

# Factors affecting caffeine metabolism

Various different factors influence how the body metabolises caffeine, which impacts how caffeine intake affects everyday activity.



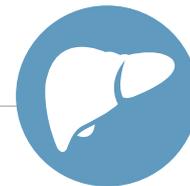
**Genetic variations** may affect the way an individual metabolises caffeine. The population could be divided into 'slow' and 'fast' caffeine metabolisers by a specific enzyme<sup>1,2,3</sup>.



Research suggests that **smoking** stimulates caffeine clearance and almost doubles the rate of caffeine metabolism<sup>9,10,11</sup>.



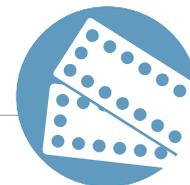
**Alcohol intake** can prolong caffeine half-life and decrease caffeine clearance<sup>4</sup>.



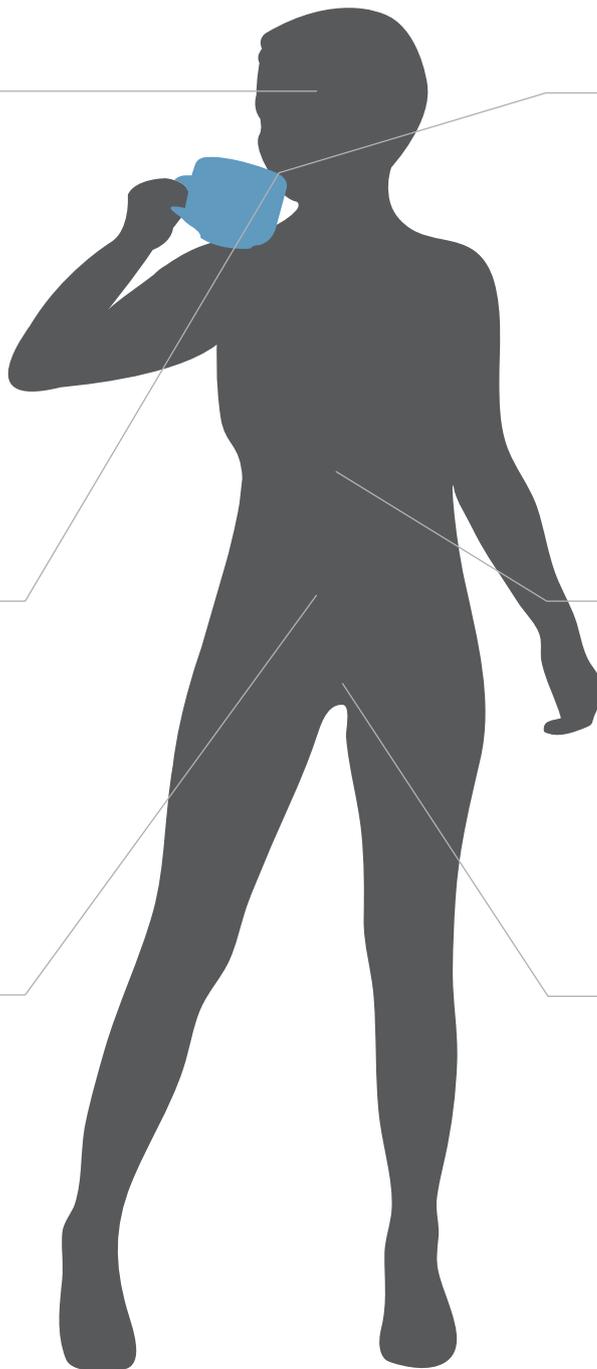
Certain **liver diseases** may reduce plasma clearance of caffeine<sup>12</sup>.



Several **dietary factors** may affect caffeine metabolism<sup>5-8</sup>. Eating broccoli and brassica vegetables, or large quantities of vitamin C, can increase caffeine clearance<sup>8</sup>.



The use of **oral contraceptives** doubles caffeine half-life, mainly during the second half of the menstrual cycle<sup>13</sup>.



## References

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