



**EVENT CLINIC,  
MEDICS & MASSAGE**

# **Maggie's Monster Bike and Hike 2012**

Produced by Athletes Angels  
[www.athletesangels.com](http://www.athletesangels.com)

# TRAINING, PREPARATION, KIT AND TOP TIPS...

Athletes' Angels Ltd have organised the medical, physio and massage support for Maggie's Monster Bike and Hike since it started. We have collected information from over the years and can tell you in truth what works and what doesn't. Please also see the training section on the CD, although note that the water advice has changed. We also have a discounted injury clinic in case of need for injuries or personalised / individualised training programmes: [clinic@athletesangels.com](mailto:clinic@athletesangels.com)

## EVENT PROFILE

DATE	<i>Pasta Party Friday 4<sup>th</sup> May 2012</i>
	<i>Event: Saturday 5<sup>th</sup> - Sunday 6<sup>th</sup> May 2012</i>
LOCATION	Fort William to Inverness along the Great Glen Way, Scotland.
DISTANCE	Bike 31.5 Miles - Hike 8.5 Miles – collect Bronze medal Bike 31.5 Miles - Hike 23.4 Miles – collect Silver medal Bike 31.5 Miles - Hike 41.2 Miles – collect Gold medal
INFORMATION HERE	Compulsory Kit List – Participants Recommended Kit List - Support Team drivers Top Tips – Participants Training – As a team Physical Training – Bike Physical Training – Hike Nutrition & Hydration Stretching & Muscle conditioning Training Schedule – Bronze, Silver and Gold distances Medical Information Safety in the mountains Training Summary

(Please note there is more information in these guidelines than the summary in the event booklet).

## **Compulsory Kit List – To be carried at all times**

### *Bike Section*

Correct size bike helmet (provided with your bike if hiring from Maggie's).  
Event Map in waterproof cover.  
Repair kit.  
Tyre removal tools.  
Correct size spare inner tube.  
Bike pump.  
Day rucksack with waterproof lining.  
Participant number – visible with completed emergency information on the back.  
Energy snacks / drinks.  
Sturdy water bottle or platypus (minimum 2L).  
Personal medication.  
Wicking base layer.  
Warm fleece.  
Warm hat and gloves.  
Spare clothes and socks  
Good quality **waterproof** jacket (with hood) and **waterproof** trousers.  
Watch  
Fully charged mobile phone in waterproof case.

### *Walking Section*

High quality walking boots/shoes.  
Event map in water proof cover.  
Day rucksack with waterproof bag inside.  
Participant number – visible with completed emergency information on the back.  
Emergency whistle.  
Sun hat (remember the weather can change suddenly).  
Energy snacks/drinks.  
Sturdy water bottle/platypus (2 liters minimum).  
Personal Medication.

## TOP TIPS

1. Feet – Toughen your feet by walking as much as possible. Wear in and alternate trainers/boots. Trim toe nails and ensure your alignment is correct.
2. Socks – 1,000 mile or double lined socks for cycling. Thick breathable socks for walking. Change your socks at each checkpoint.
3. Walking Boots – light Gore-Tex type boots. Make sure they fit perfectly and are well broken in.
4. Trainers – fine in dry weather on some sections and cycling only. Not recommended in the wet. Alternate with walking boots.
5. Joints – use two walking sticks throughout the entire hiking section.
6. Rubbing – wear Lycra running shorts and apply Vaseline to prevent chaffing.
7. Stretching – stretch both before and after training and at each checkpoint. Use Athletes' Angels to massage & stretch at checkpoints.
8. Drink and hydration – drink regularly & ensure you eat salty food to absorb water. Use a Camelback/ Platypus water container. Mix energy drinks containing sodium with water. See training advice for quantities.
9. Dehydration symptoms – feeling thirsty, not going to the loo, dark coloured pee and minor headaches. Seek advice if in doubt.
10. Overhydration symptoms – If you have not eaten enough salty food with too much water, feel drowsy, have pale coloured pee. Seek medical advice.
11. Blisters – if you feel a potential blister forming, stop and deal with it there and then. Puncture the blister with a pinprick, drain and dress it. See first aiders at checkpoints.
12. Temperature – maintain a constant body temperature and prevent your body from sweating. Use your hat (30% of body heat lost/held here) to save taking fleeces on/off.
13. Checkpoints – keep stops at checkpoints down to a maximum of 20 minutes to prevent muscles seizing up.
14. Kit – remember you only need a small day sack which must contain waterproofs, water, head torch and energy food with sodium.
15. Midges – wear a midge head net and midge repellent during dawn and dusk.
16. Helmet – for cycle section – compulsory.
17. Medical details (on the back of your participant number) – given out at registration – please ensure all medical details are listed and if you take any medication on route, this should be recorded – compulsory.
18. Mobile - don't rely on it and ensure you don't waste the battery – compulsory.
19. Waterproofs – trousers & jacket. Jackets should have an attachable hood – compulsory.
20. Head torch and spare batteries - compulsory.

## Training

### Training as a Team

It is important to have a discussion before you start with the rest of your team about speed. You may decide to a) stay together no matter what speed the slowest team member is going at, or you may decide that b) the faster team members will speed on ahead. Either way it is important to have this discussion so that you are prepared for all eventualities, i.e. for scenario a) if you are fast, you will have to be prepared to go slower and not get impatient (which is much harder than going fast); equally if your team decide to go for scenario b) the slowest member must be prepared that the speedy ones will go on and leave you. It is very important that you understand how to look after yourself in the outdoors no matter how proficient the rest of your team are.

### Physical Training

As there are different disciplines in the Maggie's Monster Bike and Hike, there are some important things to consider. Below is a guide to developing fitness and strength to complete the event.

#### *Bike*

It is not enough to train in a gym; you need to practice on rough terrain and with a mountain bike to understand

how the gears work on different gradients. Ensure that your training routes involve cycling up and down hills. If you are not used to cycling, you may want to buy a padded seat or padded shorts. Don't forget - the paths on route are rough, uneven, undulating and as there are 30 miles of them – you WILL need to know how to change a puncture! It is compulsory to wear a helmet within the event and we recommend that you train using one. Below is a grid to some training distances building up over the next few months.

### *Hike*

Train with walking poles; this will build up your arm muscles and relieve the joints in your lower limbs. Like the bike section, you must ensure that your training involves walking up and down hills. It is easy to see the participants who train in a gym as their feet are unprepared and result in blisters, leading to mal-alignment, limping and injury. You will need to buy your footwear at least 2 months before the event and wear them in properly. Practice walking in different clothing and find the right solution for you. See our kit and equipment guide above. For example, it is vital that you walk in a waterproof with an attachable hood so that you do not get rain down your back as this can lead to hypothermia.

### *Potential Injuries*

A common problem that participants have during training is from mal-alignment of the lower limbs which can be caused by many different factors. Doing repeated movements (like cycling or hiking) in the wrong alignment will cause micro-trauma of your joints resulting in injury. If you want a complete health check where your alignment can be assessed and your muscles/joints examined for potential injuries with a guide to injury avoidance, please contact [info@athletesangels.com](mailto:info@athletesangels.com)

## **Stretching & Muscle conditioning**

Stretching your muscles before and after training will help to stop them becoming shortened and also reduce the chance of Delayed Onset of Muscle Soreness (DOMS). The actual process of stretching a muscle should be slow and sustained and last for around 1minute this should be repeated three times. If you try and stretch the muscle too quickly it will just grip on and you will gain no benefit, the key here is slow and sustained and it should never be painful. It is essential to only stretch a warmed up muscle; the current scientific evidence suggests if you stretch cold muscles you will increase your chance of injury. Imagine your muscles like a piece of blue tack; when blue tack is cold you can tear it easily, if however you warm it between your hands first it becomes much more pliable, this principle applies to your muscles. The best advice is to start your training session slowly then after approximately 15minutes stop and stretch, once you have finished your training stretch again to help prevent DOMS. Muscle groups to concentrate on for an event which includes biking and hiking are your Lower Back, Quadriceps (front of thigh) and Hip Flexors (upper front of thighs), Hamstrings (back of thighs), Calf muscles and Iliotibial band (side of thigh).

A regular massage throughout your training will also help keep your muscles in good condition. Many participants find that going to a weekly class of yoga is an excellent way to keep their muscles in the correct state and help prevent injury.

## **Nutrition**

Note that you should get used to eating on the go, little and often, through your bike and hike sections. Your food intake should include salty foods (look on the back labels of foods and sports drinks for sodium) in order to absorb water. Please see examples of nutritional meals and foods to use during training here: [http://www.athletesangels.com/index.php?option=com\\_content&task=view&id=64&Itemid=1](http://www.athletesangels.com/index.php?option=com_content&task=view&id=64&Itemid=1)

## **Hydration**

Note that for the Maggie's Monster Bike and Hike, we recommend 300-400mls (half to one pint) of water per hour for smaller people (unless it is hot, when you can take up to 600mls of water per hour) and up to 800mls (1 pint and a half) per hour for bigger people who may sweat more. Combining this with salty foods such as

salted peanuts, chicken noodle soup, pot noodles, instant mashed potato with sliced salami, tomato juice and use tuna based in brine instead of spring water.

Please also read the sections on hydration:

**HYPONATREMIA:**

[http://www.athletesangels.com/index.php?option=com\\_content&task=view&id=57&Itemid=1](http://www.athletesangels.com/index.php?option=com_content&task=view&id=57&Itemid=1)

**DEHYDRATION:**

[http://www.athletesangels.com/index.php?option=com\\_content&task=view&id=58&Itemid=1](http://www.athletesangels.com/index.php?option=com_content&task=view&id=58&Itemid=1)

## Medical Information

Below is some essential medical information to be aware of. All of your team members may be vulnerable to getting ill and we have listed the 4 medical conditions most commonly seen on Maggie's Bike and Hike in the past.

Your continuous assessment and knowledge of these signs and symptoms and what to do may be vital.

### Hyponatremia

A potentially fatal condition, hyponatremia most often occurs in exercise lasting four hours or longer and results primarily from drinking too much fluid. It is made worse by not replacing sodium losses. Severe cases may involve seizures, increased intracranial pressure, fluid in the lungs, and respiratory arrest. To avoid sodium depletion, ensure foods contain sodium and check the back of sports drinks for sodium content.

Symptoms:

- Headache
- Fatigue
- Nausea
- Lack of co-ordination

Note - these symptoms are very similar to those for dehydration.

Prevention:

Monitoring your fluid intake. Drink enough fluid so that you do not feel thirsty and so that you are urinating at normal periods. If urination becomes frequent and clear-coloured, you may be drinking too much.

Ensure your food content contains sodium.

Drink isotonic sports drinks instead of water. Isotonic drinks contain salts and thereby assist in maintaining the correct salt balance in your body. Participants should try isotonic drinks during training and ensure they can drink it comfortably.

Use sports drinks at 50% concentration in the two to three days pre-event in preference to water to pre-hydrate. Normal intake should be approximately 5ml / kg (i.e., 375ml if you weigh 75kg) five times per day for base hydration.

If you experience any of the symptoms of hyponatremia, consult the medical staff at the nearest checkpoint. DO NOT PROCEED and DO NOT simply continue drinking water.

## **Dehydration**

Dehydration is the condition of having insufficient fluid in your body tissues. It is a serious risk in such a long and strenuous event and can lead to impaired performance, vomiting, and in very extreme cases, muscle failure potentially resulting in death.

### Symptoms:

Tiredness.  
Irritability.  
Tight/heavy feeling muscles.  
Headache.  
Dry mouth and lips.

Note - Symptoms of dehydration are only apparent when you are already dehydrated. Symptoms are very similar to those of hyponatremia.

### Prevention:

Drink isotonic drinks instead of or in addition to water. Participants should try isotonic drink during training and ensure they can drink them comfortably.

Monitor your urine and make sure you are urinating at regular intervals and that the urine is light yellow to clear. If you are not urinating or your urine is dark in colour, you may be dehydrated.

If you experience symptoms of dehydration, check immediately with medical staff at the nearest checkpoint. DO NOT PROCEED and DO NOT simply continue drinking water.

## **Hypoglycaemia**

Hypoglycaemia (also called low blood sugar) occurs when your blood glucose (blood sugar) level drops too low to provide enough energy for your body's activities. The majority of participants in endurance events will enter hypoglycaemia at some stage and it is vital to keep alert for this. We do not give out structured measurements of how much glucose a participant should take as it varies from a participant's build (big man/small women), the type of event, length, speed, fitness etc. The only real way to test how much glucose is in the blood is via a portable blood test:

Normal and target blood glucose ranges (mg/dL) in people who do not have diabetes

Upon waking (fasting) – 70 to 100

After meals – 70 to 140

However it is important to notice when someone is suffering from hypoglycaemia and refer to the medical team. The first thing that should be done is to check for any diabetic records that they may be carrying around their neck or in their pockets.

### Symptoms:

hunger  
nervousness and shakiness  
perspiration  
dizziness or light-headedness  
sleepiness  
confusion  
difficulty speaking  
feeling anxious or weak

Quick treatment: If there are no medical staff available and you believe that the participant is low:

give glucose tablets 1/2 cup (4 ounces) of any fruit juice 1/2 cup (4 ounces) of a regular (not diet) soft drink 1 cup (8 ounces) of milk 1 or 2 teaspoons of sugar or honey

## Safety

“Any fool can be cold...” Dr Hallam, ex-Royal Marines. Being safe in the hills includes responsibility in:

- Wearing and carrying the right kit (see compulsory kit list above)
- Being prepared for your target distance (see schedule above)
- Eat foods with nutritional value (see nutritional advice above)
- Keep hydrated and not over hydrated (see hydration advice above)
- Know your route (map and compass)
- Knowing the weather forecast (check night before departure)
- Be prepared for medical complications (See Medical section above).
- Telling someone where you are going and your expected time of finishing.

If you are a past or present participant and would like to offer advice to other participants, please let us know at [info@athletesangels.com](mailto:info@athletesangels.com)

## Training Schedule

It is important to combine both the biking with the hiking at least once a week. Obviously individual fitness levels and time for training vary greatly, so we have put down the minimum training sessions with a view to finishing the event within 24 hours. We have also aimed to guide you in days/distances, so that you can train with your team members no matter which distance you are aiming for. For very approximate times, allow 6-10 miles an hour (depending on hills/speed) for biking and 3 miles an hour for hiking. For more information on individualised, specific training schedules please email [info@athletesangels.com](mailto:info@athletesangels.com)

<b>Week Countdown</b>	<b>Week of:</b>	<b>BRONZE 31.5 MILE BIKE 8.5 MILE HIKE</b>	<b>SILVER 31.5 MILE BIKE 23.4 MILE HIKE</b>	<b>GOLD 31.5 MILE BIKE 41.2 MILE HIKE</b>
12	06.02.2012	Monday & Thursday: 2 mile Bike rides Saturday: 2 mile bike 0.5 mile hike	Monday & Thursday: 2.5 mile bike ride 1.5 mile hikes Saturday: 3 mile bike 2 mile hike	Monday & Thursday: 3 mile bike rides 2 mile hikes Saturday: 8 mile bike ride 4 mile hike
11	13.02.2012	Monday & Thursday: 3 mile Bike rides Saturday: 4 mile bike 0.5 mile hike	Monday & Thursday: 4 mile bike rides 2 mile hikes Saturday: 5 mile bike 3.5 mile hike	Monday & Thursday: 5 mile bike rides 3 mile hikes Saturday: 10 mile bike ride 7 mile hike
10	20.02.2012	Monday & Thursday: 5 mile bike rides Saturday: 6 mile bike 1 mile hike	Monday & Thursday: 5 mile bike ride 3 mile hikes Saturday: 6 mile bike ride 5 mile hike	Monday & Thursday: 8 mile bike rides 5 mile hikes Saturday: 12 mile bike ride 11 mile hike
9	27.02.2012	Monday & Thursday: 7 mile bike rides Saturday: 8 mile bike 1.5 mile hike	Monday & Thursday: 7 mile bike rides 3 mile hikes Saturday: 8 mile bike 6 mile hike	Monday & Thursday: 9 mile bike rides 5 mile hikes Saturday: 15 mile bike 16 mile hike
8	05.04.2012	Monday: Swim or yoga Wednesday: 8 mile bike ride 1 mile hike Saturday: 10 mile bike 2 mile hike	Monday: Swim or yoga Wednesday: 8 mile bike ride 4 mile hikes Saturday: 10 mile bike 7 mile hike	Monday: Swim or yoga Wednesday: 10 mile bike 6 mile hike Saturday: 17 mile bike 20 mile hike
7	12.03.2012	Monday: Swim or yoga Wednesday: 8 mile bike 1 mile hike Saturday: 14 mile bike 3 mile hike	Monday: Swim or yoga Wednesday: 10 mile bike 5 mile hike Saturday: 12 mile bike 8 mile hike	Monday: Swim or yoga Wednesday: 12 mile bike 6 mile hike Saturday: 20 mile bike 24 mile hike
6	19.03.2012	Monday: Swim or yoga Wednesday: 8 mile bike 1.5 mile hike Saturday: 18 mile bike 4 mile hike	Monday: Swim or yoga Wednesday: 10 mile bike 6 mile hike Saturday: 15 mile bike 10 mile hike	Monday: Swim or yoga Wednesday: 12 mile bike 6 mile hike Saturday: 22 mile bike 28 mile hike
5	26.03.2012	Monday: Swim or yoga Wednesday: 8 mile bike 2 mile hike Saturday: 22 mile bike 5 mile hike	Monday: Swim or yoga Wednesday: 10 mile bike 6 mile hike Saturday: 17 mile bike 12 mile hike	Monday: Swim or yoga Wednesday: 12 mile bike 6 mile hike Saturday: 20 mile bike 18 mile hike
4	02.04.2012	Monday: Swim or yoga Wednesday: 8 mile bike 2.5 mile hike Saturday: 24 mile bike 6 mile hike	Monday: Swim or yoga Wednesday: 10 mile bike 6 mile hike Saturday: 20 mile bike 14 mile hike	Monday: Swim or yoga Wednesday: 12 mile bike 6 mile hike Saturday: 25 Mile Bike 33 Mile Hike

3	09.04.2012	Monday: Swim or yoga Wednesday: 8 mile bike 3 mile hike Saturday: 28 mile bike 6 mile hike	Monday: Swim or yoga Wednesday: 10 mile bike 6 mile hike Saturday: 22 mile bike 16 mile hike	Monday: Swim or yoga Wednesday: 12 mile bike 6 mile hike Saturday: 16 mile bike 16 mile hike
2	16.04.2012	Monday: Swim or yoga Wednesday: 8 mile bike 3.5 mile hike Saturday: 16 mile bike 7 mile hike	Monday: Swim or yoga Wednesday: 8 mile bike 6 mile hike Saturday: 25 mile bike 18 mile hike	Monday: Swim or yoga Wednesday: 8 mile bike 5 mile hike Saturday: 28 Mile Bike 38 Mile Hike
1	23.04.2012	Monday: Swim or yoga Wednesday: 6 mile bike 4 mile hike Saturday: 28 mile bike 7 mile hike	Monday: Swim or yoga Wednesday: 6 mile bike 4 mile hike Saturday: 28 mile bike 20 mile hike	Monday: Swim or yoga Wednesday: 8 mile bike 5 mile hike Saturday: 16 Mile Bike 16 Mile Hike
<b>Gentle With Active Rest</b>	30.04.2011	REST Swim or yoga 5 mile bike 2 mile hike	REST Swim or yoga 5 mile bike 3 mile hike	REST Swim or yoga 5 mile bike 4 mile hike
<b>EVENT DAY!!</b>	05.05.2012	31.5 MILE BIKE 8.5 MILE HIKE	31.5 MILE BIKE 23.4 MILE HIKE	31.5 MILE BIKE 41.2 MILE HIKE

## Training Summary:

Start training early in the year and build up slowly. Ensure you have rest days, eat properly while training and wear in / try out all equipment. Replicate the event terrain and profile of the event, i.e. training on hills and over a long distance. Do not rely on a gym to get you fit – you need to mountain bike and walk distances to train the correct muscles and your feet.

Any sign of injury – get checked out: [info@athletesangels.com](mailto:info@athletesangels.com)