

#### Healing Process with the Lux Spa Home Laser

#### The Lux Spa Home Laser by Dr. med. Wilden safely and reliably improves:

Loss of hearing (also and especially in childhood), tinnitus (noises inside the ear), hyperacusis (hearing sensitivity), dysacusis (hearing distortion), pressure in the ear, recovery after hearing loss, otogenic vertigo and Ménière's disease (nausea). You will experience the success of our personalized therapy both in dealing with acute problems and with chronic ear complaints that you may have suffered for many years.

Again and again, the question arises: why is our LLLT ear treatment not the standard therapy for these problems since long ago, given that so many people suffer such tormenting symptoms? And why does the international ENT expert world persistently refuse to check the revolutionary effectiveness on the ear of our Low Level Laser Therapy in a neutral way, and to let those affected benefit from it?

There is a good reason for this: "Never change a running business – certainly, never change a well-running business"!

When it comes to ear therapy, there is a global economic monopoly which turns the idea of the above symptoms being allegedly incurable into the foundation of a growing billion-dollar business. See my article on the ear monopoly at https://luxspaibiza.com

I have not been able to change this global, catastrophic situation regarding ear difficulties on my own, although I have been trying continuously for more than 30 years to inform our ENT authorities about the scientific truth and conclusiveness (see https://luxspaibiza.com) of my Low Level Laser Therapy (LLLT).

But we are certainly succeeding at changing very individual, completely personal and private ear situations for the better and better, thanks to our Lux Spa Home Laser by Dr. Ing. Wilden / Inner Ear Laser.

All users of our Home Laser experience this every day.

As a rule, you will experience the first improvements in your hearing loss after your first self-therapy with our Lux Spa Home Laser / Inner Ear Laser. We recommend that our users document their subjective hearing improvement after 4-6 weeks of self-therapy with a control audiometry. The possibility of controling the auditory, biostimulatory efficacy of our Home Laser using repeated control audiometries is given over the entire individual inner ear regeneration process.

In addition to improving their hearing, users of our Home Laser notice an improvement of any other inner ear distress signals that may be present.

Your tinnitus (noises inside the ears) is usually a high-frequency sound which becomes finer and gentler, then retreats more and more into the background and finally disappears completely.

• Your dysacusis (hearing distortion) improves quickly and your hearing becomes clearer and finally clear again.

- Your hyperacusis (hearing hypersensitivity) loses its painful nature and turns into a stable, very good and no longer painful hearing.
- Your pressure in the ear quickly becomes changeable and gentler, and then disappears completely.
- Your otogenic vertigo (dizziness) improves amazingly quickly and your previously compromised balance steadily stabilizes.
- The same applies to all patients suffering from the most severe of all inner ear overwhelming symptoms, Ménière's Disease (rotary-nausea).

Dizziness and Ménière's Disease patients are our most grateful customers.

Do not be blinded.

Use your common sense to understand your ear situation biologically correctly (see https://luxspaibiza.com).

Take the initiative to solve your ear problems in the smartest, most modern, and most comfortable way!

We will help you!

Send us your score and your questionnaire by e-mail (found in the contact section of all our web pages). This is enough to advise you individually.

Experience the scientific truth of the biological, always positive and side-effect-free biostimulatory effectiveness of light, especially on our overburdened hearing and balance organs (our inner ear organs), quite comfortably and in all transparency at home.

We are also happy to advise all your family members and friends with whom you may want to share your Lux Spa Home Laser. The more people test and use our Home Laser, the clearer its therapeutic quality. Slowly but surely, a democratic objectivity arises which is based on your own honest experience

### The Basic Biological Effectiveness

The term 'basic biological effectiveness' can be illustrated quite well with the example of pharmaceutic evaluation of an antibiotic (antibiotically operating substance). Two Petri dishes are used for this purpose. Both are seeded with a bacterium. Thereby, a bacterial layer develops on the surface of the Petri dish.



Two Petri dishes seeded with the same bacterium

Then, pure saline solution (sodium chloride solution) is applied to one Petri dish. And the other Petri dish gets a saline solution that contains an antibiotically operative substance.

A so-called 'hindering ring' develops in the Petri dish with the antibiotically operating substance. This is a bacterium-free zone that is the result of the tested substance's antibacterial effect.



Petri dish with pure solution of NaCl. Here no bacteria free ring is built.

Petri dish with a solution of NaCl, containing some antibiotic substance. Here a bacteria free ring is built.

The equivalent in Low Level Laser therapy (LLLT) to the just explained biological effectiveness of an antibacterial substance is the basic bio-stimulative effectiveness that is visible in the context of wound healing.

Stimulation of the wound healing of previously not healing wounds is the basic indication of LLLT. As early as 1962, it was observed and documented for the first time by the Hungarian surgeon Dr. Endre Mester in his practice in Budapest. Dr. Mester has been regarded as the father of LLLT ever since.



Progressing Wound Healing of a Previously Not Healing Wound (e.g. a so-called ulcerated leg = Ulcus Cruris) During a Therapy with Low Level Laser Light



Ulcus Cruris (ulcerated leg), before Laser Therapy

Ulcus Cruris (ulcerated leg), after 10 x Laser Therapy

Until today, this basic bio-stimulative effectiveness of LLLT in regard to wound healing has been verified thousands of times, and it has been officially recognized by the American FDA (Food and Drug Administration).

In addition to that, there currently are several thousand international scientific publications that examine and verify the general bio-stimulative, basic biological effectiveness of LLLT, by now for all somatic cells, also especially for the auditory cells and other nerve cells. (amongst others: <u>www.primabooks.com</u>)

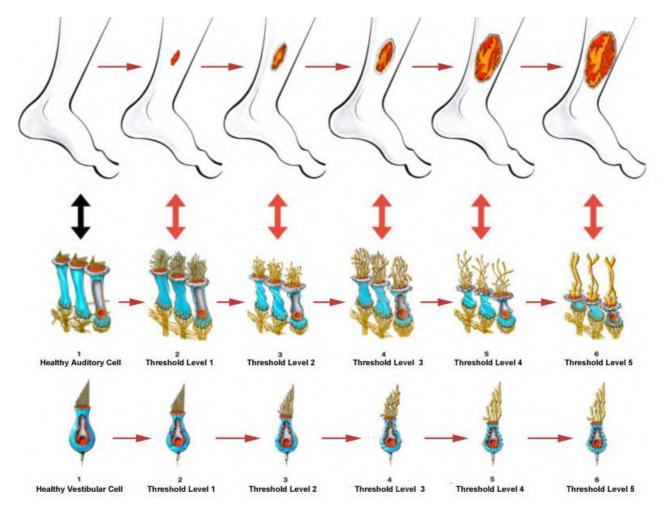
Until today, it has been normal for university medicine to discount this impressive clinical effectiveness of Low Level Laser therapy (LLLT) with the argument: "How is this supposed to work?".

Considering the technical side of medicine, as well as its primary task to develop biological problem solutions for the patients, this attitude is indeed hard to understand.

If you also consider that the biological mechanisms of action of many medications that are prescribed millionfold, e.g. aspirin (acetylsalicylic acid), are not really clearly known, the statement above seems very questionable, at least for me.

Our current academic handling of LLLT becomes completely incomprehensible when more and more people get the chance to learn about the fact that we have a scientifically clear explanation for the biological effectiveness of LLLT

## Visualizing the Gradually Proceeding Biological Overstrain of our Auditory and Vestibular Cells, Using the Example of Healing Ulcus Cruris

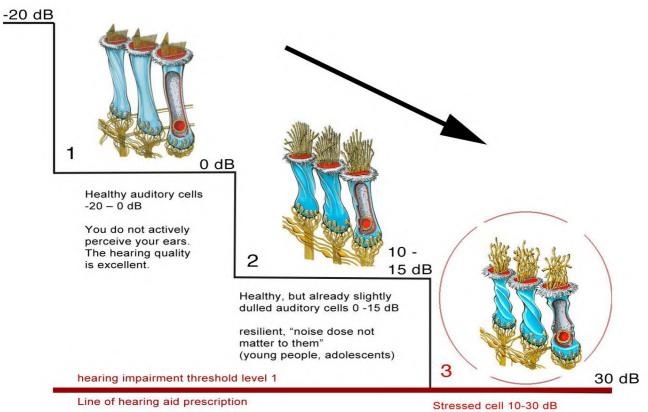


Hearing impairment in children, acute hearing loss, hyper- and dysacusis (auditory hypersensitivity and auditory distortion), ear pressure, tinnitus (sounds inside the ear), chronic hearing loss, hearing impairment, vertigo (dizziness), and Ménière's disease (spinning sensation and throwing up) are the distress signals of our overstrained auditory and vestibular cells, or of our entire inner ear organ.

From a biological point of view, those are symptoms of an internal overstrain wound, just like Ulcus Cruris (ulcerated leg) is a kind of biological overstrain that produces the typical symptoms of an ulcerated leg (pain, feeling of heaviness, exercise intolerance, swellings etc.).

Ulcus Cruris patients with bigger wounds suffer from more intense afflictions. Lust like inner ear patients feel their afflictions (symptoms) increasing in the course of progressing inner ear overstrain.

### The step-by-step worsening of the auditory and vestibular cells' biological quality compared to your personal hearing curve:



At this point, we advise you to take a look at you individual hearing curve and to compare it. By means of this illustration and this procedure, we want to make you comprehend the previously experienced process of your inner ear organs' overstrain.

Distress signals (symptoms):

auditory hypersensitivity, auditory distortion, ear pressure, sounds inside the ear, vertigo, spinning sensation and vomiting, hearing loss (often remains unnoticed)

20		-20
10	100% healthy and exceptional	-10 100% quality of the auditory cells
0		0
10	the second s	10 ca. 90% quality of the auditory cells
20		20 ca. 80% quality of the auditory cells
30	overstrain that often goes unnoticed	30 ca. 70% quality of the auditory cells
40	hearing impairment threshold level 1	40 ca. 60% quality of the auditory cells
50		50 ca. 50% quality of the auditory cells
50		60 ca. 40% quality of the auditory cells
70		70 ca. 35% quality of the auditory cells
80	hearing impairment threshold level 2	80 ca. 30% quality of the auditory cells
90		90 ca. 25% quality of the auditory cells
00		a. 20% quality of the auditory cells
10		100 ca. 15% quality of the auditory cells
20		120 ca. 10% quality of the auditory cells
	quality of the auditory cells is completely exhausted	ca. 5-0% quality of the auditory cells

#### The step-by-step worsening of the auditory and vestibular cells' biological quality compared to your personal hearing curve:





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Obviously exhausted, stressed.tired. suffering hearing impaired auditory cells (hearing impairment level 1)

intense realizations of the distress signals (symptoms): tired, suffering, massively auditory hypersensitivity, auditory distortion, ear pressure, sounds inside the ear, vertigo, spinning sensation and vomiting, hearing loss

50 dB 5 80 dB 50 bis 80 dB

> massively exhausted, stressed, hearing impaired auditory cells (hearing impairment level 2)

even more intense realizations of the distress signals (symptoms): auditory hypersensitivity, auditory distortion, ear pressure, sounds inside the ear, vertigo, spinning sensation and

vomiting, serious hearing loss

#### At this point, we advise you to take a look at you individual hearing curve and to compare it.

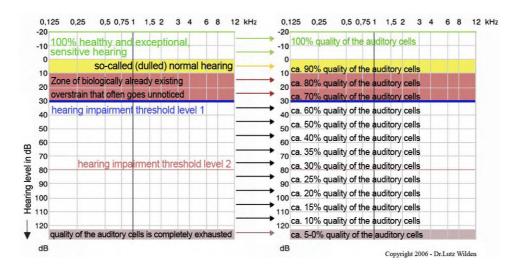
under 80 dB

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massively worn out and exhausted, stressed, overstrained, tired, very seriously hearing impaired auditory cells

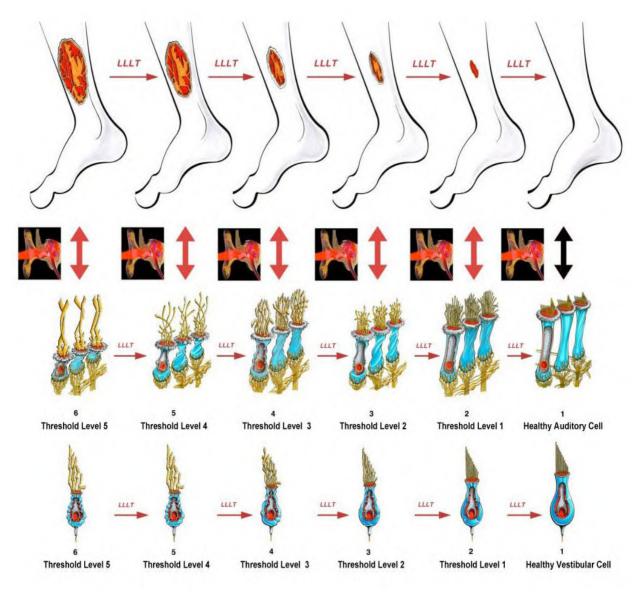
120 dB

even more intense realizations of the distress signals (symptoms): auditory hypersensitivity, auditory distortion, ear pressure, sounds inside the ear, vertigo, spinning sensation and vomiting, very massive hearing loss.



The step-by-step worsening of the auditory and vestibular cells' biological quality compared to © Dr. Lutz Wilden 85

Visualizing the Gradually Proceeding Biological Regeneration of our Overstrained Auditory and Vestibular Cells with the Help of highly dosed Low Level Laser Therapy (LLLT) By to Dr. Wilden®, Using the Example of Healing Ulcus Cruris



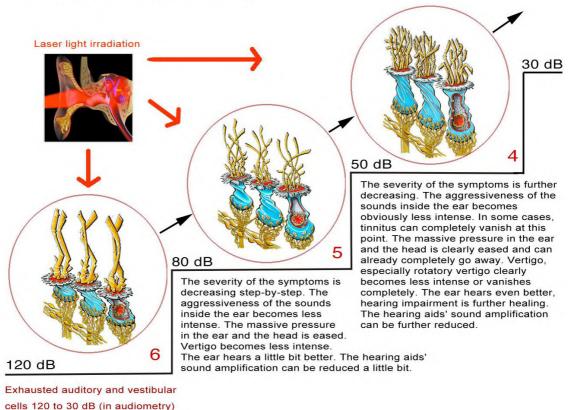
Because of its basic bio-stimulative effectiveness, high-quality laser therapy achieves stepby-step improvement of the biological inner ear quality, and if the therapy is conducted long enough, the symptoms mentioned above are reduced step-by-step, and can eventually be eliminated or healed completely.

From a biological point of view, this is the same process as the previously illustrated healing process of Ulcus Cruris (ulcerated leg).

Of course, the duration of the therapy of inner ear overstrains and their symptoms depends on how grave the respective condition of overstrain is. Just like the duration of the therapy of Ulcus Cruris depends on how big the wound is at the beginning of the therapy.

The regeneration time also depends on the naturally given regeneration times of the nerve cells. Auditory and vestibular cells are highlyspecialized nerve cells.

### The Therapeutic Procedure of Highly Dosed Low-Level-Laser Therapy



The Step-by-Step Improvement During and After the highly dosed Low-Level-Laser Therapy by Dr. Wilden

The results of our treatment have been achieved for more than 20 years, especially in cases of serious and very serious inner ear overstrains. The improvement of the biological quality of seriously overstrained auditory and vestibular cells can be experienced as follows:

**Hyperacusis** (auditory hypersensitivity), which accompanies all inner ear overstrains, becomes more intense at first (= The auditory cells' wish for regeneration without disturbing noise).

At the same time, the hearing becomes more sensitive (= hearing ability gets better).

Auditory distortion (dysacusis) gets less and less intense.

# Ear pressure fluctuates, decreases step-by-step and at the end gradually goes away completely.

The pressure can temporarily increase a little bit, after noise stress during the regeneration phase. When the stress is over, the ear pressure decreases again.

Tinnitus (sounds inside the ear) is alternating at the beginning, then (in the case of high-frequency tinnitus) it becomes a little bit more high-frequent, but at the same time thinner and finer.

The aggressiveness of all sounds inside the ear steadily becomes less intense (observed over a period of 24 hours).

Altogether, tinnitus (sounds inside the ear) requires the longest regeneration time until it is completely eliminated.

In the case of declining tinnitus, if the auditory cells are further supported with our laser light radiation at longer intervals, the tinnitus will be completely eliminated.

Vertigo (dizziness) and the frequently co-occurring pressure in the head/feeling of numbness disappears step-by-step.

The intensity of the vertigo thereby becomes "more and more flat". Spatial orientation becomes possible again, without any disturbances. The unsteady gait

disappears. This also applies to spinning sensation and throwing up

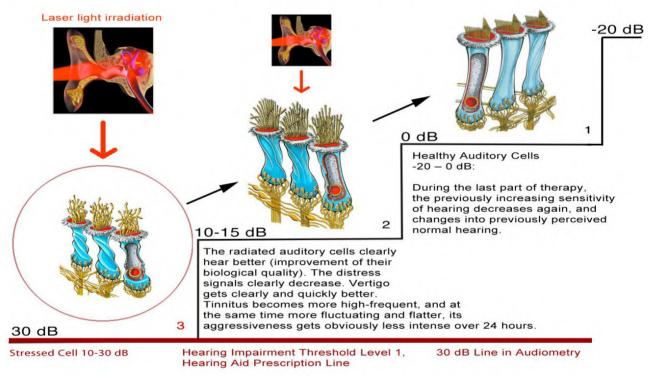
#### (Ménière's disease).

In cases of very serious vertigo, occasional situations of dizziness can occur in the first phase of our laser light treatment, in the course of long-term regeneration.

Hearing impairment gradually gets better and better. The ears hear better. The measurable hearing improvements are 5-20 dB, if the treatment time mentioned above is complied with. This applies to all frequencies. If the treatment is continued, the hearing improvements will steadily increase.

Altogether applies: the more serious the respective inner ear overstrain, and the longer it has been existing, and the greater your wish for improving the personal situation is, the more intensely you should support your ears with our treatment.

# The Step-by-Step Improvement During and After the highly dosed Low-Level-Laser Therapy by Dr. Wilden:



The Step-by-Step Improvement During and After the highly dosed Low-Level-Laser Therapy by Dr. Wilden

As long as most of the auditory cells measured in audiometry are above, slightly above, or slightly under the 30 dB line, our therapy achieves within only few therapy sessions (e.g.  $5 \times 15$  or  $5 \times 30$  minutes radiation time per ear) improvements regarding hearing and symptoms. This is very quickly and very clearly perceivable, and very obviously measurable in audiometry.

The improvement of the auditory cells' biological quality can be experienced as follows:

Hyperacusis (auditory hypersensitivity) becomes clearly milder. Thereby, the hearing becomes more sensitive (= improvement of the hearing ability).

Dysacusis (auditory distortion) quickly eases.

Ear pressure is fluctuating, increasingly eases and completely goes away step-bystep.

Tinnitus (sounds inside the ear) are at first fluctuating, then (in the case of high-frequency tinnitus) it becomes a little bit more high-frequent, but at the same time thinner and finer.

The aggressiveness of the sounds inside the ear steadily eases (observed over 24 hours).

Altogether, tinnitus (sounds inside the ear) requires the longest regeneration time until it is completely eliminated.

In the case of ear sounds more and more vanishing, if the auditory cells are further supported with our therapy at longer intervals, they will be completely eliminated.

Vertigo (dizziness) and the frequently accompanying pressure in the head / feeling of numbness quickly disappears in the case of this starting situation (most of the auditory cells are over 30 dB).

The intensity of the vertigo thereby becomes "more and more flat". Spatial orientation becomes possible again, without any disturbances. The unsteady gait disappears.

This also applies to spinning sensation and throwing up (Ménière's disease).

Hearing loss (hearing impairment), which often remains unnoticed in this starting situation, changes to a condition of increasing auditory sensitivity.

The measurable hearing improvements are 10-20 dB, if the treatment time mentioned above is complied with. This applies to all frequencies. If the treatment is continued, all symptoms of inner ear overstrain will ease with every therapy session.

In the end, the distress signals that were present before vanish completely.

# **Outlook and Conclusions**

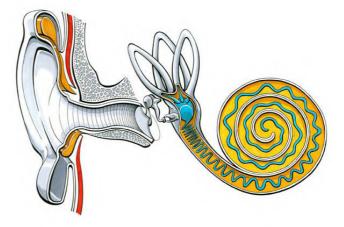


At the moment, neither money, nor ENTmedical attention, nor ENT-intelligence is spent in order to spare and treat the inner ear organ which has to biologically process all sound events. Money and ENTintelligence is only used to surgically destroy it (surgical implantation of cochleaimplants in the skull)

Child with Cochlea Implant

At the moment, a lot of money,

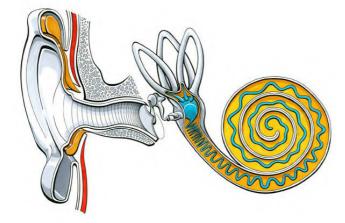
technological intelligence and attention is spent on intensifying the acoustic before the hearing aid (e.g. hearing aid technology, loudspeaker technology in i-pads and headphones, in-ear-monitoring, all kinds of techniques of sound exposure, etc.)



Cross Section through the Auditory Organ

Money and technological intelligence is only used for the inner ear, if it is in order to replace it with technical prostheses (cochlea implants).

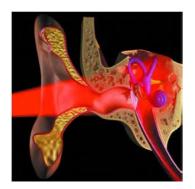
#### The consequence is:



More and more children, young people, adults and older people thereby become hearing-aid-users, or get cochlea implants. Thus, they become victims of the global ENThearing aid and ENT-cochlea implant strategies.

Cross Section through the Auditory Organ

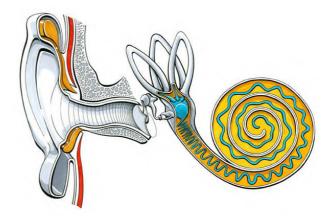
ENT-medicine's procedure for the auditory organ, which has been officially recognized for a long time.



The high-quality (= sufficiently dosed) and long-enough dosed LLLT is so far the only therapy which achieves clearly measurable and perceivable improvements or the healing of symptoms of inner ear overstrain (hyper- and dysacusis, ear pressure, tinnitus, acute and chronic hearing loss (hearing impairment), vertigo and Ménière's disease)

Laser light reaches the inner ear.

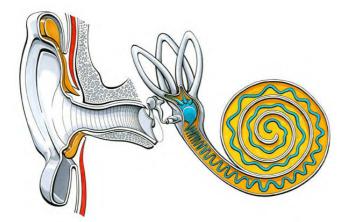
With only a small amount of money, but with enough commitment for broad public education about the significance and the effect of active self-protection against every-day noise, the inner ear can be treated in an intelligent and gentle way.



Cross Section through the Auditory Organ

If money, technological intelligence and ENTmedical intelligence were used for the inner ear organ, it could be kept healthy for its whole life, despite our civilization's every-day noise stress.

#### The consequence is:



More and more children, young people, adults and older people thereby would be spared from conditions of overstrain, hearing aids and cochlea implants.

Cross Section through the Auditory Organ

LLLT's therapeutic procedure for the auditory organ, which is already realized, but not yet widespread.

In my opinion, the ENT-medicine's current monopole regarding expert opinion and therapy, in connection with the hearing-aid-industry, continuously increased the number of people who suffer from ear problems.

Beyond that, I witness growing intellectual lethargy and resignation within the public, when it comes to the topic ear.

One feels the inner repugnance (on the one hand, "noise is not good for my ear" – on the other hand, it should be "treated with sound amplification"), but one feels powerless and helpless when facing ENT-authorities' approaches and procedures.

Preferably, one does not want to hear any more about this whole topic.

Only if more and more people are nevertheless searching for solutions of their ear problems, and only if LLLT for the auditory organ is openly discussed in public, more and more peoples will be able to improve their often very desperate situations regarding their ears.

I want to make a contribution for this purpose, in the form of this text.



Therapy Situation of highly dosed LLLT by Dr. Wilden®