



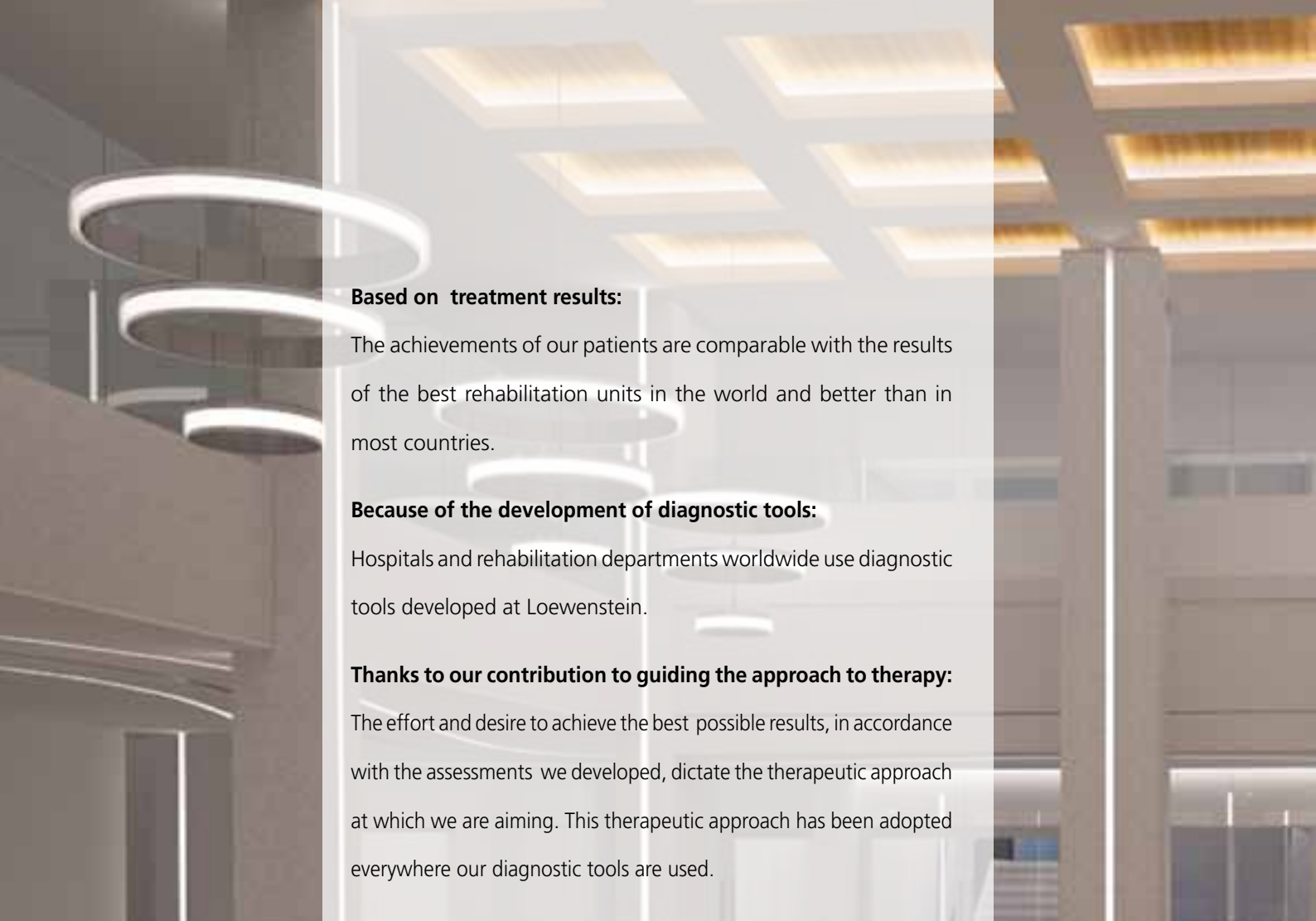
LOEWENSTEIN HOSPITAL
Rehabilitation in Renewal



Loewenstein Rehabilitation Hospital

Israel's largest and leading rehabilitation hospital

The Clalit Group



Based on treatment results:

The achievements of our patients are comparable with the results of the best rehabilitation units in the world and better than in most countries.

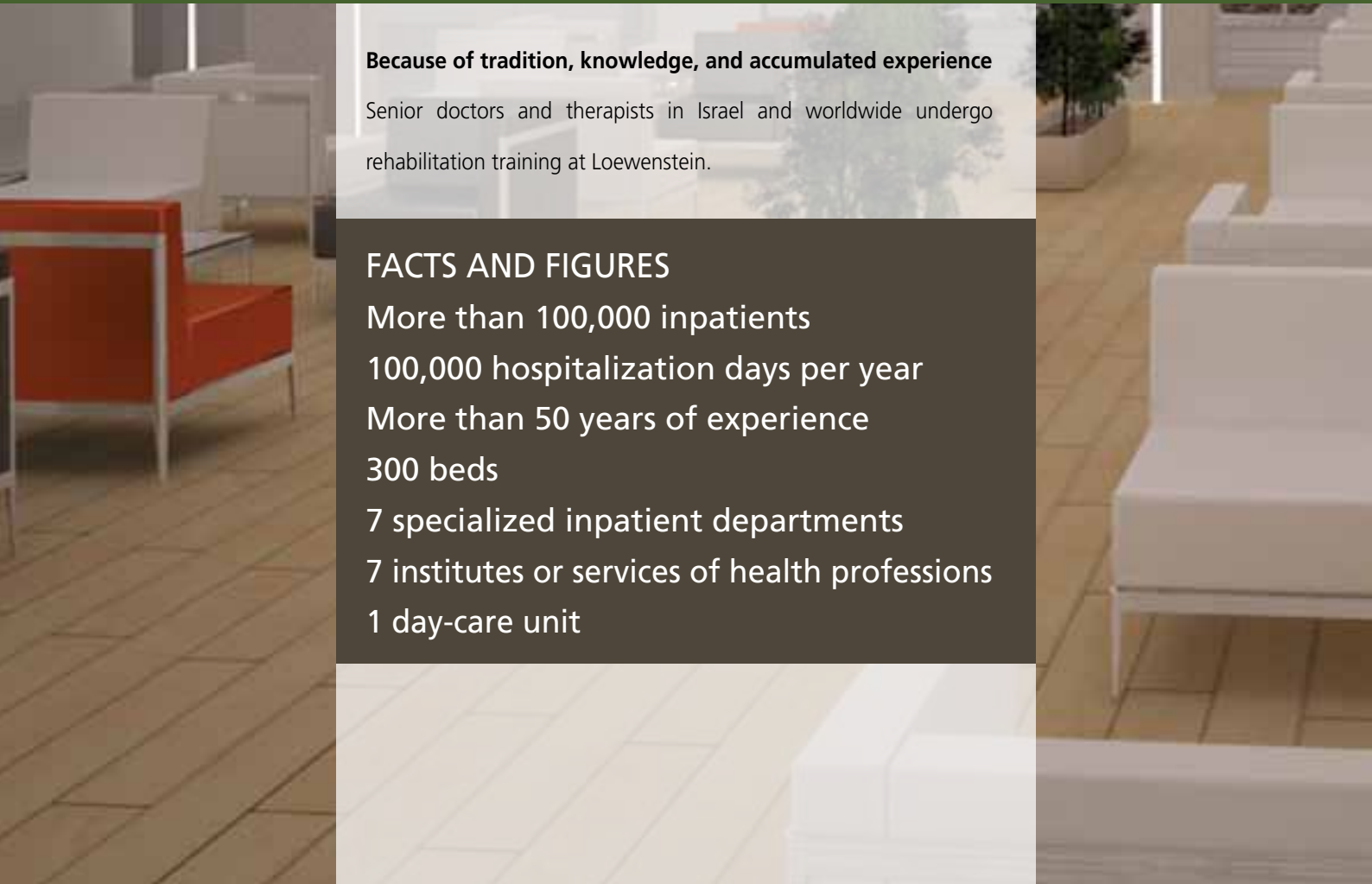
Because of the development of diagnostic tools:

Hospitals and rehabilitation departments worldwide use diagnostic tools developed at Loewenstein.

Thanks to our contribution to guiding the approach to therapy:

The effort and desire to achieve the best possible results, in accordance with the assessments we developed, dictate the therapeutic approach at which we are aiming. This therapeutic approach has been adopted everywhere our diagnostic tools are used.

Loewenstein is a leader in the world of rehabilitation



Because of tradition, knowledge, and accumulated experience

Senior doctors and therapists in Israel and worldwide undergo rehabilitation training at Loewenstein.

FACTS AND FIGURES

More than 100,000 inpatients

100,000 hospitalization days per year

More than 50 years of experience

300 beds

7 specialized inpatient departments

7 institutes or services of health professions

1 day-care unit

Loewenstein Hospital



Loewenstein Hospital, a member of the Clalit Group, is the largest and the leading Israeli hospital in the field of rehabilitation medicine. Loewenstein is renowned and appreciated worldwide because of its accumulated experience and original thinking. Specialists at our hospital, doctors and therapists, are considered to be leading innovators in their fields. Rehabilitation tools developed at Loewenstein are being used in the largest and leading rehabilitation hospitals worldwide.

At Loewenstein there is the highest concentration of rehabilitation specialists in the country. Each of our professionals has unique and in-depth knowledge in a particular field of rehabilitation. Loewenstein departments specialize by type of injury. Department staff is organized in organic teams with extensive cumulative experience and undisputed expertise in their fields.

All of us at Loewenstein, physicians, rehabilitation nursing staff, occupational therapists, physiotherapists, speech therapists, psychologists, social workers, and others, provide the best rehabilitation treatment, using innovative technologies and offering advanced medical services. At the same time, we are at the forefront of academic learning, teaching, and research, mostly in cooperation with the Sackler Faculty of Medicine, Tel-Aviv University, with which the hospital is affiliated.

Who are we?

The patients and their families are in the focus of our attention and at the center of our activity. Our primary objective is to achieve a long life and a better quality of life for those whose functioning has been severely impaired by injury or disease. Hospital staff has the knowledge and experience needed to extend the life of our patients and to teach them the skills that improve the quality of life by improving functioning.

Our approach is comprehensive, multidisciplinary, and aimed at the physical, mental, and social welfare of each patient. In addition to addressing the patient's physical condition and performance, we also make sure that his and his family's views are appropriate for a situation of uncertainty and suitable for creating the appropriate post-hospitalization environmental conditions.

In October 2013, we inaugurated the new hospital wing named after the late Aeneas Hellenberg of blessed memory, built with the focus on the particular needs of the patients. The new wing contributes to reducing the overcrowding in hospital wards and improves physical conditions, bringing them to the level of the highest standards worldwide, for the benefit of patients and their families during prolonged hospitalizations.

In 2015, the hospital began the renovation of the old central wing in order to bring it up to the level of the leading standards worldwide.

Prof. Amiram Catz,
Director of Loewenstein Hospital

Our vision at Loewenstein

Loewenstein Hospital, the largest and leading Israeli rehabilitation hospital, will always be at the forefront of rehabilitation treatment and lead the field of medical rehabilitation worldwide, in quality and innovation, care, professionalism, academic studies, research, teaching and training of rehabilitation personnel, for the sake of patients and their families, and remain a source of attraction for the best minds in the field.



Our patients at Loewenstein

Our patients are children from the age of 3, teenagers, young people, soldiers, and adults who suffer from functional impairment following diseases, traffic accidents, terror acts, combat, hostilities, and other injuries. The injuries include:

- Stroke • Brain injury • Spine and spinal cord injury
- Orthopedic impairment of the limbs, following amputation, fracture, or joint replacement

Our patients come from all walks of life and from all insurers across the country and around the world.



Our values at Loewenstein

- Compassion and humanity—which characterize our people and are cultivated as a long-standing tradition.
- Professionalism—we are committed to our professional rules and to organizational and academic learning as part of our ongoing quest for excellence.
- Quality—we are committed to the best quality in every interaction with patients and their families, and we work constantly to improve quality.
 - Innovation—in treatment we combine advanced rehabilitation methods and technologies to realize the maximum rehabilitation potential of each patient.
 - Service orientation—we make sure that all hospital services are available, accessible, and friendly to patients and their relatives.
 - We are family—we provide support, encouragement, and backing to patients and their relatives by creating the atmosphere of tolerance and a family feeling.



Our mission at Loewenstein

To extend the life of our patients and improve its quality by realizing the rehabilitation potential and achieving the best possible results through rehabilitation programs custom-tailored for each patient.



Our concept of expertise at Loewenstein

The concept of rehabilitation treatment at Loewenstein is that of active rehabilitation with dedicated specialization, carried out by multi-disciplinary teams, so that each patient receives comprehensive treatment from the best doctors and rehabilitation therapists from a variety of health professions.

The organizational structure and infrastructure of the hospital, adapted to our concept of expertise, allow achieving high levels of professionalism and expertise in treating every patient in need of rehabilitation.

We have separate departments or units specializing in specific areas of injury. Every specialized department has an organic multidisciplinary team, each and every member of which has extensive accumulated experience and broad knowledge in the area of specific expertise of the department.

As a result, hospital physicians are at the forefront in various fields of rehabilitation medicine and enjoy international recognition and reputation. The therapeutic teams in various health professions represent professional excellence in each area of rehabilitation and serve as centers of learning and clinical experience.

Residents and students majoring in health professions consider specialization at Loewenstein as a professional challenge.

Loewenstein is a teaching hospital affiliated with the Sackler Faculty of Medicine at Tel-Aviv University. For decades, senior Loewenstein physicians have served as heads of the Department of Physical and Rehabilitation Medicine. Department heads, senior physicians, and health profession teams serve as lecturers, clinical instructors, and mentors in the Department of Rehabilitation Medicine and at the School of Health Professions at Tel-Aviv University and at other academic institutions.

Expanding the Loewenstein rehabilitation concept

In addition to its involvement in various fields of health and rehabilitation care, the hospital extends its activity into wider areas of rehabilitation. Operating within the Loewenstein Hospital compound are also an institute for functional assessment, where the degree of disability is determined on behalf of the National Insurance Institute, and Gal College, which complements medical treatment with training aimed at facilitating participation in the workforce.

Our human approach at Loewenstein

Alongside our professional commitment, we display great human sensitivity and sympathy toward patients and their families, who come to us at a significant crossroad in their lives. We recognize and understand their distress, fears, and expectations, we accept their manifestations, and transform them into a driving force that rebuilds the patient's humanity, self-image, and ability to reintegrate into life, family, and society.



Our research and development at Loewenstein

At Loewenstein we carry out extensive research and development, with the participation of hospital physicians, therapists in various health professions, and researchers from academic institutions who work with us to continuously expand the knowledge and professionalism of rehabilitation medicine.

Among the major research themes at Loewenstein are:

- Integrating advanced equipment and technologies in the field of rehabilitation
- The feasibility of using electrical stimulation with tDCS to affect the executive ability in people with severe head trauma—**Senior researcher: Dr. Yaron Sachar**
- EEG monitoring of the recovery process of patients with unilateral spatial neglect – **Senior researcher: Dr. Nachum Soroker**
- Cough excitation for quadriplegics using electrical stimulation of the abdominal muscles, initiated by nasal air flow—**Senior researcher: Prof. Amiram Catz**

Rehabilitation of patients with brain injury

- Effect of administering Amnatadin on spatial functioning in patients following brain trauma— **Senior researcher: Dr. Yaron Sachar**
- Assessment of the relationship between the theory of mind (TOM) and verbal abilities in patients with traumatic brain injury (TBI)—**Senior researchers: Dr. Yaron Sachar and Michal Biran**
- Characterization of procedural learning in patients with brain injury—**Senior researcher: Dr. Sharon Saklai**

Rehabilitation of patients with spinal cord injury

- Development of tools to assess the recovery of the autonomic nervous system by measuring the heart rate and the rate of sweating response to exposure of foot to cold—**Senior researcher: Prof. Amiram Catz**
- Validation of the fourth version of the scale for assessing the daily functioning of patients with spinal cord injury (SCIM IV)—international research. **Senior researcher: Prof. Amiram Catz**
- Validation of the third version of the scale for assessing daily functioning of patients with spinal cord injury (SCIM III) by interview. **Senior Researcher—Ms. Malka Itzkowich**
- Thromboembolic events during rehabilitation of patients with spinal cord injury: Prevalence, diagnosis, treatment, and outcomes—**Senior researcher: Prof. Amiram Catz**
- Continuation of development of tools for evaluation of daily performance and the contribution of rehabilitation to improvement of functioning (SCI-ARMI) in individuals with spinal cord injury—**Senior researcher: Prof. Amiram Catz**
- Coronary artery disease and hypertension in patients with spinal cord injury—**Senior researcher: Prof. Amiram Catz**
- Sleep disorders in patients with cervical spinal cord injury: Comparison of polysomnographic and actigraphic tests, and the connection between sleep and respiratory indices, urine output, level of melatonin, and body posture. **Senior researcher: Prof. Amiram Catz**
- The prevalence of sleep disorders in different groups of patients in the Spine Rehabilitation Department. **Senior researcher: Prof. Amiram Catz**

Rehabilitation of children and child development

- Effect of Ritalin on ecological functioning in children with brain injury acquired at a subacute stage. **Senior researcher: Dr. Sharon Shaklai**
- Rehabilitation results in children after anoxic/hypoxic brain injury. **Senior researcher: Dr. Sharon Shaklai.**
- Testing of sleep function in children with attention deficit hyperactivity disorder with and without sensory integration difficulties compared to typically developing children. **Senior researcher: Dr. Aviva Mimouni-Bloch**
- Clinical and molecular characterization of a genetic syndrome of microduplication involving chromosomes P16.1-2p15. **Senior researcher: Dr. Aviva Mimouni-Bloch**
- Long-term follow-up of children suffering from thiamine deficiency in infancy. **Senior researcher: Dr. Aviva Mimouni-Bloch**

Rehabilitation of post-stroke patients

- The role of the healthy hemisphere in the post-stroke recovery process. **Senior researcher: Dr. Nachum Soroker**
- Brain plasticity and functional recovery of upper limbs after stroke. **Senior researcher: Dr. Nachum Soroker**
- Parietal lobe function in declarative memory: A neuropsychological study. **Senior researcher: Dr. Nachum Soroker**



Our most successful developments include:

LOTCA (Loewenstein Occupational Therapy Cognitive Assessment) - a kit developed by the occupational therapy services. Its aim is the administration of a test that allows evaluating in a relatively short time the cognitive functioning of patients with brain damage.

SCIM (Spinal Cord Independence Measure) - a tool for functional assessment developed in the spinal rehabilitation department.

SCIM, which was found to be valid by comprehensive international studies, received countless praise and has been recognized worldwide. Today it is used in the world's leading rehabilitation centers and was adopted by the International Spinal Cord Society (ISCoS) as a tool for routine evaluation of patients, and by the US Food and Drugs Administration (FDA), as an evaluation tool in the research of innovative therapies for spinal cord recovery.

SCI-ARMI - A unique tool, created by mathematically combining SCIM with a quantitative assessment tool of the neurological deficit, the ASIA motor score (AMS). The tool appraises the contribution of rehabilitation to the functional improvement of patients after spinal cord injury, eliminating the contribution of other factors, including natural recovery, on the patients' state.

PALPA (Psycholinguistic Assessment of Language Processing in Adult Acquired Aphasia - the Hebrew version was developed by the Department of Communication Disorders Rehabilitation to help evaluate the language processing capabilities of patients suffering from aphasia (a language impairment resulting from brain damage). This development is considered to be a diagnostic achievement of great importance.

Developments



Loewenstein Hospital was founded by the Clalit Health Fund in 1959 and has been operating in its current form ever since. To date, the hospital treated over 100,000 patients who received the most professional, high-quality, and innovative care in the field of rehabilitation.

The history and therapeutic tradition of Loewenstein are intertwined with the changing needs of Israeli society.

- 1959** Establishment of Loewenstein Hospital by Clalit. The hospital was comprised of two departments: Neurological Rehabilitation and Spine and Orthopedic Rehabilitation.
- 1973** Inauguration of the main hospital building, opening of the Brain Injury Rehabilitation Department.
- 1974** Opening of ICU for rehabilitation of consciousness.
- 1976** Establishment of a day center for head trauma patients in collaboration with the Ministry of Defense. The goal of the center is to treat patients with brain injury after initial rehabilitation carried out during full-time hospitalization.
- 1976** Establishment of the Institute for Functional Assessment, where Loewenstein hospital staff members carry out patient evaluations for the National Insurance Institute.
- 1981** Establishment of the Vocational Rehabilitation Center within the Loewenstein hospital compound as a joint initiative of Clalit, the National Insurance Institute, and the Zucker- Goren-Goldstein foundation.
- 1985** Establishment of the Friends of Loewenstein Hospital Association.
- 1990** Establishment of an independent unit for the rehabilitation of children and youths.
- 1995** Inauguration of the Fleischmann Building, where most therapeutic and diagnostic services for the community and for the population of post-hospitalization rehabilitation patients are concentrated.
- 2008** Start of construction of the new Hellenberg hospital wing.
- 2009** Loewenstein Hospital celebrates its 50th jubilee.
- 2013** Inauguration of the new Hellenberg hospital wing.
- 2015** Loewenstein Hospital successfully and with distinction passed the JCI (Joint Commission International) assessment for international accreditation.
- 2015** Beginning of the renovation of the main wing of the hospital.



Our wings at Loewenstein



Loewenstein, of the Clalit Group

Loewenstein Hospital is part of a network of hospitals belonging to Clalit, and its only rehabilitation hospital.

Clalit is the largest and most advanced healthcare organization in Israel, managing 14 hospitals, approximately 1,400 clinics throughout the country, complementary medical services, dentistry, and aesthetic medicine. Clalit provides health services to 4.3 million members, representing about 52% of Israel's population. Clalit spearheads the Israeli health care system by the quality of its medical services, leadership in innovation, and by raising awareness of a healthy lifestyle.

The main hospital wing

The hospital building inaugurated in 1973 is a nine-storey tower, six floors of which are occupied by the various inpatient wards.

The diagnosis and therapy complex consists of two floors. The complex contains a laboratory and the X-ray institute, therapy halls with advanced technological equipment, a therapeutic pool, meeting rooms for individual and group therapy, a regular gym for disabled persons, and a "brain gym" for training of cognitive functions.

In 2015, the renovation of the main hospital wing has been started.

Each of the rehabilitation departments located both in the renovated main wing and in the Hellenberg wing, has its own dining room and nurse station situated in the Hellenberg wing. The renovation in the main wing includes patient rooms and staff rooms. Protected spaces (shelters) as well as a meeting room and a family room will be established on every floor. The hospital's therapeutic pool will also be renovated, and space will be allocated in every department for research laboratories, physiotherapy, and occupational therapy.

Hellenberg wing

The new hospital tower, named after Aeneas Hellenberg, was inaugurated in October 2013. It is one of the most modern and advanced rehabilitation facilities in the world. Its planning and construction focused on meeting the unique needs of rehabilitation patients (difficulties in independent mobility, need for privacy).

Spacious and modern rooms accommodate two patients. Every patient has a private view and a half of a large window, a workstation, and a space where a family member can sleep over. In planning the wing, emphasis was placed on providing maximum privacy for the patients and space for their families, which play a significant role in our rehabilitation concept. The rooms were designed to enable the staff to provide patients with the best possible care, based on the experience accumulated at Loewenstein over decades with regard to the unique needs of patients during the rehabilitation process.





The meticulous design of the rooms is aimed to accommodate disabled people and people who have difficulty getting around. In addition to the facilities and standards available today in modern hospitals, which will also be implemented, the new tower includes:

- **Wireless nurse-patient system**—The system is positioned next to each patient bed, providing immediate, uninterrupted, and continuous availability and connection between the patient and the nursing staff. A nurse, even when outside the station, is accessible and alert to patient requests. The system allows quick and efficient response based on the nurse's assessment.
- **CCTV**—The system includes four closed-circuit cameras that monitor the public areas in the department around the clock. The system helps the nursing staff maintain full control over everything taking place in the public spaces and identify patients in distress or requiring assistance.
- **Personal multimedia system**—The system, located above each bed, provides patients with the possibility to receive essential information about the hospital and enjoy listening to the radio, watching movies, and using the Internet in their free time.

- **Ceiling crane**—The electric ceiling crane is used to move patients between the bed, toilet, and shower in a safe, efficient, and convenient way for both patients and staff.
- **Electric washing stretchers**—The stretcher is used for washing patients with complex mobility difficulties. It is designed for a weight of up to 200 kg. The stretcher has an electric remote control for adjusting it to the patient's height. It can be folded against the wall to save space when not in use.
- **Dining room adapted to patients with disabilities**—The dining room is located in the southeast corner of the hospital building, overlooking a spectacular view of the Sharon region. Its unique design is adapted to the special needs of the patient population. Among the dining room tables there are some electrically adjustable tables designed to provide a solution for patients in wheelchairs of different heights. Adjacent to the dining room is a sophisticated and advanced kitchenette that meets all the needs of a modern department. The dining room is equipped with modern food distribution carts that have simultaneous heating and cooling capacity.





The hospital contains approximately 300 beds in seven specialized departments and units, and a day-care unit. The departments and the units at Loewenstein Hospital have designated specializations: department staff, physicians, and professional teams of medical therapists form organic teams with vast accumulated experience and expertise in types of injury characteristic for each department. Patients hospitalized in each department receive treatment from a team with specialized skills in the area of their injury. In addition, consulting services are offered to hospitalized patients in the areas of internal medicine, infectious diseases, orthopedics, urology, psychiatry, ophthalmology, and dermatology. The added value to patients includes physicians, nurses, and therapists who are used to work as a team and have concrete experience treating similar injuries. This advantage allows patients to receive personal rehabilitation programs optimized for their rehabilitation potential.





Our inpatient and day-care departments and units at Loewenstein

Spinal Rehabilitation Department - The largest of its kind in the country, one of the largest in the world, and a world leader in assessment of the functioning of patients with spinal cord injuries. The department specializes in individual, comprehensive, and unique rehabilitation of patients suffering from varying degrees of injury of the spine, spinal cord, or peripheral nerves as a result of illness or trauma, or from functional impairments resulting from back or neck pain.

Orthopedic Rehabilitation Department - One of the leading departments in its field, specializing in the rehabilitation of patients with limb injuries following amputations, joint replacements, fractures, burns, pain syndromes, and complex damages as a result of accidents or diseases. The main objective in this department is to restore mobility and independent daily functioning, with or without assistive devices.

Brain Injury Rehabilitation Department - The only one of its kind in the country and among the leaders in its field worldwide. For over 40 years the department has specialized in treating patients suffering from head injuries, some of them severe. These injuries result from acts of war and terrorism, as well as traffic, work, and other accidents that cause a combination of physical, neurological, and mental damage.

Neurological Rehabilitation Department 2 - The department specializes in the rehabilitation of patients with brain damage after stroke, surgery, or brain disease. The department staff has extensive experience in the rehabilitation of young people after a stroke. The department is a leader in Israel and worldwide in the treatment and research of unique brain lesions.

Brain Rehabilitation Department 3 - The department specializes in rehabilitation after a stroke or brain damage caused by disease or surgery, and is a leader in the country in the functional assessment of patients suffering from brain lesions.

Both departments strive to lower the risk of recurrence of strokes and to prepare patients for returning to their home, work, and independent functioning in the community.

Children and Youth Rehabilitation Department - The department specializes in the rehabilitation of children and youths aged 3 to 18, who have undergone various types of injuries and diseases—car accidents, falls, acts of terrorism, surgery, tumors, damage to the nervous system, and orthopedic injuries—and who are in need of rehabilitation, functional assessment, or both.

Intensive Care and Rehabilitation of Consciousness Department - The department specializes in consciousness rehabilitation following brain injury. The unit treats physical injuries that accompany brain injuries to prevent associated complications, involves patients in activities that stimulate return of consciousness, and prepares the patient for continuing active rehabilitation. More than 80% of patients regain consciousness, a success rate that is among the highest in the world.

Day Care Unit - The unit specializes in the rehabilitation of patients who require complex rehabilitation in a hospital without having to be hospitalized full time. After the functional assessment, the unit team designs a personalized, custom-tailored rehabilitation program for the patient, which includes physiotherapy, hydrotherapy, occupational therapy (cognitive and motor), communication and psychological therapy. The unit also provides art therapy, music and drama therapy, sexual rehabilitation, social welfare assistance, and more.

The health profession teams at Loewenstein Hospital enjoy excellent reputation and international recognition for research and breakthroughs in the development of measurement, assessment, testing, and care tools.

Nursing - The nursing staff at Loewenstein possess special skills that combine general medical-nursing knowledge with knowledge that is pertinent specifically to problems routinely encountered in the course of rehabilitation. These include especially the skills necessary to improve the daily functioning of patients and to bring each patient to the maximum possible performance of daily activities. The staff implements the rehabilitation program in parallel with treatment of the patient's background diseases. The tradition of warm and human approach carried on by the nursing staff creates a family atmosphere, characterized by human sensitivity and compassion for which the hospital is famous.

Physiotherapy - The team of this sector combines professionalism and task orientation with experience and special skills in the various fields of rehabilitation. The physiotherapy institute operates a therapeutic pool, therapeutic gym, and some of the most advanced technological equipment available (Anti-Gravity Treadmill, Lokomat, Posturograph, ReWalk).

Occupational therapy - Our occupational therapy services enjoy wide international recognition and assessment. The LOTCA assessment kit, developed by the unit for the rapid evaluation of the patient's cognitive ability, is being sold to hospitals and rehabilitation institutions worldwide. The occupational therapy institute operates treatment halls for each department, and several outpatient clinics.

Health professions

Rehabilitation of Communication Disorders - This sector specializes in the rehabilitation of language disorders (aphasia), swallowing disorders (dysphagia), and speech disorders (dysarthria). Together with linguistic treatment, it helps improve non-verbal communication skills. The communication disorder rehabilitation institute provides inpatient and outpatient services, and promotes educational programs for all hospital staff members, aimed at improving communication with patients with language disorders.

Social services - This sector provides support aimed at alleviating the psycho-social difficulties of patients and their families. It assists our inpatients with their successful reintegration into the community after discharge from the hospital. The unit operates various social programs as part of the rehabilitation process.

Psychological services - With its accumulated specialized experience in clinical psychology, neuropsychology, and rehabilitation, this sector specializes in cognitive and psychological assessment and treatment for our inpatients and outpatients. It also contributes to functional improvement, in all types of psychological injuries following emotional trauma and diseases involving neurological and other injuries.

Nutrition and diet - The nutrition and diet service provides appropriate and balanced food to hospital patients. The service team adjusts the diet for patients with special dietary requirements, after assessing their nutritional needs based to their state of health, and tracks and monitors the results of diet therapy. The team also instructs patients and their relatives in preparation for discharge from the hospital, and conducts group training on the topics of diabetes, hypercholesterolemia, and obesity.



The hospital established on-site services, clinics, and treatment centers in all areas of rehabilitation, which are managed by the hospital staff and are unique in that they target the population at large.





Advanced rehabilitation technologies

ReWalk—This innovative device is based on robotic technology, which allows patients with paralyzed lower body and therefore confined to wheelchair to walk with crutches. The system consists of a suit that the patient wears on the lower extremities and which includes, among others, batteries, an array of sensors, a computerized control system, and a sophisticated emergency and safety system.

Anti-Gravity Treadmill (AGT)—The device was developed by the US Space Agency (NASA). Based on differential air pressure (DAP) technology, this is a treadmill that reduces the patient's body weight with the aid of a conveyor on which the patient walks while wearing the specially designed trousers.

Lokomat—The most advanced robotic system of its kind for the practice of walking as part of physiotherapy. The system combines a moving conveyor with a robot synchronized by a computer, allowing patients to imitate normal and continuous walking already at the earliest stages of rehabilitation. The system can handle a wide variety of patients, including those with spinal cord injuries, head injuries, post-stroke, multiple sclerosis, or patients suffering from functional disorders and movement difficulties for other reasons.

Posturograph—This computerized system helps diagnose problems with stability and balance resulting from orthopedic or neurological impairments. The assessment of deficiencies covers both the sensory and motor systems (voluntary as well as automatic). With the help of the Posturograph it is possible to assess the patient's ability to perform various functions, including walking, getting up from a sitting to a standing position, and walking stairs. The main treatment goals are improving balance and posture, strengthening of the muscles, and learning appropriate strategies to achieve balance.

Brain gym—The occupational therapy department, at the Loewenstein rehabilitation hospital runs a "brain gym" for patients with acquired brain injury. The gym contains a number of computer stations with access to different internet programs which address various cognitive functions, such as attention, memory, responsiveness and visual and spatial perception. Each patient has his own access code, the program adjusts the level according to his abilities and keeps track of his progress.

Snoezelen room—A portion of the therapeutic space is used for activities that combine relaxation and multi-sensory stimulation of hearing, touch, taste, smell, and movement. Snoezelen treatment is intended for patients of all ages suffering from severe disabilities and complex functional problems, and for patients to whom other treatments are not accessible. At Loewenstein the Snoezelen room is used also with unconscious patients.

Virtual reality—In this unique and innovative treatment method the action projected on a screen makes the viewer experience a sense of activity and presence, as if it were happening in reality. In a virtual reality environment created with advanced technologies, the user moves objects and receives visual and auditory feedback in response to his actions.

This is an additional platform where patient and therapist can discuss the difficulties faced by the patient in the course of the rehabilitation process, and an opportunity to revisit the strategies learned at individual sessions of occupational therapy. For example, a patient dealing with the hemispatial neglect, will be asked to perform tasks and respond to stimuli set up for him by the occupational therapist on the left side of the screen.

The tasks are varied and interesting, many of them implemented as fun games, such as blasting balloons moving in different directions, rafting, goal keeping by kicking the football while avoiding distractors, shooting at enemy spaceships, and more.

Driving simulator—This device, which simulates various driving situations and tests the driver's responses, is used to rehabilitate driving skills. The occupational therapy institute at Loewenstein operates the simulator for the benefit of hospital patients, using a team of professionals specializing in rehabilitation of driving skills.

Head mouse (Head-controlled mouse)—The device consists of a sensor affixed to the patient's forehead and of components installed on the computer. It replaces the computer mouse for patients with severe weakness or quadriplegia. Mouse activation is by neck movements only. With the help of a head mouse, a person who lacks voluntary and controlled movements of the hands but controls the movements of the neck can use a computer.

to benefit our patients at Loewenstein





Rehabilitation of soldiers at Loewenstein

Since the establishment of the hospital, hundreds of soldiers and reservists have been treated at Loewenstein. Soon after the inauguration of the main hospital wing, in 1973, IDF soldiers injured in the Yom Kippur War were admitted for rehabilitation. At that time the Brain Injury Rehabilitation Department was established to serve soldiers wounded in military operations, and victims of accidents. Cooperation between the IDF and Loewenstein is very close and has continued for many years. Rehabilitation programs have been adapted to young people and their unique functional needs.

From a letter of commendation of the late Prime Minister and Minister of Defense, Yitzhak Rabin:

"When they [the soldiers] come to the hospital, they are very upset, frustrated, and anxious because of their difficult situation. In their hearts and in the hearts of those dear to them, there is hope that here, at Loewenstein Hospital, they will receive the medical assistance that they need. Most of them are released singing the praises of the devoted care provided by doctors, nurses, and the multidisciplinary team. Everyone works night and day as best they can to restore them to full functioning and allow them to return to their previous lives."

From a speech by the late Israeli President, Prime Minister, and Minister of Defense, Shimon Peres:

"It is impossible to understand the State of Israel, or at least the secrets of the State of Israel, without a deep understanding of the operation of several entities, which are of paramount importance in our lives. Beit Loewenstein is among those, having managed to save people who were practically sentenced to death."



Rehabilitation of youths at Loewenstein

Accidents, injuries, and neurological trauma also occur in the young. Rehabilitation of a young person happens at a pace that matches the life of a young person. A young person's rehabilitation is dynamic and active, driven by the intention to return the individual to independent functioning.

The main objective of the rehabilitation of a young person is rapid return to normal life in the best possible manner, including employment, family life functioning, interpersonal relations, and full realization of the individual's potential.

Our accumulated experience suggests that a rehabilitation process that takes place shortly after the injury can lead to the restoration of optimal functioning. These are young people whose lives changed dramatically because of an accident or illness. They suffer from impaired functioning, and the rehabilitation process allows them to return as soon as possible to independent, high-quality living for years to come.



Rehabilitation of Holocaust survivors

A rehabilitation program for Holocaust survivors operates at Loewenstein Hospital. A social worker representing the services for Holocaust survivors coordinates the follow-up and lends an attentive ear whenever special attention is required. Holocaust survivors who need rehabilitation, some of them lonely, receive the best possible treatment at Loewenstein, and their specific needs are addressed in a comprehensive manner that takes into account their age and their physical, mental, and emotional condition. During their hospital stay, in addition to excellent rehabilitation treatment, the survivors receive unique, custom-tailored solutions for their needs.

There is ongoing cooperation between the Loewenstein Hospital and the Claims Committee, which works on behalf of Holocaust survivors. The Claims Committee assists in the development of the hospital, and it contributed to the building of the new Hellenberg hospital tower.





With Loewenstein experts, patients have maximum chances of extending life and improving the quality of life

Loewenstein Hospital doctors are world-renowned experts in rehabilitation medicine.

At Loewenstein there is the highest number of rehabilitation physicians in Israel.

Health professionals at Loewenstein are internationally recognized pioneers and innovators.

The highest expertise in functional assessment, critical for the outcome of the rehabilitation process,
can be found at Loewenstein.

Tools developed at Loewenstein have been acquired by leading rehabilitation hospitals worldwide.

Loewenstein departments employ organic teams specialized by type of injury.

Loewenstein is a teaching hospital affiliated with the Tel-Aviv University.

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