Soon after you drink a cup of coffee, caffeine, a strong stimulant is absorbed into your intestinal tract and into your blood. Peak absorption occurs in less than an hour, usually within thirty minutes.

Once absorbed, it is rapidly distributed into all of your body’s fluids, then processed by your liver and eventually excreted in urine.

Three hours after you drink a cup of coffee, the level of caffeine in your blood will be half of what it was at its peak.  Six hours after drinking coffee, you will have eliminated most of the caffeine from your system.

Once caffeine is distributed throughout the body, it stimulates your nerves and causes adrenalin to be released. Adrenalin is the main neuro-transmitter that changes your levels of energy and alertness.

**Effects Of Adrenalin**

Adrenalin increases your heart rate, which results in more blood pumped per minute.  This blood carries extra oxygen to your brain, making you feel more alert.  Caffeine also directly stimulates the spinal cord and the cortex of the brain, which enhances these alert feelings.

Many people experience a dip in energy several hours after drinking coffee. Though scientists aren’t exactly certain why this happens, a possible explanation may be that, after the effects of caffeine wear off, your brain needs to adjust to working without the stimulus the caffeine provided.

So, though that first cup of coffee might get you going in the morning, it might also leave you feeling fatigued half way through the day.

喝完一杯咖啡，咖啡因后，强烈的兴奋剂会被吸收到你的肠道和血液中。峰值吸收发生在不到一小时，通常在30分钟内。

一旦被吸收，它会迅速分散到您体内的所有液体中，然后由您的肝脏处理，最终排出尿液。

喝一杯咖啡三小时后，血液中的咖啡因含量将达到其最高峰时的一半。喝咖啡六小时后，您将从系统中消除大部分咖啡因。

一旦咖啡因分布在全身，它会刺激你的神经并导致肾上腺素被释放。肾上腺素是主要的神经传递物，可以改变你的能量水平和警觉性。

### 肾上腺素的作用

肾上腺素会增加您的心率，从而导致每分钟抽血更多。这种血液会为你的大脑带来额外的氧气，让你感觉更加警觉。咖啡因还可以直接刺激脊髓和大脑皮质，从而增强这些警觉感受。

许多人在喝咖啡几小时后体验到能量下降。虽然科学家们并不确定为什么会发生这种情况，但可能的解释可能是，在咖啡因消失后，你的大脑需要适应工作状态，而不需要咖啡因提供的刺激。

所以，虽然第一杯咖啡可能让你早上去，但也可能让你在一天中途感到疲惫。