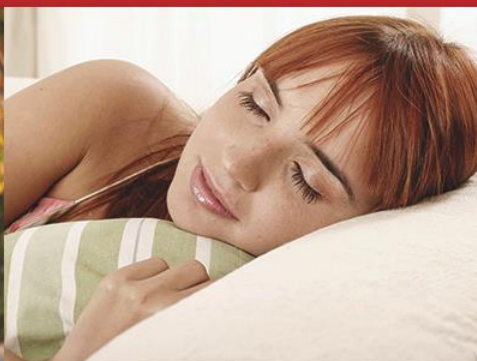




JOHTAVAA SYKETEKNOLOGIAA



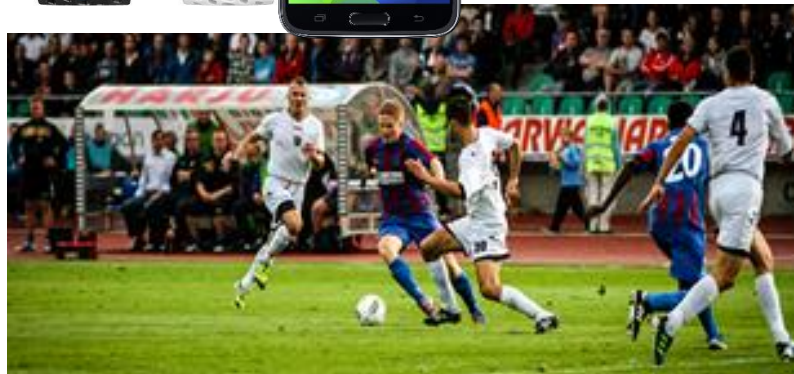
PRODUCTS FOR FITNESS, SPORTS AND WELL-BEING

CONSUMER
PRODUCTS



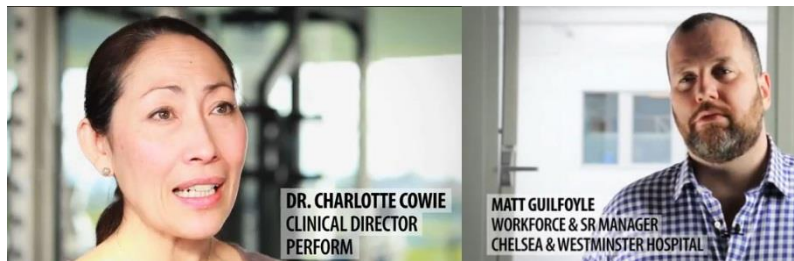
Leading consumer
brands

SPORTS



300+ professional teams

HEALTH &
WELL-BEING



DR. CHARLOTTE COWIE
CLINICAL DIRECTOR
PERFORM

MATT GUILFOYLE
WORKFORCE & SR MANAGER
CHELSEA & WESTMINSTER HOSPITAL

100,000+ individuals
organizations and
well-being professionals

#1 LICENSOR FOR CONSUMER PRODUCTS

- Millions of Firstbeat inside consumer products sold
- Firstbeat is the key partner for successful heart beat based products
- We work closely with our partners for end-to-end user experience
- Firstbeat enables enhanced user experience, better accuracy and quality
- Today 25 consumer products



GARMINTM



SAMSUNG



BOSCH



SUUNTO



FIRSTBEAT HEARTBEAT ANALYTICS IN GARMIN FR620



Features from Firstbeat:

- Fitness level estimation
- Training effect
- Recovery time
- Energy expenditure
- Automated personalization

Number #1 device for runners!



FIRSTBEAT HEARTBEAT ANALYTICS IN SAMSUNG



Gear Fit

Gear 2

Gear 2 Neo

Galaxy S5

Features from Firstbeat:

- Real-time coaching
- Training Effect
- Personalized workout advice



GSMA award: “The best mobile device at MWC”

“Where it differs from a smartwatch is that it offers real-time fitness coaching, personalised advice and recommendations.”

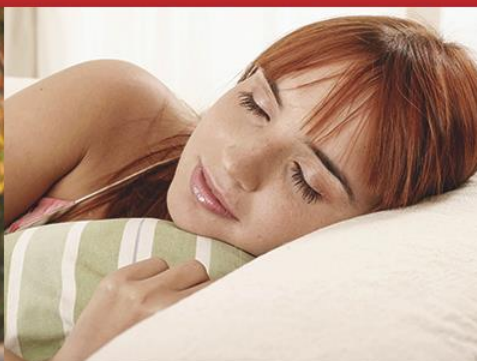


ECG VS. OPTICAL MEASUREMENT





FIRSTBEAT SOLUTIONS IN PROFESSIONAL SPORTS



PRODUCT OVERVIEW

Firstbeat SPORTS is heart beat analysis based system for monitoring the training load and recovery

- Monitor player's **individual training load** in real time
- Detect early signs of **overtraining** and increased risks for **injury**
- **Optimize the performance** of the players and the whole team
- Apply **objective data** in critical training decisions



AT THE HEART OF SPORTS



OVER 300 PROFESSIONAL SPORTS TEAMS AND TRAINING CENTERS TRUST IN FIRSTBEAT

TEAM SPORT

- Buffalo Sabres - Ice Hockey
- Pittsburgh Penguins - Ice Hockey
- JYP - Ice Hockey
- HJK Helsinki - Soccer
- Liverpool FC - Soccer
- Spain National Team - Soccer
- France National Team - Rugby
- Sweden National Team - Handball
- Eskilstuna GUIF - Handball
- Chicago Bulls – Basketball

TRAINING CENTERS AND INSTITUTES

- SWISS Olympic training center Magglingen
- KIHU Research Institute for Olympic Sports
- CAR Sierra Nevada
- St. George's Park
- Stanford University
- University of Madrid
- Bejing Sports University

SOCHI 2014: 25 MEDALS "TO FIRSTBEAT"



WHY TO MEASURE?

*"We are using the Firstbeat SPORTS system with Boca Juniors team to track players' workload and recovery **to help us minimize injury risk** and maximize performance and fitness benefits of our players"*

Boca's Team Doctor **Pablo Ortega Gallo**



...WHY TO MEASURE

Gallo, Pablo Ortega & all. The epidemiology of injuries in a professional soccer team in Argentina. Int. SportMed J. 2006: 7(4): 255-265.

2 year follow-up study on injuries of the Boca Junior players:

- Total 391 injuries
- 9.5/player, on average 9 days off from training/games
- **Total 1442 days OFF**
- 10% of the players were off in each week.

“**Injuries produce considerable economic and performance losses** for a soccer team and probably **long lasting consequences for the health and sport career** of a soccer player. “

ECONOMIC PERSPECTIVE:

Players in Premier league earns

30 000£ / week

Employees in UK earns:

26 500£ / year



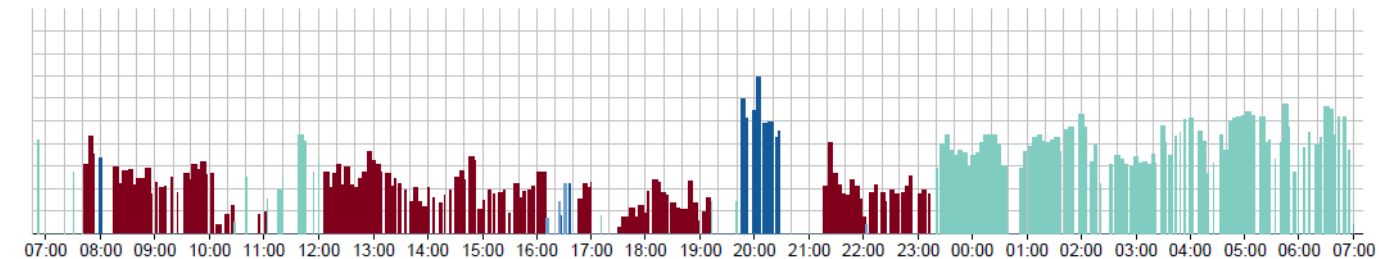
STRESS AND RECOVERY ASSESSMENT

- Professional athletes train up to 25 hours a week
- **How the rest 143 hours/week are affecting on body?**

Jetlag Travelling Massage Nutrition Ice-baths Media
Cryotherapy Daily routines Naps Alcohol work Pressures

 **Discover the cause-effect relationships for performance and recovery**

Stress and recovery chart



Journal markers

	Duration	Proportion
■ Stress reactions	9h 46min	(40%)
■ Recovery	7h 57min	(33%)
■ Physical activity	53 min	(4%)
■ Light physical activity	24 min	(2%)
■ Other events	5h 25min	(22%)

