

# Appky na biohacking

Biohacking meetup Paralelná Polis

11. 2. 2019

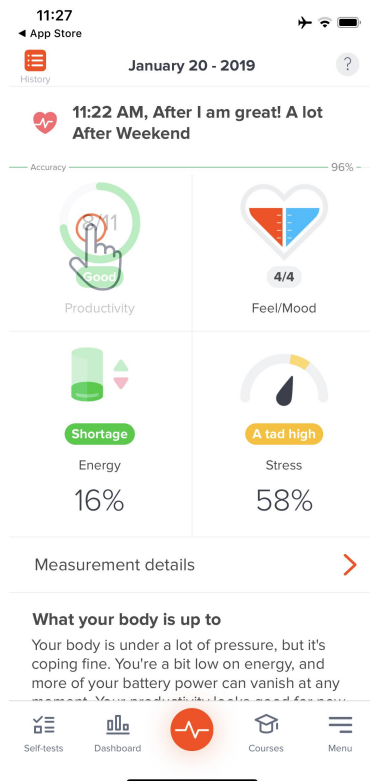
[juraj@bednar.io](mailto:juraj@bednar.io)

HRV a srdce

# Welltory

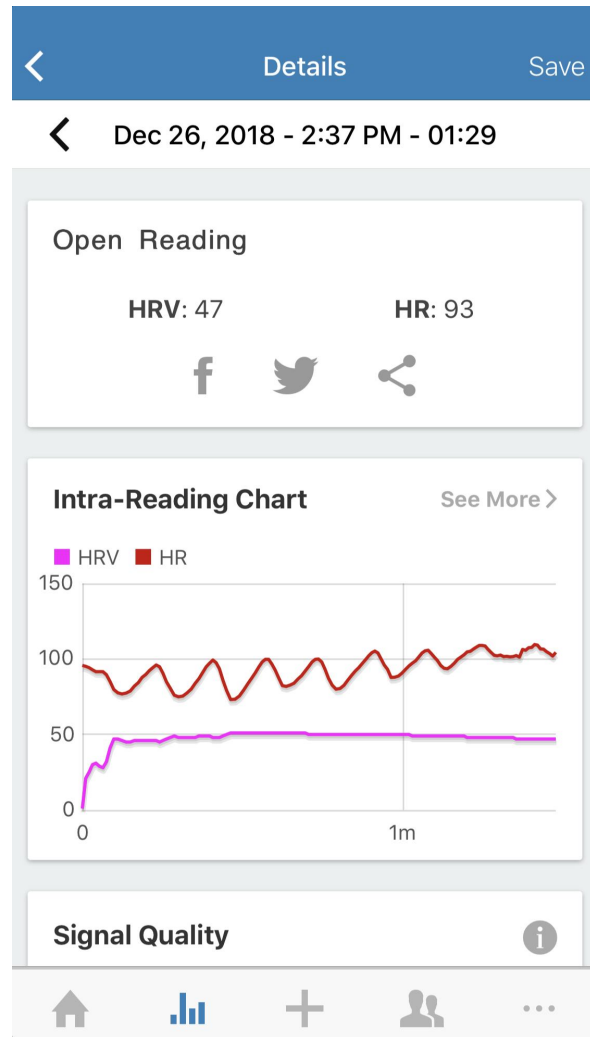
Existuje free verzia

Meria HRV a iné parametre srdca pomocou kamery alebo beltu

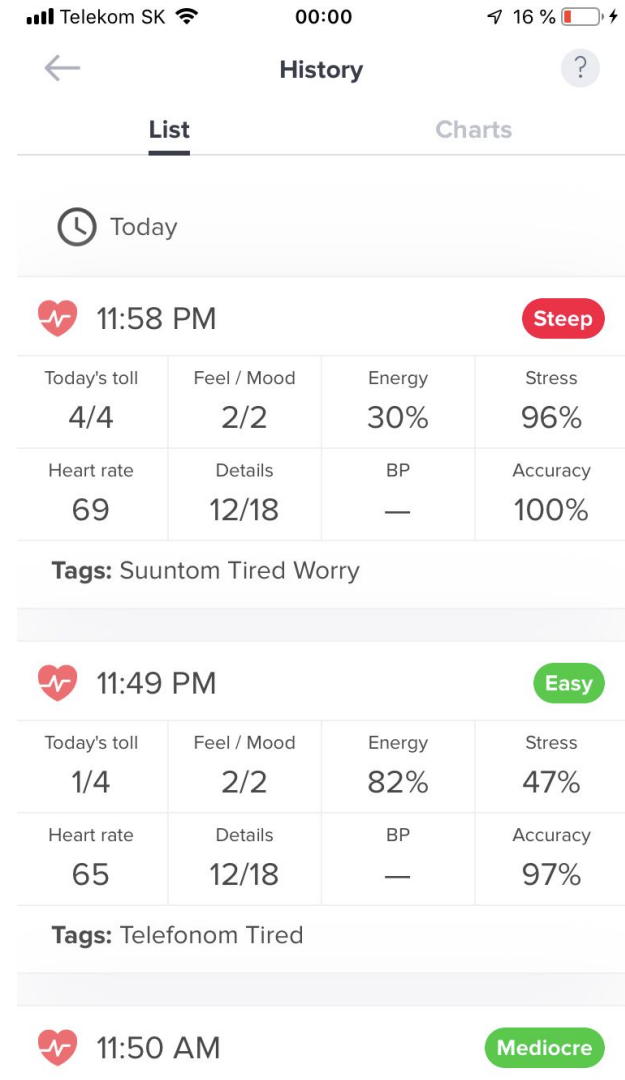


# EliteHRV

Používa senzor (ja mám Suunto)



# Senzor vs. kamera presnost'



# Inner Balance sensor

HRV, HRV coherence

Na ucho

Biofeedback cvičenia

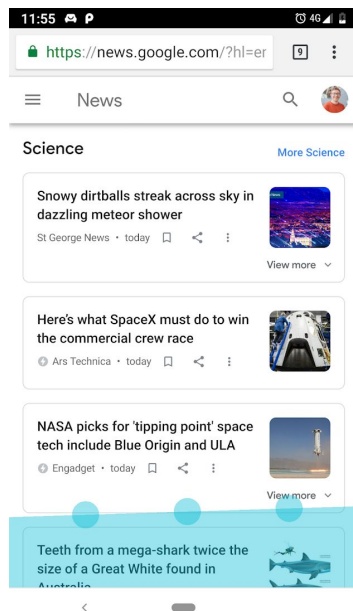
\$159



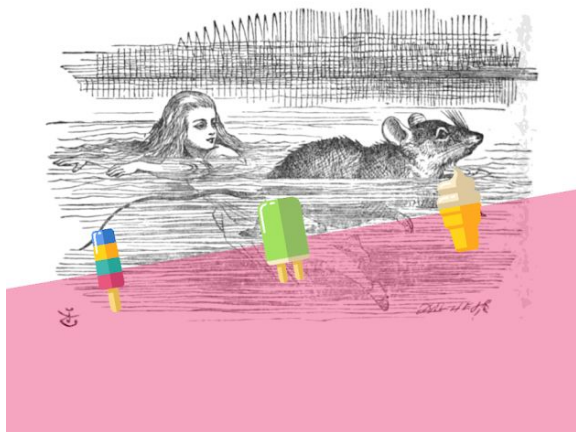
Cestovanie

# KineStop

- Iba Android
- Umožňuje púšťať videá, browsiť alebo čítať ebooky s nakresleným umelým horizontom, ktorý reaguje na pohyb cez gyroskop
  - => nebude vám zle počas jazdy v aute



about in the pool, "and she sits purring so nicely by the fire, licking her paws and washing her face—and she is such a nice soft thing to nurse—and she's such a capital one for catching mice—oh, I beg your pardon!" cried Alice again, for this time the Mouse was bristling all over, and she felt certain it must be really offended. "We wo'n't talk about her any more, if you'd rather not."





Tréning mozgu

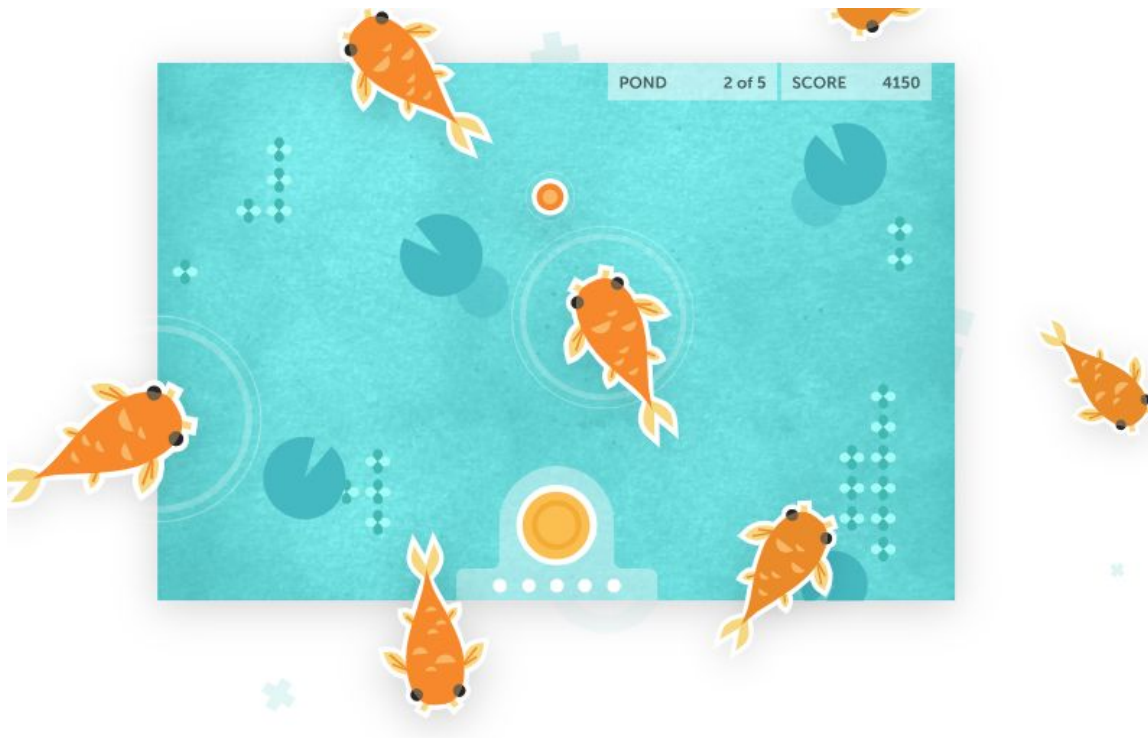
# Owlle (Android) BrainWorkshop (počítač)

Dual-N-Back training



# Lumosity

- Kontroverzná appka - učíte sa hrať hry alebo sú tieto schopnosti prenositeľné?
- Free trial, ale platená

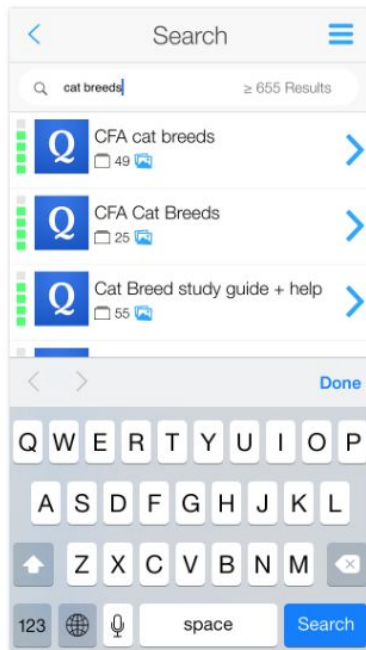


# Anki - hackovanie pamäte

- Buď si vytvoríte alebo použijete existujúcu sadu kartičiek
- Používa princíp učenia pomocou “spaced repetition”

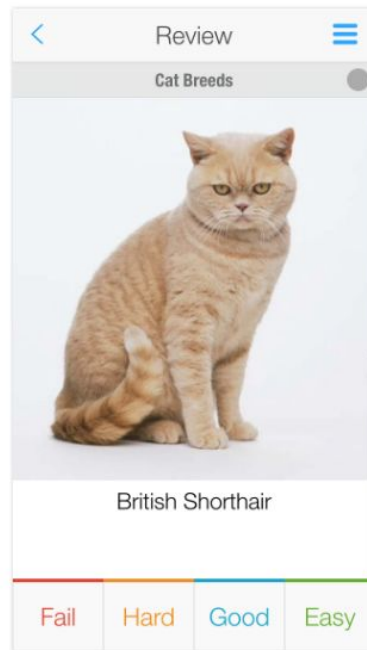
## 1. Get material.

Download from a selection of 80+ million pre-made flashcards, or create your own.



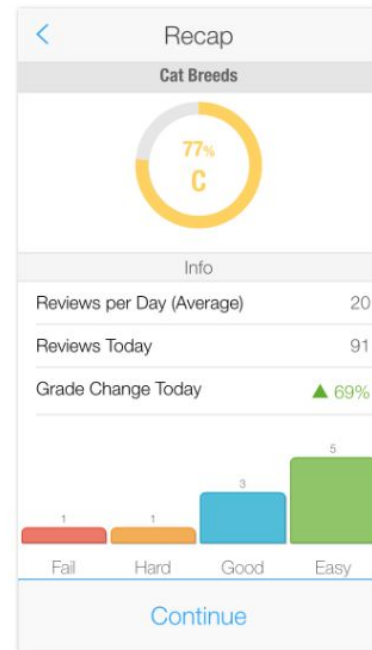
## 2. Study.

AnkiApp tests your knowledge in quick sessions—1 minute or less.



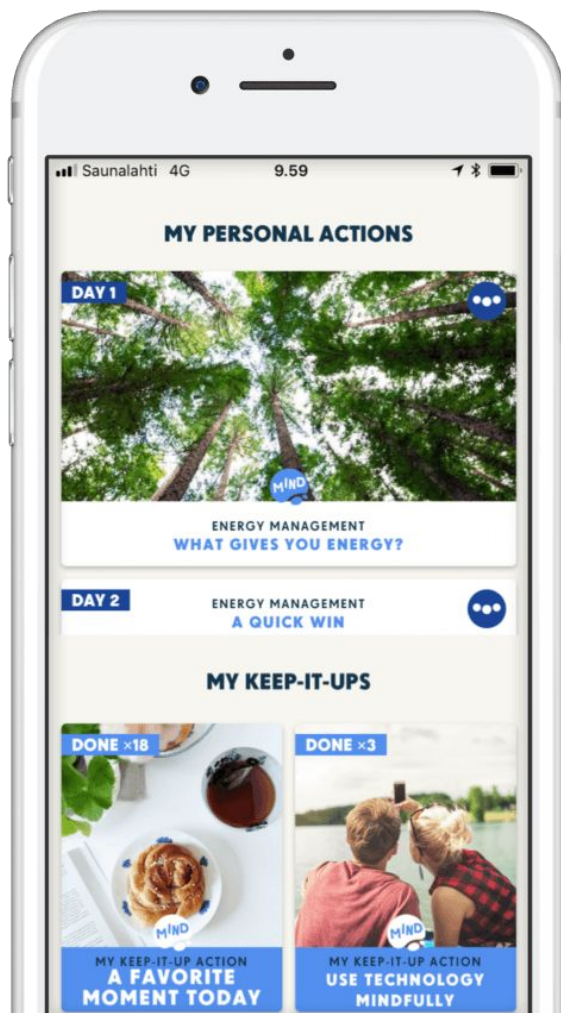
## 3. See progress.

After each session, AnkiApp displays your progress, giving you a “sense of speed”.



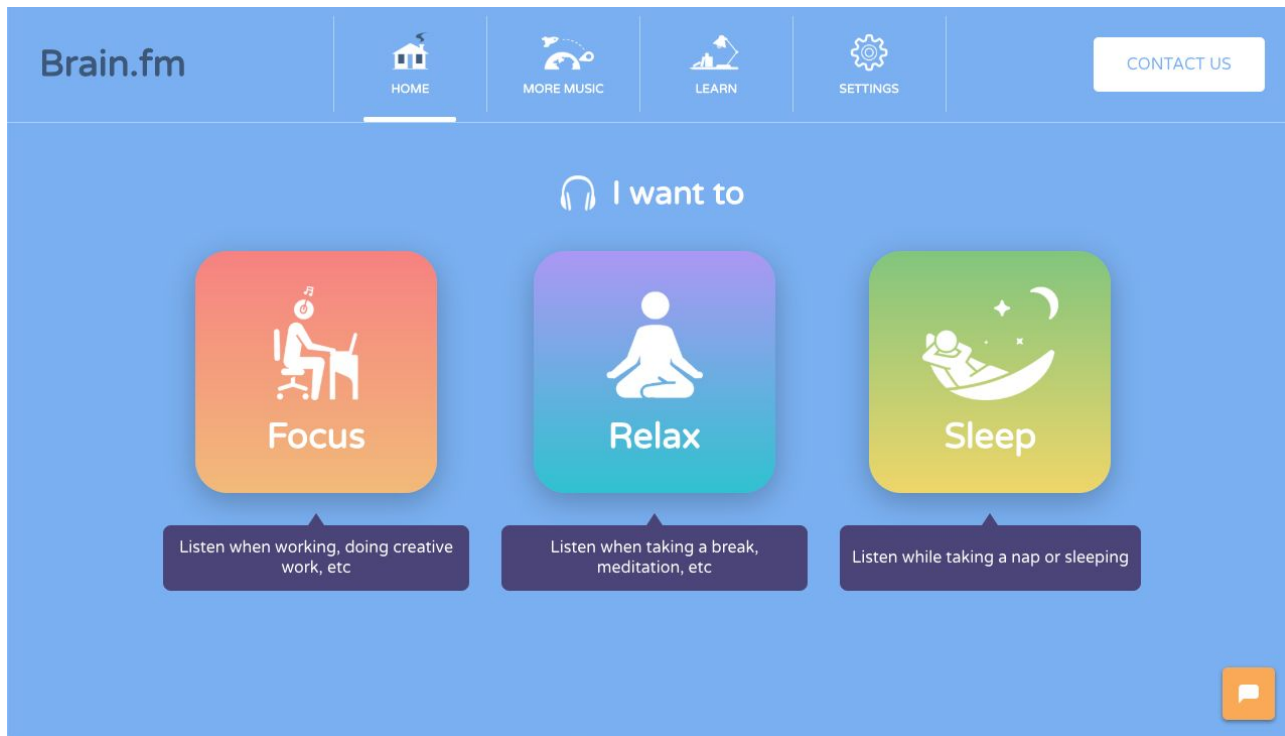
# You-App Návyky

- Ako sa naučiť návyk?
- Cool motivačná appka
- iOS, Android, Freemium

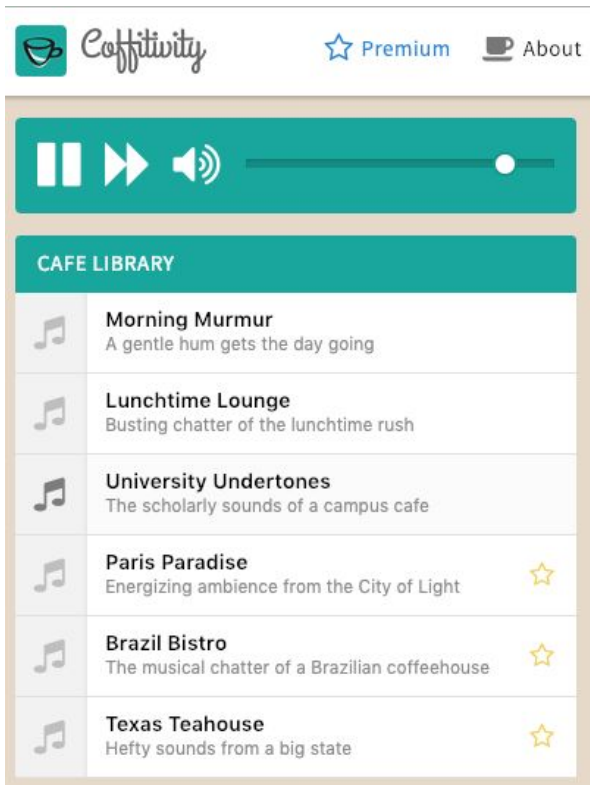


Mozog, focus a hudba

# Brain.fm



# Cofftivity



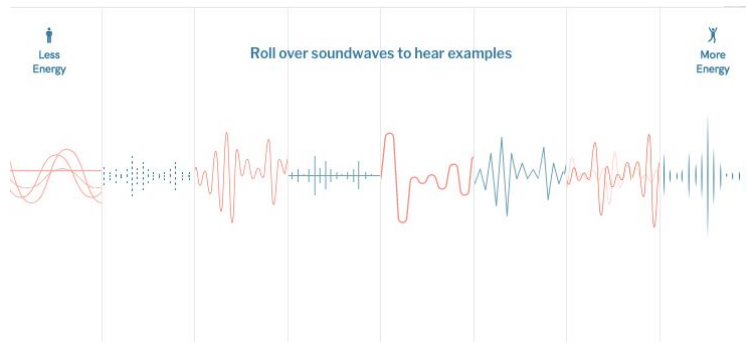
Free verzia

Webová appka

Simuluje zvuky kaviarne - kvôli vyrušeniu



# Focus at will



## Creativity on demand - hit your deadlines with ease!

Unique, scientifically created focus music to boost your creative juices

2 Week Free Trial. Only \$9.95 per month. Cancel anytime.

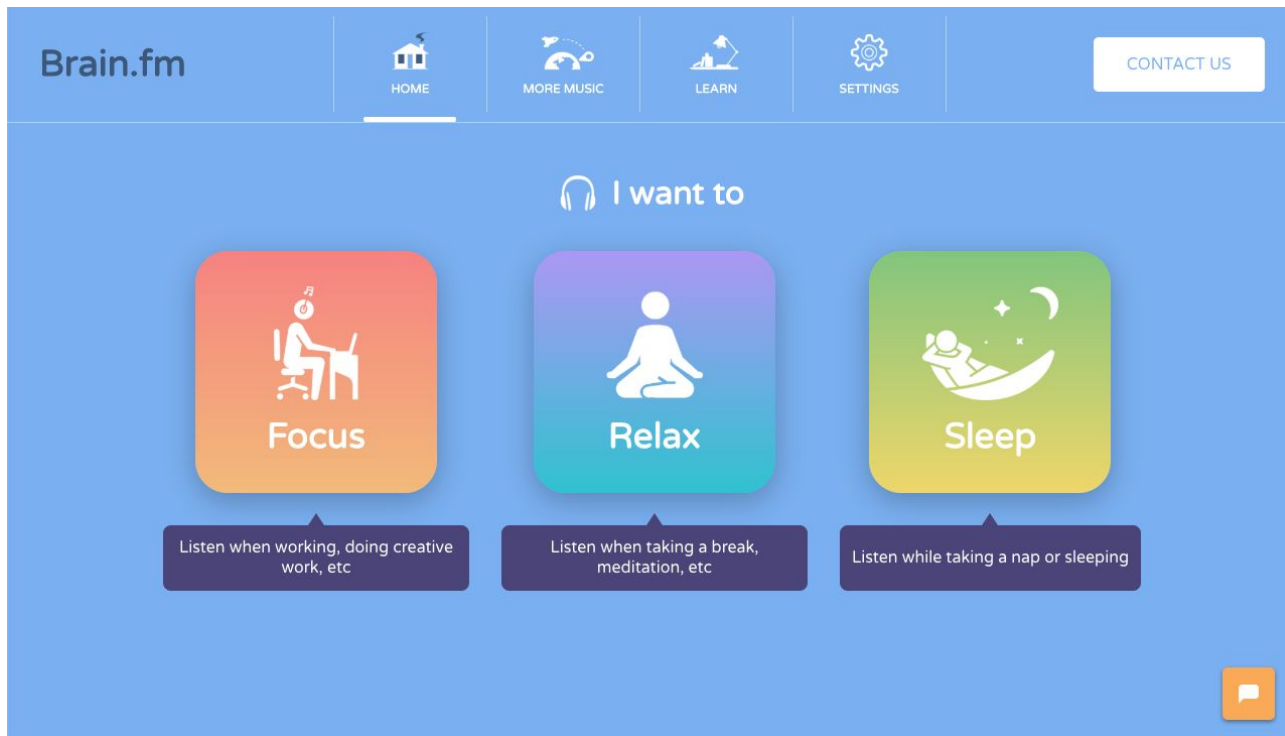
Try Now

Platená appka

Hudba na sústredenie

Meditácia

# Brain.fm



# Muse

Neurofeedback  
headband  
€219-€269

Meditácia s  
okamžitým  
feedbackom



# Headspace

Vedené meditácie

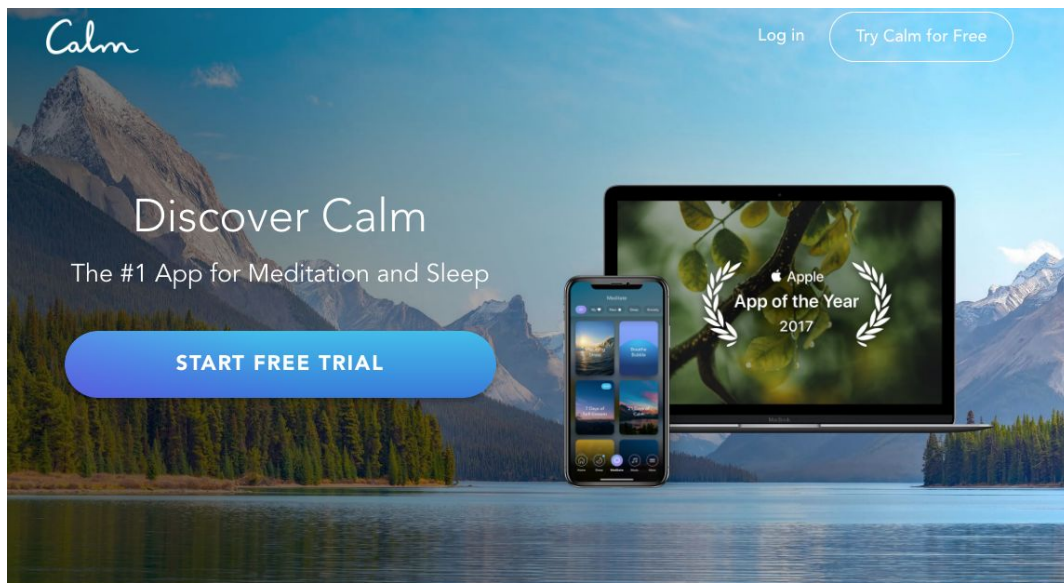
## Learn to meditate and live mindfully

- Hundreds of themed sessions on everything from stress and sleep to focus and anxiety.
- Bite-sized guided meditations for busy schedules
- SOS exercises in case of sudden meltdowns



# Calm

Alternatíva k headspace - používa  
niekto?



## Meet Calm



### Meditate

Learn the life-changing skill  
of meditation



### Sleep

Get more restful sleep and  
wake up feeling refreshed



### Body

Video lessons on mindful  
movement and gentle  
stretching



### Music

Exclusive music to help you  
focus, relax, and sleep

# Konkrétne vedené meditácie

- Jon Kabat-Zinn - autor Mindfulness Based Stress Reduction techniky
- Tara Brach - veľa zaujímavých meditácií
- Vishen Lakhiani - 6-phase meditation
- Sam Harris - waking up meditácia (!) - má aj meditačnú app
- Joe Dispenza - morning and evening meditations
- Nathaniel Branden - relaxing meditation (uvoľňujúca/zaspávajúca)
- Wheel of awareness
- Dýchacia app: Pranabreath (Android)

# Krvné testy



# Wellnessfx.com

## Vitamins & Minerals

Vitamins and minerals are substances obtained from food and supplements needed for normal growth and body processes. Deficiencies in certain vitamins and minerals can interfere with normal body function.

### Vitamins

Vitamins are organic substances required for normal health and function. For example, vitamin B12 is essential for cellular development, including the development of red and white blood cells. Deficiency in B12 can lead to anemia and immune dysfunction.

|                                                            |  |      |
|------------------------------------------------------------|--|------|
| <b>25-Hydroxy Vitami...</b><br>Precursor to vitamin D      |  | 35.3 |
| <b>Vitamin B12</b><br>Essential nutrient for cells         |  | 85.2 |
| <b>1-25 hydroxy Vitami...</b><br>Total amount of Vitamin D |  | 42.4 |

### Minerals

Minerals are inorganic substances needed for many of your body's processes such as cellular development, carrying oxygen to tissues, and bone growth. Mineral deficiencies result in weak bones, organ malfunction, and poor cellular development, which can cause conditions such as anemia.

|                                                     |  |       |
|-----------------------------------------------------|--|-------|
| <b>Phosphorus</b><br>Electrolyte in cells and bo... |  | 3.9   |
| <b>Magnesium</b><br>Essential mineral               |  | 14.41 |
| <b>Calcium</b><br>Blood and Bone Mineral            |  | 10.2  |

Komplexný tracking krvných testov

Free verzia umožňuje zadať vaše výsledky, appka zarába na tom, že vedia spraviť aj oni krvný test

Občas treba prepočítavať jednotky

# Moja Krv

- Mojakrv.com
- Sestra príde k vám alebo vy prídete do laboratória a dostanete výsledky krvných testov
- Juraj Karpiš

## Odporúčané balíčky

Zvoľte si jeden z nami odporučených balíčkov krvných testov

**ZÁKLADNÝ**

€82,86

Štartovací balik obsahuje základné testy, ktoré môžu pomôcť odhaliť niektoré akútne ochorenia zvýšené riziko chronických ochorení. Minimum, ktoré by mal pravidelne sledovať každý, kto cíti zodpovednosť za svoje zdravie.

**PODROBNOSTI**

**ŠTANDARD**

€122,02

Umožňuje komplexný pohľad na aktuálny zdravotný stav. Testy obsiahnuté v balíku môžu odhaliť zápal, problém s pečťou, obličkami, štítnou žľazou, metabolické poruchy alebo zvýšené riziko srdcovo-cievneho ochorenia.

**PODROBNOSTI**

**PREMIUM**

€197,26

Umožňuje detailnejšiu analýzu vplyvu zmien v strave a fyzickej aktivite. Obsahuje sofistikovanejšie testy v oblastiach s vyšším rizikom vzniku chronických ochorení.

**PODROBNOSTI**

# Metabolizmus

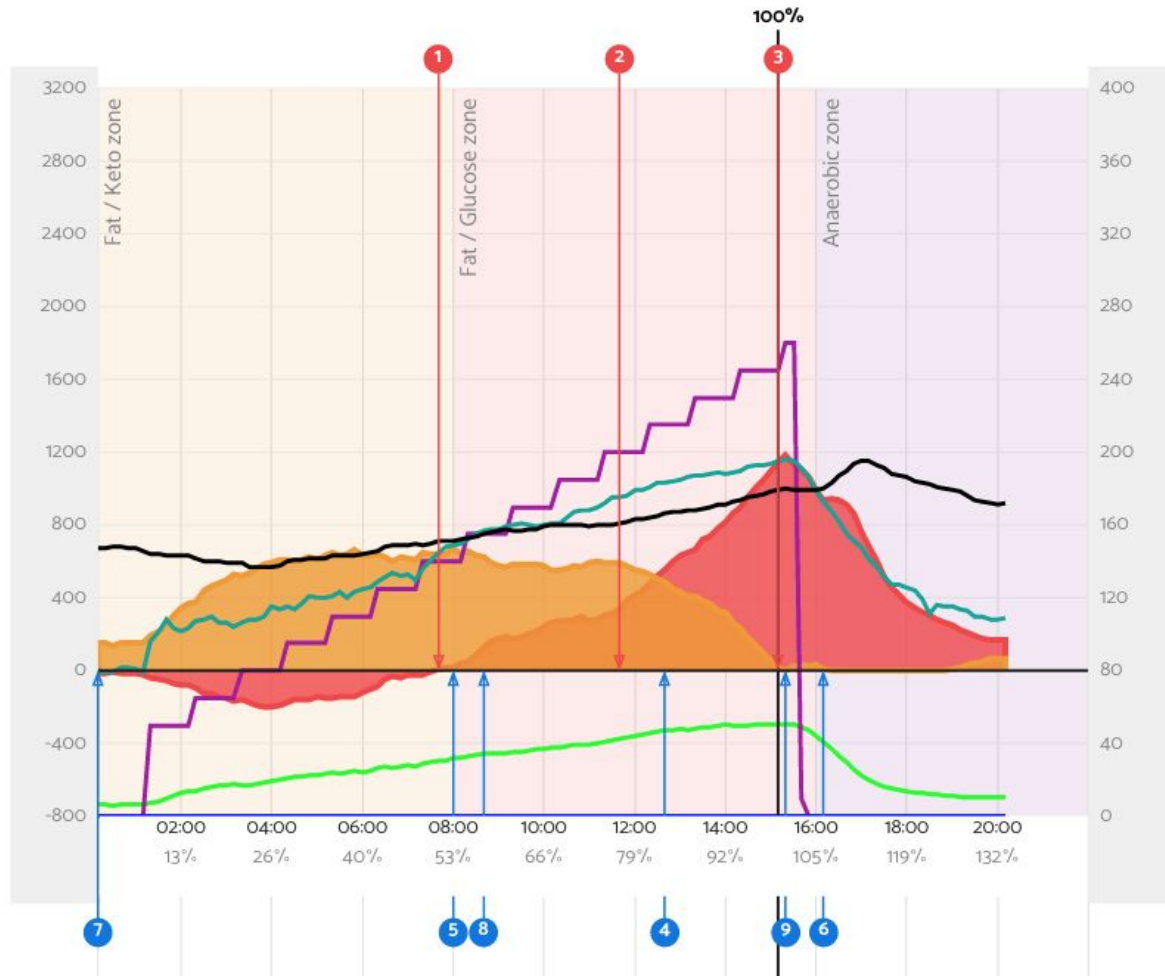
# Metflex: Diagnostika metabolizmu

metflex.me

(Vlado Zlatoš)

Akú máte metabolickú flexibilitu? Pri  
akej záťaži pálite tuky, pri akej cukry?

Stacionárny bicykel alebo bežiaci pás  
+ meranie dychu



DNA testy

# 23andme.com

Cca \$199, treba objednať do USA  
alebo UK

Dáta sú exportovateľné a použiteľné v  
službách ako Promethease alebo  
Genetic Genie

## Health Predisposition



|                                          |                                                |   |
|------------------------------------------|------------------------------------------------|---|
| Age-Related Macular Degeneration         | Variant detected, not likely at increased risk | > |
| Hereditary Hemochromatosis (HFE-Related) | Variant detected, not likely at increased risk | > |
| Alpha-1 Antitrypsin Deficiency           | Variants not detected                          | > |
| BRCA1/BRCA2 (Selected Variants)          | Variants not detected                          | > |
| Celiac Disease                           | Variants not detected                          | > |
| G6PD Deficiency                          | Variant not detected                           | > |
| Hereditary Thrombophilia                 | Variants not detected                          | > |
| Late-Onset Alzheimer's Disease           | Variant not detected                           | > |
| Parkinson's Disease                      | Variants not detected                          | > |

## Wellness



|                          |                                    |   |
|--------------------------|------------------------------------|---|
| Alcohol Flush Reaction   | Unlikely to flush                  | > |
| Caffeine Consumption     | Likely to consume more             | > |
| Deep Sleep               | Less likely to be a deep sleeper   | > |
| Genetic Weight           | Predisposed to weigh about average | > |
| Lactose Intolerance      | Likely tolerant                    | > |
| Muscle Composition       | Common in elite power athletes     | > |
| Saturated Fat and Weight | Likely similar weight              | > |
| Sleep Movement           | Likely more than average movement  | > |

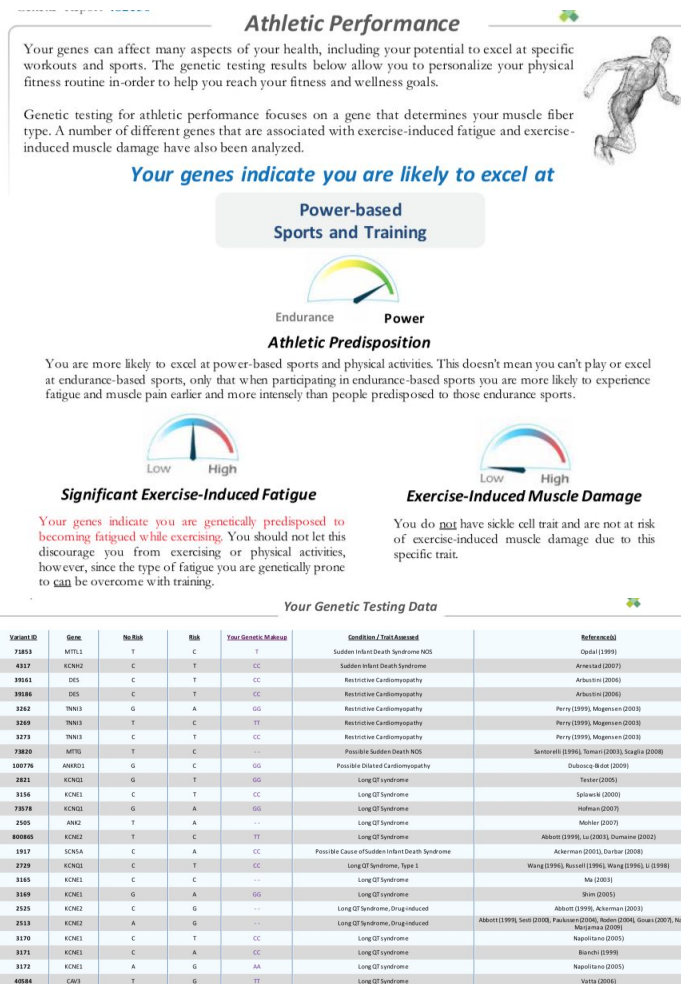
# Dante labs

€200-€850

Talianška firma

Nemá až takú peknú appku, ale  
podrobný report, ktorý sa ale  
neupdatuje (PDF)

Taktiež stiahnuteľné dáta



# Testy mikrobiómu



# Ubiome

Mikrobióm: Črevá, koža, nos, ústa, pohlavné orgány

Vysvetlenia sa zlepšujú, ale veda v oblasti mikrobiómu je stále dosť v začiatkoch

\$89 - \$399

## Overview

Healthy Weight

Unique Bacteria

## Gluten Sensitivity

Inflammation

Lactose Intolerance

Artificial Sweeteners

Probiotic Bacteria

Probiotic Foods

Microbial Diversity

Alcohol

Alcohol Metabolism

Sleep Quality

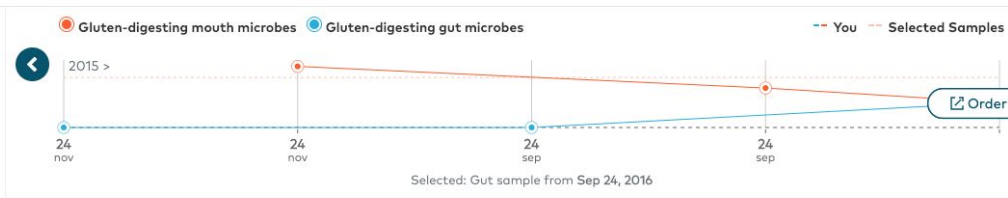
Vitamins

Metabolism

Gut Barrier

PLUS

Advanced ➔

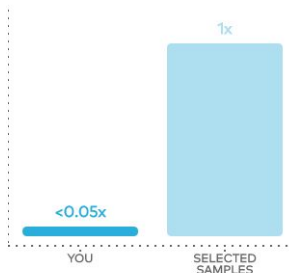


## Gluten Sensitivity

### HOW YOU COMPARE

#### GLUTEN-DIGESTING GUT MICROBES

When you eat foods containing gluten, microbes in your mouth get a jumpstart on breaking down these proteins. Streptococcus bacteria are among these microbes, and we've compared their abundance in your sample with our Selected Samples.



### TAKE ACTION

Want to increase the abundance of gluten-digesting microbes in your gut?



#### Foods

##### ▼ Kochujang

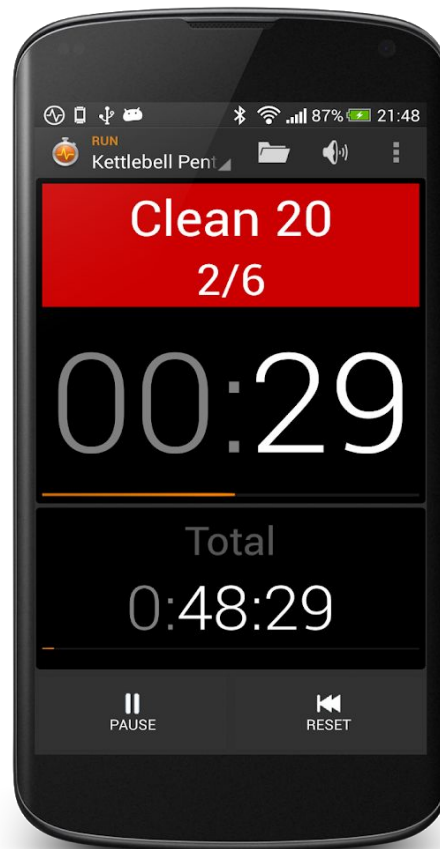
Kochujang, a traditional Korean fermented, soybean-based red pepper paste, is rich in *Bacillus licheniformis*.<sup>[4]</sup>

Goal: Boost *Bacillus licheniformis* bacteria.

Workout

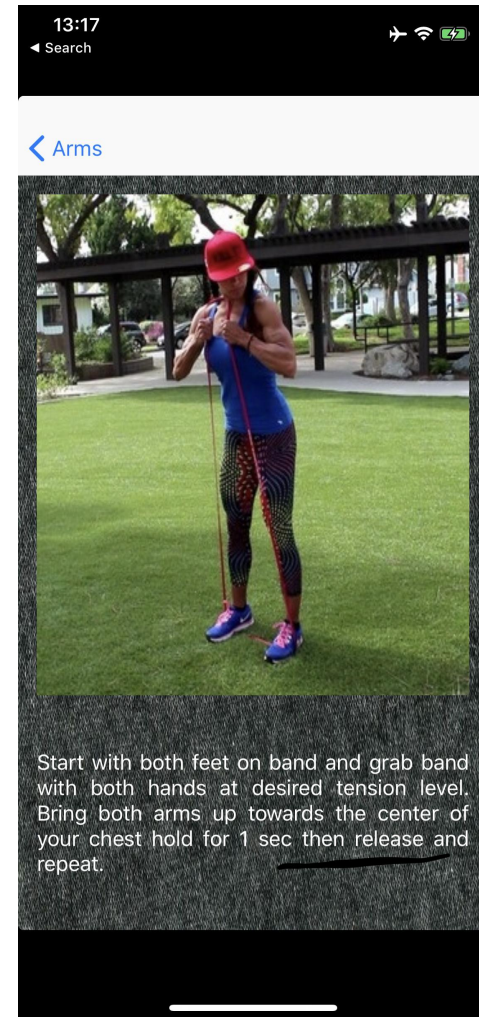
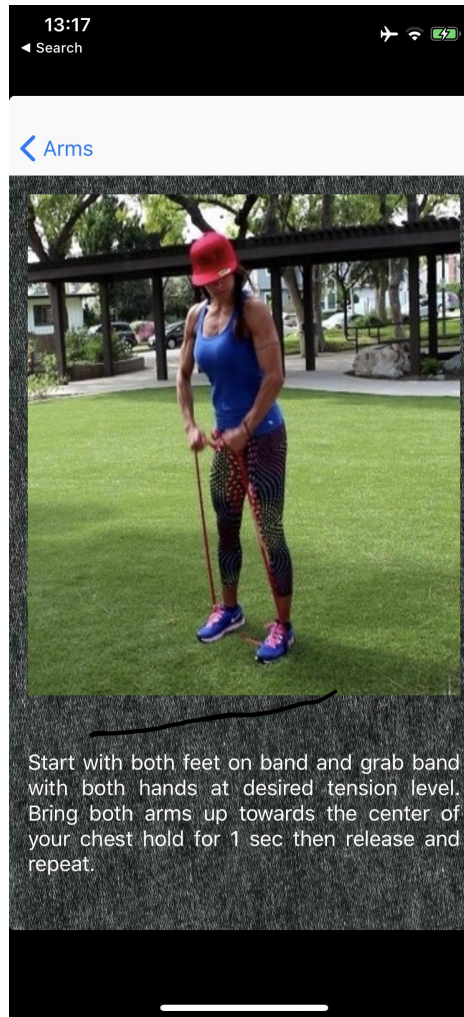
# HIIT / tabata timers

- Impetus Interval Timer (Android)
  - Freemium
- HIIT & Tabata (iOS)
  - Freemium



# Resistance bands

Resistance bands app

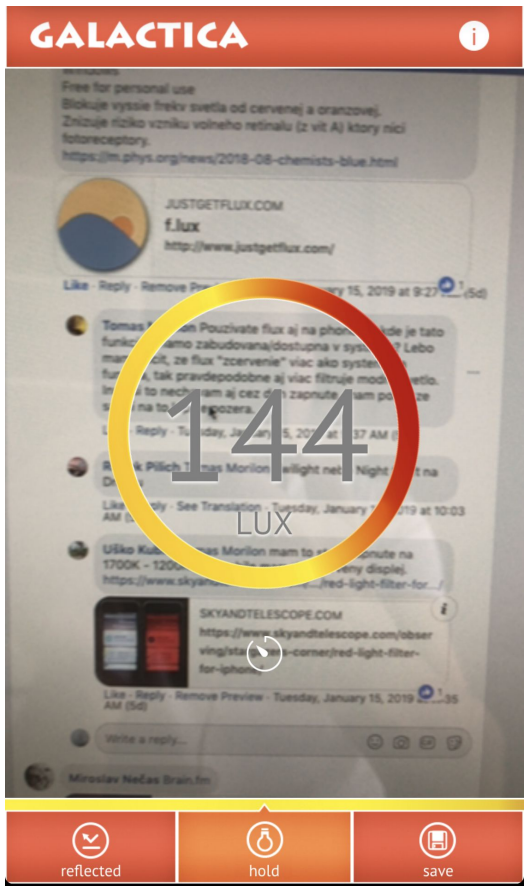


Spánok

# Svetlo

- Flux (macOS, Windows)
- Twilight (Android)
- Night mode (macOS, iOS) - built in feature

Luxmeter ----->

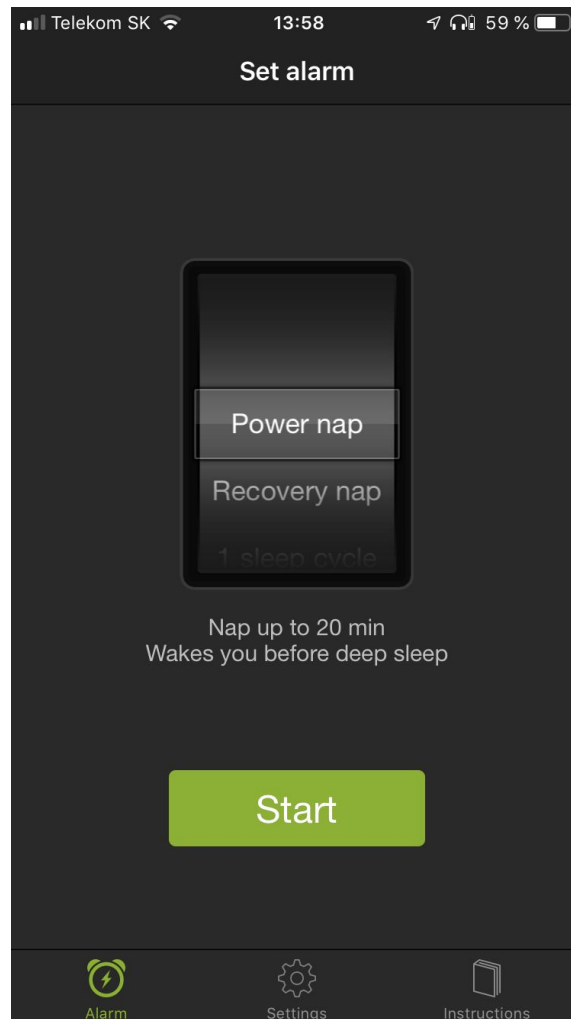
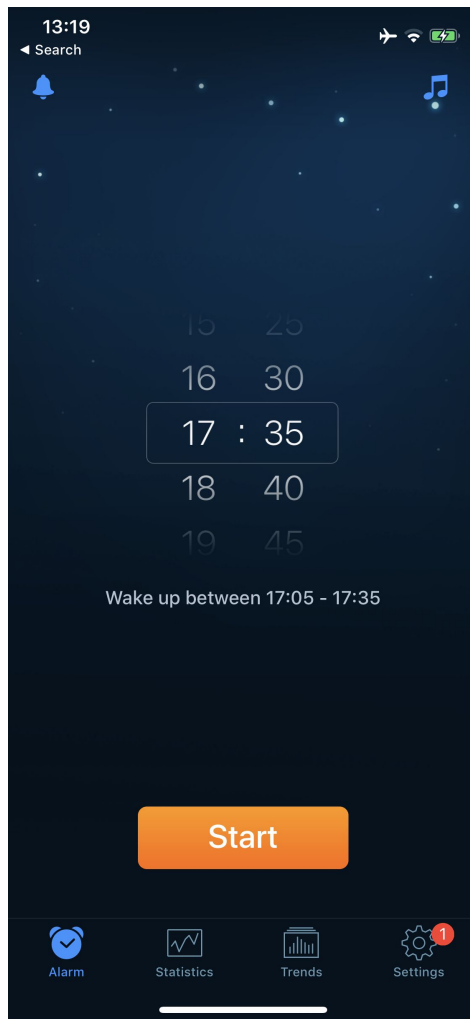


# Sleep as Android

## Sleepcycle Alarm Clock

## Sleepcycle Power Nap

Položíte mobil na postel', trackuje  
pohyb a z toho fázy spánku



# Oura prsteň

- Meria spánok, čiastočne (ale nie stále) HRV a pár ďalších parametrov. Najužitočnejšie je to na vyhodnotenie spánku
- Treba si požičať Sizing kit
- Alternatíva: Apple Watch, iné hodinky



Balance

Price varies from  
314.00 € - 1 049.00 €

CHOOSE BALANCE



Heritage

Price varies from  
314.00 € - 419.00 €

CHOOSE HERITAGE



# Xiaomi Mi Band 2 alebo iné náramky

- Väčšinou meria kroky, fázy spánku a tepovú frekvenciu
- Nebude tak kvalitný ako Oura ring, na druhej strane cena je cca 23€
- Počet krokov dokáže merať aj telefón (napríklad Moves app alebo Health aplikácie v telefóne)



# Assessments - ako sa dostat' do flow?

- Lifebook assessment (free): [life.mindvalley.com](https://life.mindvalley.com)
- VIA Character Strengths (free): [viacharacter.org](https://viacharacter.org)
- Biohacking mindset scorecard: <https://paralelnapolis.sk/uvod-do-biohackingu/>  
alebo na bare

# Podcasty

- Moderný pračlovek (Marián Černý)
- Zlatoš podcast
- Ako byť fit
- Juraj Bednár: Reči o vesmíre, živote a vôbec
- Tim Ferriss Show
- Bulletproof Radio (Dave Asprey)
- Ben Greenfield Fitness
- The Mastering Happiness Podcast Dr. Joel Wade - psychológia a biofeedback
- Smart Drug Smarts
- Peter Attia Drive
- Biohacker's podcast
- Meditačné
  - Tara Brach
  - Hurry Slowly

# Bonus: Podcast appky

- Pocket Casts (Casts)
  - Zrýchľovanie podcastov
  - Trim silence
  - Dobré playlisty, pamätá si kde som skončil vo viacerých podcastoch naraz
    - Up next

# Bonus: Coinomi

- Čo má Coinomi (peňaženka na kryptomeny) s biohackingom?
- Môžete si vďaka nej kúpiť lístok / rezerváciu na ďalší biohacking meetup
- Môžete si kupovať biohackerské veci, nabíte si ju vzadu v ATM a máte oveľa viac možností!
- S heslom “BIOHACKINGMEETUP” máte do konca februára zľavu na biohackerské produkty!
- Ďalší Biohacking meetup:

**18.3.2019: Biohacking ako extrém, alebo nový prístup k produktivite v 21.storočí:**

**Biohacking meetup – Dušan Plichta (predpredaj za 3€ dnes na [paralelnapolis.sk/listky/](https://paralelnapolis.sk/listky/) alebo na bare)**

# Bonus: Purse.io

- Kupujte si biohackerské hračky a potraviny z amazon.com a amazon.co.uk lacnejšie za kryptomeny - 15-33% zľava vďaka platbe cez krypto
  - Ak sa chcete lepšie stravovať, nemusí to nutne znamenať drahšie jedlo
  - Be smart, move to crypto! :)
- <http://bit.ly/purse-juraj> <- dodatočný \$5 discount