

# Oxytocin effects and uses



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## Oxytocin and Its Effects and Uses for the Human Body

### Abstract

This paper discusses oxytocin and how it is distributed throughout the body and the ways its functions. It covers how oxytocin is a crucial hormone in the bearing of children and breastfeeding of the child. Also it delves into the many other things like how oxytocin is known to effects how we trust and our relationships with others and with society as a whole. Oxytocin is a key factor in sex and the feeling of love or our relationship with one and another. I chose this concept because trust is a big thing to me and I wanted to see why we trust and how something so simple can alter and predetermine our decisions.

## Oxytocin and Its Effects and Uses for the Human Body

Oxytocin has been known by many names but one I like is the “ Love Hormone” and I will try to show you exactly why it is called this later on. First of all though, Oxytocin is made in the brain and the Hypothalamus. It is then transported to the pituitary gland after it’s created. Then the pituitary gland will release and distribute the hormone for all its bodily functions. The pituitary gland can be found at the base of the brain, and its main purpose would have to be the distribution and regulation of hormones. Once Oxytocin is released its job in the body is not just limited to one role but to many. For instance it is found to be responsible in the aiding of the female reproduction systems in child birth or breast feeding. “ These hormones, which originate in the deepest and oldest parts of our brain, cause the physical processes of labor and birth, as well as exerting a powerful influence on our emotions and

behavior.” (Buckley, 2005) It also is known to affect our emotions and our decision or feeling we may have during sex. Also it can have many psychiatric as well as many other medical uses in synthetic drugs like Pitocin or Syntocinon.

It has many uses in the birthing of children and breast feeding of them. When this chemical is released during labor it helps to aid the muscles in the uterus and womb with contractions. It increases the function of the uterine. When the cervix and vagina during labor are widening the pituitary gland releases the oxytocin and when the body continues to contract you will continue to have more and more oxytocin released. It also has synthetic uses as a drug to aid in child birth. It will be prescribed by doctors to start child birth contractions or aid in the strengthening of them. It can also be used to reduce bleeding that can occur soon after the child is born and delivered. Finally it naturally helps in breastfeeding by arousing the nipple and easing the milk out for the breast for feeding of the baby.

Now we come to the part I was most interested in learning. I heard about it in class and knew right away I was intrigued and wanted to learn as much as I could about it. It has many functions and is commonly known as “ a neuropeptide that promotes social behavior and bonding in humans and in animals” (Yamasue, 2014) For instance when you start to like someone and you get this feeling you can “ trust them” this is because of oxytocin. It is a chemical that is released and causes us to get these feelings of trust. It was also found that, “ oxytocin plays a role in bonding, maternal instinct, enduring friendship, marriage, and orgasms. Oxytocin is a mingling of trust and physical touch, as well as love-making. Oxytocin increases the ability to

recognize differences between self and others and increases positive evaluation of others” (Watson, 2013) Oxytocin can be released into the blood stream to help functions such as child birth and breast feeding or it can be transported to the brain and its areas associated and known to effect emotion, cognition and social behavior. Oxytocin has been able to answer question like why are some individuals extroverted and others introverted. “ it has profound effects on social bonding that are exerted at sites that richly express oxytocin receptors” (Ludwig & Leng, 2006) The people who are found to be heavily saturated with oxytocin in the brain receptors are seen and known to be more commonly extroverted because they are more likely to trust and feel comfortable in new situations unlike there counterpart the introverted individual. Some scientists think this hormone if used right could aid in autism or socially awkward individuals, but oxytocin only influences the basic instincts and functions of the brain and couldn’t help the higher functions like knowing right from wrong and what’s socially wrong to do. So even if someone was more outgoing because of the drug they still wouldn’t get social norms and hence forth would still be perceived as “ strange”.

It has been known that oxytocin is involved in sex and because it is known to help functions of the female reproduction systems it has been stipulated that it aids in causing orgasms through the stimulation of the vagina to open up the way for sperm. It also is released after sex and is known to cause that feeling of security and closeness we get after sex, which some may call love. It affects us in or relationships too. Sometimes we can be tricked by our primal instincts. Take for example, women and their intrigue with “ bad boys” this can be traced back to a female feeling safe because the stronger

bigger males will protect them from harm and that's a desirable trait. But in today's society males can carry themselves in an arrogant manner that women find attractive and associate with alpha male behavior and this has been the cause of many heart breaks. This is why we as humans cannot trust our first impressions of someone.

I loved researching this topic and there are so many possibilities to oxytocin if we can develop more refined versions that could aid with maybe autism or other psychological illnesses. It is also crazy to learn that one little hormone is the cause of something as significant as trust. Who we trust and what we find trustworthy are very important things. They will determine who we eventually end up with as friends and lovers. I learned a lot about oxytocin through all my studies and inquiries. I never knew how important it was to the healthy functions of a human body and mind. It not only effects how we come into this world but how we enjoy it. I think trust and love are 2 of the most important feelings and they are crucial to happiness. So I believe that without oxytocin we would be far less happy and therefore far less healthy because joy, love and trust are what make us want to live and are the things we inadvertently live for.

## References

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