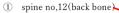
## **Body conditioning**

# Chapter 7 [spine]



In Part 2, I talked about the importance of correct posture in order to perform well in sports.

Correct posture has three points





If you can use these three parts well to stand,

You can support your body with bones instead of muscle power.

If you can support it with your bones instead of your muscles, your strength will increase.

You can stand comfortably because you don't need it.

It's comfortable, so you won't get tired even if you stand for a long time.

If you are relaxed and relaxed, you can move quickly and easily.

"But what does it mean to stand on your bones?"

From here, let's take a look at what correct posture is anatomically. First, let's talk about "spine", especially ① spine no, 12 (back bone).

① spine no,12(back bone) To be precise, it is thoracic spine no,12.

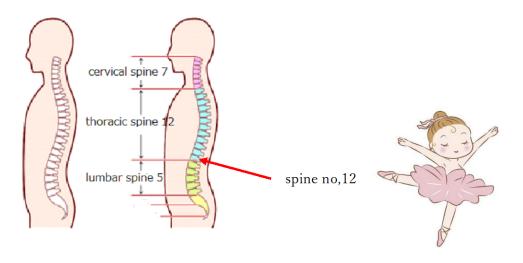
Strength of trunk is important! say many people.

In the world of sports and training, trunk strength is required. Therefore, trunk training is incorporated into every sport.

"spine no, 12" will play an active role as the central presence of this trunk.

Why? "This time, let's take a closer look at that."

First, let's look at the structure of the entire spine. This is a side view.



In this way, 32 to 34 bones are stacked and divided into 5 parts.

Below the lumbar spine is the sacrum, and further below that is the coccyx.

This spine, five parts do not move in the same way.

Also, not all parts have the strength to support the body.

In order to become the center of movement of the trunk and support the body, it must have both elements of "easiness of movement" and "strength". Where is the part that satisfies that condition?

That part is "spine no, 12".



Let's explain each one.

☆cervical spine

It's the neck bone. works very well. It moves delicately in all directions.

This is because the structure is small and circular, and the joints are flat and spacious. but small,

Due to its delicate structure, it is not suitable for supporting heavy objects. For example,

The cervical spine is "ballerina". A specialist in light movements,

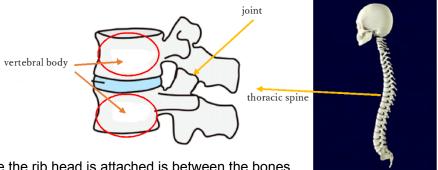
I am not good at supporting heavy things.

### ☆thoracic spine

It is one of the bones that make up the rib cage. When viewed from above (or below), each bone is almost circular, and the joints are flat and easy to slide.

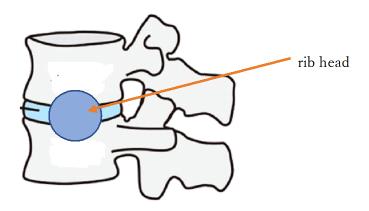
It seems to work well, but in fact it doesn't.

The thoracic spine has ribs. If you look at the thoracic spine one by one from the side, it looks like this.



#### Like this.

And the place where the rib head is attached is between the bones.



The rib is sandwiched between the thoracic spine and the thoracic spine

It is. This will limit your movement.

In addition, the ribs extend to the front of the body to form a basket called the rib cage. The basket contains lung and heart.

In other words, if this rib cage moves a lot, lung and heart

The thoracic spine is said to be a site that should not move, as it will put pressure on it. It will be.

A thoracic spine, for example, is a rugby forward.

Each one is strong and has good movement,

Form a scrum to protect your team.

## ★ Lumbar spine

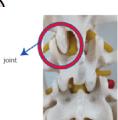
The lumbar spine is large and oval when viewed from above (bottom). Vertebral body seen from above



rib cage







The joint is designed so that it does not slide sideways. It is structured.

Large, oval shape with non-sliding joints, so you can lay it on its side It is difficult to move in the direction of twisting. If it moves, will it curl forward? It will be warped backwards.

Another feature of the lumbar spine is "physiological lordosis".

The five lumbar spines are naturally arranged so that the front is rounded.

Large vertebral body, strong joints, physical lordosis,

In other words, the lumbar spine is thick and has the strength to support heavy objects. Since it doesn't move much, it supports the trunk like a pillar in a house.

For example, the strong "sumo wrestler".



physiological lordosis



☆thoracic spine no,12

spine no,12 is the transition of thoracic and lumbar vertebrae.

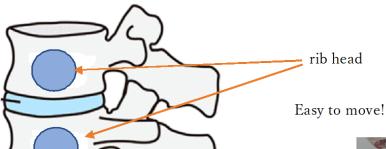
By number, we have thoracic spine no,11 and 12, and lumbar spine no,1.

It is a part that has both strength and good movement, and works as the center of the trunk.

For example, among rugby players, there are players outside the scrum formation (thoracic spine no, 11 and 12) and sumo wrestles (lumbar spine no, 1) who are good at moving quickly in the transition of thoracic and lumbar vertebrae. increase.

This thoracic spine no, 11 and 12 has something different from other thoracic spines!

One is attached to the vertebral body at the junction with the rib head, not between the bones.



Furthermore, this rib no, 11, 12 does not extend to the chest. It is not involved in the formation of the rib cage. in a floating state That's why it's called "floating bow ribs".

It's not attached anywhere, so it's easy to move.

The lumbar spine no,1 is the rounded It has a vertebral body. It means easy to move.

A combination of a movable thoracic spine and a strong lumbar spine "thoracic spine no, 12 (transition of thoracic and lumbar vertebrae)" can be said to be the core that supports human movement and the body.



thoracic spine no,11

In this way, by supporting the body and understanding the correct parts to move and doing sports and training, You can use your body efficiently and move quickly, strongly and for a long time. Plus, it helps prevent injuries.

Body conditioning Reflexer
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