



2<sup>nd</sup> October 2009

Dear Runners,

## THE NORTH FACE 100 RACE : OCTOBER NEWSLETTER

### 7km Progressive Run – 21<sup>st</sup> October 2009

This last progressive run will go through the toughest portion of the route; ascending bukit timah hill and the technically challenging Rengas & North View trails.

Please sign-up on-line <http://www.thenorthface100.com.sg/runs.php>

Cost : \$12/- (\$8 special rate for TNF100 athletes who register and pay on-line prior to the run.)

The first 100 registered and paid runners will be entitled to a TNF100 Water bottle OR TNF towel.

Kindly download and sign the indemnity form and bring it with you on the day of the run.

#### PROGRAM

5.00 pm: Registration

5.30 pm: Briefing

5.45 pm: Start of 7 KM North Face Progressive Run

7.00 pm: End

#### RUNNING ROUTE 7KM:

*Start: Rifle Range Carpark, Rifle Range Trail, Senapang Trail, Senapang Link, Main Road, Hindede Drive, Bt Timah Nature Reserve, Main road, Rengas Path, North View Path, Dairy Farm Loop, Dairy Farm Pass, Belukar Track, Lasia Track, Cross the road at Rifle Range Road, go up trail to Jalan Kampong Chantek, Turn right into Durian Loop, Nangka Trail, Rifle Range Road, Back to Carpark.*



(Directions to meeting point : Turn left from Dunaern Road into Rifle Range road just before Sime Darby Center, go down Rifle Range Road until you see lamp post 46. There will be a car park on your left in front of the Nangka Trail / Durian Loop. Please note that if you are driving from town, you will need to make a u-turn to come down Dunern Road. Those of you who will be driving, please offer a ride to the runners you see walking in. Thanks. )

## EATING FOR A BETTER RUN

### Pre-Race Dinner 22<sup>nd</sup> October 2009

The pre-race dinner will be held on the 22<sup>nd</sup> oct, 7pm @ Hotel Inter-Continental.  
 Please sign-up on-line <http://www.thenorthface100.com.sg/carboDinner.php>  
 Cost : \$35/- (\$28 special rate for TNF100 athletes who register and pay on-line.)

This special carbohydrate rich pre-race dinner has been designed by Ms Joanna Tan (Dietitian, Changi Sports Medicine Centre, Changi General Hospital) who will be giving us nutrition tips for pre-race, race day and post-recovery, Carbohydrate loading and Hydration strategies.

- fluid, CHO and protein intake pre-race and on race day
- nutrition recovery after race
- hydration strategies and effectiveness of various fluids ( water vs sports drinks vs caffeinated drinks vs energy drinks)

#### **Selection of Bread**

*Pita bread with Grilled Chicken or Foccacia Bread with Smoked Salmon  
 Plain Bread rolls*

#### **Cold Selection**

*Roasted potato and grilled corn salad*

#### **Soup**

*Pumpkin soup*

#### **Hot selection**

*Vegetarian fried white rice with cashew nuts  
 Fettuccini with tomato, chicken and tarragon  
 Braised broccoli*

**Dessert Selection**  
*Sorbet or Frozen Yoghurt Ice-cream topped with fruits*

## Hydration Tips

In a long distance race such as this, hydration is a major concern. There is risk in both over and under-hydration that runners have to be aware of when preparing for the race. Dehydration may result in cramps and fatigue whilst overhydration can result in hyponatraemia which affects the brain's function.

You are advised to read carefully the hydration tips below from Dr Jason Chia (*Consultant Sports Physician at the Singapore Sports Medicine Center and Changi Sports Medicine Center*)

### **Purpose of hydration**

Replace: replace water, replace electrolytes, refuel

Inadequate hydration : leads to dehydration. At mild levels can lead to decrease in performance as your heart struggles to pump smaller volumes of blood through your body. At greater levels of dehydration, the body's ability to cool itself is reduced, putting you at risk of heat illness. At the extreme stage, the ability of the body to sustain circulation to the vital organs is compromised and heat stroke can occur. Profuse sweating also results in salt loss which puts you at risk of heat cramps.

The combination of intensive exercise in a hot environment and dehydration can result in exertion heat illnesses such as heat cramps, heat exhaustion and heat stroke in order of increasing severity. Note that despite its name, these conditions do not occur exclusively in a hot environment although it is more common when exercising in heat.

Overhydration: excessive intake of water in long races (such as an ultramarathon) can lead to dilution of the sodium levels in our body. This can lead to hyponatraemia (low sodium concentration) which in severe cases can affect brain function and such as nausea, vomiting, fatigue, dizziness, headache, bloatedness, cramps, shortness of breath and collapse. This tends to occur in longer races where substantial amounts of salt is lost through the sweat coupled with intake of water / fluid low in sodium. This overwhelms the body's normal ability to regulate salt concentration resulting in hyponatremia

Small error in the rate of replenishment can be magnified by virtue of the duration of the run, so rehydration is best done by measurement rather than by estimation based on thirst.

The volume of fluid lost can be based on the weight change over the run. As a rough approximation, 1kg loss in weight is roughly equivalent to 1L lost in fluids.

Water loss (L) = body weight before (L) – body weight after (L) + water drunk (L)

The following guidelines may be used in a long run eg. marathon

a) For longer runs here the energy expenditure is high and salt losses being to become significant, replenishing the carbohydrate stores and electrolytes become significant. Sports drinks would then be the drink of choice.

b) Pre-hydrate: ensure that your body has sufficient fluids and normal salt concentration in the body before the event by drinking 5-7mls of fluid per kg of body weight at least 4 hours before the event. If this does not result in the passage of clear urine, repeat the intake of fluids at least 2 hours before. It is preferable to take fluids with a small amount of salt in it as this would help the body retain the fluids

c) To replenish carbohydrate stores: drink enough sports drink (or sports gel / bar) to take in at least 1g of carbohydrate per kg of your body weight per hour. The sugar in the sports drink should be a mixture of glucose, maltose and fructose rather than pure glucose.

d) Replace salt loss: intake of at least 450mg of sodium per hour

e) Replace fluids : this can range from 0.4L/ hr to 1.5 L/hr and depends very much on the individual's rate of sweat and the running environment

f) post exercise rehydration: replace every litre of deficit after exercising with 1.5L of fluid

# EAH (Exercise Associated Hyponatremia) Study

Please note that there will be a study conducted on race day by a research team from the Defence Medical & Environmental Research Institute to better understand the hydration status of runners and incidence of exercise associated hyponatremia (EAH). EAH is a potentially fatal fluid imbalance condition largely resulting from sustained fluid intake beyond the capacity for fluid excretion. In fact, hyponatremia has been stated to be one of the most common medical complications of long-distance racing and is an important cause of race-related fatalities.

## WHAT WILL BE REQUIRED OF YOU?

1. Measurement of body mass before and after the race.
  - *This will be done at RACE START and immediately after RACE FINISH.*
2. Collection of urine sample before the race to assess your hydration status.
  - *This will be collected from those who visit the toilets before RACE START.*
3. Blood draw at the end of the race.
  - *Only for admitted patients who show symptoms related to EAH (nausea, confusion etc.) at the medical tent*

Study participation is voluntary and will be done on site so there is no need to sign up for this study. Volunteers are not required to participate in all 3 measurements. Your participation will provide valuable information to educate the public about appropriate drinking guidelines during prolonged endurance races held in our local climate. We hope that you will kindly assist in this study.

From,

***The North Face 100 team***

