

**Interview with Lev Neymotin, PhD
IsoTone Developer, N5Digital, Inc.**

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1. Inspiration and Vision

What inspired you to create the IsoTone device, and what gap in the fitness or physical therapy market were you aiming to fill?

IsoTone was born from a simple but powerful need: to create a compact, intuitive tool that delivers full-spectrum resistance exercise and therapeutic massage, accessible to anyone, anywhere. I've spent much of my career in Mechanical Engineering while always keeping an eye on developments in technologies and mechanical tools used in physical therapy with focus on health innovation. On the latter, specifically, I saw a huge gap—most resistance devices were either too bulky, limited in function, or not suitable for people recovering from injury or illness. I wanted to create something that adapts to the user, rather than the other way around.

2. Unique Features

The website highlights IsoTone's versatility, portability, and ability to engage muscles with "pinpoint precision." Can you explain how you achieved these qualities and what sets IsoTone apart from other resistance exercise tools?

IsoTone's portability, versatility, and pinpoint muscle targeting were achieved through both mechanical innovation and user-centered design. The device uses spherical handles fitting nicely in any hand and a carefully engineered internal resistance system to engage multiple muscle groups from any angle. It provides 360-degree resistance and auto-adjusts based on the user's force—allowing beginners and athletes alike to use it safely and effectively. Unlike resistance bands or free weights, IsoTone offers continuous resistance to any movement the user makes, in any direction. This makes the exercises to engage the body 360 degrees, continuously, making it 100% efficient. In addition, the size of the handles allows to engage not only the hand during exercising but also the fingers.

3. Design Process

What challenges did you face while designing such a compact yet powerful device, and how did you overcome them?

One of the biggest challenges was fitting high-quality resistance functionality into a small, hand-held form factor. We had to experiment with various internal mechanisms to ensure smooth and scalable resistance without compromising durability or comfort in using the device. Another challenge was to identify the design that would maintain consistent, smooth and "elegant" performance at different intensities—something we resolved by carefully reviewing different mechanical solutions and extensive user testing.

4. Technology

The site mentions "patent-pending technology" that maximizes workout efficiency. Could you share more about how this technology works without giving away proprietary details?

Our patent-pending design integrates dynamic, auto-adjusting resistance with mirror-directional feedback. While I can't share full details, the key innovation is IsoTone's ability to automatically match user effort in any direction, creating a self-regulating experience and making it appropriate across all age

groups and fitness levels. That's part of what makes it unique—it becomes an extension of any user's movement, practically for anyone. And by embedding an effort gauge, we added a layer of real-time performance data.

5. Target Audience

Who do you see as the ideal user for IsoTone—fitness enthusiasts, physical therapists, or a broader demographic—and how did you tailor the device to their needs?

IsoTone was designed with a wide demographic in mind. It's ideal for:

- Fitness enthusiasts looking for compact, versatile training, aerobic exercises and strength development;
- Physical therapists seeking a safe and adaptive rehab and preventative medical therapy tool;
- Older adults and post-surgery patients who need gentler, auto adjusting resistance exercise engagement;
- In the office space, it is the workers who want quick tension relief physical recharge.

The overarching goal was to build something that scales up or down with the user's needs and fits a wide range of environments.

6. Physical Therapy Angle

IsoTone is marketed as both a fitness device and a rehabilitation tool. How did you ensure it meets the specific demands of post-trauma recovery?

We worked closely with PT professionals and medical doctors to make sure IsoTone meets rehabilitation demands. Its resistance is self-adjustable simply by the user's applied force, so it eliminates the need for complicated setups. Additionally, the smooth resistance and 360-degree movement range help retrain motion patterns gently—especially important for post-trauma or joint-sensitive recovery.

7. Effort Gauge

The "effort gauge" feature sounds intriguing. Can you elaborate on how it helps users and therapists monitor progress in real time?

The effort gauge measures how much physical effort the user applies in real time performing any specific exercise. The gauge uses a unique IsoTone's feature: the device heats up during the exercise as the user's "biological" energy is converted into the heat energy deposited into device heating it up. The visual feedback – temperature of the device measured by and shown on the gauge – helps users maintain consistency and motivates them to push their limits safely. A simple calculation even allows to estimate how many calories the user burned during the exercises. For therapists, it provides quantifiable data to track recovery or strength progression—something rarely available in such a small, portable tool.

8. User Feedback

Since launching, what kind of feedback have you received from users, and has it influenced any updates or future plans for IsoTone?

Feedback has been overwhelmingly positive. Users appreciate the simplicity, portability, and effectiveness. Therapists are especially excited about its real-time resistance adaptability and low learning curve. Many say it's the first tool they've seen that truly bridges fitness and rehab. We're incorporating feedback when developing exercises addressing various muscle groups and preventative and physical therapy application.

9. Scientific Backing

Have you collaborated with fitness experts, therapists, or researchers to validate IsoTone's effectiveness, and if so, what were the key findings?

While full-scale clinical trials are being planned, we are staying in touch with PTs, kinesiologists, and occupational therapists using their feedback in the further development of IsoTone. Their input helped validate the movement ranges, resistance curves, and massage features. We are also starting observational use cases—particularly looking into circulation enhancement and joint mobility.

10. Future Goals

Where do you see IsoTone in five years? Are there plans to expand its functionality or introduce complementary products?

In five years, I see IsoTone becoming a “ubiquitous”, well accepted tool in both fitness and therapy environments. We're planning to expand functionality through interchangeable attachments, integrate more advanced app-based analytics, and possibly develop a digital twin for remote therapy monitoring. Ultimately, IsoTone is just the beginning—we're building a platform for intelligent, adaptive movement solutions.