

COMRADES NUTRITION GUIDE

Endurance events such as Comrades marathon are very demanding on the body and mind. Ask any professional athlete what he considers to be critical to his success, and he will come up with three key elements which are training, nutrition and recovery. Now ask the athlete of the three critical criteria mentioned, what sets him apart from the other professional athletes and you will get one common answer from the sporting community, nutrition. Nutrition plays such an important role that if done properly the human body will be given the highest chance of performing at its best. No matter how fit, fast or strong you are, you will never reach your full potential if your nutrition is not good. The aim of this Comrades nutrition guide is to ensure you reach Comrades marathon in a healthy and fuelled up state so that you can reach your full potential on race day. It's been many months of hard work, it's now taper time and the area you are now able to put your focus into is your nutrition.

The key areas you need to focus on at the moment are:

- Immune System Strength
- Energy System Stability
- Muscle Recovery

Immune System Strength

Putting in a large amount of mileage week after week actually takes its toll on the immune system the problem is that you become very susceptible to viral attacks such as flu just by coming into contact with a bug no matter how mild it is to another person. Your immune system does not usually function at its peak when you are at levels of peak fitness and you need to be wary of this.

Energy System Stability

One of the areas you also need to focus on is keeping your energy system as stable and balanced as possible. This means reducing the peaks and troughs associated with blood glucose highs and lows, keeping those glycogen stores nicely topped up and ensuring you don't gain excessive weight in the process of tapering. This all boils down to proper nutrition.

Muscles Health (Recovery)

The body has endured a large amount of stress in the form of the general Comrades training programs. A lot of people tend to overdo it with mileage in the lead up to Comrades. In a way it gives people a sense of confidence knowing they have put in a large training effort. After all who would want to go into one of the toughest ultra-marathons in the world thinking they have not put in enough effort. Unfortunately most people tend to measure effort by the amount of mileage they have done and tend to forget about quality sessions. Most participants would have done really long runs over the past few weeks and now it's important to ensure that the muscles recover completely for the big day. Some might think they need only a few days or a week or two to recover from such distances, but don't be naive. It can take even 4-8 weeks to recover from a marathon depending on your age level of endurance and fitness. Aside from tapering you are definitely in a recovery phase and there is plenty you can do to ensure you are at your peak for Comrades day.

With this all in mind now we have put together basic nutrition guidelines which will give you some direction on how you should be eating leading up to Comrades marathon and on the big day.

There are a few areas to consider when eating for a big endurance event. The most important as mentioned above is eating for immune system strength and balanced energy, ensuring your body gets all the appropriate nutrients to perform at your best.

WEEKS LEADING UP TO COMRADES

- Eat SMALL yet frequent meals. On average a person should consume at least 6-7 meals a day including healthy snacks. On training days one should possibly eat before however definitely after to assist with recovery.
 - Reduce sugar intake. If you require something sweet in your coffee or tea rather use xylitol or fructose as a substitute. 32Gi Neutral endurance is a perfect sweetener providing stability as well, you can mix it into your breakfast, tea or coffee.
 - If you are craving something sweet to eat, try eating a fruit before you go for the chocolate, have in mind that you can only be rewarded the sweet if you have the apple first, it's a control mechanism but it works.
 - Reduce Caffeine intake, the more caffeine intolerant you are the better caffeine will work in your favour in an endurance event.
 - Stick to low GI carbohydrates for breakfast such as rolled unprocessed oats, FutureLife, Pro Nutro, Morvite or low GI toast such as Woolworths Seedloaf, Sasko Oats or Soy Linseed bread with your eggs.
 - Only use boiled NOT baked potatoes, avoid white rice's and pastas rather stick to wild rice, quinoa and rye pasta. Baking a potato makes it very high GI boiling it keeps it pretty low.
 - Ensure your protein intake is excellent – rather stick to easily digestible proteins such as chicken, turkey and fish etc. Heavy red meats should be limited especially the days before.
 - Eat plenty of fruit and vegetables, again stick to the low GI fruits such as apples, pears, apricots also consume your high antioxidant fruits to assist with immune system strength such as blueberries, cranberries, goji berries, strawberries, gooseberries. Avoid eating dried fruits they are a lot higher in sugar.
 - Eat foods such as spinach, rocket, chives, tomatoes, peppers.
 - Eat nuts and seeds they provide healthy protein and fats.
 - Reduce sauce intake such as mayonnaises and barbeque sauces, rather stick with things such as raw tahini, humus, olive oil etc.
 - Most importantly hydrate frequently, this means water not tea or coffee. Muscle hydration is actually most important pre event & not just during. Ensure you get to Comrades with properly hydrated muscles. You should consume at least 2 liters of water a day. If you consume caffeine stimulants, then as an example for every cup of coffee you have you should consume an additional two glasses of water.
 - Stick to herbal teas such as green tea, yerba mate, rooibos tea etc. The polyphenols in those teas assist with immune system strengthening.
 - Add simple things to your diet which provides additional benefits such as
 - Cinnamon - Assists with blood sugar stabilization & immune system strength
 - Raw Honey – Immune boosting properties
 - Raw Cocoa Nibs – Immune boosting properties rich in anti-oxidants
 - Omega Fatty Acids – Salmon, Sardines, Mackerel, Tuna etc., or supplement
- Try to keep your foods as natural as possible, avoid the fast food outlets until after Comrades and try to avoid processed foods as much as possible. Keep it natural keep it healthy.

Supplements to consider over this period are:

Good Multivitamin – Choose a multivitamin wisely no two are exactly alike and you need to be selective.

Spirulina – Assists with muscle recovery

Glutamine – Glutamine assists with recovery of a stressed immune and muscle system. Remember glutamine appears naturally in food, don't overdo it, one should cycle on glutamine only for a short period until such time as the stress has subsided and you feel strong again.

Vitamin B Complex course leading up to the event or Neurobian – Many athletes embark on a weekly dose of Vit B injections in order to assist in keeping the immune system strong. A Neurobian (B1,6,12) is another option for an immune boost. If you are planning on taking it, then intramuscular is your best bet, ask your nearest pharmacist or doctor to assist.

Vitamin C – A good vitamin C is always worth taking, especially after a training session to keep that immune system a little topped up. Its worth spending on an esterified brand which has a higher absorption rate.

CARBO-LOADING

Carbo-loading is often exaggerated, and most athletes actually overdo it putting on excessive weight before an event. First let's understand the reasoning behind carbo-loading. It's simply upping the carbohydrate intake before an endurance event in order to ensure your glycogen stores are topped up for the event. Glycogen are your natural carbohydrate stores and are the fastest accessible energy supply to the muscles, however they are more primarily accessed when you are performing at a high intensity, if the intensity is lower you have the ability to utilize your fat stores which is a far more powerful form of energy. The thing that most people don't understand is that glycogen has a maximum value, once topped up to its maximum you cannot exceed this value. The second thing to take into consideration is that when tapering for an event you don't exercise as much and if you are eating correctly meaning frequent meals and healthy food options you will naturally top your glycogen stores up. The only reason to consider carbo-loading would be to ensure your glycogen levels are topped up if you are worried about not eating correctly in the week leading up to the event or if you have depleted them for some reason such as intensity session and not sufficient recovery.

If you are planning on carbo-loading then you should consider a low GI carbohydrate carbo-loader, something that will not cause you to gain unnecessary weight. 32GI™ Endurance drink is a perfect carbo-loader in that it can be used 2-3 days before the event, and it will assist with also assist with muscle hydration which is extremely important for an endurance event. In the week leading up to the event, try to rather focus on eating small healthy meals each day and save the hydration & carbo-loading regime for the last 2-3 days. You want to arrive at race day properly hydrated, glycogen loaded BUT with the proper race weight if you are overweight your body will suffer on route.

THE 2 DAYS BEFORE COMRADES

Don't try and do anything different than what you have been doing in the week leading up to Comrades in the form of nutrition. Keep eating healthy consistent meals, ensure you are hydrating properly every day, these few days before are key in ensuring your body is ready for the race. Stay away from sugar, caffeine and especially alcoholic beverages. You have come this far and want to ensure the best possible condition for the race. Avoid rich dairy products such as full cream milk and yoghurts as well as foods that are high in fiber. These foods can easily cause stomach irritability and the last thing you want before or on Comrades is an upset stomach. Stick to clean foods, little or no spice, chillies or rich sauces and remember this is part of your preparation for the big day. Another bit of sound advice is that is totally unnecessary to go about eating large meals and going back for seconds and thirds. It's pure overeating and will not give you any added benefit. If anything it will cause discomfort and if you eat these large meals at night they will certainly impact your sleep leaving you far worse off. Especially avoid red meat it's heavy on the digestive system and takes quite a long time to digest. It can cause discomfort especially during a sporting event.

The days before Comrades ensure you are hydrating properly. Eat a good breakfast and lunch meal on the day and snack in between. Don't overdo it. Ensure you take in at least 2 liters of liquid through each day. If in the form of 32GI™ Endurance as part of your hydration that's perfect as a pre-load. The nights before Comrades do not eat large meals, especially the night before the race. Eat a small balanced meal. It is so important to get a decent night's sleep. Overeating will impact your sleep significantly. Nerves of course play a part in causing lack of sleep, but overeating on top of that makes it far worse. Try and get the best possible sleeps you can in the week leading up to Comrades especially over the 2 days before.

MORNING OF THE RACE

The morning of the race you will be up very early a couple of hours before the event, especially if you are based in Durban and need to get up to Pietermaritzburg. Whatever you do, DO NOT SKIP your pre-race meal. This meal is so important as those carbohydrates will become available for use later on in the race

and it will make your brain quite happy to have some food in your system. Do not eat foods which will spike your blood glucose levels. Eat foods that are easy on the stomach however that provide a steady and balanced level of energy. A low GI meal is most recommended. A good pre-race meal would be something like:

- Rolled Oats
- Future Life
- Pro-Nutro
- Low GI Toast & Jam/ Nutella or Peanut Butter
- Morvite

If you have to have coffee or tea that's fine but ensure it's a couple of hours before the event. If you are caffeine intolerant taking in caffeine the morning of the event actually has quite a benefit in that it has shown to provide a higher level of free fatty acids which makes an excellent source of fuel in an endurance event. It's been shown that 1-2mg of caffeine per a kg of body weight will provide this added benefit. If you are not caffeine intolerant in other words you kept drinking caffeine drinks leading up to the event then this benefit will not work, however you probably still want your morning coffee and I advise you to take it as the body will need it if it's used to it. Caffeine does increase the acidity levels in the stomach and so rather take it early on, also it can act as a diuretic and you will not want to become dehydrated quickly either.

On the way to the event and during the time before the start it could be a couple of hours more. Please ensure you take some snacks with you to nibble on to the start to keep your energy levels topped up. You can also take in a low GI energy drink such as 32Gi Endurance however due to the cold weather at that time of the morning, it's advised to keep your liquid intake to a comfortable level as not to cause the bladder to overwork. The recommended 32Gi product pre-race would definitely be 32Gi chews, it makes a perfect snack pre-race, if you don't want to overdo it on the liquid. 32Gi endurance drink can also be taken in as a concentrate meaning less water so as to not overload on the liquid.

RACE TIME NUTRITION

Don't overload yourself just before the race, when you are running Comrades you want to try and keep yourself as comfortable as possible and running with a full stomach is very uncomfortable, it can also lead to stomach cramps which is the last thing you want. Don't consume anything in the 30-45 minutes before the start. You know what's best for you as you have trained and tried different nutrition regimes for this big day, so listen to your body.

The worst thing you can do is start to consume spiking products before the event and start taking sugar very early on. It will play with your blood glucose levels and send you on an up and down roller coaster ride which can also result in GI distress on the stomach leading to cramping and nausea. Another thing you must have in mind is that Comrades race for most is a low intensity endurance event; you can easily tap your fat stores for energy as long as you don't overload your system on glucose. Keep that insulin spike lower rather consume low to medium GI products on route. If you are running at a slightly higher intensity then medium to higher GI is fine, but those will be the silver medalist athletes or quicker. Eat according to your requirements.

Another consideration is how you will feed during the race. Do NOT overload your digestive system. Drip feeding is best i.e.: feeding small but consistently will benefit you far more in that it provides a much more steady and balanced supply of glucose to your system without overloading it.

Whatever you have decided for your nutrition ensure it has worked for you during training. Do not try something you have not done before stick with what you know and with what has worked. Changing your nutrition on race day can prevent a smooth day and potentially causes digestive or other issues.

32GI Feeding Suggestions

32Gi Endurance – 25gram servings each hour, you can mix in a concentrate and then consume water. The endurance drink on its own will not provide enough calories per an hour for the event and you might want to top up with 32Gi chews or food on route such as potatoes or bananas, unless you are extremely efficient at using your fat stores as energy ;-).

32Gi Chews – Its best to consume 1 block every 25minutes or so, if you feel hungry reduce the feed time to 20 minutes or more or leave as is if you are feeling comfortable. You can take the endurance drink and the chews together there is no problem with that or the chews with water on their own. Our recommendation on Comrades day would be not to consume water without electrolytes in it. Drinking water on its own can lead to diluting your electrolyte levels and this will lead to severe issues such as cramping, nausea etc. You need to keep a balance of electrolyte intake with water consumption.

32Gi Accelerate – 32Gi Accelerate is a high intensity race drink, if you have decided to use this on route as your nutrition, we would recommend you to consume it in the second half of Comrades, and more frequent feeding would be required. Be careful of what you consume with the drink as a serving of Accelerate provides approximately 300 Calories. You should be aiming for 150 – 250 calories per an hour for the event, don't overdo it as doing so can lead to calorie overload and eventual discomfort and illness.

32Gi Energy Tabs – If you are one of the fortunate few to use 32Gi Energy tabs this is a perfect drip feed for an endurance event. The tube of tablets will provide enough energy for the event if consumed at the correct frequency. The Accelerate tabs would need to be consumed every 20minutes, it's just a chew and swallow and you can utilize water on route with it. The Endurance tabs would require a feed every 15minutes.

32Gi Recover- 32Gi Recover although a recovery protein drink is used by some as a meal replacement during an endurance event. It can definitely be used for this. It's easy on the digestive system and provides a good level of carbohydrate feed. The recommendation would be to take in a serving every 2hours if this was the case, or one major serving at the half way point.

Along route there are water tables very often. One of the biggest issues on race day is overhydration. Don't fall into the trap of over-hydration, drink when you are thirsty listen to your body and don't consume too much at once. Early on in the morning it will be cold and you will not lose much liquid in the form of sweat at these temperatures. Drinking too frequently and excessively can cause over hydration leading to nausea dizziness and cramping. Remember to listen to your body.

**Team 32Gi wishes you the best for your event,
run safe and more importantly enjoy the big day!**