Page STRESS AND RECOVERY OVERVIEW 1(2) Measurement information: **Case Tired Mom** Day 1 Day 2 Day 3 Age (yrs) 50 Resting HR (beats/min) 35 Start time: Start time: Start time: Height (cm) 30.09.2012 09:23:25 01.10.2012 06:00:00 02.10.2012 06:00:01 Max HR (beats/min) 189 Weight (kg) Duration: 20h 37min Duration: 24h 0min Duration: 24h 22min HR: (low/avg/high) HR: (low/avg/high) HR: (low/avg/high) Activity class 6.0 Body Mass Index (BMI) 21.5 39 / 66 / 179 39 / 62 / 126 42 / 65 / 176 (Good) **Stress and Recovery Charts** Day 1 - Sunday 30.09.2012 Missing heart rate 10% 160 (140 120 (peats/min) Strength of reaction 100 Heart rate 80 60 17:00 03:00 04:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00 18:00 19:00 20:00 21:00 22:00 23:00 00:00 01:00 02:00 05:00 **Journal Markers** Result Recommendation Playing w/ kids 6 Reading 11 Kids to bed Less than 60% 8h 58min (43%) Husband cooking! Shopping 5h 16min (26%) More than 30% 8 3. Eating Eating 1h 2min (5%) 4. Housework 9. Hard exercise 5h 21min (26%) Gardening/DIY Shower/bath 5 10 Day 2 - Monday 01.10.2012 Missing heart rate 4% Strength of reaction 160 140 120 05:00 09.00 11:00 13:00 15:00 17:00 21:00 23:00 01:00 03:00 **Journal Markers** Result Recommendation Driving 6 Phone meeting 11. Shower/bath Less than 60% 13h 6min (55%) 2. phone ringing continuously Driving 12. Kids to bed 5h 31min (23%) More than 30% 3. Errands 8. Cooking 13. Reading 21min (1%) 4. Making a summary Housework 5h 1min (21%) Gardening/DIY Day 3 - Tuesday 02.10.2012 Missing heart rate 4% 160 140 120 (peats/min) Strength of reaction 09 00 Heart rate (09:00 13:00 15:00 21:00 23:00 01:00 03:00 05:00 Recommendation **Journal Markers** Result Driving 6. Eating 11. Kids to bed Less than 60% 14h 40min (60%) Eating 2. Housework 12. TV 7. 5h 2min (21%) More than 30% Driving Hard exercise 42min (3%) Shower/bath 4 P-u kids 9 3h 59min (16%) 5. Cooking 10. Housework Missing heart rate Sleep period Heart rate Work period Stress reactions Recovery Physical activity Other physiological states

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:

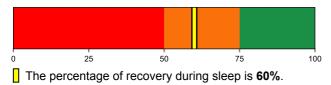
Medication

<u>..</u>

Overview of sleep

Day 1 - Sunday 30.09.2012

Share of recovery during the sleep period:



Quality of recovery during sleep period (heart rate variability, RMSSD in milliseconds):

0 - 15

16 - 29

30 or more

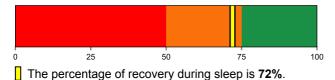
Your result is 45 ms.

The average value for your age is 30 ms.

The length of your sleep period was 7h 15min. It is recommended to sleep 7 hrs or more per night.

Day 2 - Monday 01.10.2012

Share of recovery during the sleep period:



Quality of recovery during sleep period (heart rate variability, RMSSD in milliseconds):

0 - 15

16 - 29

30 or more

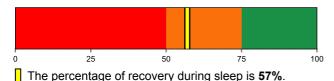
Your result is 53 ms.

The average value for your age is 30 ms.

The length of your sleep period was **7h 15min**. It is recommended to sleep 7 hrs or more per night.

Day 3 - Tuesday 02.10.2012

Share of recovery during the sleep period:



Quality of recovery during sleep period (heart rate variability, RMSSD in milliseconds):

0 - 15

16 - 29

30 or more

Your result is 49 ms.

The average value for your age is 30 ms.

The length of your sleep period was **8h 0min**. It is recommended to sleep 7 hrs or more per night.

Weak recovery



Moderate recovery



Good recovery

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.

Share of recovery during sleep is the percentage of recovery during the sleep periods in the journal. The measurement breaks and measurement errors are excluded from analysis.

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.

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.

