



ERGONOMICS IN CAMINO DE SANTIAGO



Addressed to:
Pilgrims traveling to Santiago

Produced by:
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WHAT YOU SHOULD KNOW ABOUT:

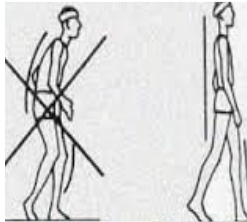
- Posture when walking
- Right backpack
- Correct cycling position



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POSTURE WHEN WALKING

Watch your posture: the trunk should be straight to maintain body balance.



Front view: if you walk looking at the ground you will generate pressure on the neck.

Shoulders relaxed: avoid upload / shrug to increase the pace as you will waste energy.

Swing your arms in a reverse way to the legs movement. It will take less effort and will facilitate the optimal intake of oxygen.

Hands relaxed: avoid clench your fists or keep your hands wide open. They must be semi-closed.

Watch the footprint: supports heel - Foot - tip. Avoid walking with your toes.



Slightly flex the knee at heel strike.

Do not walk with too long steps.

Breathe consciously and consistently. Always inhale air through the nose. Exhale through your mouth.

RIGHT BACKPACK

Some interesting tips:

- The gross weight of the backpack should not exceed **10% of your weight**.

- Center heavier objects around **an imaginary central axis and close to your back**. Lighter, more flexible elements should be positioned around it. This way, you will distribute the load better and prevent the backpack from pulling back.



- The **essential items** that you're going to use more frequently, should go on the top or in the outside pockets.

- **Avoid packages hanging out** of the backpack. Produce side decompensation and increased aerodynamic drag.

- Make sure that the weight **rests on your hips** and exert minimum pressure on the shoulders.

- Make sure the backpack features **padded** in all parts in contact with your body, and has a wide **waist belt** to fit the hip.

- **Adjust the straps and belt** backpack so it does not move but does not squeeze you. You should have complete freedom of movement.

CORRECTO CYCLING POSITION

Seat: adjust it depending on the length of the riders' legs, using this formula:

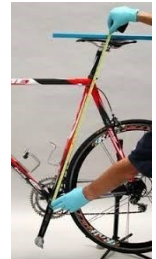
$0'885 \times \text{crotch height (from the ground to the crotch, being barefoot.)}$

=

$\text{seat height from the bottom bracket to the base top of it.}$



$\times 0'885 =$



This result will give you the height in centimeters at which you should place the seat.

Handlebar:

1º Measure the distance from the center of the seat to the floor

2º Measure from the top of the handlebar grip to the ground.

3º Calculate the difference. For example, if the seat is 110 cm from the ground and the handlebars to 107 cm, handlebar height be -3cm.

References according to the height of the rider:

- 160-170 cm: between 2 y -2.
- 170-180 cm: between -2 y -5.
- Mora than 180 cm: between -5 y -8.