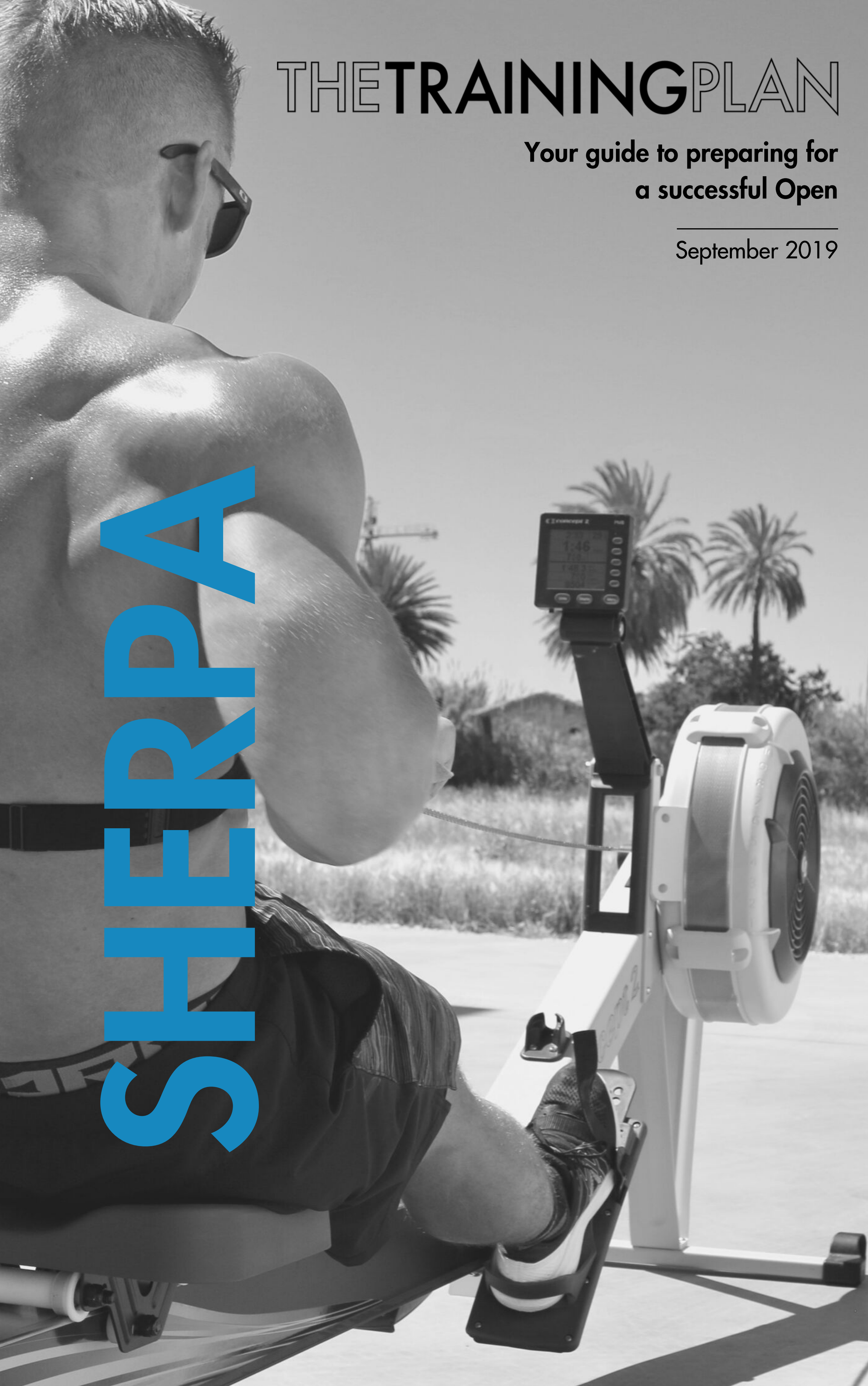
THE TRAINING PLAN

Your guide to preparing for a successful Open

September 2019



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PART #1
FUEL BETTER

The Open is once again upon us! Now is not the time to cram in as much training as possible. Instead, subtract non-essentials and focus on what can bring about the greatest returns.

One area that meets this criteria is dialling in your fuelling practices. When we talk about fuel, we mean what you eat, your hydration and your breathing. All three aspects are important contributors to your performance in training. They are also critical to your adaptation and recovery from that training.

This final approach to The Open is an important time to ensure your optimise your health, both physically and mentally. Quality food, water and breathwork once again tick those boxes.

NUTRITION

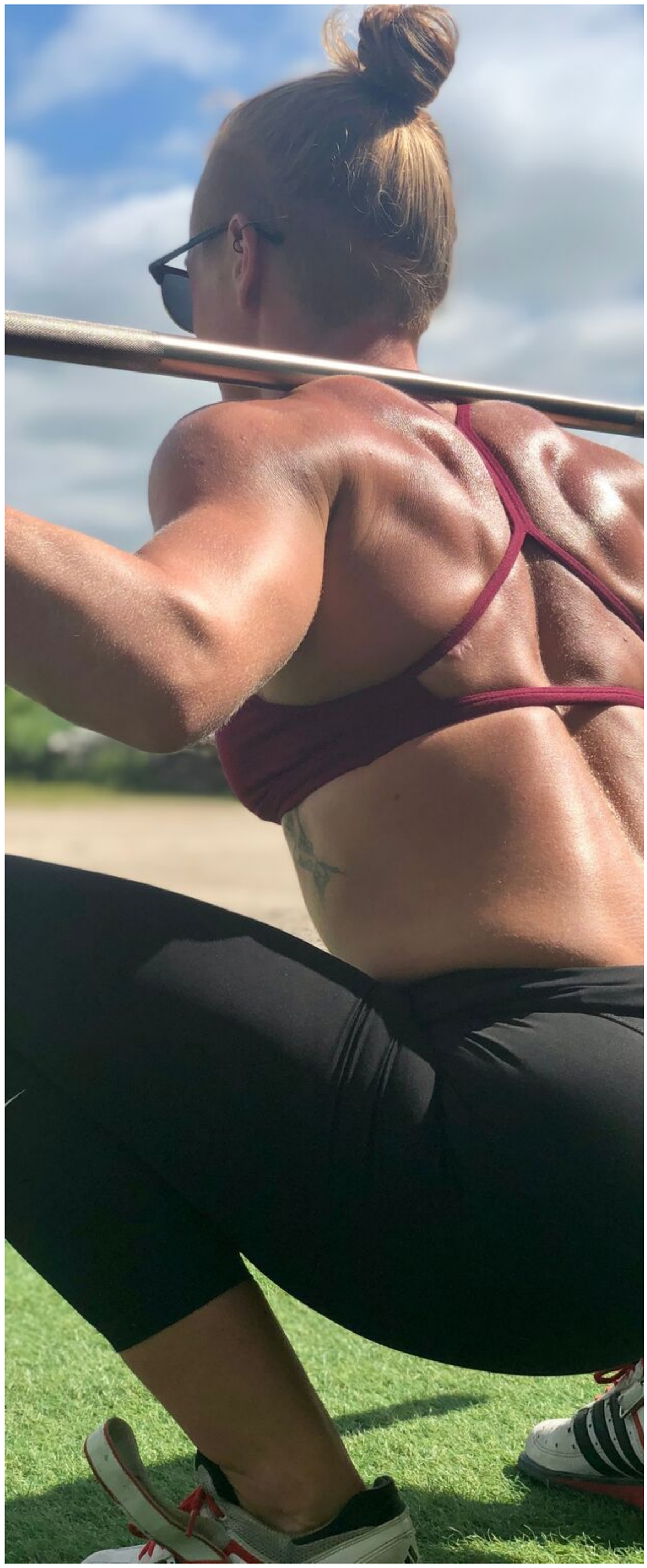
There are three major areas of eating well:

1. Energy intake to fuel daily activity and training
2. Macronutrient ratios to optimise performance, recovery and health.
3. Strategies and habits to ensure nutrition goals are easily achieved every day.

Depending on your starting point, your goals, your willingness to change and your support network, choose 1, 2 or all 3 areas to work on! Improving any of these will help boost your performance, recovery and overall health.

ENERGY

For the purposes of pure performance, energy intake is your starting point. If you're not getting enough energy to fuel your workouts and recovery, forget about any other aspect of nutrition. In these weeks leading up to The Open, skip body composition improvements and focus on performance. In general, erring on the side of eating MORE food will serve you better than eating too little. (Too little will leave you exhausted, cranky and unable to adapt to the work you're putting in.)



ACTION STEP

Use this online BMR calculator, to calculate your energy requirements.

Play around with the activity levels (on the calculator) to get an idea of the range that would suit you for heavier training days, lighter ones, and rest days. Remember that this is simply an estimate. Going forward you can (and should) make adjustments as needed.

If you're training at high volumes or have above average muscle mass, you may have even higher energy requirements than the calculator suggests. For a more intuitive (long term) method, weigh yourself daily, record your energy intake and then monitor changes over time. If you're losing weight (and especially if your energy levels are low), you need to eat more.

REMEMBER

When in doubt, eat more (not less)!

MACROS

At its base level, food is fuel but it also alters the internal environment of your body. This affects how efficiently it performs, the type of fuel it uses, and what it looks like. So while food IS fuel, you must also consider the source and timing of fuel to optimise your performance and health.

Once you have calculated your energy intake target (see calculator), you need to decide where that energy will come from (macronutrient distribution). Everyone is different, but you should find yourself somewhere within the macro ranges below.

Genetics, daily activity, age, stress levels, current body composition, training volume, sleep, digestion and your training goals will all affect your energy requirements. For example, there can be a 10% difference in basal metabolic rate across the menstrual cycle for women, and as much as a 20% variation due to sleep deprivation. Not to mention the accuracy of data entry itself which will have an error of 10% at best.

This is why we encourage constant tracking and regular self-evaluation of your performance, body composition and daily energy/mood levels. You must learn to listen to your body and use instinct as well as data to help decide what and how much to eat.

PROTEIN	CARBOHYDRATE	FAT
25 - 35%1.8 - 2.2g/kg BW	40 - 55% Enough to cover the remaining calories (after protein and fat accounted for)	20 - 30%1g/kg BW

The % ranges refer to distribution of your overall daily calories. The grams are per kilogram of bodyweight. Carbohydrates (calories) = total daily calories - calories from protein - calories from fat.

ACTION STEP

You can use the website/app My Fitness Pal to enter an average day of eating to calculate your current macronutrient breakdown.

Carbs rule this sport

This is a glycolytic sport, meaning, we burn predominantly glucose (carbohydrate = CHO) to drive our performance. As the sport has evolved with greater loads moved, more intensity generated and higher volume of training and competition completed, we are more reliant on carbs than ever.

The following carb sources are high-grade fuel for your training efforts. Make most of your options from this list.

- Fruit (fresh, dried or frozen)
- Starchy tubers, such as potatoes, sweet potatoes, yuca/cassava, taro/tapioca, plantains, parsnips, turnips, squash and pumpkin
- Whole, minimally-processed grains, such as quinoa, rice, slow-cook oats, ancient grains, etc

Other carb sources that might work well for you

- Sourdough and other minimally processed breads as tolerated
- Beans and legumes as tolerated
- Low fat milk as tolerated

Supplementary carbs such as pre and post workout drinks/bars can also be a useful addition to your arsenal. (Especially if you find it difficult to consume the necessary amount of carbs or total energy each day from whole foods.)

Examples include;

- Sports drinks
- Sweet potato or fruit baby food
- Soft fruits
- Carbohydrate based energy bars

ACTION STEP #1

Calculate how many grams of CHO you consume in a day and how many grams you consume post training.

It's common to see athletes consuming less than optimal sources of carbohydrates, particularly after training, because 'they've earned them'. Yes, it's true in general that the younger, leaner and more genetically gifted you are, the less impact poor quality foods will have on you (in the short-term). But how good you could be if you made more effort to choose from better quality sources? If you want to be a competitive athlete for a long time, the choices you make now will pay dividends to your goals later.

After training

Aim to drink 500-750ml of water (with carbs/protein) as soon as possible after you complete your training. Then drink to thirst for the remainder of the day. Make CHO the priority (recommended amounts are listed below as a range). The longer and more intense the training, the more carbohydrates. Adding a powdered protein supplement with the carbs not only assists in more rapid glycogen repletion, but will help you tick off your daily protein goals easier.

Male: 40-80g CHO / 10-30g PRO
Female: 30-60g CHO / 10-25g PRO

ACTION STEP #2

What's ONE small change you could make today to improve the quality of your carb intake?

PART #1
FUEL BETTER - Nutrition

THETRAININGPLAN

Turn Pro, eat your protein

You are LITERALLY MADE OF PROTEIN. Your body uses it to build and repair cells. You need it to make enzymes and hormones. It is an important building block for your bones, muscles, cartilage, skin, and blood.

But are you eating enough of the right food to get the full benefits?

Our general rule is to consume 2 grams of protein for every 1kg of body weight (or about 1g/lbs of body weight).

So for a 85kg (187lb) male athlete, that is 170 grams per day. For a 60kg (132lb) female athlete, 120 grams per day.

The common misconception is that 100% of meat = 100% protein - But there is water and other components to consider when calculating your protein intake. For example, 100g of chicken breast has approx 30g of protein, one large egg has about 6g. Use MyFitnessPal to get a good estimate of protein in your meals.

ACTION STEP

Figure out how much protein you consume each day, and then choose more of your favourite protein foods to boost your intake where needed. Protein shakes can be a helpful way to meet your requirements if you're unable to consume enough via whole foods.

Here's a list of our favourite protein foods. In general, animal sources of protein contain the most protein per gram, and are the most bioavailable (easily absorbed).

MEAT

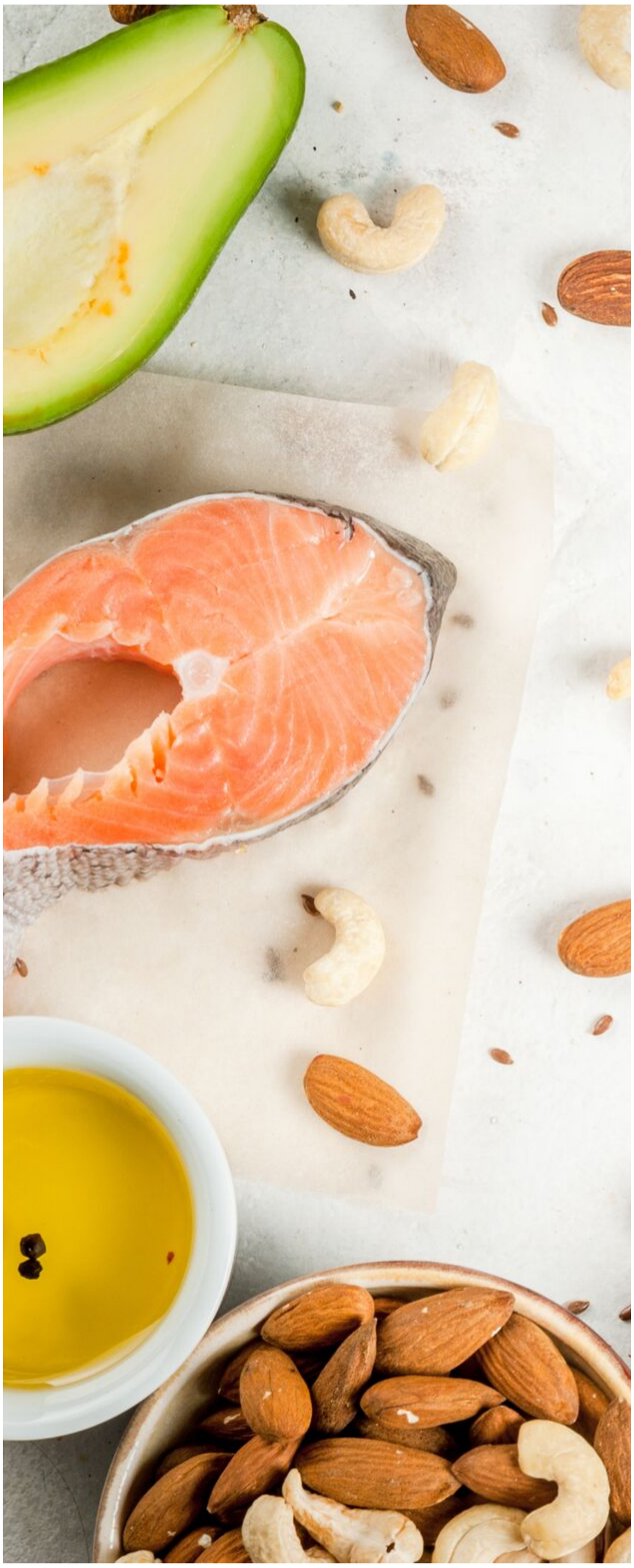
- Red meat
- Eggs
- Poultry
- Fish

DAIRY

- Milk
- Yogurt
- Cheese
- Cottage cheese
- Whey Protein Powder

VEGETARIAN

- Tofu
- Tempeh
- Chickpeas and beans
- Lentils
- Pea/Rice/Hemp protein powder



Fat

We know that carbohydrate is our most essential macronutrient for performance. But fat is vital for our health, management of inflammation and production of hormones.

On average, for every 10 food diaries we see, more than half of them show less than optimal amounts of fat.

A good reference point is 1g/kg of bodyweight (0.45 grams/lb).

There is a general consensus that this is a healthy amount to ensure all fat reliant bodily processes will operate effectively.

So for a 85kg (187lb) male athlete, that is 85 grams per day.

For a 60kg (132lb) female athlete, 60 grams per day.

From there, depending on your protein and carb intake, you may or may not need to increase this.

ACTION STEP

Calculate your daily fat intake. Is it at least 1g/kg?

STRATEGIES FOR SUCCESS

As the Boy Scouts say, 'be prepared!' There is no point in figuring out your exact energy requirements and macronutrient profile if you constantly miss meals, your cupboard is always bare, and you buy food on the run because you weren't organised in advance.

Here are some ideas to help you maximise your time and ensure you always have high performance food on hand.

The Evening Ritual

Seeing as you are already in the kitchen making dinner, you can use any down time to prep enough food to last you for at least the following day.

This can include:

- Make extra so that you have leftovers for lunch the next day.
- Put a bowl of slow cook oats on the counter to soak overnight so they will cook faster in the morning.
- Do extra veggie chopping or protein prep for another meal.
- Drop a big cut of meat into a slow cooker for dinner the next day.
- Whip up a frittata that you can easily eat cold in the car for breakfast.
- Add protein and carbohydrate powders to shaker bottles for the next day.

Sunday Prep

The biggest hurdle to eating healthy is getting caught short without any healthy food!! Spend a day 'hunting and gathering' all the supplies you need to make good food.

Look up simple recipes, batch cook your favourites, freeze extras, and win the food prep game. This doesn't have to be a Sunday. It can be any day where you have a few hours to shop, cook, and prepare some food in advance.

On this day, you can do things like:

- Buy groceries for the week (or at least several days). Stock up on easy staples such as canned tomatoes, frozen veggies, etc.
- Cook large meals that can be refrigerated or frozen in smaller portions (e.g., stews).
- Cook protein in bulk (e.g., roast a couple of chickens, grill burger patties and quality sausages, boil a dozen eggs, get the slow cooker cranking, etc.)
- Wash, peel, and chop veggies ahead of time for future meals.

Meal prep/delivery services

There has been a rapid increase in this service area, which is great news for the busy athlete! Some of the options available include

- Pre-portioned ingredients and recipes so that you can cook them yourself. Great if you have the time, and also if you simply enjoy cooking
- Ready to eat meals. Depending on the company, you can get breakfast, lunch, dinner and snacks, you can choose portion size and you can customise macronutrients
- Frozen meals. Always a great idea to have a few of these in the freezer to ensure you never get caught short

Meal sharing

Cook multiple servings of a meal to share with friends, and they in turn do the same. Cook once, get lots of different meals!

Meal Planners

If you like to cook, but struggle for inspiration, try a recipe and meal planning site like THIS.

You can find recipes based on your favourite foods, or perhaps one food group you want to base your meal around….maybe it's all you have left in your fridge….

The site will then create a shopping list for you so you don't forget any ingredients!

Supplements

Remember that there are still only three supplements that have consistent, solid scientific evidence to say they can improve your performance significantly,

- Carbohydrate
- Creatine
- Caffeine

Carbohydrate
We've already talked about this at length but to reiterate, carbs = fuel. Eat more = do more. The consumption of carbs before and after training should be standard practice. After workouts, anywhere from 40-100 grams depending on the volume of training, usually paired up at a 4:1 ratio with protein, eg. 60 grams CHO: 15 grams PRO.

Creatine
This molecule buffers ATP (our energy currency) to increase power output and prevent fatigue, thus it is highly recommended. Take 0.1 grams per kg of bodyweight per day from now until the end of the Open. Read more about creatine HERE.

Caffeine
Everyone's favourite stimulant, it increases power output and anaerobic, and may decrease fatigue from a neural perspective. Dose at 2-6 milligrams/kg (0.9/2.7 mg/lb) bodyweight depending on tolerance. The actual amount of coffee depends on the brewing process. Also, pre-workout drinks are another source of caffeine, be sure to check for banned substances against the CrossFit Games Rules.

Other supplements you might consider are;

- Fish oil
- Zinc
- Magnesium
- Vitamin C
- Glutamine
- Curcumin

This list of supplements is aimed towards health and recovery, versus performance. Your budget and your beliefs will play a role in whether you try these or not.

Ultimately the vast majority of dietary supplements have no supported effects. Even the most effective contribute minimally to health and performance outcomes. The main aim of course, is to get your real food in order.

Just remember, if you can't make it better, you can still make it 'less worse.' No matter what situation you find yourself in, it is almost always possible to locate a form of protein, and some kind of carbohydrate. Veggies and good fats are likely a bonus, get them if you can, but your main priority is always carbs and protein.

Sometimes, you just have to take it one good decision (meal) at a time.

Aim to tick these six boxes every day.

- [ ] Consume adequate energy to fuel and recover from training.
- [ ] Carbohydrate at all meals, in particular post workout for faster recovery.
- [ ] Eat protein at all meals (1.8-2.2g/kg/day) for muscle protein synthesis and repair.
- [ ] Sip water throughout the day to stay hydrated and maintain blood volume.
- [ ] Prepare food in advance to make it easy to meet energy and macronutrient demands.
- [ ] Ensure fat (1g/kg/day minimum) and vegetables are eaten at all meals outside of 1-2 hours of workouts. This will optimise digestion, health and recovery.

PART #1
FUEL BETTER - Hydration

THETRAININGPLAN

HYDRATION

More than half of your body is made of water. It plays an important role in the functioning of vital body processes, not to mention it's all important function as sweat to help you stay cool during your incredible physical performances! While the water companies tend to exaggerate, the fact is that dehydration can significantly impact your performance, decision-making and mental clarity.

How much water do you need?

There's no exact formula. You may need more or less depending on your body chemistry, how sweaty you are, the amount of veggies and fruit you eat, the weather, intensity/duration of your workouts, and so on.

The recommendations on how much water to drink are varied. It will take a bit of experimentation, but remember that you have your own built in guide - thirst! Drink when you feel like you need it. However, in today's busy world, it can be easy to miss the signals.

Our recommendations for the minimum requirements are 30ml of water, per kg of bodyweight. So a 60kg female should drink at least 1800ml of water per day.

When you're training, sweating or in a really hot climate — be sure to:

- Consume above the minimum recommendations. Consider pre-hydrating before the session (drink a bit more than usual), and sip water through your training session.
- Consider adding an electrolyte supplement in your water, such as Nuun or Nuun Endurance. (A good natural option: coconut water with a pinch of sea salt). Electrolyte supplements with a little bit of sugar help hydrate you more effectively.

Weigh yourself before and after training for a week or two. This gives you a good idea of how much water weight you lose by sweating.

You can then use this information to set hydration goals. Remember to hydrate with water and with electrolytes, such as sea salt or supplement mixed in.

ACTION STEP

Make sure you always get your water in:

- Wake up and immediately have a glass of water. Adding a splash of lemon juice and some sea salt ramps up the hydration process!
- Carry a water bottle with you, keep one at your desk and/or in your car.
- Use a water drinking app such as Waterminder. If you struggle to remember, apps like this can help you form a water drinking habit.
- Post workout is a great time to drink deep.
- Don't like water? Not that uncommon actually….. Try cold fruit teas, sparkling water, or adding a splash of lemon/lime juice to your glass.

BREATHING

Ultimately, breathing is the ultimate fuel source for performance, as our aerobic energy system is dependent on oxygen and CO2.

When you push your body to maximal performance in conditioning pieces, whether in training or competition, it is often a feeling of shortness of breath (together with muscle fatigue) that slows you down or makes you stop.

If your respiratory muscles are poorly trained, when you reach your anaerobic threshold in a workout, a reflex (metabolo reflex) kicks in. This shunts blood from the working muscles of your legs and arms to your respiratory muscles (so that you can continue to breathe = maintain survival). As a result, you will slow down or have to rest. This means that the stronger and more efficient your respiratory muscles are, the longer you can continue to exercise.

Air hunger is the sensation of being "starved for air." You feel like you must take a big breath in, and this is one of the fastest ways for the metabolo reflex to kick in and shutdown your ability to continue. But just as you can train your respiratory muscle capacity and strength, you can also learn to get more comfortable with the threat of air hunger.

ACTION STEP

Test your breathing

Functional inhale / exhale test (VIDEO)

1. Standing, take as long an inhale (breath in) through your nose as possible. Time how long you can make it.
2. Repeat step 1, this time focus on exhale (breath out). Once again, time how long you can make it.

Perform these tests without preparation (any excessive breath in or out), starting from your normal breathing pattern.

If either your inhalation or exhalation (or both) takes less than 10-seconds it is likely that your respiratory biochemistry has significant room for improvement and might be impairing your recovery. We would like to see both of these at least 30-seconds and eventually closer to 60-seconds. This indicates a level of control of your diaphragm and functionality of your respiratory biochemistry.

The goal of training your breathing, from a performance perspective, is to allow you to maintain better movement for longer (and therefore kick ass and take names).

PART #1
FUEL BETTER - Breathing

THETRAININGPLAN

Training to breathe better

1. Inspiratory muscle awareness. Diaphragm drill 1 + 2. (VIDEO)

2. Walking breath ladder → 1 up to 10 and back down, matching breath with your steps.

This is an excellent way to do breath training on the way to gym etc. (VIDEO)

3. Assault Bike / Running breathing ladder → 1 up to 10 and back down, matching breath with your arms or your steps (VIDEO)

4. Nasal breathing - practicing this can improve your CO2 tolerance, pacing control and aerobic capacity.

ACTION STEP

You can incorporate these drills into your warm-ups.

Perform 3 reps of each diaphragm drill and then work through the breathing ladders. Then, you can try this breathing focused general warm up on an Assault bike, utilising nasal (nose) breathing only:

Women start @46 RPM, men @50 RPM. From there, increase the RPMs by 1 or 2 every minute, nose breathing (in and out) throughout.

See how high up you can climb before you cannot continue with nose breathing anymore.

This warm up should take you 10 to 20-minutes (depending on your ability and jumps you made each minute).