

How (not) to train for an ironman triathlon

(and why my first paper was published in the third year of my PhD)



- What is an ironman triathlon?
- The different ways in which you can die
- My weird reason to do one anyway
- Training, nutrition, injuries, ...
- The D-day (Aug 25, 2013)
- An accident, a fightback, and other stuff

Ironman triathlon

- **3.8km** open-water swim, **180km** road bike ride, **42km** road run (“Ironman-140.6”)
- Starts 7am, ends midnight
- 4 distances: **Sprint** (0.75, 20k, 5k), **Olympic** (1.5k, 40k, 10k), **Half-Iron** (1.9k, 90k, 21k), **Full-iron** (3.8k, 180k, 42k)

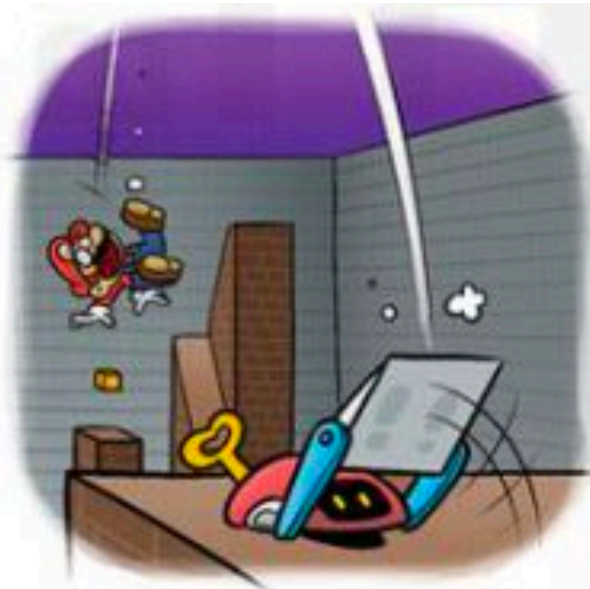


Ironman triathlon

- **[Videos: 3 crazy finishes]**

Triathlon deaths

- Annals of Internal Medicine research study. 9 million participants from 1985-2016: 135 deaths OR cardiac arrests (13 survivors due to emergency medics).
- **Most drown in open-water swim** (cramping, stampede, hyperventilation, heart attack, etc)
(90 swim, 7 bike, 15 run, 9 just after = 120 deaths)
- Dehydration, heatstroke, etc ...
- Study concludes that for vast majority of people, engaging in regular exercise will yield more benefit than harm.



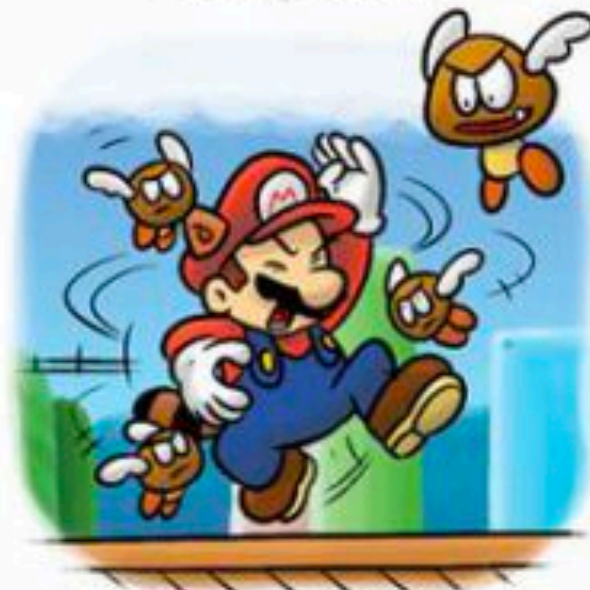
Catapulted



Burned



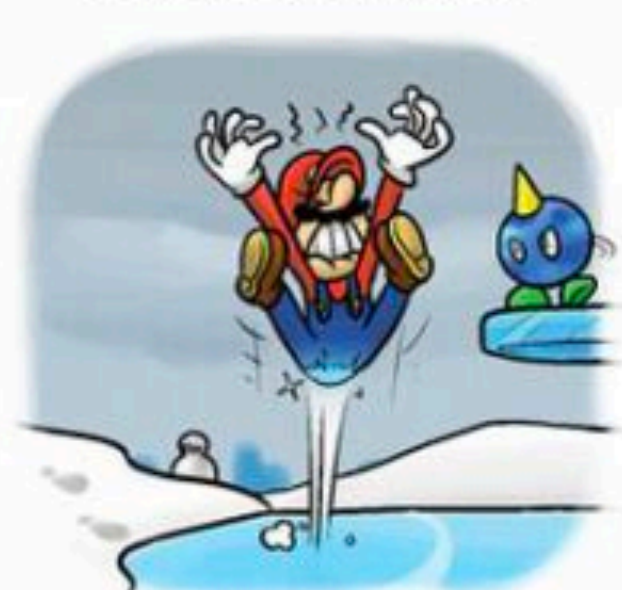
Overconfidence



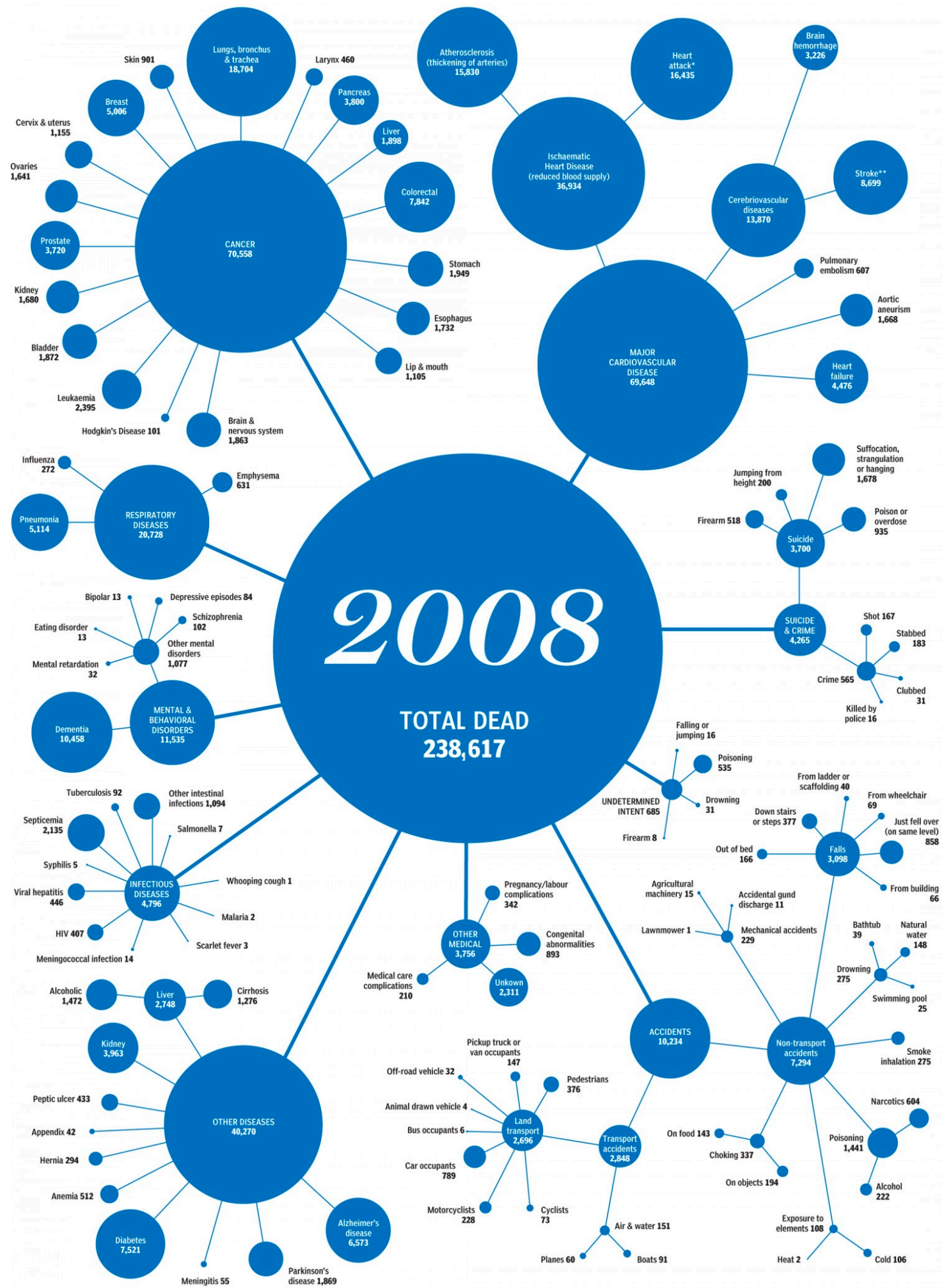
Infestation



Leeched



Ice burnt



My (weird) reason to run a marathon

- Didn't want to do a triathlon initially, no idea what an ironman was. In 2011, I had never run more than a couple of miles, or ever ridden a road bike, never ridden a bike more than 5km, and I used to "swim" (aka did not sink) with my head above the water.
- Went down to see the Pittsburgh marathon as the route went past my house. Watched videos later.
- Wanted to understand deeply why some people cry when they finish a half marathon or full marathon.

Timeline

- **May 2011:** Thought long-distance stuff was “boring”, watched Pitt marathon, got inspired, signed up for Atlanta half marathon in Nov 2011.
- **Summer/Fall 2011:** Swollen ankles and knees, shin splints. ICE. Did not use ibuprofen. Cannot run more than twice per week. Begin to ride a bike more than 5 miles, learning how to swim (CMU pool), yoga to stretch it all out.
- **Nov 2011:** Completed Atlanta half, painful but did not cry, signed up for Pittsburgh full in May 2012. Genuinely learnt to swim. **Jan 2012** Lasik eye surgery.
- **May 2012:** Completed Pitt full, painful but did not cry, headed to MSR Cambridge (UK) for a summer internship. Registered for Wales “triathlon weekend” in Jun 2012.
- **Jun 2012:** Rented and used my first ever road bike. Finished Wales, easy so did not cry, registered for Marlow olympic tri in Jul 2012.
- **Jul 2012:** Rented road bike, second time ever. Finished Marlow, easy so did not cry, registered for Grafham half-iron in Aug 2012.
- **Aug 2012:** Rented road bike, third time ever. Finished Grafham (barely), very painful but did not cry. Registered for Louisville, Kentucky full-ironman in Aug 2013.

Training

- Commitment devices
- Mix it all up (swim, bike, run, intervals, yoga, weightlifting)
- Company: less fun training alone
- Nutrition, sleep, rest, ice (recovery and maintenance)
- Smaller goals along the way (timings or distances)
- Injury management

WEEK	 Mon	 Tues	 Wed	 Thurs	Fri REST	 Sat	 Sun
1	Swim 1000yds (400yds Drills)	Bike 10 miles	Swim 1000yds (400 yds Drills)	Run 2 miles (75% Effort)	Recovery Day	Swim 1000yds Bike 10 miles	Run 4mi Easy
2	Swim 1200yds (400yds Drills)	Bike 12 miles	Swim 1200yds (400 yds Drills)	Run 3 miles (75% Effort)	Recovery Day	Swim 1000yds Bike 12 miles	Run 4mi Easy
3	Swim 1500yds (400yds Drills)	Bike 15 miles Run 10 min	Swim 1500yds (400 yds Drills)	Run 4 miles (75% Effort)	Recovery Day	Swim 1000yds Bike 15 miles	Run 6mi Easy
4	Swim 1800yds (400yds Drills)	Bike 18 miles Run 15 min	Swim 1800yds (400 yds Drills)	Run 4 miles (75% Effort)	Recovery Day	Swim 1000yds Bike 18 miles	Run 6mi Easy
5	Swim 2000yds (400yds Drills)	Bike 18 miles Run 20 min	Swim 2000yds (400 yds Drills)	Run 4 miles (75% Effort)	Recovery Day	Swim 1000yds Bike 20 miles	Run 7mi Easy
6	Swim 1000yds (400yds Drills)	Bike 12 miles	Swim 1000yds (400 yds Drills)	Easy Warm Up, Run 10x60 sec at Race Pace, Cool Down.	Recovery Day	Swim 1000yds Bike 10 miles	RACE DAY

Training for runs

- (Early on) Pick a route that's longer than your current endurance.
- Two runs per week: one intervals, one long endurance. If a third run, then add one "tempo run".
- Sign up for running groups, make running friends, sign up for 10k, halves, fulls, etc.
- Run outdoors in winter also when sun is out and not "icy". Very refreshing and oddly adrenaline-rushing.
- Experience "bonking" or "hitting the wall".
- Running after a lot of biking is *very* different. **Knees buckle.**

Training for biking

- First, buy a road bike that fits you. I bid on a 56cm (frame size) Trek road bike on e-Bay on Nov 4, 2012, did not win it. I bid on a 54cm Trek road bike on e-Bay on **Nov 12, 2012** and won it (first ever road bike). It was delivered maybe a week later. I rode it maybe once in 2012.
- On **Jul 13, 2013**, I bought a second-hand 56cm road bike on Craigslist for 700\$ (later sold the 54cm to Leila). A few days later, I did a 2-day 150mi bike ride. In **mid-August**, I did my first ever 100mi bike ride.
- During my ironman, I did my second ever 100mi bike ride (112 mi), and then had to run a marathon.

Training for swims

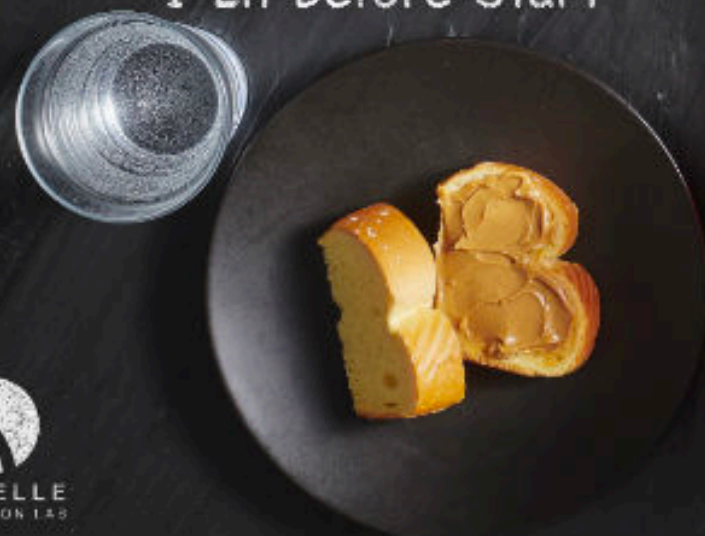
- Did most learning+training in CMU pool. Some training in “Jesus Greens” pool in Cambridge, UK (outdoor long pool). A CMU swimming class helped.
- All triathlon swims are open-water, but I had no practice (until the triathlons: I did seas, rivers and lakes).
- Also bought my wetsuit on the day of my first triathlon.
- SO many things to be conscious of: alternating breathing sides, blinded by sun, kicked by other swimmers, not using legs much, etc. Hard to practice most of these.

Race Day Nutrition
Iron Man

Breakfast
3-4h Before Start



Snack
1-2h Before Start



Swim
(Before Start)



Bike
60-90g Carbs/h



Run
40-60g Carbs/h

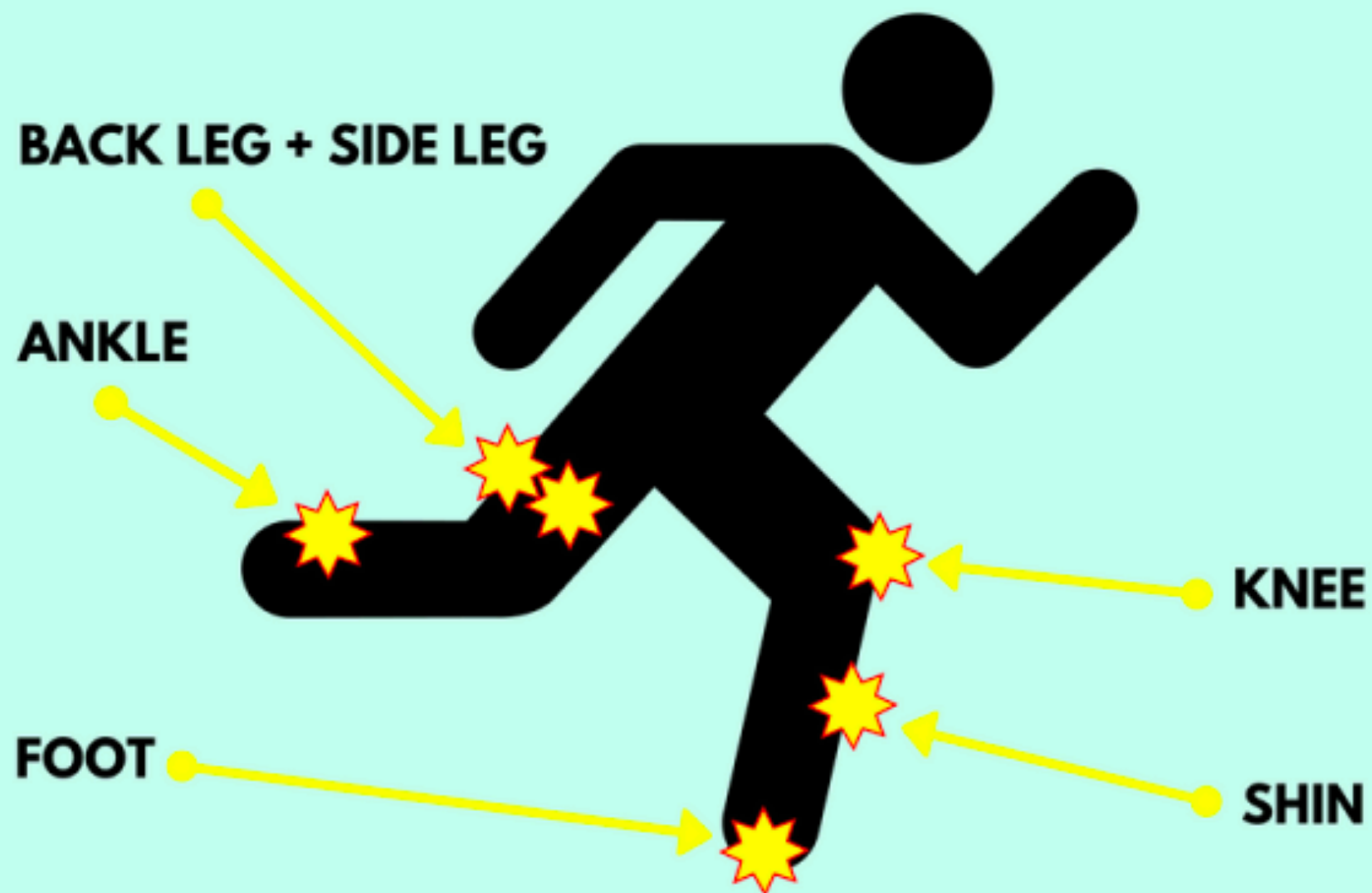


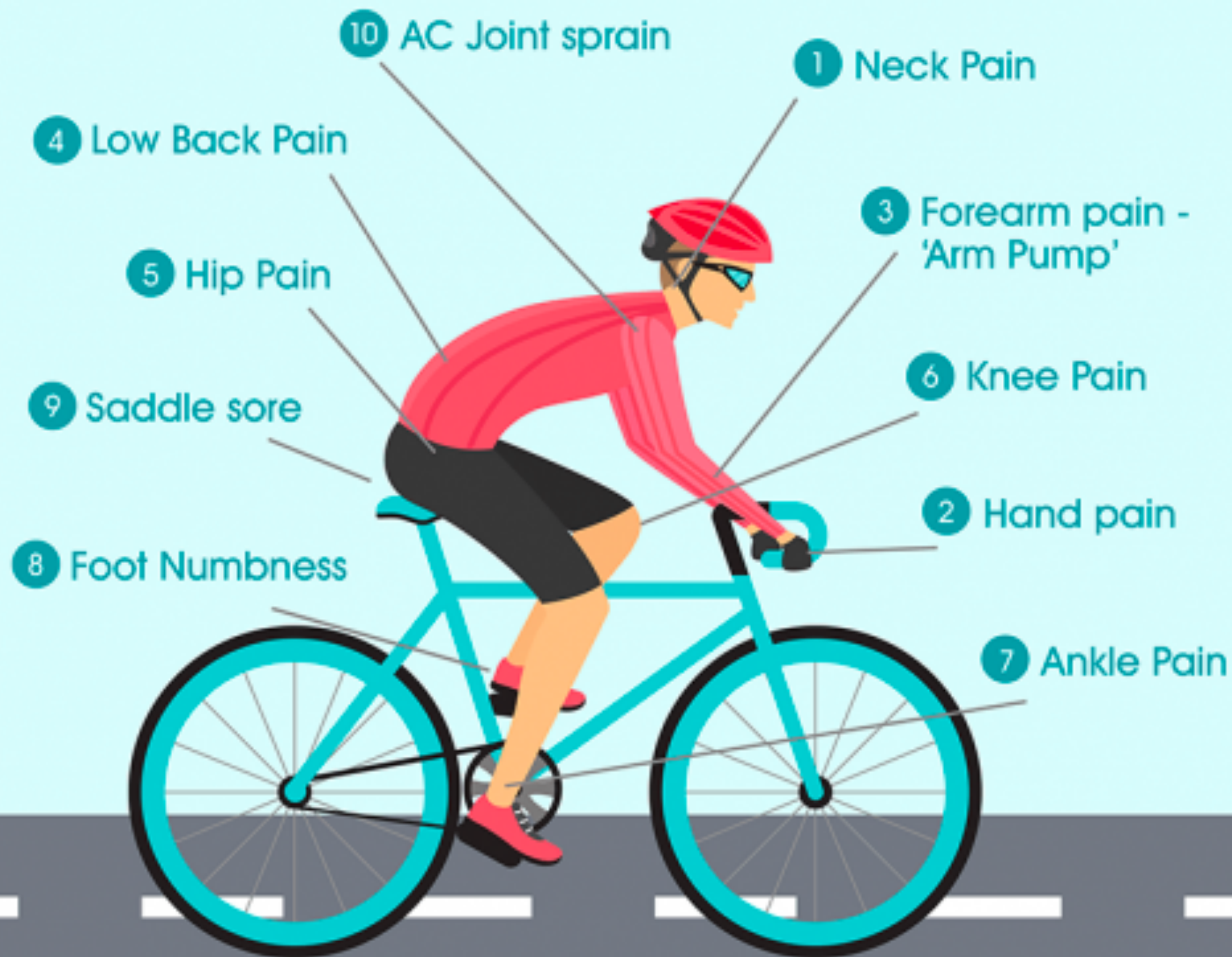
Nutrition

- World's best breakfast: rolled oats, milk, banana, raisins, sliced almonds, chia seeds, flax seeds, crumbled walnuts, **cocoa powder (Leila's contribution)**, coconut flakes.
- Supplements: no pills including Ibuprofen (would change this if I could go back in time), electrolytes during bike rides, energy bars and gels, protein powder.
- Mostly vegetarian diet cooking at home, some meat eating out.
- Carb-loading before races (would change this if I could go back in time).

HOW TO PREVENT

COMMON RUNNING INJURIES

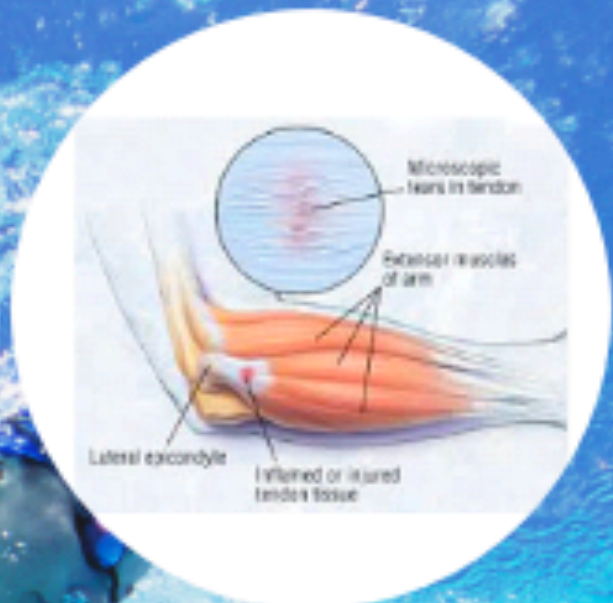




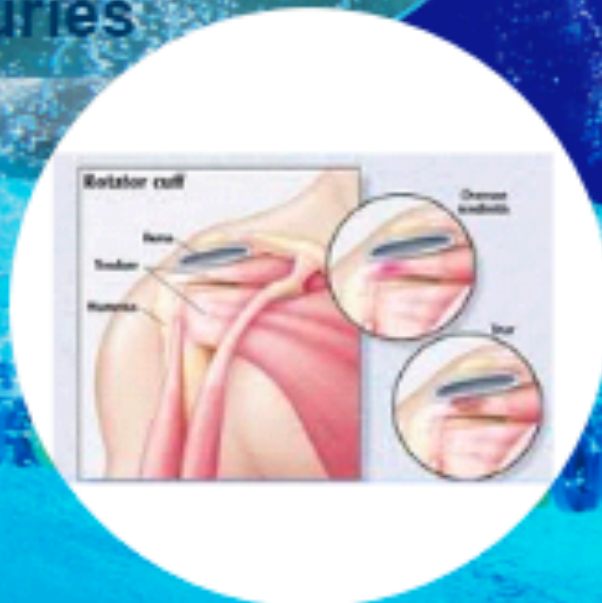
Common Injuries Associated with Swimmers & their Prevention



Knee Injuries



Elbows Injuries



Shoulder Syndrome



Thoracic Outlet

Injuries

- Impossible to avoid fully. More about listening to body and picking it up early.
- Differentiate mental block [**push**] or sore/tight muscles [**stretch/rest**], and strains/pulls/cramps [**stop**] or stress injuries [**doc**].
- ~**May 18, 2013** — first ride after long winter season, time to really ramp up training after sem end (Ironman Aug 25). Had a silly fall, dislocated left elbow in rural Ohio (Leila rescue).
- Had a solid cast 24hrs/day, no swim/bike/run for 5 weeks!!!
- **Jun 22, 2013** first day removing cast, very sore hands, attempted 100mi “Diabetes” ride (first ever 100 miler), was a really super-hot day. Cramped very badly @ mile 56 on an uphill (Leila rescue).









Less than a year later

- **Bad accident (car hit me while I was on my bike).**



Fightback

- I signed up for the **AIDS LifeCycle: 900km in 7 days from San Francisco to Los Angeles.**
- A whole different Quatre a Cinq (or cinq a six).
- Last summer, completed a **week-long ride through Zambia**, also to raise money for AIDS, women empowerment and other local causes.

Other life-threatening hobbies

- Scuba-diving in a dry-suit Iceland in winter in the tectonic plate gap between North America and Europe in 0 Celsius water.
- Night scuba-diving in the Great Barrier Reef (100s of km from land), when my torchlight went out underwater.
- The Gauley Fest (West Virginia): white-water rafting down many class 5 rapids, the same day a kayaker died there.
- Solo skydiving after 6hrs of training (out of which 5hrs is telling you how you could die and how to avoid it).