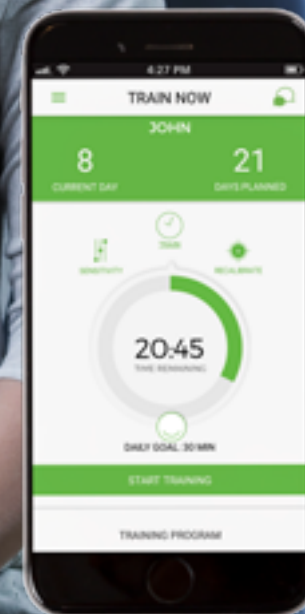




# CLINICAL FINDINGS AND SUCCESS FROM USAGE OF THE UPRIGHT PRO TRAINER

MARCH 2017, VOL. 2



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# CURRENT STATE OF BACK PAIN



• Lower Back Pain

## LOWER BACK PAIN IS THE MOST COMMON CAUSE OF DISABILITY

Lower back pain is the leading cause of disability throughout the world<sup>1</sup>. Although research has shown that a specific diagnosis can be reached in greater than 90% of spine conditions presenting to an interventional spine specialist<sup>2</sup>, most patients presenting to their primary care physician with low back pain are given a non-specific diagnosis. In many of these conditions, muscular and postural abnormalities have been implicated. Multiple conservative treatments have been used to treat these conditions, with similar, modest, and unfortunately waning effects on outcomes<sup>3</sup>.

## CURRENT STATE OF BACK PAIN



60%

OF CHILDREN DIAGNOSED  
WITH IMPROPER POSTURE



40%

REPORT HAVING BACK PAIN,  
NOT DIAGNOSED

Close to 60% of children have been diagnosed with improper posture<sup>4</sup>, and poor endurance of back extensor muscles has been associated with low back pain<sup>5</sup>. It has been demonstrated that people can learn a sequence of movements by a brief daily practice over a few weeks<sup>6</sup>, and that people can use a flexible sensor training system to adjust their posture<sup>7</sup>. In a clinical trial of patients with subacute or chronic low back pain, patients who used a sensor to modify their posture achieved improvements in pain and activity compared to patients who used a placebo sensor<sup>8</sup>.

# INTRO TO UPRIGHT CLINICAL DATA



The UPRIGHT PRO trainer is a new postural training device that attaches to the skin on the back via an adhesive. When the user slouches, the device vibrates, reminding the user to return to a proper upright posture.

**The purpose of this paper is to present the up to date clinical data as observed on patients using the UPRIGHT PRO device. This paper will also present professional's feedback and comments regarding their personal experience in using the UPRIGHT PRO device.**

Clinical data from three clinical institutes (Kessler Rehabilitation center, Sport Clinic and Kupat Holim Leumit), using the UPRIGHT PRO as a clinical treating tool on patients with postural deficits, are presented in this paper.

Currently "evidence based" studies have yet to be conducted (since a reliable study will take over a year to conduct). However, the clinical value of the UPRIGHT PRO device as presented in these case studies, suggests that training with this device has significant clinical benefits.





## STUDY DESIGN AND PREPARATIONS

For those clinics participating in the UPROGHT PRO pilot, a specific study design was created:

For each chosen clinic an UPRIGHT PRO device was supplied (sometimes more than one) and the physiotherapists participating in the pilot were given detailed information regarding the operation of the device. This guidance was supplied by the company's physiotherapist based on his experience with the device.

For each of these clinics participating in the study, a patient, allocated by the physiotherapist was enrolled to participate in the pilot. Each patient signed an informed consent prior to the beginning of the pilot.

For each patient participating in this pilot Initial data regarding pain and posture were collected as well as an objective measure which varied among these clinics. Patients data was recorded at the beginning of the training session and was again collected at the third week and at the end of the entire training session.

## WHAT PROFESSIONALS ARE SAYING & RECENT AWARDS

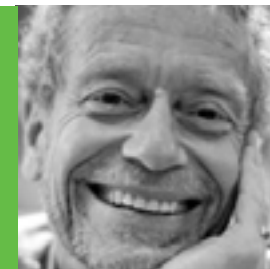


"Using UPRIGHT and its smart sensors to track the back's changes in posture, gives highly effective feedback, which enables relevant posture training."

Dr. Youssef Masharawi PhD, MSc, BPT Head of Spinal Research Lab.Senior Lecturer,  
Physical Therapy Dept.Tel Aviv University

"The UPRIGHT device is the best reminder to sit straight. My students report that when they use the UPRIGHT and continuously are reminded to sit upright, they have more energy and are more alert while working."

Dr. Erik Pepper P.h.d, San Francisco State University

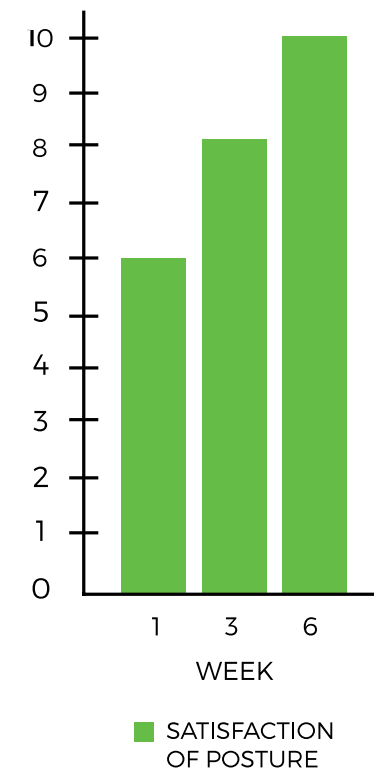
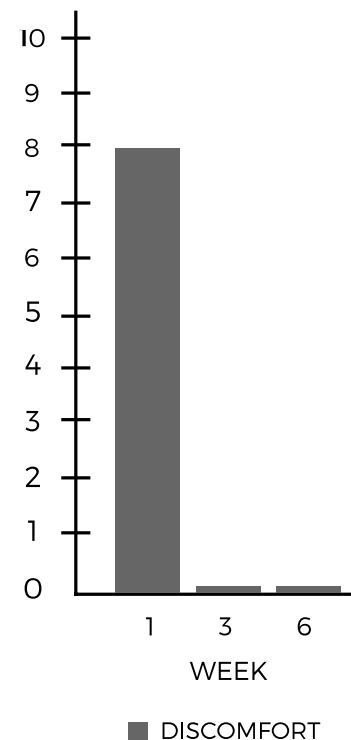
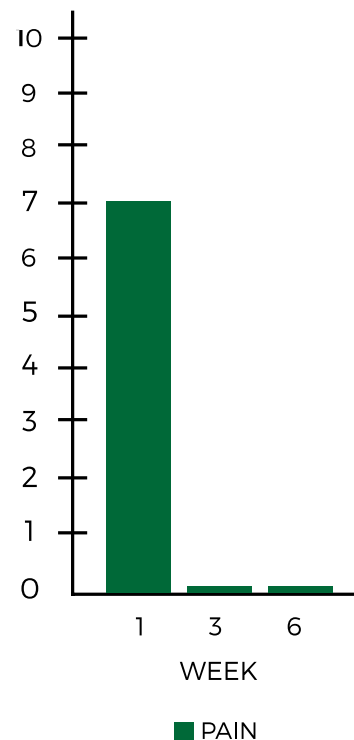
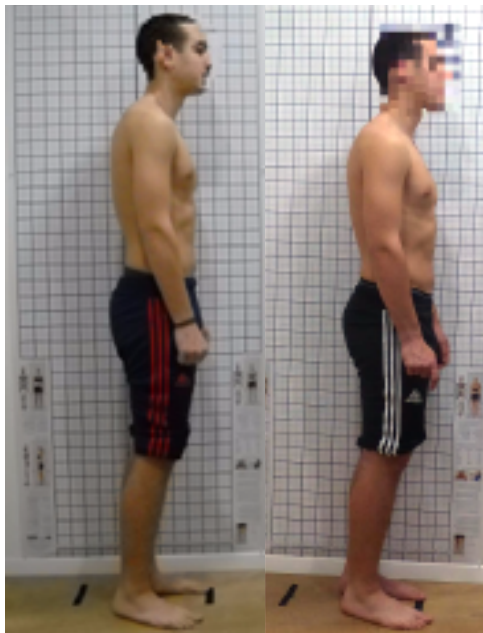


## SPORT CLINIC



Sport Clinic is a private physiotherapy clinic treating patients mainly in the field of sport injuries. The owner of sport clinic was the former physiotherapist of several sport clubs, among them was the Israeli leading football club – Maccabi Tel Aviv. Sport Clinic conducted a pilot study assessing the effectiveness of the UPRIGHT PRO device as a useful method in performing postural training. Results of this pilot study are seen in the below figures.

I.S., male, 18 years old. Daily sitting time: 8 hours daily. Initially diagnosed with kyphosis, started physical therapy for lower back pain 1 month prior to the intervention with the UPRIGHT PRO device. I.S finished 6 weeks intervention with no pain or discomfort, and was completely satisfied with his posture.





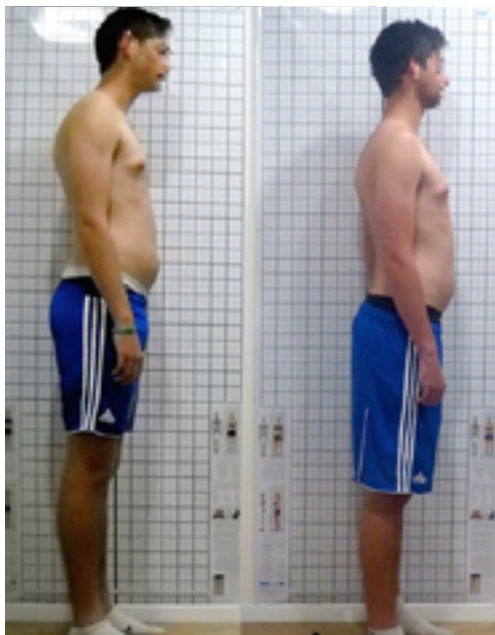
# SPORT CLINIC



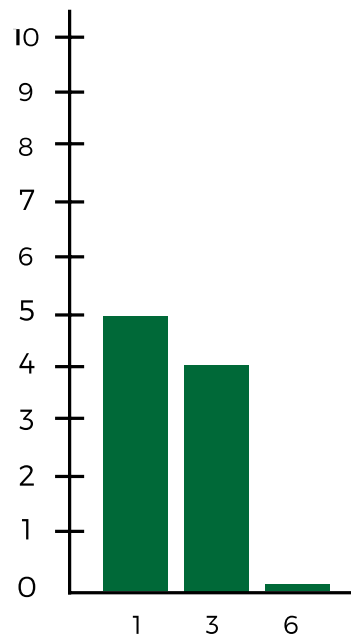
I.R., male, 17 years old. Daily sitting time: 10 hours daily.

Diagnosed with kyphosis by his physical therapist, I.R has been suffering from upper back and neck pain for years. He has been treated by physical therapy in Sport Clinic for a month, including posture correction exercises & manual therapy.

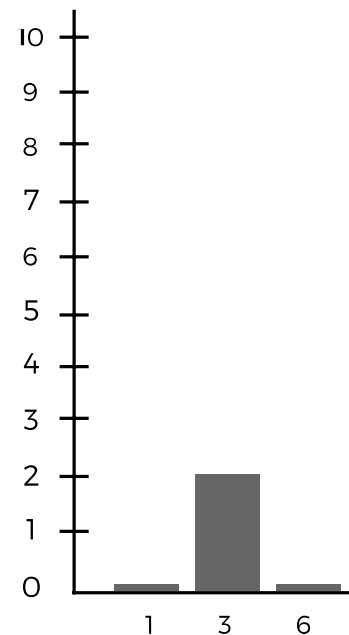
After 8 weeks of using the UPRIGHT PRO, the patient has showed great satisfaction with his posture and reported no pain.



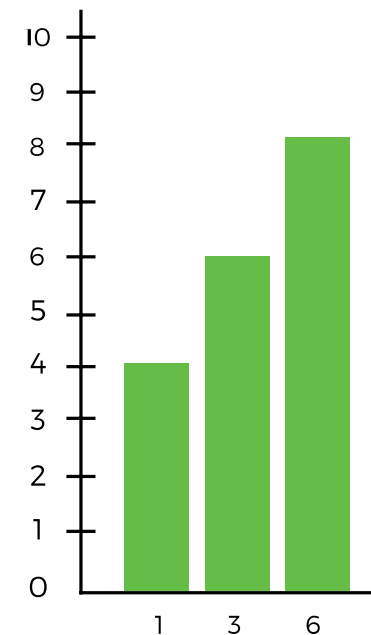
**SC** Sport Clinic



■ PAIN



■ DISCOMFORT



■ SATISFACTION OF POSTURE

## SPORT CLINIC

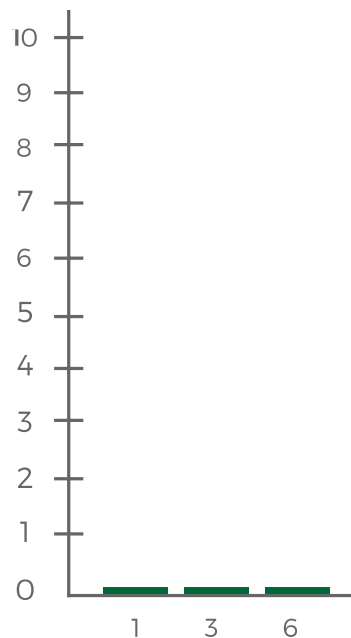


M.S., female, 42, Daily sitting time: 8 hours daily.

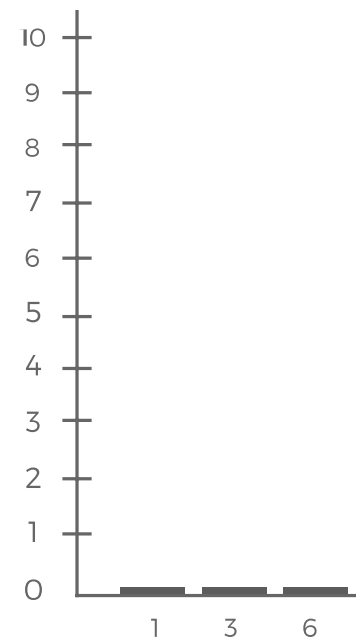
M.S. has been a patient in a Sport Clinic for over a year, she had no pain when started the study but was not satisfied with her posture. By the end of the intervention pilot the patient showed great satisfaction with her posture.



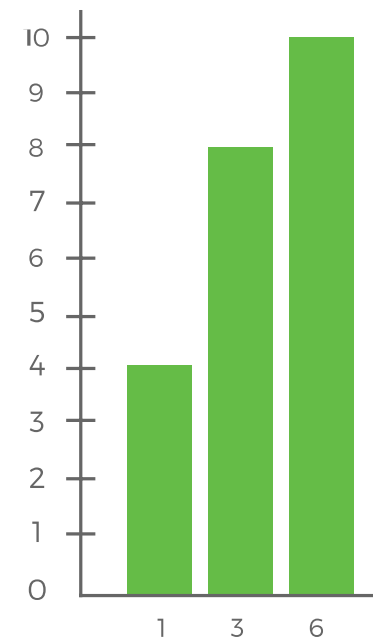
**SC** Sport Clinic



■ PAIN



■ DISCOMFORT



■ SATISFACTION OF POSTURE

## SPORT CLINIC



The conclusion of this pilot study was that the potential of the UPRIGHT PRO device goes beyond posture training. **The biofeedback capabilities of the UPRIGHT PRO device allow it to be used in order to solve other physiotherapy challenges, such as orthopedic rehabilitation, strengthening muscles, balance and more.**



"Using UPRIGHT for postural training is much more effective and the results are much more long-lasting than any other method I have used"

Ido Dana M.P.T. owner of Sport Clinic

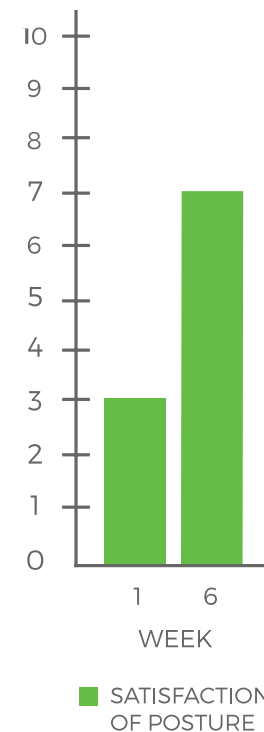
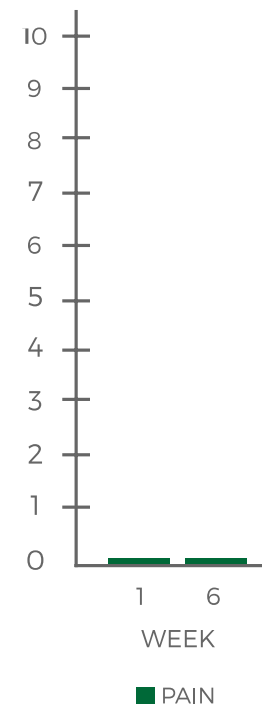
# KUPAT HOLIM LEUMIT



Kupat Holim Leumit initiated together with UPRIGHT a pilot study to take place in leading physiotherapy clinics in Israel. Together with the director and head of physiotherapy services in Leumit, Ms. Gabi Sade, 7 leading physiotherapy clinics were allocated to participate in this pilot study.

To date, 4 patients have completed their training sessions. Patients initial and final parameters are shown in the charts below. 2 of them are still using the Upright at their home. Patients were also being pictured before and after the training with the UPRIGHT device. Below are results of some of the patients.

S.M.Y., 54 years old. Daily sitting time: 9 hours daily.  
Was referred with no pain in her lower or upper back.

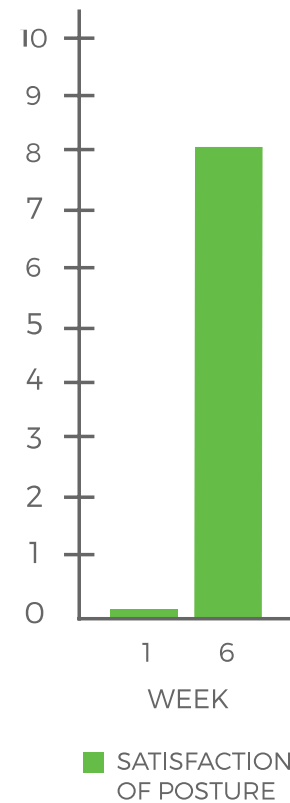
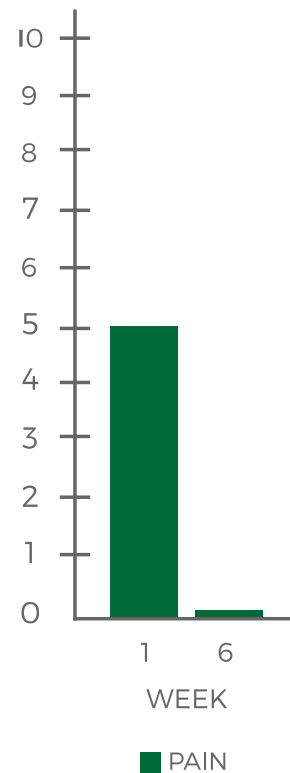


# KUPAT HOLIM LEUMIT



Female, 14 years old. Daily sitting time: 8 hours daily.

Was referred due to thoracic back pain. Reported improvement of posture awareness by the end of the pilot with UPRIGHT.

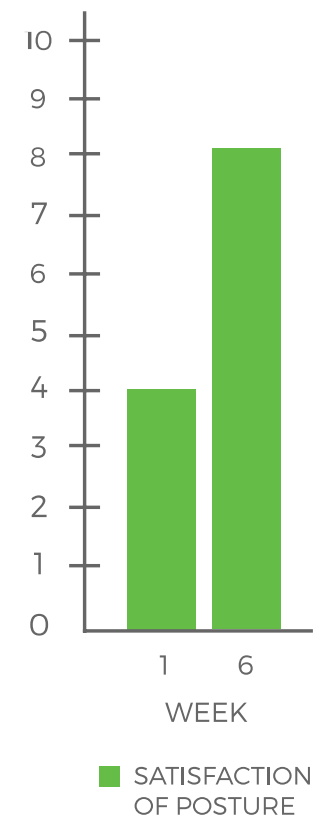
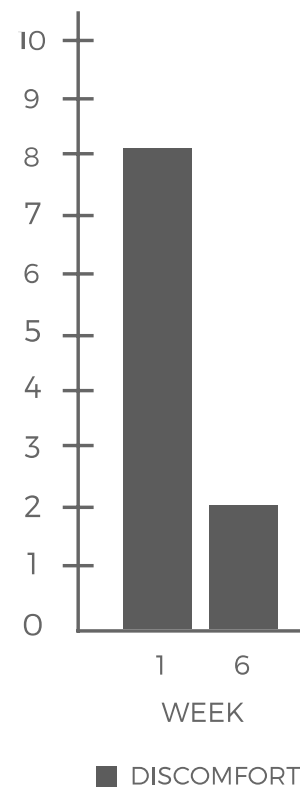
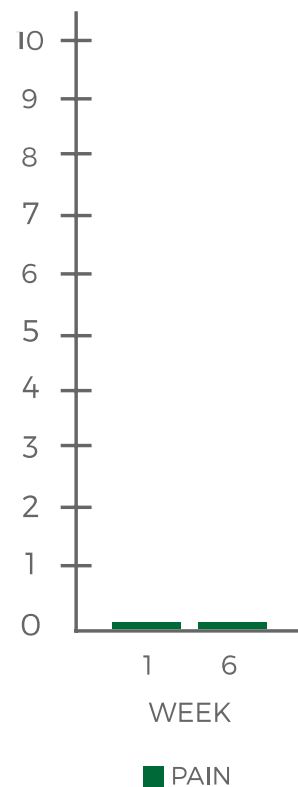


# KUPAT HOLIM LEUMIT



UPRIGHT was used by Susan Solomons, MPT (Pediatric Physical Therapist) with children with developmental disorder.

Girl, 8 years old. Daily sitting time: 6-8 hours daily. Initially was diagnosed by her physical therapist with kyphotic posture. Currently not suffering from pain.



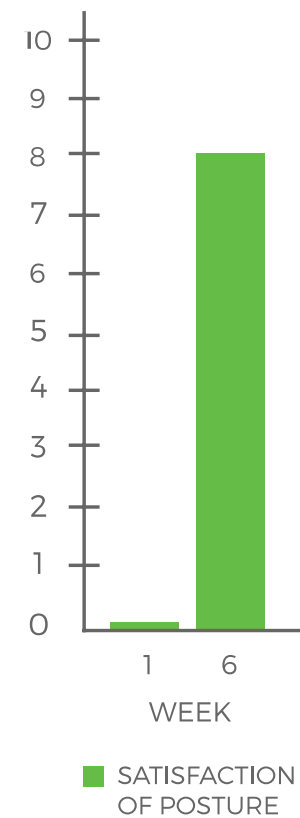
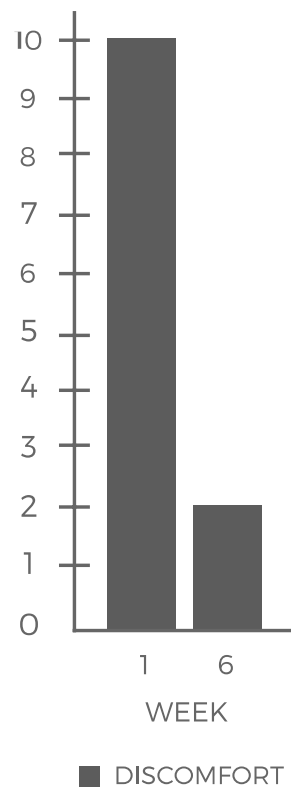
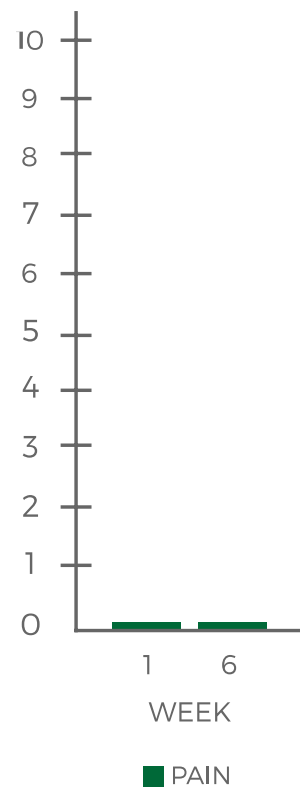


# KUPAT HOLIM LEUMIT



Boy, 11 years old. Daily sitting time: 10-12 hours daily.

Initially was diagnosed by his physical therapist with hypotonia, Developmental coordination disorder. Currently not suffering from pain.



The conclusion of the Leumit pilot study showed great potential for the UPRIGHT PRO when using it with children and other patients, not only by decreasing their back pain but also by improving their satisfaction with their posture. The children whose results are shown above, felt more comfortable while sitting with upright posture, after a relatively short time training with the UPRIGHT PRO.

“After 2 weeks of training with the device 4 times a week there has been a remarkable improvement with regarding to shoulder protraction measurements and the patient seems to be able to better use his rhomboid muscles”

Susan.S, MPT

“After 3 weeks upon which the patient was training daily, pain level decreased by 50%.

The patient can perform functional activities for a longer period of time and with less pain”

Achmed Agabia, DPT,  
Head of Leumit clinic in Netanya

# KESSLER REHABILITATION CENTER



The Kessler rehabilitation center has more than 85 centers across New Jersey, and treats more than 38,000 patients each year.

A pilot study is being conducted in five physiotherapy clinics lead by Ms. Kavita Patel, DPT. For each of the five clinics, a patient allocated by the clinic's Head of Physiotherapist was enrolled to participate in this study.

For each patient participating in this pilot Initial data regarding pain and posture were collected as well as the occiput wall distance (OWD) measurements.

**Though some patients are still in treatment, all are showing an objective improvement in terms of forward head posture and rounded shoulders.**

In 2017, Kessler started selling the UPRIGHT PRO in their clinics.

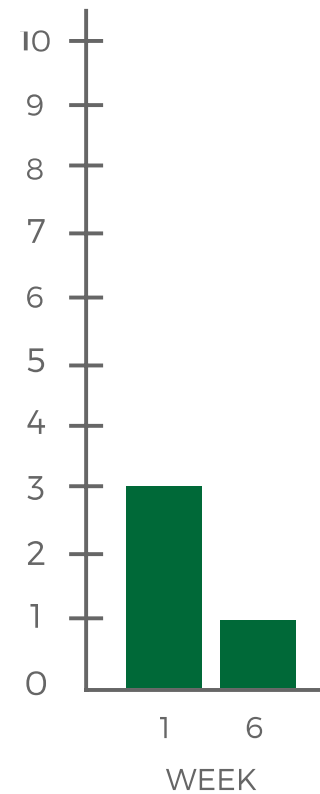


## KESSLER REHABILITATION CENTER

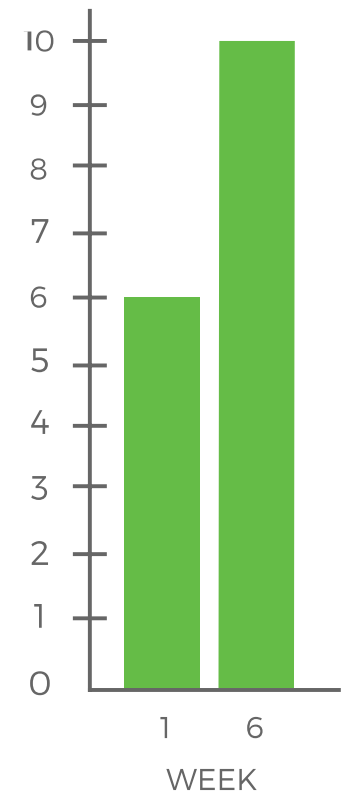


J.S., female, 40 years old.

The patient has demonstrated an improvement in her Occiput to Wall distance measurement (OWD) from 2.5cm to 0.5cm and has reported a great satisfaction with the device.



■ PAIN



■ SATISFACTION OF POSTURE

# KESSLER REHABILITATION CENTER



The feedback from Kessler rehabilitation center was very positive:

1. The UPRIGHT PRO device is small, compact, and easy to handle.
2. The instructions that come with the unit and the ones available online are very easy to follow.
3. Good adjunct to PT interventions for postural re-education at home or at the office.
4. Can be used for various patient populations: computer workers, anyone with poor postural stability.
5. It was initially designed for the lumbar spine, but we were able to use for cervico-thoracic placement too.

"The patient at my center has demonstrated excellent improvement in his pain levels and posture."

Kavita Patel, PT, DPT, Clinical Specialist PT



# ASSUTA HOSPITAL



In Assuta hospital the device was used on an 18 year old gymnast with a need to correct his posture in order to reduce pain and efficiency of movement. The program was 2 trainings a week for a period of six weeks.

The first session was very uncomfortable for the athlete and he needed to take short breaks between sets and finished even the most basic of exercises with muscle fatigue. The first session lasted 45 minutes. Pain throughout the first session was recorded above 6 (VAS, out of 10). Each session throughout the program firstly increased in duration and then in intensity. The athlete was able to hold a more correct posture through the exercises while it increased in difficulty (through time or load) with less fatigue and less pain reported.

The gymnast went on to win Silver in the 2016 Rio Olympics, and this is in part due to his consistent posture training.

Other than him, more than 50 patients have used UPRIGHT PRO as part of their core training and rehab.



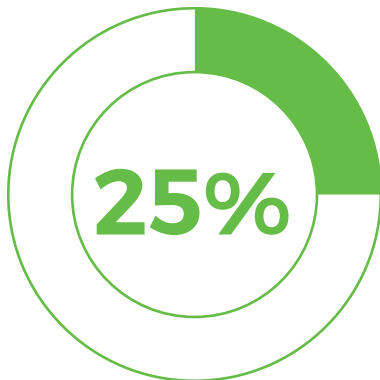


## CORPORATE - SAP

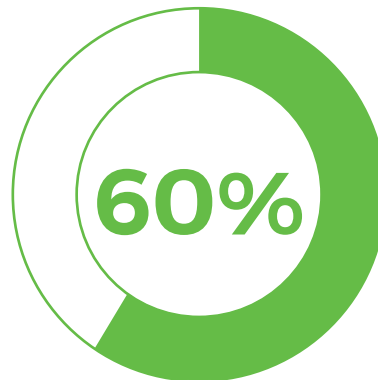


SAP Software Solutions, a multinational software development corporation, filled with thousands of developers, decided to team up with UPRIGHT for a corporate wellness initiative.

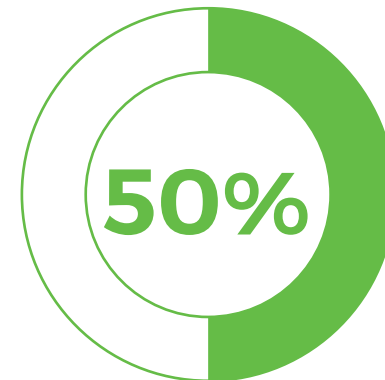
13 SAP employees were given an UPRIGHT PRO device and asked to perform their training at their working station. Throughout the program, the employees were asked to fill out various surveys to evaluate different aspects effected by their posture.



REPORTED RELIEF  
IN THEIR BACK PAIN



FELT MORE PRODUCTIVE WHILE  
WORKING WITH GOOD POSTURE



FELT THEIR CORE MUSCLES  
BECOMING STRONGER

OVERALL SATISFACTION FROM OWN POSTURE IMPROVED BY 70%



"From the begining of using it I became more aware of my posture even when I'm not wearing it"

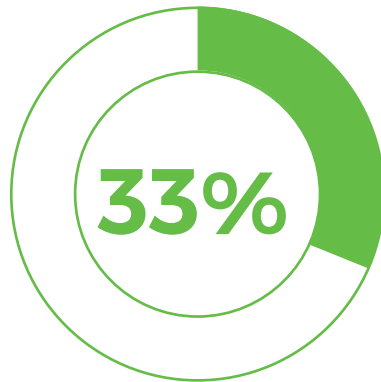
Matan M.

## CORPORATE - SIEMENS

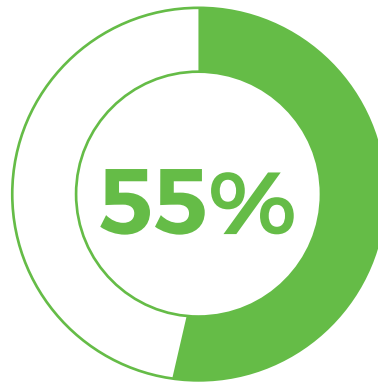


Siemens, a multinational electronics and electrical engineering company, filled with thousands of workers, decided to team up with UPRIGHT for a corporate wellness initiative.

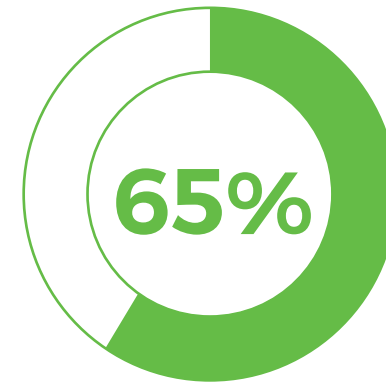
9 Siemens employees were given an UPRIGHT PRO device and asked to perform their training at their working station. Throughout the program, the employees were asked to fill out various surveys to evaluate different aspects effected by their posture.



REPORTED RELIEF  
IN THEIR BACK PAIN



FELT MORE PRODUCTIVE WHILE  
WORKING WITH GOOD POSTURE



FELT THEIR CORE MUSCLES  
BECOMING STRONGER

OVERALL SATISFACTION FROM OWN POSTURE IMPROVED BY 85%

**SIEMENS**

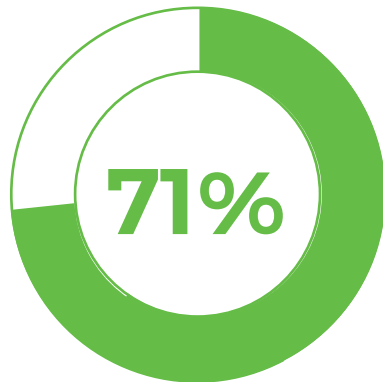
"I achieved my goal of using UPRIGHT - increasing my awareness to posture through out the day"  
Ram S,

## CORPORATE - ERNST & YOUNG

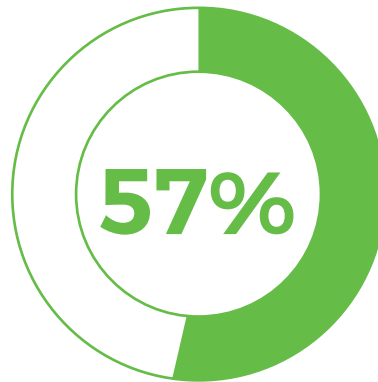


EY ISRAEL is a member firm of Ernst & Young Global Limited, which is a global leader in assurance, tax, transactions and advisory services. EY ISRAEL decided to team up with UPRIGHT for a corporate wellness initiative.

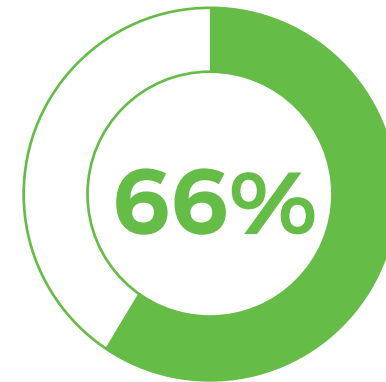
31 EY employees were given an UPRIGHT PRO trainer. Throughout the program, the employees were asked to fill out various surveys to evaluate different aspects effected by their posture.



REPORTED RELIEF  
IN THEIR BACK PAIN



FELT MORE PRODUCTIVE WHILE  
WORKING WITH GOOD POSTURE



FELT THEIR CORE MUSCLES  
BECOMING STRONGER

OVERALL SATISFACTION FROM OWN POSTURE IMPROVED BY 76%



“A wonderful device that upgrades your quality of life.”

Rafael Bar Moshe

## PRIVATE CLINICS



Alongside the pilot studies that are being conducted in these clinics using the upright device as a clinical tool in treating these patients with postural deficits, our device is being used by many professionals that have stated that this device has changed their entire approach in addressing patients demonstrating posture deficits.

In May 2016 the Israel physiotherapy society (IPTS) held its annual conference. During this conference the UPRIGHT PRO device was presented and explored by worldwide known physiotherapists and over 150 devices were sold. The device was demonstrated to worldwide leading physiotherapist including Hospital managers, directors of the physiotherapy services in the leading HMOs, private clinics physiotherapists, head of physical therapy schools in the leading universities in Israel, and other professionals.

Here is some of the feedback we recieved:

“An eye opening experience even  
for a Physical Therapist!  
I have had the chance to use the  
UPRIGHT Posture device for the past  
month and I am ecstatic about what  
it has done so far for me and  
my patients”

Justin C Lin, DPT, MS, Owner, Rehab and  
Revive Physical Therapy

“This is a device that meets a need  
that should have been resolved  
a long time ago. Correct posture  
can prevent many pains. Upright  
is simple, comfortable and user  
friendly. It is challenging and makes  
the postural practice a "training"  
instead of a "burden"”

Noa S. BPT, owner of a private PT clinic

## PARTNERSHIPS & ONGOING RESEARCH



UPRIGHT PRO is constantly on the demand for clinical research. It is for this reason that we are involved in several clinical studies assessing both the psychological benefits of an upright posture as well as the advantages of the device in terms of pain, drug consumption, muscle endurance, patient adherence, postural effects and in comparison, to other treating tools.



**Stanford University** - we will be starting a Prospective, randomized, pragmatic trial comparing postural-based physical therapy with or without the UPRIGHT PRO trainer in patients with thoracic and/or lumbar pain.

**Tel Aviv University** - we are conducting a trial that aims to study the Endurance of the muscles and effects of a vibrotactile intervention program on back muscles, quality of life and thoracic curvature in healthy subjects.

**Ohio State University** - we are checking out the Impact of the UPRIGHT PRO device on self-confidence and stress.

**Newcastle University** - Staying upright in Parkinson's disease: feasibility of a novel posture intervention.

**The Academic College at Wingate** - the effects of a biofeedback posture trainer device on subjects with kyphosis.

**University of Haifa** - we will be assessing the effect of an upright posture on the mood and symptoms in mild to moderate depression as well as the effects of shoulder girdle posture on anxiety by using a biofeedback device.

# ANNOUNCING OUR SECOND PRODUCT



For more information about the UPRIGHT GO please email:  
[hello@uprightpose.com](mailto:hello@uprightpose.com)

Estimated shipping: Summer 2017





# SUMMARY



## THE WORLD LEADER IN POSTURE TRAINERS

UPRIGHT PRO is gaining more and more credibility both clinical based and evidence based. We expect 2017 to be an extremely abundant year for Upright with more clinical feedback and with researches proving the usefulness and effectiveness of the UPRIGHT PRO device as a clinical tool treating patients and helping them stay upright.

"The best posture trainer on the planet"

Dr. Ken Hansraj MD New York Spine Surgery & Rehab Author of  
"Keys to an Amazing Life: Secrets of the Cervical Spine"

# APPENDIX



1. Vos T, Flaxman AD, Naghavi M, Lozano R, Michaud C, Ezzati M, Shibuya K, Salomon JA, et. al. Years lived with disability (YLDs) for 1160 sequelae of 289 diseases and injuries 1990-2010; a systematic analysis for the Global Burden of Disease Study 2010. *Lancet*. 2012 Dec 15;380(9859):2163-96.
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<https://www.ncbi.nlm.nih.gov/pubmed/12322811>

<http://www.mdpi.com/1424-8220/15/2/3975>

<https://www.ncbi.nlm.nih.gov/pubmed/26022102>

<http://www.pnas.org/content/95/3/861.full.pdf>

# THANK YOU

For more information please email us: [hello@uprightpose.com](mailto:hello@uprightpose.com)