

O'AHU
KA'IWI CHANNEL
HAWAII
MOLOKAI

BROUGHT TO YOU BY 'JUST PADDLING'

TRAINING.

FOR THE CHANNEL.

*Molokai
to O'ahu*

TRAINING FOR THE M2O

INSIDE THE CHANNEL

There is so much I could tell you about this race, the Molokai 2 Oahu Paddleboard race and what goes on inside the Channel but I want to get to the points that will save you time and effort and get you the most enjoyment out of your day on the water of the Ka'iwi Channel.

Ok, so you know its 32 miles or 52 km from Kalua Koi Beach on the Island of Molokai, to the finish line inside Maunalua Bay on Oahu.

So how long is going to take to paddle across one of the most famous channels of open ocean you ask? Well some may say how long is a piece of string. We have been across the Channel of Bones now officially as a race for 21 years and we have seen many different moods of this Channel and we know it's possible and we have a fairly good time span to work within. 21 years ago I made it across in 5 hours 21 minutes and that record stood for 8 years for the Prone paddleboards, but since then the times are changing. So now if you want to chase a record time on a SUP you need to holding sub 7.5 minute/mile or 4.5 minute/Km and on a UL prone paddleboard your chasing down 8.5 minute/miles or 5.2 minute/Km.

But that's always going to change and for most of us that just a dream, but just like the guys and girls that are going to go out and chase a record time this year you need to have a goal and be realistically training towards that personal goal.

So how do you do that, you ask?

It's simple mathematics and you need to be honest with yourself. So you need to know your own pace and how long you can hold that pace, so go out there and paddle. Start with a mile or KM and work you way up progressively to 10 miles or 20 KM and so on.

But how do you do that you say?

It's called "Interval training" to build your fitness to be able to tolerate the speed and endurance required to hold out for 32 miles. I advise you to find your Mile/Km pace that you feel comfortable at and start from there. To improve that pace and your Fitness to hold that speed, you will need to do shorter Intervals of the Mile/Km at a pace that you're not so comfortable with and have rest periods so you can keep pushing at that pace for 1 to 5 hours. This will take consistent training time and equally important recovery time.

So get a plan together and map out your finishing time and work towards achieving it but remember the Channel of Bones always has the last word so plan for the worst and hope for the best, because when you add up the fast miles/Km and the slow Miles/Km your average speed or what we call your "Threshold paddling pace" can get a little out of whack after 32 Miles.

Thankfully this year we have the most favourable tides we have had in 20 years so that's one piece of the puzzle that may, and I say may, be in our favour when we get inside the Channel of Bones in July.

If you are interested in some more advance explanation of what Threshold paddling Pacing is all about, check on my website <https://justpaddling.com/using-functional-training-pace/>

ALOHA

Mick Di Betta

M2O NUTRITION

What your body needs for Fuel inside the Molokai Channel

Hydration is only one piece of the nutrition puzzle faced by Paddlers in the Molokai2Oahu Paddleboard Race. There are numerous subtleties that you can only ever figure out based on the individual nature of your own body and the situations you find yourself in. However, hopefully this post will give you a good sense of the right direction in which to set off experimenting during training, so you can be ready for your race-day and training nutrition and hydration needs.

Even the most expensive racing car in the World won't make 1 lap if it doesn't have the right fuel in its tank.

So what does your body actually need during the M2O?

No matter what kind of paddling you're doing, whenever you're exercising hard for several hours at a time your body loses water and sodium in sweat. It also burns calories, mostly in the form of carbohydrates stored in your muscles and liver. Water, salt and calories are therefore essentially the main "costs" of doing a Molokai crossing. The nuts and bolts of any sensible nutrition plan should therefore be largely based on replacing varying proportions of each of these three items to enable you to sustain your performance for the 4 to 7 hours it may take us to paddle the 32 Miles across the Channel.

So now we know what your bodies/engines need to perform at racing pace for racing distance, we have to train our bodies to use the right fuels economically to make the 32-mile distance. So just like setting out on our paddling training program, we need to use our chosen fuel for race day in that weekly Training program. Just because its 60 or 90 minute training session it's still your opportunity to train your body to adapt to the fuel you have chosen and the way you are going to carry and access the fuel on your board. The more times you get this opportunity the easier it will be in the Channel on race day.

M2O Training sessions (less than about 90 minutes)

BEFORE

Make sure you begin whatever you're doing topped up with fluids, electrolytes and carbohydrates. Trying to make up for a deficit if you start a bit dehydrated or energy depleted by eating and drinking during the activity itself is definitely leaving it too late. You really cannot play catch up, especially with hydration, during heavy activity.

WHILE YOU'RE SWEATING

If you start most shorter activities properly fuelled and hydrated, there's usually little to be gained from taking in large amounts of anything, be that water, electrolytes or calories during the activity itself. Your body has what it needs to last this long in reserve (even at a relatively high intensity) and you can simply refuel and rehydrate afterward (ideally within 30 minutes of finishing) to replenish stores for next time. This doesn't mean you shouldn't consume anything during exercise lasting less than 90 minutes.

You should absolutely still listen to your body and eat or drink if you feel you really need to (and it's also a bright idea to eat and drink something if you're training again very soon afterward so you don't start the next bout of activity already depleted). However, it's worth understanding that the impact the nutritional intake is going to have on your performance during the race or session itself is probably minimal, but will be a missed opportunity to practice. A slight exception to this rule might be if you are doing those Higher Intensity Interval sessions that we need to do to increase our paddling Threshold Pace and Lactate Tolerance needed to successfully complete the Channel crossing at speed. There is some evidence that ingesting small amounts of a carb-based drink can be beneficial to a consistent performance under these circumstances as we said earlier its an opportunity to practice using your Nutrition system.

M2O Distance (about 4 to 6 hours)

It's during these long sessions that fluid intake and carbohydrate fuelling in particular, start to have more of an impact on performance. The bottom line from all research is that the current consensus is that taking in around 60g of carbohydrate per hour is optimal for most endurance athletes doing two to six hour activities. Think more like 40g/hr. if you're a smaller person and not working at a high intensity, but maybe as high as 90g/hr. if you're bigger or going really hard. This carbohydrate can come from many different sources including drinks, bars, gels and "real" foods (if their composition allows for easy consumption and digestion).

BEFORE

Again, it's important to make sure you begin whatever you're doing well hydrated and fuelled. Trying to make up for a deficit is definitely leaving it too late.

WHILE YOU'RE SWEATING

About 90 minutes to two hours is usually the threshold at which sweat losses can become significant, so fluid needs must be considered along with refuelling during this period. If you're using a hypotonic sports drink (i.e. a lower concentration than your blood) then, unlike isotonic drinks, they don't deliver all of the carbs you're likely to need during your activity (but they absorb faster and are better at achieving the specific goal of hydrating you).

Your fuelling and hydration intake need to be tweaked in proportion to one another based on sweat loss and fluid absorption. In my own experience, using more highly processed "simple" sports nutrition products like gels or jelly chews along with carb-based hypotonic sports drinks tends to work best because they reduce the amount of effort your body needs to put into chewing them, digesting them and getting the sugars into your bloodstream.



PHOTOS BY JIANCA LAZARUS

How you get the majority of your carbs is up to you and through your training and trial and error, I always say if you haven't felt the pain and disappointment of BONKING in a long paddle or race then you will never really know what advantage you can get from having the right Nutrition.

Most energy gels contain about 20 to 25 grams of carbs per pack, and energy bars contain as much as 35 to 40 grams per serving. If you prefer your carbs a bit more "old school," then eight jellybeans contain 42g, so this could do the trick along side typical carb-based hypotonic sports drinks. Or, if you want to go 100 percent natural, you could go for about 1.5 bananas, as they tend to contain around 25 to 30g of carbs per fruit. Then we still have the disadvantage of what we can access and carry on our boards in a very unstable Open Ocean Channel of water.

They don't call it The Channel of Bones for nothing.

1. **CHECK YOUR FUEL TANK** - Water; Sodium; Calories
2. **CHECK FUEL LEVEL REQUIRED** - 60 g carb/hour; 1 litre/hour
3. **ACCESS FUEL** - Practice in training fuel access set up on your board
4. **RESERVE FUEL** - at Coke = 52g carb/500 ml but don't start too early

When you start experimenting, make sure you're staying close to the guidelines of ~60g of carbs per hour (across all of your foods and drinks), with enough fluid to stop you getting thirsty and a sufficient amount of sodium to offset what you're losing in your sweat.

ALOHA

Mick Di Betta

THE LONG PADDLE DAY

BREAKFAST

We've heard it again and again and again—breakfast is the most important meal of the day. Yet for most paddlers, our pre-workout morning nutrition (breakfast) takes a back seat to a few extra minutes of sleep each morning, I know that's me on those cold, dark winter mornings when training for M2O.

The good news is there are days where this will have a relatively minor impact on your workout, like those mid week Interval sessions where I just go with some of my Race Day Nutrition on my board, to sip as I go and force the body to convert over to using my body fat as fuel. There are also days where a lack of proper fuelling can be extremely detrimental to the effectiveness of your Long Paddle.

Having a specific purpose for every workout (e.g. Interval sessions 60–90 minutes, Long Paddles 3–5 hours), makes the most of the time and effort you are putting into training each and every day. If each workout has a specific purpose beyond just logging miles for the sake of logging miles, then it only makes sense that the fuelling your body needs for each of those workouts is also different and specific to the goal to get the body to use its own fat for energy on those long paddles.

With the M2O Race start set for 7.30 AM and the pre-Race Hawaiian Pula at 6.30 AM and the escort boat check in and the mostly sleepless night before Race Day and the many logistics you need to take care of, it's crucial to properly fuel and hydrate before the 32 Mile crossing.

So this morning preparation takes practice and I like to go through this as often as I can before Race Day, in training, with all my long paddles. They say the more times you have been there the easier it will be on the day that really counts.

This is particularly important in training as it trains the body to become efficient at using Fat as the fuel for those long hours in the Channel. When you need sustained energy through a long, challenging paddle, aim to have about 60 percent of your calories come from carbs, 20 percent from protein and 20 percent from fat. This is a good balance to provide the energy you need over a longer period of time. The carbs will help you get that initial energy off the start and the protein and fat will help as the paddles get longer and more physically demanding. Try whole-wheat toast with almond butter and coffee or a fruit and yogurt smoothie. Make the smoothie the night before so it doesn't become another project delaying you from your workout.

Everyone's systems are so different and delicate; take the first few weeks of training to find what works best for your body when it comes to the types of food and exact timing of consumption before the workout. Unfortunately that part can really only come through trial and error. The sooner you can get that dialled in the more you will be able to benefit from training with the proper nutrition for your body.

Aloha

Mick Di Betta

THE LONG PADDLE DAY

RECOVERY FOOD

After my long Paddles each week, which is also my last training session of the week, I'm not sure what you are thinking in those last few miles but for me in years gone by it was a can of Coke or maybe a beer ha ha. After some years of doing this and feeling my progression slowing due to not recovering each week enough to push again the next week. Well it made me look deeper into my diet and what other athletes did, after all paddling 5 hours or running 5 hours must have a similar toll on your body hey?

Recovery is as important to athletic performance as a well planned and executed training sessions. Specifically in recovery, athletes should take advantage of an optimized fuelling window, which ranges from the conclusion of a workout to up to three hours afterward. What an athlete consumes during this time is important for overall health and recovery.

- The three principal nutrients to target post workout are:
- Carbohydrate to restock lost glycogen in the liver and skeletal muscles
- Protein to assist in muscle repair and growth

Water for Rehydration

So back in those days of the can of Coke or a beer I didn't know the difference between a protein or carbohydrate but I found out quickly that the Coke or Beer didn't fit well into the recovery food list.

But I did know I didn't want any more Electrolytes fluid through a straw from the front of my board.

So looking into it I found some foods that were high in those 3 recovery ingredients and that I could get into me soon after I caught my breath and got my land legs back under me.

Most long paddles involve Paddle backs and traveling up to 50 km away from home so those drives home can get very very long without some recovery food ASAP. This what I found and these 3 can be left in the pick up car and ready to be consumed without any lengthy preparation.

PEANUT BUTTER

Some say peanut butter is a perfect athlete food. It is delicious, full of good fats and protein, inexpensive and comes in a variety of grinds and mixes. Two tablespoons of creamy peanut butter contains calories, protein, carbohydrates and fat. Spread it on bread or eat straight from jar. Peanut butter can be fast acting for packing in lost calories and carbohydrates, and the high protein and fat content not only aids in glycogen restocking, but also helps you feel satiated for longer.

UNSWEETENED SOY MILK

Easy to store and easy to get down after 5 hours of Electrolytes it's good to have on hand a carton of soy milk. Made from soybeans and generally found with added vitamins and salt, one cup unsweetened soymilk has sodium, potassium and protein. Added to smoothies or mixed with a prepackaged recovery drink, soymilk has stood up in research as having superior rehydrating capabilities. It is surmised that the excellent rehydrating properties of both soy milk and cow's milk are in part due to the high protein content and if you don't like Soy milk just get a good old bottle of chocolate milk.

AVOCADOS

This awesome fruit is loaded with a variety of essential nutrients and phytochemicals. Avocados are rich in potassium, which we shed while sweating. They are also an excellent source of fat. 1 cup of sliced avocado has fat, sodium and protein and a lot of potassium.

So find your recovery foods and be ready to hit the next week's training on a full tank and don't forget that rest day.

Aloha

Mick Di Betta

BUILDING THE M20 STAMINA

SERIES FINAL

While there are many factors that impact our stamina, the most important is our muscular metabolic fitness. Endurance training induces major adaptations in skeletal muscle. These include increases in the mitochondrial content and respiratory capacity of the muscle fibres. As a consequence of the increase in mitochondria, exercise of the same intensity produces less metabolic strain than in untrained muscles. Additionally, endurance training has consistently shown a fast-to-slow conversion in response to such training. That is, highly-fatigable fast-twitch type IIx fibres are converted into the more fatigue-resistant type IIA fibres, and some type IIA fibres may even be converted into the slower contracting, less powerful, but highly fatigue-resistant type slow twitch type I fibres. The major metabolic results of these adaptations are a slower utilization of muscle glycogen and blood glucose, a greater reliance on fat oxidation, and less lactate production during exercise of a given intensity. These adaptations therefore play an important role in the large increase of the ability to perform prolonged strenuous paddling intensities that are required when you make it to Mid Channel and about to move into the business end of the Molokai to Oahu crossing.

The adaptations described above result in an increase in functional threshold pace (FTP), which is the highest exercise intensity at which aerobic production balances aerobic demand, such that a steady-state of physiological responses can be maintained. If cardiovascular fitness, i.e., VO₂ Max, sets the upper limit for aerobic exercise, it is one's muscular metabolic fitness, as reflected by FTP that determines how much of that aerobic upper limit can be used. Thus, FTP and stamina are closely related, with the Functional Threshold Pace describing the level at which the Threshold pace tends to plateau and the Stamina declines once past that point in time. Even with the same FTP, however, there can be subtle differences between individuals in stamina, depending in part on training specificity, habitual diet, etc.

So what does this really mean to our paddling speeds come Mid-Channel?

Stamina: a measure of resistance to fatigue during prolonged-duration, moderate-intensity (i.e., sub-FTP) exercise.

Well what I have found out over 20 odd years of Endurance paddling and in particular paddling in the Molokai2Oahu race and in Training for this race, is that there really is not many other Endurance events that compare to the Intensity and the unique challenges faced during the race from Nutrition up take, course management and just being in a very unstable environment. All of these hardships take up energy use and not just physical drain but Psychologically it can wear you down quickly.

So as I mentioned in my first article about adding up the “slow miles” and the “fast miles” to get your average speed or Threshold Pace you need to have done the miles in training at Threshold Pace and above to with-stand the times in the Channel when the Channel of Bones takes back control off you and ask you do you really want it. These are all so common in the channel as we paddle over and around some of the massive Mountains and Drop offs that make this Channel one of the strongest Ocean currents in the World.

Through working those Interval Training sessions of short duration of paddling above your FTP (or your average pace) and slightly below that pace, you are in fact increasing your Stamina and in this race Stamina is the key ingredient that is required to finish strongly. I say to most people that they can paddle 1 hour and 50% of them can paddle 2 hours and 20% of them can paddle 3 hours but if your not doing the miles at Threshold pace for 1 to 2 hours and building up volume.

See you on the start line!

Aloha

Mick Di Betta