



## Oxytocin 10mg

### About

Oxytocin Nasal Spray is being studied for its potential to support emotional balance, stress regulation, and overall well-being. Oxytocin, often referred to as the “connection hormone,” plays a role in social bonding, mood, and relaxation pathways.

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## What's Included

- One spray bottle
- Concentration: 10mg/15ml
- Bottle duration varies based on use

### Clinical Research Potential Benefits:

- May help promote calmness and emotional stability
- May support mood and stress regulation
- May enhance connection, trust, and social bonding
- May support healthy hormonal and nervous system balance
- May aid in overall sense of well-being and relaxation

### Clinical Research Suggested Use:

- 125–500 mcg per day (~62.5mcg per spray)
- **Wellness / mood:** 2–4 sprays daily (~125–250 mcg)
  - 4-8 weeks, cycle breaks after 1-2 months
- **Stress / libido:** 4–8 sprays daily (~250–500 mcg total)
  - Up to 12 weeks, cycle break after 3 months
- Duration: 1-3 months



## Nasal Spray Guidelines

### Before Use:

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- For first-time use: Prime the spray by pressing the pump 2 to 3 times until it fully activates
- Gently blow your nose to clear the nasal passages
- Shake the bottle lightly
- Insert the nozzle toward the back of the nostril while keeping your head upright
- Press the pump to administer the recommended number of sprays

### After Use:

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- Try to avoid blowing your nose right away
- Wipe the spray tip with a clean tissue
- Replace the cap securely
- Store in the refrigerator



## Oxytocin 10mg Mechanism of Action

- **Receptor Binding and Signal Transduction:**
  - Oxytocin exerts its physiological effects by binding to the oxytocin receptor (OXTR), a G-protein-coupled receptor (GPCR) expressed on target cells in the brain, uterus, mammary glands, and cardiovascular system. Receptor activation stimulates phospholipase C (PLC), leading to the hydrolysis of phosphatidylinositol 4,5-bisphosphate (PIP<sub>2</sub>) into inositol triphosphate (IP<sub>3</sub>) and diacylglycerol (DAG). This cascade elevates intracellular calcium (Ca<sup>2+</sup>) levels, initiating downstream contractile and signaling responses.
- **Cellular Activation and Physiologic Response:**
  - Increased intracellular calcium activates calmodulin-dependent kinases and the cell's contractile machinery, producing smooth muscle contractions, most notably in uterine and mammary tissues. This mechanism underlies oxytocin's role in labor induction, postpartum uterine tone, and milk ejection during lactation.
- **Neuroendocrine and Behavioral Regulation:**
  - Beyond its peripheral actions, oxytocin functions as a neuropeptide in the central nervous system, influencing social bonding, trust, emotional regulation, and sexual behavior. It modulates activity in limbic and hypothalamic brain regions associated with emotional processing and stress adaptation.
- **Stress Reduction and Parasympathetic Activation:**
  - Oxytocin dampens hypothalamic-pituitary-adrenal (HPA) axis activity, lowering cortisol levels and promoting a parasympathetic, restorative state. These effects contribute to reduced anxiety, enhanced mood, and improved stress resilience.
- **Systemic and Therapeutic Effects:**
  - Through its dual roles as a hormone and neuromodulator, oxytocin supports reproductive physiology, emotional connection, and autonomic balance. Its actions on smooth muscle tone, cardiovascular regulation, and social cognition make it a unique peptide bridging endocrine and behavioral health.