Alkaline Breathing

Physiological Explanation

Alkaline breathing is a controlled, activating breathwork technique.
It is used to create access, increase arousal, and bring energy into the system - but also to calm or regulate. Depending on the pace, duration and intensity. This explanation describes what happens in the body during this breathing pattern.

The Breathing Pattern

Alkaline breathing uses the following structure:

- Inhale through the **nose**
- Allow the breath to move **deep into the lungs**
- Exhale through the **mouth**

The inhale is initiated by the **diaphragm**, which moves downward and allows the lungs to fill from the bottom up.
As the lungs fill, the breath naturally expands upward into the chest.

The exhale through the mouth increases ventilation and allows air to leave the body more quickly.

Muscles Involved

This breathing pattern primarily engages:

- The **diaphragm** (primary breathing muscle)
- The **intercostal muscles** (between the ribs), which allow the chest to expand

When the diaphragm leads the inhale, breathing is more efficient and the lower lung lobes are engaged, where blood flow and gas exchange are highest.

Oxygen and Carbon Dioxide

Breathwork is often misunderstood as being about oxygen. In reality, the nervous system is regulated primarily through **carbon dioxide (CO_2)**.

Carbon dioxide is not a waste gas.
It plays a central role in:

- regulating breathing rhythm
- maintaining blood pH
- influencing cerebral blood flow
- controlling oxygen release to tissues
- balancing the autonomic nervous system

What Happens During Alkaline Breathing

When ventilation increases through nasal inhalation and mouth exhalation:

- Carbon dioxide levels decrease
- Blood pH shifts in a more alkaline direction
- The nervous system moves toward **activation**

This state may be experienced as:

- tingling in hands, feet, or lips
- lightheadedness
- increased emotional access
- heightened bodily sensations
- altered states of awareness

These responses are **normal physiological effects** of reduced CO_2 and increased arousal.

Why This Breathing Is Activating

Lower carbon dioxide levels cause oxygen to bind more tightly to hemoglobin in the blood.
This temporarily reduces oxygen delivery to tissues and signals the nervous system to increase alertness.

This mechanism creates activation rather than calm.

For this reason, alkaline breathing is:

- activating
- energizing
- opening

It is **not** a regulating or grounding technique.

Safety and Application

Alkaline breathing should always be:

- intentional
- time-limited
- followed by regulation and rest

It should never be forced or sustained beyond the participant's capacity.

This technique is used to create access and movement in the system and must be balanced with grounding and integration afterward.

Key Takeaway

Breathwork is not about increasing oxygen.
It is about how changes in breathing alter **carbon dioxide levels** and how the nervous system responds to that shift.

Alkaline breathing works by lowering CO_2, increasing blood alkalinity, and activating the nervous system - in a controlled and purposeful way.