Be geek & get fit
Introduction & background

- **Previous obese**
  - 130 Kg, HR @110 at rest
  - Limited physical capabilities

- **Run diet & learn food and activity stuff**
  - Lost 70 Kg in 18 months
  - HR @ < 50 at rest

- **Maintaining fitness level since 3 years**
  - Weekly run ~50 Km
  - Preparing 2013 NYC marathon
Fit ?
Geek and fitness compatibility

- No time for training
- Bad food habits
But why?

• **Stay healthy, live longer, feel better**
  - No longer sick, improve medical metrics
  - Keep up stamina, less stress
  - No pain during daily efforts

• **Better resistance, resilience to daily issues**
  - Run to catch the bus
  - No fatigue
And how?

- Just matter of choice
  - Make good choice
  - Establish a daily routine
  - Keeping geeky stuff

- Know your enemy, learn how to feed yourself
  - Make right choices
  - Maintain activity
The geek & fit trilogy

- Nutrition
- Exercise
- Rest
Quantify nutrition

- **Unit**: Kcal
- **Macro-nutrient**
  - Carbs: 4 Kcal/g
  - Fat: 9 Kcal/g
  - Protein: 4 Kcal/g

![Nutrition Facts](image-url)
LOOSING WEIGHT → Kcal IN < Kcal OUT

TAKING MASS → Kcal OUT < Kcal IN
KCAL IN = FOOD + DRINK
KCAL OUT = BMR + EXERCISE

BMR = Basal Metabolic Rate
BMR evaluation

• Variability factors
  – Age: the older the less
  – Gender: female = low
  – Weight: the fatter, the more

• Mostly between 2000 and 2500
  – Visit http://www.calotor.com/
Activity evaluation

• **Intense exercise**
  - Running: up to 1000 Kcal/hour
  - Swimming: ~500 Kcal/hour
  - Squash: ~600/700 Kcal/hour

• **Moderate/daily exercise**
  - Cycling: 400Kcal/hour
  - Walking: 300Kcal/hour
Target efficiency

• Avoid fat and sugar (bad stuff)
  – Mostly in processed food
  – Industrial stuff, even when claimed healthy

• More vitamins and nutriments
  – Make sure your body gets what it needs
  – Avoid nutrients deficiencies
Eat more proteins!

- Consumption for processing (30%)
- Less Kcal/g than fat
- Limit muscles loss
Choose your proteins!

- **Enjoy low-fat protein**
  - Chicken, turkey, ham, white fish, seafood

- **Some good-fat (Ω3)**
  - Tuna, salmon, eggs
  - Pack both: tuna/seafood omelet!

- **Avoid fatty meat!**
  - Beef, pork, lamb, etc.
Ban sugar!

• Low nutritional efficiency, no need
  – can be synthesized from fat
  – More a push from the industry

• Choose appropriate carbs
  – Low-GI (veggies, beans, nuts, ...)
  – Ban processed sugar (white bread/pasta, etc.)
Sweet alternatives

- Choose low-IG sweetener
  - Honey (with vitamins, better efficiency)
  - Apple syrup

- Keep a fruit basket
  - Eat apple/banana
  - Pack fibers, vitamins, etc.
The Glycemic Index

• How sugar is processed
  – Avoid insulin peaks and diabetes issues
  – High GI food → fatigue and heavy

• The lower, the better
  – Avoid being hungry
  – Better food consumption regulation
Why GI matters?

YOUR HEALTH AND THE GLYCEMIC INDEX

**High-glycemic chart**
- Release energy quickly
- Feel hungry sooner
- Eat more

**Low-glycemic chart**
- Release energy slowly
- Feel full longer
- Eat less

You can reset your eating habits...

Taken from: http://www.medsavebemidji.com/blog/?p=569
Choose Appropriate GI

• High-GI food
  – Processed food: pastries, white bread, cereals
  – Most of food we consume

• Low-GI food
  – Veggies, beans, whole grain rice
  – Need to cook and be prepared
Welcome (good) fat

• Take Ω3 and nutritional-efficient fat
  – Salmon, eggs, etc.
  – Olive-oil for salad dressing

• Ban processed fat
  – Pastry, pre-cooked meals
  – Mostly linked with sugar
Food is not everything ...  
... look at your glass!

- Lot Kcal intake
  - High carbs (e.g: a coke ~ = 200 Kcal)
  - Low efficiency

- Avoid alcohol
  - 7Kcal/g
  - One beer = 150Kcal (ok to have one)
  - Ban all strong alcohol (bye-bye whisky !)
Good drink!

- **Coffee (geeky drink !)**
  - 0Kcal + caffeine
  - Avoid cappuccino and all additions (no cream!)

- **Tea, all kind**
  - Green/Black tea, 0Kcal
  - Avoid sweetener, bubble tea (~200/300Kcal)
The non-alcohol drink fight

Regular Coke  
(150 Kcal)

Diet coke  
(1 Kcal)
The alcohol drink fight

**Whisky**
(300 Kcal)

**Beer**
(140 Kcal)
Conclusion

Regular Coke
(150 Kcal)

Go for a beer!

Beer
(140 Kcal)
Fast food is not a crime!

• Follow advices!
  – Avoid fatty side (bye-bye french fries … 500 Kcal!)
  – Do not go large!
  – Take diet drinks!

• Good proteins intake
  – (single) Whooper, McNugget
  – Choice of chicken and fish
Fast food guidelines!

• Avoid all sugar intake
  – No regular soda (up to 200 Kcal)
  – Side-salad (< 50 Kcal) instead of french fries (>350 Kcal)
  – Single-patty burger or chicken nuggets
  – Avoid desert, ice-cream can be ok

• Choose good branches
  – Avoid cheesecake factory (up to 1500 Kcal for a salad …)
  – Most have reasonable choices
Fast food sample

- Mac Donald, Big Mac
  - With side salad, diet code < 600Kcal
  - With french fries, regular coke > 1200Kcal
- Burger King
  - Whooper, side salad & diet coke < 750 Kcal
  - Double whooper, fries & coke > 1600 Kcal
- Subway
  - 12 inch turkey & ham < 500 Kcal
  - Avoid side-chips, mostly healthy
The dessert danger zone

- Low-efficiency (~400Kcal)
  - Carbs: flour, sugar
  - Fat: cream, butter, oil

- Desert alternatives (~150/200 Kcal)
  - Fruits & greek yogourt (pack proteins !)
  - Vanilla ice-cream (limit to two scoops ...)

The dessert fight

Chocolate cake
(500 Kcal / piece)

Ice cream
(250 Kcal)
Dutch food?

- Mostly unhealthy ...
  - Full of fat ... (bitterballen, sate, spare-ribs)
  - And sugar ... (bread, fries, beers)

- ... can be good: matter of choice!
  - Hello fatty fish (haring, makreel, eel, etc)!
  - Welcome to the pea soup (good carbs + proteins)!
Recipes sample : breakfast

- Two low-fat yogurt + banana
  - Good protein (yogurt)
  - Low-GI carbs (banana)

- One slice of bread with honey, egg and one apple
  - Some good fat (egg)
  - Protein (egg)
  - Low-GI carbs (apple + honey + whole grain bread)
Recipe sample: lunch

• Pasta + fruit
  – 60g whole grain pasta + 100g tuna + tomate sauce
  – One apple

• Salad + yogurt
  – Salad with chicken or tuna and whole-grain bread
  – Yogourt with fruits
Recipe sample: dinner

• Omelet and salad
  – Two-eggs omelet with mushroom: pack proteins!
  – Side-salad: get the fiber
  – One fruit: get vitamins, fiber and carbs!

• Home-made quiche with salad
  – High-protein quiche (NO CRUST) with fish and eggs
  – Side salad
  – One fruit
Exercising (part 2)
Exercising is good for you ...

- Make your body working (conditioning)
- Increase BMR
  - Daily Kcal burned
- Avoid muscles loss
... but not too much

- Avoid fatigue
- No too-intense exercise
- Follow a regular routine
Start exercising

• Walk
  – Drop your public transportation subscription
  – Use day-to-day walking

• Bicycle
  – Enjoy Netherlands!

• No intense exercise
  – Lead to injuries, especially when overweighted
  – Imply too much fatigue, counter productive
Just not overdo it!

• Stick to a daily routine
  – Just a little bit … each day

• Long and low-intensity = fat burning
  – Walking @6Km/h = 270Kcal/hour
  – Bicycle @25Km/h = 386Kcal/hour ; @20Km/h = 369 Kcal/hour

• Avoid any fatigue and muscle-stress
  – Lead to injury
  – Need later recovery
Yes, you have a body ...

... and it can be useful ...

- Take the stairs
- Lift things
- Go for shopping by walking!
- Your body must support your daily efforts
Go beyond!

- **Run and jog**
  - High calories burning (around 700/900 Kcal/h)
  - Need special diet

- **Fitness and muscles building**
  - Change your appearance
  - Special diet, more protein, no carbs
Running?

• **Start low**
  - 10/15 minutes per workout
  - Feel your heart rate
  - Increase mileage and time over weeks

• **Do not overdo!**
  - Potential injuries
  - Would need recovery
Muscles building?

- **Target efficiency!**
  - No need for long workout
  - Destroy muscles by lifting weight ...

- **Take a rest!**
  - … muscles are built during rest!
  - Need protein and necessary nutriment
Rest
(part 3)
Under-estimated

• **Workout and activity break muscles**
  - Protein provide nutrient to rebuild
  - Processed when in rest

• **Recover your body & mind**
  - Less fatigue
No rest = higher Kcal intake

- **Stay awake requires more energy**
  - Bad nutrition choices are likely made during nights

- **Resting while watching TV = bad idea!**
  - Go for snack (hhhhmmmm ice cream!)
  - More fatigue, less efficient workout
The basics & need to know

• At least 6 hours
  – But mostly up to 8 hours

• Prepare rest time
  – Read & prepare yourself
  – Do not play video games before sleeping

• Go for small afternoon nap
  – Your girlfriend would also love it!
Conclusion
Matter of choice

• Nutrition
  – Avoid carbs, pack proteins!

• Be active, not sportive
  – Use your body as much as possible

• Rest
  – Sleep a lot
Change for Life

• This is not a regime ...
  – You will keep these guidelines for your life
  – Fatty & sweets are just the exception

• … just a way of life!
  – Make the good choices for yourself!
  – Choose alternatives you like!
Resources

• General
  – Greatist: http://greatist.com/

• Exercises

• Nutrition
  – Eat this not that: http://eatthis.menshealth.com/home
  – BMR calculator: http://www.calotor.com/
  – Kcal counter: http://caloriecount.about.com/
Resources

• Fast food
  – http://www.mcdonaldsmenu.info/nutrition/
  – Go on restaurants websites!

• Food assessment
  – Kcal me: http://kcalme.blogspot.nl/

• Map My Run
  – http://www.mapmyrun.com
Questions ?