

The chemical basis of love  
by Lloyd Robertson

The best definition I have heard for the "I" word is that it exists when the well-being of another person is essential to our own. Men might feel love but they are not supposed to say the word except when we are feeling amorous and then they may or may not have the well being of the other person in their minds. Women say the word often as in "If you loved me you would do more around the house / remember our anniversary / buy me a diamond ring, etc."

Most people fail to use the word "love" in a way that communicates. There are many different meanings to the word and a sizeable minority even admit they do not know what it means. This does not stop most of us from using it when the emotion arises.

And that is what "love" is first and foremost, emotion. Or rather, it is a collection of emotions, each of which is given the name "love". Often couples are not even sharing the same emotion when they exchange that famous phrase "I love you".

A simple definition of emotion is that it is a chemical mix that is distributed throughout the body via the bloodstream. This is why the ancients thought that love and other emotions had something to do with the heart. Actually, the operative organ that directs the glandular secretions we feel as emotion is the amygdala but this is highly influenced by the activities of the rest of the brain.

Romantic love includes testosterone, yes, even in females. It is not the amount of testosterone but it's ratio with vasopressin that is important in generating the feeling. Other important chemicals in the mix include dopamine, serotonin and certain pheromones. The chemical nature of love makes love potions possible.

Okay, I have just ruined it for all the poets who like to see love as a great mystery that allows them to write about the effects without understanding the way it works. They want our spirits to soar with the magic of it all and fear that if we understand how it works in the body the magic will be gone. "Love is blind", they say, but if we see will it cease to exist?

Fear not, we can experience the emotion and still understand how it works in our bodies. In fact, by understanding how the emotion evolved we can enjoy various kinds of love and avoid misapplying the wrong kind of love to any given situation.

The kind of "home run-over-the-fence" kind of love that poets most like to dwell on evolved in human beings for a very specific purpose. Part of us is always sizing up members of the opposite sex for suitability as mates. Often this is done unconsciously. Many factors go into the mix. If there was nothing else in the equation then all relationships would be unstable. I would be your partner until someone who was even more suitable would come along. Evolution solved the problem by creating a kind of irrational love that over-rules other considerations. Hence the phrase "love is blind".

One of the problems with this kind of love is that it only lasts two to three years. That is when some people wake up one morning and say to themselves "I married that .... what the hell was I thinking of". The relationship may then be on the rocks.

Unless, of course, the initial romantic kind of love has evolved into something else. If there is a child in the relationship then a new kind of love with a different chemical mix arises that is more tender and more nurturing providing both parents have bonded with the child and with each other in child rearing. This lasts up to five years unless there are more children. With unconscious awareness of this process some women attempt to save their relationships by becoming pregnant. This strategy rarely works because their partner is less likely to bond with the resultant offspring.

There is yet another kind of love that develops over time and is related to companionship. Oxytocins are the dominant chemical in this mix and may be stimulated thru our sense of touch. In fact, older couples often report that touching and cuddling is as important, or more important than sex in their relationship. But its more than that. It involves a thorough knowledge of the other and an acceptance of both strengths and weaknesses. It involves a kind of acceptance and openness that usually comes from many years of cohabitation but may also come from shared awareness, experience and values.

Each kind of love provides a beautiful and natural "high". But it's hard work. To get that high we have to know, treasure and cherish the object of our love. Their well-being must be as important to us as our own.