# **BBC LEARNING ENGLISH**

# 6 Minute English The science of falling in love



This is not a word-for-word transcript.

#### Neil

Hello. This is 6 Minute English from BBC Learning English. I'm Neil.

#### **Beth**

And I'm Beth.

#### Neil

'Head over heels', 'butterflies in the tummy', 'the apple of my eye' – in English there are many idioms to describe what it feels like to fall in love.

#### **Beth**

Aww, I didn't know you were such a romantic, Neil! But do you know what's actually happening in our brains when we fall in love? Because I'm sorry to say this, Neil, but it's more about brain chemistry than romance – specifically hormones, chemical messengers which the body releases into the blood to control our growth, mood, and yes – falling in love.

### Neil

Thanks for ruining my romantic ideas, Beth! And since my dreams are now shattered, why don't we spend the rest of this programme finding out exactly what is going on inside our bodies and brains when we fall in love. And, of course, learn some useful new vocabulary too.

## **Beth**

There's no doubt that being in love has the health benefit of reducing stress, even lengthening your life, but the hormones which the brain releases have an

immediate effect as well. So, chemically speaking, what happens when lovers look into each others' eyes? Is it:

- a) their body temperature increases?
- b) their heartbeats harmonise? or,
- c) the hairs stand up on the back of their neck?

#### Neil

Hmmm, is it... all three? No? OK then, I'll guess it's b) their heartbeats harmonise.

#### **Beth**

OK, we'll find out if that's correct at the end of the programme. According to Helen E Fisher, self-help author and anthropologist at Rutgers University, there are three aspects of romantic love. Here's BBC Ideas to explain more:

## Helen E Fisher

Often **lust** comes first, but not always. For some people who are **asexual**, it may not happen at all. But for those who do experience lust, it's driven by the hormones oestrogen and testosterone. It may feel purely carnal, but in fact it's about the urge to mate and pass on your DNA via offspring. Without lust, **it's fair to** say our species would not survive.

## Neil

Helen Fisher thinks the first aspect of love is purely physical – **lust**, the strong feeling of sexual desire for someone. Lust is driven by the hormones oestrogen in women, and testosterone in men. A few people are **asexual**, meaning they don't feel sexual attraction for anyone of any gender.

#### **Beth**

Lust is hardwired into us through our DNA and it drives us to have children. Helen thinks **it's fair to** say that without lust, our species would not survive. Here, she uses the phrase **it's fair to say** to introduce an idea she believes to be true and reasonable.

#### Neil

Of course, love is not just physical. Here's BBC Ideas again to introduce Helen Fisher's second aspect of love, attraction:

### Helen E Fisher

The second aspect of romantic love is attraction, influenced by a neurotransmitter called dopamine. This is a **feel-good** substance released in our brain that is involved in driving us towards reward. Do something, get a dopamine hit, feel good. Eventually dopamine will push us toward repeating that behaviour. This is why intense attraction feels like an addiction to another human being. Some people get **stuck in that loop**, always chasing the dopamine-soaked excitement of a new relationship.

#### **Beth**

This time, the hormone responsible is dopamine, a neurotransmitter that rewards our attraction to someone with pleasurable feelings. That's why dopamine is called a **feel-good** substance. The adjective **feel-good** can be used to describe anything causing happy and optimistic feelings about life, things like feel-good films or feel-good music.

### Neil

Here, though, there's a downside. The dopamine 'hit' of sexual attraction feels so good, we crave it more and more. Some people are always chasing the next relationship to get a new 'hit' of pleasure, and soon become **stuck in a loop** – an idiom meaning they're unable to break the habit of repeating the same patterns of behaviour over and over again.

#### **Beth**

It's fascinating to see the power which hormones have over us, but if you're an old-fashioned romantic like Neil, don't despair. And speaking as a romantic, how about the answer to my question...

#### Neil

Right, you asked me about the effect on the body when two lovers look deep into each others' eyes. I guessed it was that their heartbeats harmonise.

#### **Beth**

Which was... the correct answer! In experiments, looking into the eyes produced hormones causing couple's hearts to beat in time. OK, let's recap the vocabulary we've learned in this programme starting with the idiom **head over heels** – to be completely in love with someone.

## Neil

**Lust** is a very strong feeling of sexual desire.

### **Beth**

Someone who is **asexual** does not feel sexual attraction toward anyone of any gender.

### Neil

The phrase, **it's fair to say**, is used to introduce a statement you believe to be true and reasonable.

## **Beth**

The adjective **feel-good** describes something which makes people feel happy and optimistic.

## Neil

And finally, the idiom **stuck in a loop** describes someone unable to break the habit of repeating the same negative patterns of behaviour over and over again. Once again our six minutes are up but remember to join us again next time for more topical discussion and useful vocabulary, here at 6 Minute English. Goodbye for now!

## **Beth**

Bye!

## **VOCABULARY**

## head over heels

(idiom) be completely in love with somebody

### lust

very strong feeling of sexual desire

## asexual

not experiencing sexual attraction towards anyone of any gender

# it's fair to say

used to introduce a statement you believe to be true and reasonable

# feel-good

making people feel happy and optimistic about life

## stuck in a loop

unable to break the habit of repeating the same patterns of behaviour over and over again