STRESS AND RECOVERY OVERVIEW

Eddie Example

Age (yrs)	**35**	Resting HR (beats/min)	**39**
Height (cm)	**183**	Max HR (beats/min)	**188**
Weight (kg)	**93**	Body Mass Index (BMI)	**27.8**
Activity class	**5.0**		

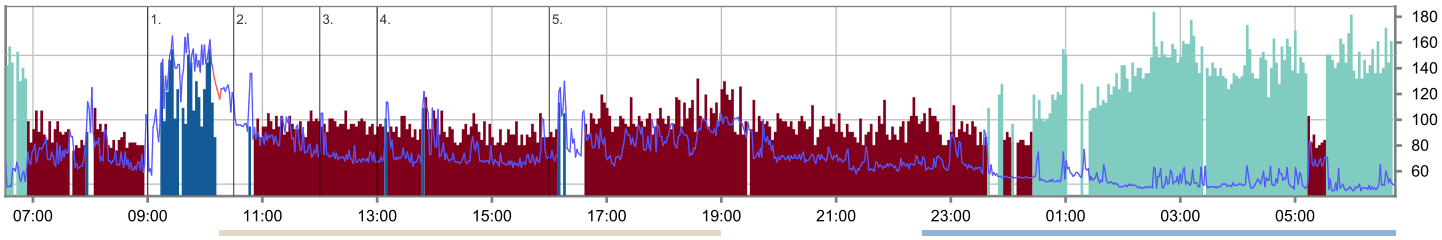
Measurement information:

Day 1	Day 2	Day 3
Start time:	Start time:	Start time:
04.05.2012 06:31:30	**05.05.2012 07:00:01**	**06.05.2012 08:45:00**
Duration: **24h 13min**	Duration: **25h 45min**	Duration: **23h 8min**
HR: (low/avg/high)	HR: (low/avg/high)	HR: (low/avg/high)
41 / 68 / 166	**39 / 56 / 135**	**43 / 70 / 167**

Stress and Recovery Charts

Day 1 - Friday 04.05.2012

Heart rate corrections **2%**



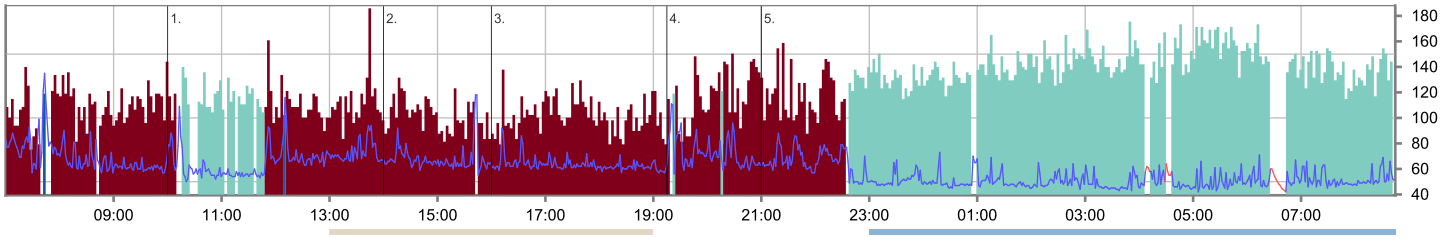
Journal Markers

1. Hard exercise
2. Computer
3. Eating
4. Meeting
5. Light exercise

Result	Recommendation
14h 46min (61%)	Less than 55%
5h 53min (24%)	More than 30%
60min (4%)	
2h 35min (11%)	

Day 2 - Saturday 05.05.2012

Heart rate corrections **3%**



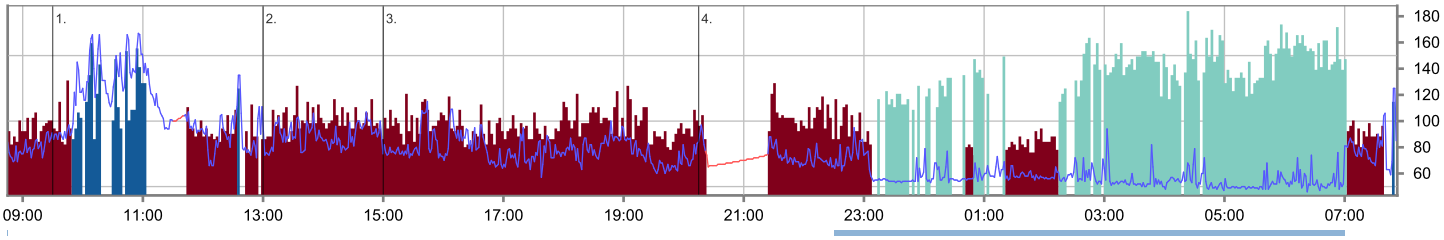
Journal Markers

1. Reading
2. Eating
3. Computer
4. Light exercise
5. Housework

Result	Recommendation
13h 23min (52%)	Less than 55%
10h 32min (41%)	More than 30%
5min (0%)	
1h 44min (7%)	

Day 3 - Sunday 06.05.2012

Heart rate corrections **6%**



Journal Markers

1. Hard exercise
2. Eating
3. Housework
4. Shower/bath

Result	Recommendation
12h 46min (55%)	Less than 55%
5h 23min (23%)	More than 30%
1h 4min (5%)	
3h 56min (17%)	

Work period | Sleep period | Heart rate | Corrected heart rate

Stress reactions | Recovery | Physical activity | Other physiological states

STRESS AND RECOVERY OVERVIEW

Additional information:

Day 1
Alcohol: **0 units**
Self-reported sleep:
Medication
-

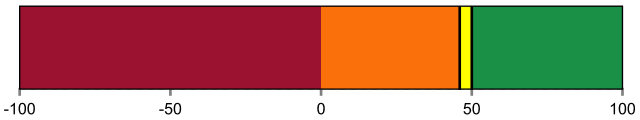
Day 2
Alcohol: **0 units**
Self-reported sleep:
Medication
-

Day 3
Alcohol: **0 units**
Self-reported sleep:
Medication
-

Overview of sleep

Day 1 - Friday 04.05.2012

The balance of resources during sleep.



The resource index for the measurement is **48**.

The index is calculated based on the duration of stress and recovery reactions.

Quality of recovery during sleep.

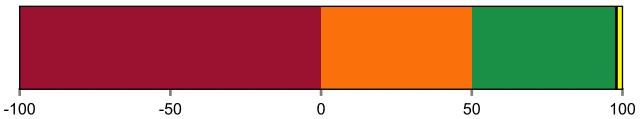
0 - 19	20 - 42	43 or more

Your sleep quality index based on heart rate variability (RMSSD) is **56 ms**. The average value for your age is 43 ms.

Your sleep time was **8h 15min**. It is recommended to sleep 7 hrs or more per night.

Day 2 - Saturday 05.05.2012

The balance of resources during sleep.



The resource index for the measurement is **100**.

The index is calculated based on the duration of stress and recovery reactions.

Quality of recovery during sleep.

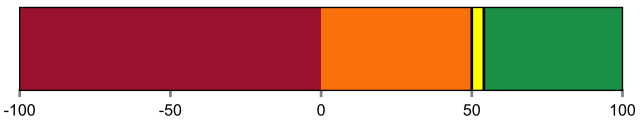
0 - 19	20 - 42	43 or more

Your sleep quality index based on heart rate variability (RMSSD) is **78 ms**. The average value for your age is 43 ms.

Your sleep time was **9h 45min**. It is recommended to sleep 7 hrs or more per night.

Day 3 - Sunday 06.05.2012

The balance of resources during sleep.



The resource index for the measurement is **52**.

The index is calculated based on the duration of stress and recovery reactions.

Quality of recovery during sleep.

0 - 19	20 - 42	43 or more

Your sleep quality index based on heart rate variability (RMSSD) is **54 ms**. The average value for your age is 43 ms.

Your sleep time was **8h 30min**. It is recommended to sleep 7 hrs or more per night.

Weak recovery | Moderate recovery | Good recovery

HEALTH PROMOTING PHYSICAL ACTIVITY OVERVIEW

Eddie Example

Age (yrs)	**35**	Resting HR (beats/min)	**39**
Height (cm)	**183**	Max HR (beats/min)	**188**
Weight (kg)	**93**	Body Mass Index (BMI)	**27.8**
Activity class	**5.0**		

Measurement information:

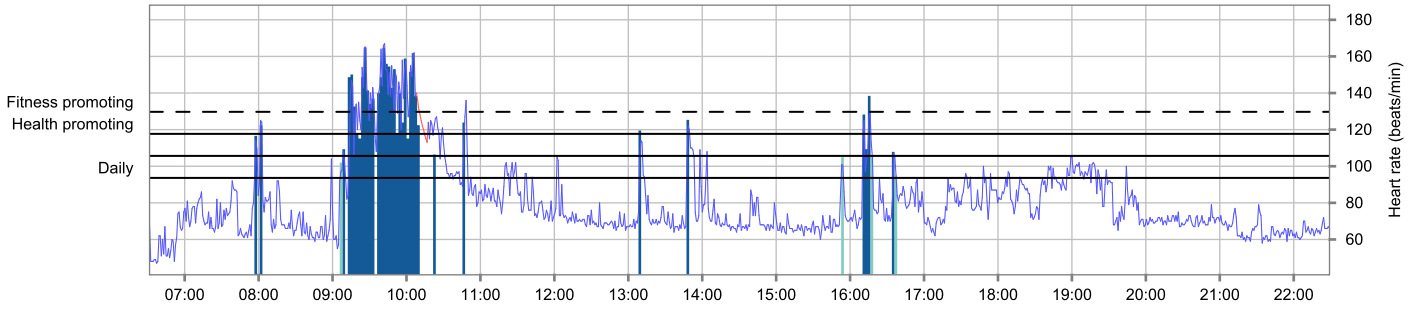
Day 1
Start time:
04.05.2012 06:31:30
Duration: **15h 59min**
HR: (low/avg/high)
41 / 68 / 166

Day 2
Start time:
05.05.2012 07:00:01
Duration: **16h 0min**
HR: (low/avg/high)
39 / 56 / 135

Day 3
Start time:
06.05.2012 08:45:00
Duration: **23h 8min**
HR: (low/avg/high)
43 / 70 / 167

Health Promoting Physical Activity Charts

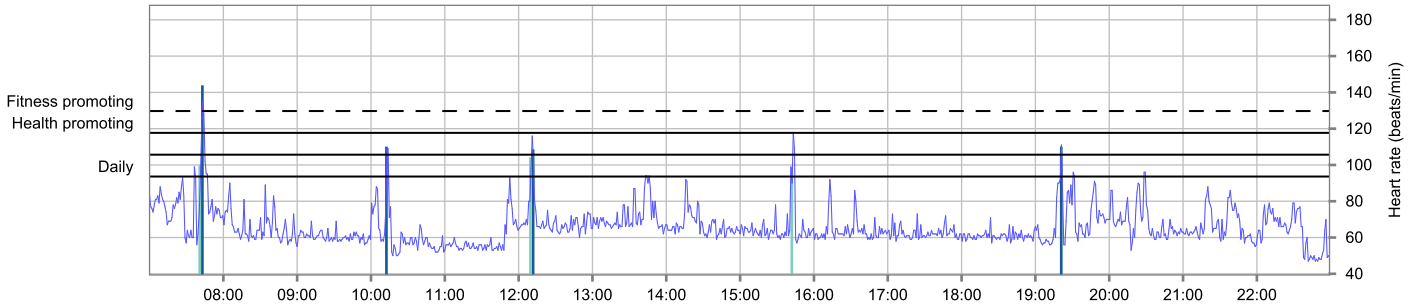
Day 1 - Friday 04.05.2012



Daily physical activity **12min**

Physical activity **50min**, of which health promoting physical activity **31min** and fitness promoting physical activity **0min**.

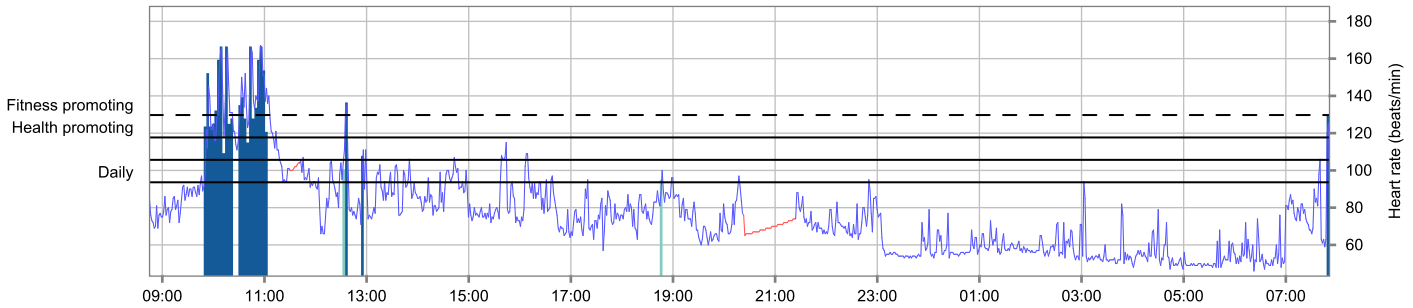
Day 2 - Saturday 05.05.2012



Daily physical activity **4min**

Physical activity **3min**, of which health promoting physical activity **0min** and fitness promoting physical activity **0min**.

Day 3 - Sunday 06.05.2012



Daily physical activity **4min**

Physical activity **57min**, of which health promoting physical activity **31min** and fitness promoting physical activity **7min**.

Heart rate — Corrected heart rate

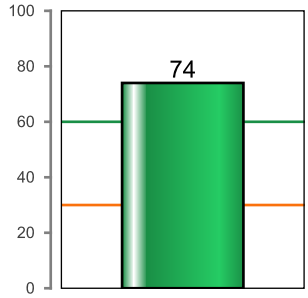
HEALTH PROMOTING PHYSICAL ACTIVITY OVERVIEW

Physical Activity Index
In order to achieve a GOOD score, you should perform approximately 30 mins of health promoting (moderate intensity) physical activity. Physical activity performed at light to moderate intensity or < 30 mins will result in a MODERATE to POOR score.

Energy expenditure during physical activity
The energy expenditure value indicates the consumed energy (kcal) during physical activity above basal energy expenditure. The recommended levels shown in the figure are determined based on body weight.

Health Effects and Energy Expenditure

Day 1 - Friday 04.05.2012

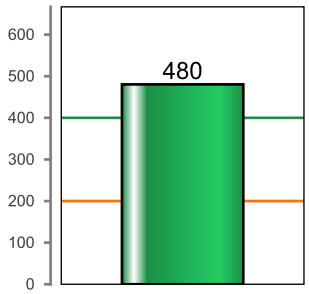


Physical Activity Index

GOOD

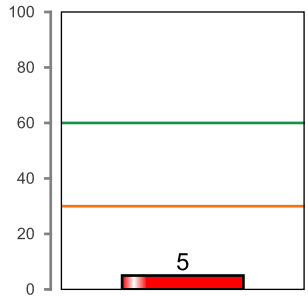
MODERATE

POOR



Energy expenditure during physical activity (kcal)

Day 2 - Saturday 05.05.2012

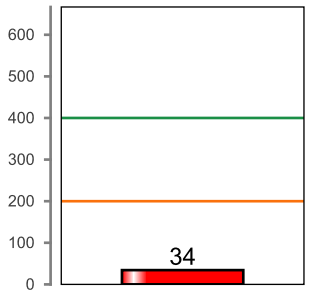


Physical Activity Index

GOOD

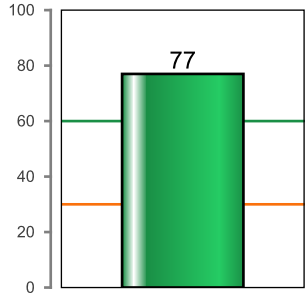
MODERATE

POOR



Energy expenditure during physical activity (kcal)

Day 3 - Sunday 06.05.2012

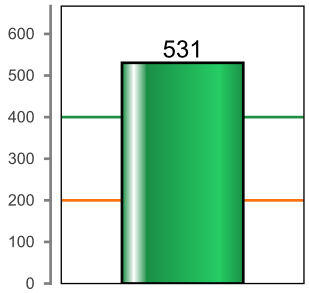


Physical Activity Index

GOOD

MODERATE

POOR



Energy expenditure during physical activity (kcal)

Definite positive effects. Some positive effects. Not enough positive effects.

LIFESTYLE INSPECTION

Eddie Example

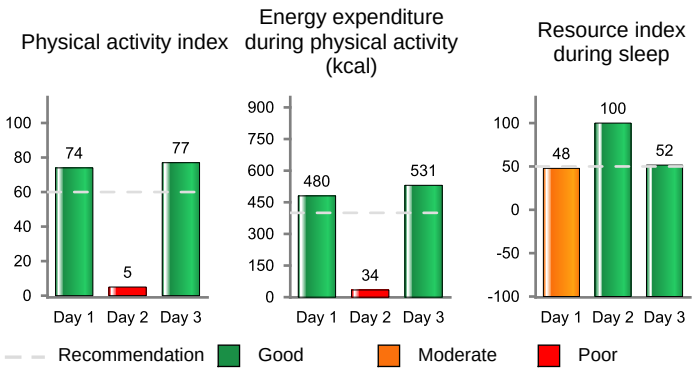
Age (yrs)	**35**
Height (cm)	**183**
Weight (kg)	**93**
Resting heart rate (beats/min)	**39**
Max heart rate (beats/min)	**188**
Body Mass Index (BMI)	**27.8**
Activity class	**5.0**

Measurement information:

Day 1 (04.05.2012) 06:31
Duration 24h 13min

Day 2 (05.05.2012) 07:00
Duration 25h 45min

Day 3 (06.05.2012) 08:45
Duration 23h 8min



Physiological Reactions During Work Periods

These reactions occurred during the time that was marked as work in the journal.

	Good	Moderate	Poor	Your result
Average daily physical activities	> 10 min	6 - 10 min	0 - 5 min	16min
Average recovery reactions	30 min or more	15 - 29 min	0 - 14 min	1min

The longest relaxation period during work was 2min (on 05.05.2012 15:45 - 15:46)

Physiological Reactions During Leisure Time

These reactions occurred during the time that was not marked as work or sleep in the journal.

	Good	Moderate	Poor	Your result
Average health promoting physical activity	> 20 min	11 - 20 min	0 - 10 min	21min

Effect of the most demanding physical activity on fitness improvement (On 06.05.2012)	Overreaching	Highly improving effect	Improving effect	Maintaining effect	Minor effect	Your result
	5	4	3	2	1	Maintaining effect (2.8)

	Good	Moderate	Poor	Your result
Average recovery reactions	60 min or more	15 - 59 min	0 - 14 min	40min

The longest relaxations period was 19min (on 05.05.2012 22:37 - 22:56)

Average energy expenditure during physical activity.	400 kcal or more	200 - 399 kcal	0 -199 kcal	348 kcal

Physiological Reactions During Sleep Periods

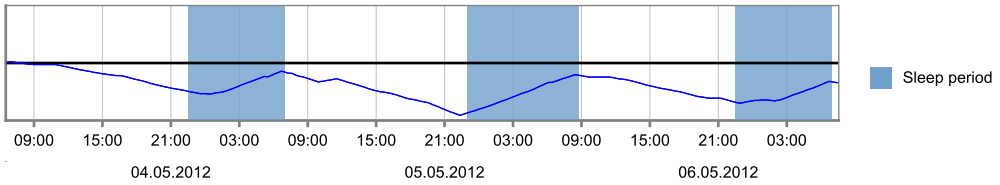
These reactions occurred during the time that was marked as sleep in the journal.

	Good	Moderate	Poor	Your result
Average resource index	50 - 100	0 - 49	-100 - -1	66
Average quality of recovery (RMSSD)	43 or more	20 - 42	0 - 19	63
Average time used for sleeping	> 7 h	5,5 - 7 h	0 - 5,5 h	8h 50min

Average recovery reactions during the sleep periods was 6h 35min.

Body Resources

The effect of stress and recovery on the body's resources. When the line goes down, this indicates the use of the body's resources. When the line goes up, this indicates the replenishment of the body's resources.



DEFINITIONS OF TERMINOLOGY

Stress and Recovery

Stress reactions means an increased level of physiological activation and alertness caused by either internal or external stressors. Stress is not entirely a negative phenomenon but instead can be considered a positive resource.
Recovery is a lowered level of physiological activation caused by a decrease or absence of stressors.
Physical Activity means time periods during which the intensity is greater than 30% of one's maximal capacity.
Other physiological states mean time periods that are not detected as physical activity, stress or recovery (white areas in the chart). For example, measurement breaks and recovery from physical activity are detected as other physiological states.

The resource index is calculated from the duration of stress and recovery reactions during sleep. The index gets a negative value (red zone) if the amount of stress during sleep is greater than the amount of recovery. When > 75% of sleep time is recovery, the index is located in the green zone.

The sleep quality is based on RMSSD, which is a measure of heart rate variability. Low values of RMSSD during sleep indicate poor recovery and higher values indicate enhanced recovery. The average RMSSD value should be 20 ms or greater during sleep.

Physical Activity

Daily physical activity means time periods of very light activity during which the intensity is 20-30% of one's maximal capacity.
Health promoting physical activity means time periods during which the intensity is moderate & greater than 40% of one's maximal capacity, with positive health effects.
Fitness promoting physical activity means time periods during which the intensity is greater than 50% of one's maximal capacity, with positive health and fitness effects.

Physical activity recommendations: Aerobic physical activity should be performed at moderate intensity for at least 2½ hours a week, or at vigorous intensity for at least 1 hour and 15 minutes a week, or an equivalent combination of moderate- and vigorous-intensity activity. This recommendation is for the healthy adult to maintain health and reduce the risk for chronic disease. (Source: American College of Sports Medicine 2008).

Effects of physical activity on health: Regular physical activity promotes health and prevents illnesses. Even short increases in physical activity improve cardiorespiratory fitness and promote health. In addition, energy expenditure is higher and blood pressure is lower for several hours after the physical activity. Both light and hard physical activity is required for better fitness.