleted of carbohydrate, but some of this is a genuine adaptation. There are not many studies that have investigated the effects on performance.

Makes sense, right? Now that we've established a clear definition of the two diets; let's have a look at some scientific studies and the practical applications.

## SCIENTIFIC STUDY:

### LOW CARB DIET VERSUS HIGH CARB DIET FOR A 100 KM TIME TRIAL

What improves performance: a high carb or a high fat diet? Scientists in South Africa tried to answer this question studying cyclists during a 100 km time trial, including 1 km sprints.

Their conclusions?

The low carb, high fat diet increased fat metabolism. This did not translate into increased performance. It became clear however, that this diet did compromise the high intensity efforts (sprints).

What can we learn from this?

This study suggests that performance is worse for high intensity efforts, if on a low carb diet. On the other hand, the body's ability to burn fat as a source of energy increases, if on a high fat diet. More background information about the study and references:

[MySportScience.com](https://mysportscience.com) by Asker Jeukendrup.

# **Strategy**

## **#1.**

---

## **Training**

## **Low**

## **DON'T BE(COME) OBSESSED WITH BURNING FAT**

'Training Low' receives a lot of attention amongst runners. Training low refers to training with a low availability of carbohydrates. Although reasons why runners train low vary, the most common heard reason is:

*"I want to burn fat."*

But why?

*"Weight loss", or:*

*"Improve fat burning capacity"*

## **HOW DOES A RUNNER BENEFIT FROM INCREASED FAT OXIDATION?**

Training low forces your body to use its energy systems more efficiently. Rather than relying on carbohydrates that are readily available, training low helps your body become better at using fat as a source of energy.

Let's have a look at the most common ways of training low. Let me share with you

5 Training Low concepts that work well for runners:

1. **Training twice a day:** the first training is used to deplete your carbohydrate levels and the second training is then executed with low carbohydrate levels. In between the two trainings carb intake is minimal.
2. **Training after an overnight fast:** training is executed 'on an empty stomach' before breakfast. Carbohydrate levels are nearly depleted after a 12 – 16 hours fast. You may want to drink a cup of coffee (no sugar or milk), no calories.
3. **Sleep low:** training before sleep, no carbohydrate intake until after the training the next morning.

4. **No carbohydrate during recovery:** withholding carbohydrate intake after a training for one or a couple of hours. But...check out the Performance Murdering Mistake #2!
5. **Long training without carbohydrate intake:** training for several hours (3+) without taking additional carbohydrates. This type of training is started with normal carbohydrate levels.

## TRAINING LOW - PERFORMANCE MURDERING MISTAKES

As a training concept, training low is an interesting strategy to make a runner's energy systems more efficient, but there are some possible disadvantages too (to put this mildly...).

### Performance Murdering Mistake #1

*"If you focus too much on using fat as your primary source of energy, your body may become less efficient in using carbohydrate as a source of energy."*

This is a problem for runners. For high intensity training and racing, runners need carbs as their primary source of energy. If your body simply 'forgets' how to use carbs for fuel or - maybe even worse- causes stomach problems, you'll literally run out of energy. Fast.

### Performance Murdering Mistake #2

In addition to protein intake, studies have shown that carbohydrates are an important source of a runner's ability to recover. Minimizing carbohydrate intake between and after training sessions impairs recovery (time) of a runner. Keep in mind that it is advised that a runner that wishes to optimise post-training recovery could consider aiming for 1.0 – 1.2 grams of fructose containing carbohydrates (a carb mix is best!) per kilogram body mass per hour for the first four hours of recovery.

# **Strategy**

## **#2.**

---

**Fuelling for  
the Work  
Required**

## EFFECTIVE NUTRITION

If there's only one thing that you take with you after reading this Training Manual...

One key component that defines whether you can race full gas or bonk half way...

I hope it's this:

Don't choose between high carb or high fat.

Use both and relate them to what you're trying to achieve.

Here are three examples:

1. One day you may want to **train your fat metabolism** (and in the end optimize this system). It makes sense then to 'train low', i.e. a zone 1 or 2 training run before breakfast or training in a carb depleted state (for example a second training on the same day).
2. You may want to **focus a training day on quality**, for example a zone 4 Tempo Run or zone 5 Interval training. Carb intake is key to properly execute this high intensity training. You could consider to make sure your carb stores are filled before you start this training.
3. Running marathons, ultra marathons and trail races; they all require carbs as the primary source of energy. To train your body to actually be able to use carbs as a source of energy, it's key to make your longer training runs (zone 2) all about **training your body to absorb cabs**.

The point?

Carbs and fats are a means to an end.

And the end should be about the objective that you are trying to achieve.

If you're able to make that connection for you personally, that's the moment when you will improve your running performance. Guaranteed.

## HOW CHRIS FROOME FUELS FOR THE WORK REQUIRED...

Let me put it out there once again:

To keep improving as a runner, it's crucial to explore new ways of training and nutrition.

All the time.

Researching other endurance sports and athletes is of great value. One area of interest are the World Tour pro-cyclists. Recently Chris Froome revealed some of his fuelling strategies during his historic breakaway at the Giro d'Italia 2018. On day 19 he crushed the competition in an impressive way, in the end winning the Giro d'Italia. [Watch this decisive moment here](#) (after minute 1, it gets quite inspiring!).

Why is this important?

Team Sky (now team Ineos) and Chris used nutrition to create the optimal circumstances for this crucial day. Their objective: winning the Giro d'Italia, right there, on that day.

Dr. James Morton has worked for years with Chris Froome and Team Sky and published a wealth of information about his philosophy and findings around "fuelling for the work required". Dr. James Morton believes there's a role for lower carbohydrate intake on some days, but very high intake on other days, for example during a mountainous stage during the Tour de France.

Team Sky released data to illustrate how they periodized Chris Froome's nutrition and fat/carb intake according to the demands of each stage in the Giro d'Italia. You'll find the [full online BBC dossier here](#).

## My personal take on this...

If you don't want to go through all the details, here are the key take-aways:

1. **Make a detailed plan:** Sky created an Excel sheet with every detail of that day's race profile. Elevation, big climbs, recovery on the flats, etc. Per section they detailed out what the estimated energy output would be. For each strategic (hard) section they made sure that Chris received required nutrition for that specific section of that day.
2. On tough climbs -when going full speed- it's hard to consume your carbs. That's where Sky's **Rocket Fuel** came into play... During the really hard climbs, when every other cyclist was struggling to get enough carbs in (80-100 grams per hour), struggling to get the gels in, Chris consumed his bidon marked 'Rocket Fuel'. It turned out that he consumed 80-100 grams per hour by just emptying his bidon. This actually turned some heads in the peloton when team Sky started handing out bidons marked 'Rocket Fuel' to the Sky riders. Nobody had an idea what this was. This 'Rocket Fuel' is now also readily available for us runners. An example include [Maurten](#).
3. **A race can still be lost** in the last half hour (although you may have been out all day!). During the final climb there were helpers every 2 km, offering Chris gear, nutrition and mental support. He later told reporters that this was a crucial moment in the race, and without this military-like planned operation, he would have collapsed.
4. **Weight** is an important factor in mountainous races. Chris planned (!) to lose 1-2 kilos before the crucial stage. Carefully studying the previous stages (km's and time on his bike) in relation to his calorie intake, they managed to keep the balance between losing weight and not losing strength.
5. **Recovery fuel** (food and drinks) immediately after each finish, within 20 minutes (including carbs!). It's noteworthy that Team Sky typically offers their riders a recovery meal instead of just a drink, bar or snack.
6. **Low, Medium and High Fuelling Plans:** fuelling strategies are based on the intensity of the training session or race itself. Key components include: carbs, fluids, protein and calories in relation to the planned energy expenditure.

# **STRATEGY**

## **#3.**

---

### **Eating**

### **Habits**

## MY SECRET RACE PREP NUTRITION PLAN

Now that you've figured out some of the truths around a runner's diet...

Understanding what works and what not...

Your final challenge is to mix it all together and come up with your personal nutrition plan.

I guess reading all this information can be quite intimidating...

Where to start?

How can you use this for your personal situation and race?

What to eat during your day-to-day life?

Let me make you an offer that will blow your mind...

It's so ridiculous (it's FREE and normally worth € 135!),  
that I only want to share it with the highly motivated and serious runner.

What I am willing to share with you is my Race Prep Nutrition Plan.

It's actually a secret, so please don't tell my competitors...

This nutrition plan is the foundation of every race I run.

Like training, nutrition determines whether I win or lose.

I strongly believe that it even prevents injury.

To be completely honest with you,  
it even makes me feel better during daily life:  
more energetic, less hungry and mentally focussed.

But that's not all...

You can use this to create your own Personal Race Prep Nutrition Plan.

Here's how:

**HURRY! SPOTS ARE LIMITED!**

**CLAIM YOUR NO-OBLIGATION 30-MINUTE  
COACH SESSION (VALUE: € 137) NOW  
FOR FREE**

**WARNING** Before you claim your free coach session you must understand that this is only for runners that are serious about being their best on race day. You have registered for a race and want to focus on achieving a personal goal.

We'll share our knowledge and expertise for free with you, but we need your commitment and dedication. If you're not ready for that please don't waste your and our time. But if you are ready to take your training to a new level and crush your P.B's in 2020, book you FREE coach session now.

By the way, we recommend you book quickly. Our coaches only have a limited number of slots available for free sessions each month and there're filling up fast...

Here's what to do next:

First, you'll need to register by clicking the button below. Don't worry, it's simple and we'll not spam you (we hate that too!). We just need to know your target race, personal goal and how to contact you. After your application we'll contact you to schedule your coach call (Skype or Google Hangouts).

Thanks for spending some of your valuable time on reading this document and I look forward to doing everything within my power to make your 2020 season a success!

To your successful finish,



Jeroen Renes  
Founder & Head Coach  
Runners Inc.

**GET A FREE 30-MINUTE COACH SESSION**

(Be quick! FREE spots are almost gone for this month!)