A doctor trying to make you feel sleepy... Dr. Raymond Cluydts, sleep researcher at the Brussels university



The Belgian Dr. Raymond Cluydts (°1951) is a prominent researcher in the field of fundamental sleep research. Cluydts is leading the Centre of Experimental Sleep Research at the Brussels university (VUB), he is co-founder of the Centre for Clinical Sleep Research at the University in Antwerp and he teaches biological psychology at the VUB university in Brussels. Cluydts is specialized in fundamental research on healthy people and epidemiological investigation of sleep disorders. He is a prominent researcher on the effect of sleep deprivation. In this domain he is frequently asked by the car and the pharmaceutical industry. As on of the finding fathers of the Belgian Association of Study of Sleep (BASS), he is convinced that there is a mutual interest in co-operating with the bedding industry. He recently co-initiated a research project with the Slaapraad, a Belgian marketing brand, founded by retailers and manufacturers of bedding products, but is open to any initiative from the bedding branch.

"A better use of already existing research by the bedding industry, might generate positive attention in different media", that is the opinion of Dr. Cluydts, an experienced professor at the Psychological department of the Brussels university VUB. "A better co-operation between the bedding industry and the world of sleep science, might eventually lead to new research that could reveal interesting information", says Dr. Cluydts. And he's got the right to speak.

Doctor Cluydts mainly researches the sleep/wake rhythm ('cercadanian' and 'homeostatical' rythm) of healthy people, mostly students who get some pocket money for being a volunteer in the sleeping lab. He observes REM-sleep, brain activity, breathing and audiovisual perception, during different sleep phases. By inducing insomnia, he finds out what possible consequences are of sleep deprivation. "By inducing insomnia, test persons are feeling sleepy during the day and they are getting moody. Some forms of depressions are caused by disturbed sleep or sleep deprivation" says Cluydts. "Other areas of my activity have to do with epidemiological sleep disorders, how people get sleepy during the day, how sleep deprivation leads to cognitive disortions (memory and attention problems) and how this results in mood swings of different levels, from feeling irritable until being depressed by lack of sleep". Raymond Cluydts also tries to help people with severe sleeping problems. This therapy can be pharmaceutical or behavioral He investigates the sleep surrounding on quality and quantity of sleep: impact of light, noise, temperature and humidity.

Accidents by lack of sleep

"A lot of accidents are caused by sleep deprivation", says Dr. Raymond Cluydts. "That's why insurance companies are getting more aware of the importance of sleep. In the USA and Australia, it is very common for insurance companies to make use of sleep research departments of universities to make their point. It is proven that the disaster with the Herald of free enterprise was caused by somebody who forgot to shut the ship doors, by lacking sleep. Formerly they used to have 24-hour guard systems in the army. I can tell you at what exact moment you can pass along the guards, without being noticed. A bad sleep or a lack of sleep can lead to severe mistakes or to heavy disturbances of the attention. Recently there was a case of a lady who forgot to deliver her baby at the childcare. In the evening she went to get the little one, but she didn't realize that the child was never delivered. The baby was found dead in its car seat, dehydrated. These kind of accidents are typical for people with sleep deprivation."

Cluydts specialized in sleep science at the university of San Diego. This leading university is famous for research on behalf of the US Navy.

Dr. Cluydts is ready and happy to co-operate with the bedding industry. We yet work together with the pharmaceutical industry and the car industry. Why would we not co-operate with the bedding industry? Cluydts is convinced that a wrong mattress can affect the quality of anybody's sleep. "Old mattresses are not offering a stable, equal surface. He doesn't think there is a lot of difference between different mattresses of a high quality. "But it's like tasting good wines. You'll find a certain wine tastier than another one, but this has probably more to do with personal taste than with quality", says Cluydts.

## Wine and dine

Speaking about wine: Dr. Cluydts' advice for a healthy night sleep is as simple as it is predictable: eating late, drinking much and sporting late is not available for a good quality sleep. "Nowadays lots of people are doing 'screen' work. All the information that is registered during the day needs to be stored in the long term memory part of our brain. The hard disk needs fading out during the night, to be capable to capture new information. On the other hand, sporting is healthy, especially in an environment where people hardly move from their desk. Sleeping and being awake is pretty much of a 24-hour schedule. You can feel deadly tired after a good session of sport, but feeling 'sleepy' is a completely different experience. In our lab, we induce insomnia on healthy, preferably sporty people, to observe the effects of sleep deprivation on different levels.

According to doctor Cluydts, many aspects of the sleep have never been investigated. The effect of the sleep-environment on the quality of sleep is one of the fields which remain almost undiscovered. Sleep research is labour- and cost-intensive. For industries like the pharma-branch, the cost of research can easily be worked away by the huge amounts of drugs to be sold. The same rule is available for the car industry. We already know something about mattresses and quality of sleep: a good mattress enables you to move smoothly during the night On a bad mattress, it gets more difficult to have an healthy sleep.

Dr. Raymond Cluydts did not know about the existence of EBIA, until a while ago. Recently, the association contacted him to ask whether he wanted to be nominated. "It's always nice to hear that people are aware of what you doing. To start off I felt pretty happy with this nomination, maybe also because the level of the other nominees is high. I'm glad to hear,

there is an association for the bedding industry, so at least there can be an information exchange, and maybe more. The EBIA award is definitely a good initiative, by involving the academic world into the bedding industry, some information can be orchestrated and the information that is sent into the world will be put on a higher level". So far the Belgian candidate for the EBIA award.