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The Alchemy Limerence of Love and Lust - Get Your Life Back from Incredibly Painful Vagus Nerve Simulation

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Abstract: ***Love biologist Dawn Maslar states that hormones such as dopamine and vasopressin are important for a man to begin falling in love. Oxytocin, a hormone released when you hug a loved one, is very important in building and strengthening love in men in later stages. The left vagal nerve runs down the left side of your neck, and the right vagal nerve runs down your right side. This nerve extends all the way from your brain to the large intestines: down your neck, through your chest, around your heart, around your lungs, and through your abdomen and intestines. Cause of Pheromones continue to be an exciting area of research. Currently, the 16-androstenes, and in particular androstadienone is fairly well characterized as a pheromone for women. They are present in male axillary sweat and possibly in other bodily secretions. While this is going on, cholecystokinin suppresses gastric emptying so your stomach won't deliver any more food until the first batch is done. It also suppresses your appetite while you're digesting, by making your stomach feel physically full and by activating vagal nerves in your stomach wall.***
Keywords: Neurology, Psychiatry, and Brain Research, finds that the brain plays the leading role in the psycho emotional, load by mediating hormones of love, oxytocin, vasopressin, and neurotransmitters, epinephrin, serotonin, dopamine, adrenaline.

I. INTRODUCTION

Love biologist Dawn Maslar states that hormones such as dopamine and vasopressin are important for a man to begin falling in love. Oxytocin, a hormone released when you hug a loved one, is very important in building and strengthening love in men in later stages, In many ways, men may fall in love in a way that mimics the female experience. The early stages can involve an infatuation with someone else, which can slowly deepen into trust, compassion and deep attachment. Men may also fall in love quickly and feel a strong need for affection from their partners.

For Example if you want to say "I love you" in chemistry formula?

$C_8H_{11}NO_2 + C_{10}H_{12}N_2O + C_{43}H_{66}N_{12}O_{12}S_2$ or in other words Dopamine + Serotonin + Oxytocin = LOVE. Dopamine is a neurotransmitter famous in popular science for its connection to pleasure and reward of three stages include lust, attraction and attachment. The first phase of falling in love is the lust or the desire phase.

A. Phase 1: Falling in Love – Limerence

In 1979, Dorothy Tennov coined the term “limerence” for the first stage of love, characterized by physical symptoms (flushing, trembling, palpitations), excitement, intrusive thinking, obsession, fantasy, sexual excitement, and the fear of rejection.

In Dr. Theresa Crenshaw’s book *The Alchemy of Love and Lust*, it is clear that not just anyone can set off the cascade of hormones and neurotransmitters that accompanies the exciting first phase of love. The person we select has to smell right, feel right, look right, and be just right in our arms. Then, and only then, will the cascade get started.

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Here is a partial list of chemicals that exert an enormous influence on Phase 1:

- Phenyleteylamine (PEA) is a natural form of amphetamine our bodies produce and has been called "the molecule of love."
- Pheromones, produced from DHEA, influence sensuality rather than sexuality, creating an inexplicable sense of well-being and comfort.
- Ocytocin has been called "the cuddle hormone." It compels us to get close, and when we are feeling close (to anyone) we secrete it. It is secreted by the posterior pituitary gland, and stimulates the secretion of dopamine, estrogen, LHRH, and vasopressin.

The cascade of "in-love" hormones and neurotransmitters of Phase 1 is highly selective and multifaceted in the experience of love and limerence. It is also generally accompanied by poor judgment, so that people will ignore the red flags that they will inevitably confront in Phase 2 of love.

B. Phase 2: Building Trust

The big questions of Phase 2 of love are, *"Will you be there for me? Can I trust you? Can I count on you to have my back?"* These questions are the basis of all conflicts newlyweds had in my Love Lab. The answer to this question is the basis of secure or insecure attachment in the relationship.

Love in Phase 2 becomes punctuated by frustration, exasperation, disappointment, sadness, and fury. The majority of fighting in a relationship happens in the first two years.

Thus, the success or failure of Phase 2 is based on how couples argue. If the ratio of positivity to negativity exceeds 5:1 during conflict discussions, a couple is likely to stay together.

The building of trust is about having your partner's best interests in mind and at heart. It's about listening to your partner's pain and communicating that when they hurt, the world stops, and you listen. Over time I have created a model of communication that helps partners attune to one another.

The word "ATTUNE" is actually an acronym that stands for six processes:

1) **A** for Awareness of one's partner's pain
2) **T** for Tolerance that there are always two valid viewpoints in any negative emotions
3) **T** for Turning Toward one partner's need
4) **U** for trying to Understand your partner
5) **N** for Non-defensive listening
6) **E** for Empathy

C. Phase 3: Building Commitment and Loyalty

Phase 3 of love is about building true commitment and loyalty. It is about a couple either cherishing one another and nurturing gratitude for what they have with their partner, or the couple nurturing resentment for what they think is missing. This third phase is about making a deeper love last a lifetime, or slowly nurturing a betrayal.

An important metric in Phase 3 of love is what I call the fairness metric. The sense that power is fairly distributed in a relationship is what the fairness metric is all about. It is very difficult to establish deep and lasting trust in a relationship that has an unwelcome power asymmetry, one in which the distribution of power feels unfair to at least one person.

Although love appears to be a process that is highly unpredictable, my decades of research and the research of my colleagues have discovered that the opposite is true.

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1) Can Limerence Turn into Love?

In some instances, limerence can transform into genuine love, especially when both individuals share mutual feelings. However, this transition is rare. Love usually entails a deeper, more enduring emotional bond rooted in mutual respect, understanding, and shared life experiences.

One hallmark of limerence is the idealization of the object of affection, perceiving them as flawless or perfect. This idealized view can hinder the development of a realistic, balanced perspective necessary for a mature and lasting relationship.

The phenomenon known as limerence could be the closest thing to describing love at first sight, The four stages of limerence are attraction, obsession,relation and frustration, and resolution. These four limerence stages help us understand the experience of intense romantic obsession and infatuation. Limerence and love are not the same Love involves deep emotional connection and acceptance, while limerence is intense infatuation and longing for reciprocation. Many kinds of relationships involve intense feelings, but not all are love. Whereas love involves a deep and reciprocal emotional connection, limerence is a kind of romantic obsession

2) Who Suffers from Limerence?

She found that this intense feeling can affect anybody regardless of gender, age, culture, background, or any other trait. If you would like to know whether you have limerent thoughts and actions, you can take our limerence test and receive a free report.

Is limerence a real attraction?

According to Tennov and others, limerence can be considered romantic love, passionate love or infatuation. It's also sometimes compared to a crush, but contrasted as being much more intense. May Individuals prone to limerence may have:

- Insecure attachment styles.
- Unmet emotional needs.
- Biological factors like hormonal imbalances.
- Life events such as trauma or stressors.

3) What is the root Cause of Limerence?

Research into the causes of limerence puts it down to a mixture of personality, biological predispositions, and childhood environment. Compulsion, obsession, and lack of control are key features of limerence, and it has therefore been likened to substance misuse disorder and obsessive-compulsive disorder

4) At what time Hormone Turns Girls On?

Estrogen, progesterone, and testosterone all affect sexual desire and arousal. Having higher levels of estrogen in the body promotes vaginal lubrication and increases sexual desire. Increases in progesterone can reduce sexual desire.

The three stages of limerence are:

- *Attachment:* This initial stage involves developing a strong emotional attachment to the object of affection. It often starts innocently and may progress to more intense feelings.
- *Crystallization:* In this stage, feelings of love intensify, and the limerent individual idealizes the object of affection, often overlooking their flaws.
- *Deterioration:* The final stage occurs when the intense feelings of limerence start to fade. This may lead to a reassessment of the relationship and a realization of its unrealistic nature.

5) Can Limerence Turn Into Love?

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II. WHAT CAUSES LIMERENCE?

Limerence is believed to arise from a combination of psychological, biological, and environmental factors. Some possible causes and contributing factors include:

1) *Early Attachment Patterns:* Limerence may be related to unhealthy attachment patterns, particularly those stemming from early caregiver relationships.
2) *Unmet Emotional Needs:* Individuals who have unmet emotional needs, particularly related to early caregiver relationships, may be more susceptible to seeking intense emotional fulfillment in other relationships.
3) *Biological Factors:* There may be biological factors, such as hormonal imbalances or neurotransmitter irregularities, that contribute toTrusted Source the intensity of feelings associated with limerence.
4) *Life Circumstances:* Life events such as trauma, loss, or significant stressors may trigger or exacerbate feelings of limerence.
5) *Fantasy and Imagination:* A tendency toward fantasy and imagination may play a role in the development and maintenance of limerence, as individuals create idealized images of their limerent object.
6) *Social and Cultural Influences:* Social and cultural factors, such as media portrayals of romantic love, may influence the way individuals perceive and experience limerence.

III. SYMPTOMS OF LIMERENCE

Here are some common symptoms of limerence:

1) *Obsessive Thoughts:* Constantly thinking about the person you're infatuated with.
2) *Fantasies:* Creating idealized scenarios involving the person, often as a form of escape.
3) *Intense Longing:* Strongly desiring reciprocation from the person.
4) *Idealization:* Seeing the person as perfect or having exaggerated positive qualities.
5) *Anxiety and Depression:* Experiencing free-floating anxiety or depression, especially when uncertain about the person's feelings.
6) *Compulsive Behaviors:* Engaging in behaviors to seek out or maintain contact with the person.
7) *Emotional Dependency:* Relying heavily on the person for emotional support and validation.
8) *Disruption of Daily Life:* Finding it difficult to focus on work or other activities due to preoccupation with the person.
9) *Withdrawal Symptoms:* Feeling physical or emotional pain when separated from the person.
10) *Disintegration of the Self:* Feeling confused or out of control, potentially leading to behaviors like stalking.

A. What are the Physical Symptoms of Limerence?

We start to idealise them and see them as the perfect person we know. Physical symptoms: Intense limerence can show up in the body as physical symptoms as well – loss of appetite, sleep disturbances and stress-related problems are some of the signs.

This can be incredibly painful and make people wonder what is wrong with them and why it hurts so bad. Living with a whirlwind of emotions, intrusive thoughts, and unrelenting questioning, can leave you feeling lost, overwhelmed and confused about why you can't stop thinking about this other person

This can be incredibly painful and make people wonder what is wrong with them and why it hurts so bad. Living with a whirlwind of emotions, intrusive thoughts, and unrelenting questioning, can leave you feeling lost, overwhelmed and confused about why you can't stop thinking about this other person.

B. Is this Hormone Attracts males with Painful?

Researchers believe that this is a part of the picture of human arousal. There are other factors at play, but certain ectohormones (androstenedione in male attraction, and estratetraenol in female attraction) show potential pheromonal effects in humans.

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For Example Ten years ago I had C3-4-5 fused. At the time I had numbness and tingling and throat issues. About a year ago, the tingling returned and then I started to have significant digestive issues. I lost 25 pounds. I have been diagnosed with gastroparesis of an "unknown cause."

C. Testosterone

Although testosterone is the main sex hormone in males, it is also present in lower amounts in females.
In females, testosterone affects:

- fertility
- sexual desire
- menstruation
- tissue and bone mass
- red blood cell production

Increased levels of estrogen and progesterone initiate the development of secondary sexual characteristics, which include:

- breast development
- hair growth on the underarms, legs, and pubic region
- increased height
- increased fat storage on the hips, buttocks, and thighs
- widening of the pelvis and hips
- increased oil production in the skin

IV. CONCLUSION

In December 2022, doctors at the Mayo Clinic, in Arizona examined the connection between migraines and gastroparesis in the journal *Current Neurology and Neuroscience Reports.* They wrote: "There is evidence that gastroparesis, a gastrointestinal (GI) dysmotility disorder in which transit of gastric contents is delayed, can occur in the setting of migraine. . . There has been increasing recognition of the importance of the connection between the GI tract and the brain, and mounting evidence for the overlap in the pathophysiology of migraine and gastroparesis specifically. . . Noninvasive vagus nerve stimulation has been FDA-cleared for migraine treatment and is also being studied in gastroparesis. Dysfunction of the autonomic nervous system is a significant feature in the pathophysiology of gut motility and migraine, making treatments that modulate the vagus nerve attractive for future research."
The connection between gastroparesis and migraine has been well understood and research goes back to the 1970s. In 2013 Dr. Henry Parkman of the Gastroenterology Section, Temple University School of Medicine wrote : "Evidence from pharmacokinetic (the study of drug interaction within the body) and gastric motor studies conducted over the past 40 years shows that delayed gastric emptying often occurs in migraine. . . The nature, causes, correlates, and consequences of gastric stasis in migraine are just beginning to be (understood); much further study is warranted. The data available to date show that gastric stasis in migraine appears to be clinically important. . . "

A. Can Limerence turn Into Love?

"Probably not," says Wakin. "There are a number of reasons why. First of all, there was never a healthy form of love in development." Secondly, the addictive aspect of a limerent relationship is something incredibly difficult to overcome and "something we don't have a cure for," Wakin adds.
Love involves deep emotional connection and acceptance, while limerence is intense infatuation and longing for reciprocation. Many kinds of relationships involve intense feelings, but not all are love. Whereas love involves a deep and reciprocal emotional connection, limerence is a kind of romantic obsession.

B. How do I know Limerence is Ending?

In the resolution stage of limerence, common behaviors include accepting reality, acknowledging the limerence was one-sided or unsustainable, and actively working to move on emotionally. This stage involves letting go of the intense feelings and seeking closure for personal growth.

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1) Vagus nerve Stimulators can stimulate the nucleus tractus Solitarius. What does this mean?

When food touches your mouth, your body begins sending chemical and mechanical messages to stimulate the gastrointestinal (GI) tract to prepare the digestive system for food intake. A good explanation of what happens next and the vagus nerve involvement is explained in this paper published in the journal *Current Medicinal Chemistry*.

- The vagal nerve conveys primary afferent information from the intestinal mucosa to the brain stem. Activation of vagal afferent fibers results in inhibition of food intake (Sends signals to tell you to stop overeating), gastric emptying, and stimulation of pancreatic secretion. Afferent nerves terminating near the mucosa are in a position to monitor the composition of the luminal (large intestine, small intestine,) contents.

So this is what is going on with the vagus nerve:

- Monitors food intake to avoid overeating or gorging.
- Helps move food down the esophagus, into the stomach, and moves food out of the stomach and into the small intestines and ultimately the large intestines.

2) So where Does the Nucleus Tractus Solitarius Come into Play?

The nucleus tractus solitarius are the first neurons to understand that eating is occurring and the first to help process digestion-related vagal afferent signals. Simply, addressing vagus nerve impairment addresses digestive problems from the moment food touches your mouth.

System	Disease
Gastrointestinal	Gastroenteritis (viral or bacterial), gastric outlet obstruction, small bowel obstruction, gastroparesis, cyclic vomiting syndrome, irritable bowel syndrome, neoplasm, peptic ulcer disease, gastritis, gastroesophageal reflux disease, hepatitis, cholecystitis, biliary colic, appendicitis, mesenteric ischemia, Crohn disease, pancreatitis, diverticulitis, volvulus, intussusception, pyloric stenosis, intestinal perforation
Central nervous system	Migraine, tumor, hemorrhage, infarction, congenital malformation, abscess, meningitis, demyelinating disorders, hydrocephalus, pseudotumor cerebri, seizure, Meniere disease, labyrinthitis, motion sickness, anxiety, depression, psychogenic vomiting, anorexia nervosa, bulimia nervosa, postconcussive syndrome
Drugs (only most common offenders listed)	Chemotherapy, nonsteroidal anti-inflammatory drugs (NSAIDs), opioids, antiarrhythmics, antihypertensives, diuretics, antibiotics, hormonal preparations, anticonvulsants, oral hypoglycemics, vitamins, ethanol
Metabolic and endocrinologic	Pregnancy, diabetic ketoacidosis, uremia, hyperparathyroidism, hypoparathyroidism, Addison disease, porphyria, uremia, alcoholic ketoacidosis
Cardiac	Cardiac ischemia, myocardial infarction, hypotension, hypertension, congestive heart failure
Other	Pain, gonadal torsion, renal colic, postoperative, overdose and toxins, emotional response, sepsis

C. Is Love at First Sight Limerence?

The phenomenon known as limerence could be the closest thing to describing love at first sight

Can you be in love and in limerence at the same time?

Two people can become limerent with each other simultaneously, sometimes it's one person who is limerent and the other truly in love, and sometimes just one person is limerent and the other has no reciprocal feelings.

Note: What happens after limerence ends?

Once limerence ends, someone generally gets hurt. Sometimes one partner is no longer interested in being together, tearing the other person apart emotionally. When you've given up everything in your life to be with someone, and they leave you, you may feel broken and consumed by sadness.

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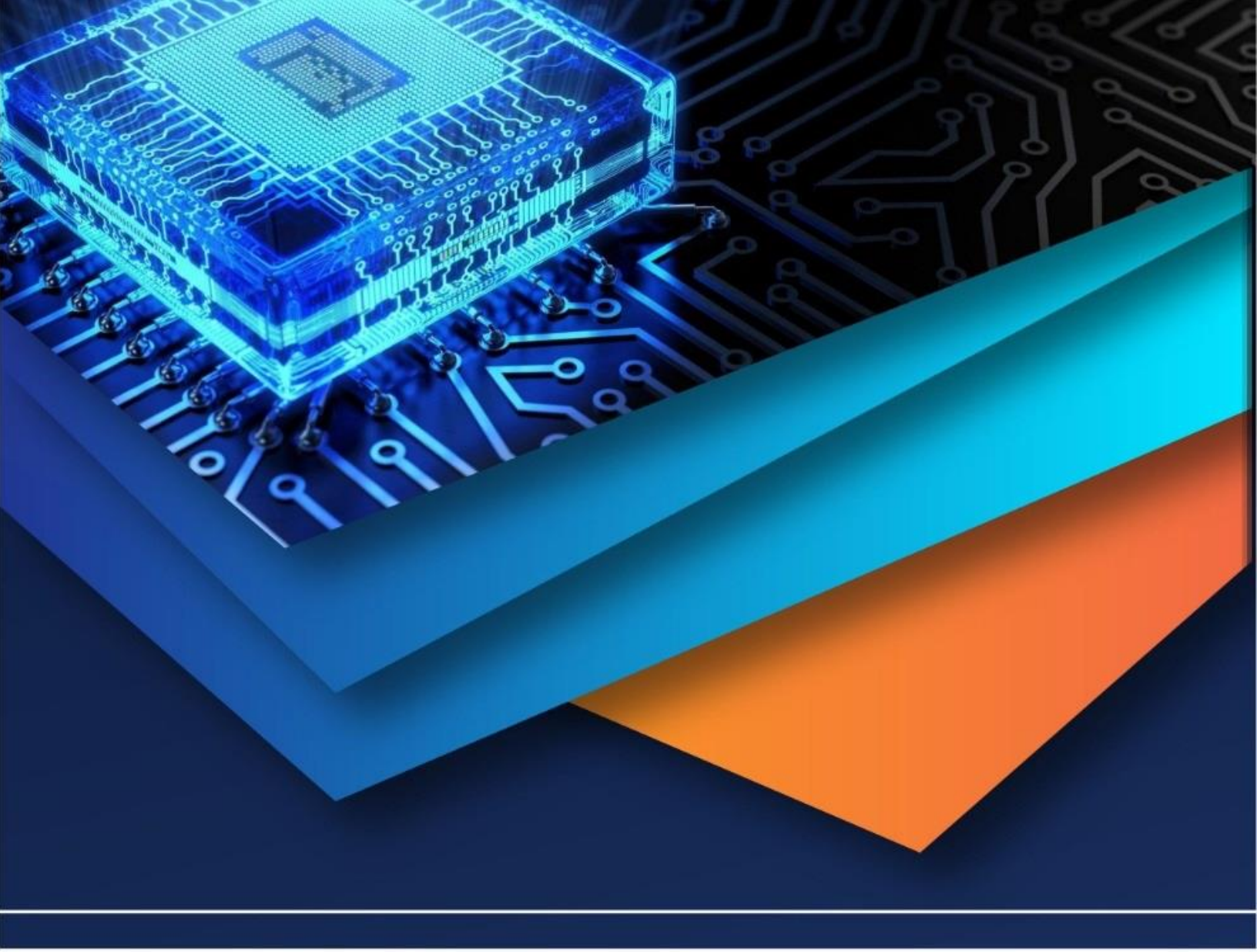

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