

Welcome To The Age Of Natural Running.



biom
NATURAL MOTION BY ECCO®

The BIOM Project.

It's time to run as nature intended.

Danish shoemaker, ECCO®, has combined its 45 years of studying the human foot with research from top experts in the biomechanics of running.

The outcome is the BIOM project—the shoe concept that lets your body follow its preferred motion paths.

Tested extensively by world-class triathlete, Torbjørn Sindballe, BIOM is based on the natural biomechanics of the human foot. It's not just a new way to run, it's a better way.

What Is Natural Running?

The Quest For Natural Motion.

Over the last 20 years, the rate of runners' injuries of the ankle, foot, knee and hip have not declined. This statistic prompted the initiation of the BIOM project. Due to ECCO's long-time study of the human foot, the company's designers were acutely aware of the advantages of modeling shoes based on anatomical structures. So they received approval to undertake a research project with the goal of creating a running shoe based on the principles of natural motion.

Humans Were Born To Run.

Over tens of thousands of years, the foot has evolved its own natural cushioning system. During running, the foot must bear tremendous impact. The idea behind BIOM is to provide support for impact—without interfering with the foot's own highly effective natural systems. By avoiding excessive cushioning and motion control, the foot is free to follow its preferred motion paths, enabling it to build muscle and strength for optimal performance.

Experts Joining Forces.

A shoe that allows natural motion may sound simple, but its actual development is a complex task. To make the BIOM concept a reality, ECCO sought out the considerations of Dr. Peter Brüggemann, a leader in the field of running biomechanics.

To create the shoe, ECCO scanned the feet of 2,500 runners. To perfect it, ECCO worked with world-class professional triathlete, Torbjørn Sindballe, who tested the shoe extensively. Additional support came from sports medicine specialist and natural running expert, Dr. Matthias Marquardt.

From Bold Concept to Pefectionist Execution.

Designing the shoe was one matter, constructing it was quite another. ECCO's core competency in direct injection PU* was critical to creating the perfect fit required for natural motion. ECCO's network of company-owned tanneries also proved crucial, enabling the first use of Yak leather in a running shoe. Up to five times stronger than ordinary leather, the hide can be made much thinner, allowing for lightness, resiliency and breathability.

More Than An Improvement. It's A Rethink.

BIOM reinvents how running shoes are classified. Four different versions of BIOM are being manufactured. Runners will select the shoe that best supports their natural function based on speed and training level.

Three Adaptations Of Natural Running.

To match a runner's training conditions, competitive categories and speed, there are two versions of BIOM. A is for marathoners and triathletes with a 4 minute/km speed or faster. B is for fitness runners with a 6 minute/km speed or faster.



BIOM A 1.1



BIOM B 1.1



BIOM B 1.1 LADIES



BIOM A 1.2



BIOM B 1.2



BIOM B 1.2 LADIES

The Anatomy Of Natural Motion

Innovation Creates Possibility.

"The foot is a masterpiece," said Leonardo da Vinci. 26 moveable bones, 32 muscles and tendons and 107 ligaments work in symphony to make us run smoothly. To match its function required rethinking nearly every aspect of a running shoe.



PU Superlight
The midsole is constructed of long-lasting, lightweight, elastic material (like the foot itself).



Anatomically Correct Last
To create an extraordinarily close "second-skin" fit, ECCO scanned the feet of 2,500 runners.



Yak Leather Upper
Extremely breathable and remarkably strong, Yak leather makes BIOM's superb fit possible.



Anatomically Constructed Shank
By stabilizing the foot without limiting natural torsion, it adds support while freeing the foot to strengthen.



Rounded Heel
Smoothly transfers the force of heel impact into energy for toe-off, while the low-profile design reduces pronation angle for a more natural landing.



Biomechanical Sole Construction
Supports the body's preferred motion paths by mimicking the natural cushioning system of the foot.



Direct Injected PU
This advanced construction method is behind BIOM's long-lasting and extremely accurate anatomical support.



TPU Rubber Outsole
Formulated for outstanding durability and superb grip.



PU Energizer Heel Pad
Designed to provide smoother landing and superior activation of the muscles of the foot and lower leg.



S Curve
Based on the architecture of the foot, it supports weight distribution, facilitates balance and reduces energy use.



Midfoot Arch Element
Offers superb support of the midfoot arch without limiting the natural pronation.



***Nano Treatment by Ionmask**
A plasma-based, molecular-level technology that makes BIOM completely water-repellent.
*Only available on the Yak leather version



Low Profile Shoe
Enables the natural structures of the foot to fully react to the ground, creating BIOM's dynamic feel.



Forefoot Flex
Anatomically correct flex grooves follow the biomechanics of your foot, providing better push off and maximum forward movement.



Horizontal Heel Flex
Following the natural "deformation" pattern of the foot, it reduces the impact of landing force.

Training with BIOM

BIOM lets your feet move in their own preferred path, but first they need to adjust. Feet need to adapt gradually, over time. This is because BIOM gives you a very direct and dynamic running feeling with centered landing point under the heel, high flexibility in the forefoot and a close-to-the-ground construction. In turn, your muscles adapt to the new pattern of motion over a period of four to six weeks, but it takes much longer for your tendons, ligaments and joints to adjust. Training the body is a gradual, long-term adaptation process. Let your body dictate the progress. Wear BIOM during your normal daily activities as you will also train your feet while walking normally. To start with, run slowly and only increase the number of kilometers/miles gradually per the training schedule below. Always run at a speed that you feel comfortable with.

Week 1

- Wear BIOM for normal usage for half a day every day you can.
- Run gently 2-3 times/week, 20 minutes including running drills, stretch after each session.

1/2 Day
2-3 times
20 min



Week 2

- Wear BIOM for normal usage for half a day every day you can.
- Run gently 2-3 times/week, 20-25 minutes easy, including running drills, stretch after each session.

1/2 Day
2-3 times
20-25 min



Week 3

- Wear BIOM for normal usage for half a day every day you can.
- Run gently 2-4 times/week, 25-30 minutes easy, including running drills, stretch after each session.

1/2 Day
2-4 times
25-30 min



Week 4

- Wear BIOM for normal usage every day you can.
- Run 3-4 times/week, 25-35 minutes easy, including running drills, stretch after each session.

Full Day
3-4 times
25-30 min



Week 5

- Wear BIOM for normal usage every day you can.
- Run 3-4 times/week, 30-40 minutes easy, including running drills, stretch after each session.

Full Day
3-4 times
30-40 min



Week 6

- Wear BIOM for normal usage every day you can.
- Run 3-4 times/week, 35-45 minutes easy, including running drills, stretch after each session.

Full Day
3-4 times
35-45 min



After 6 weeks

- Use BIOM more and more during your normal training runs. Continue to increase the amount of time you spend in your BIOMs gradually. Remember to stay in tune with your body. At the slightest feeling of pain, take 1-2 steps back and continue again from there. Consistency is the main parameter for success. The training schedule is a general guideline. Some runners will be able to run more and some less. This depends on the level of physical fitness, muscle strength, body weight, age, talent and so on.

Gradual Increases In Time



Developed and recommended by Dr. Matthias Marquardt, German doctor and running technique expert and Torbjørn Sindballe, Danish world class triathlete.

"This is something that you dedicate yourself to. It takes patience and time - but in the end you'll be in a better state."

torbjørn sindballe



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