

Fullscript-tested

# Assessing B6 potency

At Fullscript, we're committed to independently testing products we distribute to provide quality assurance and validate important safety and efficacy label claims.

As part of our commitment to quality, we selected a variety of products distributed by Fullscript to test for potency and/or purity claims. Based on US and Canadian industry guidelines, Fullscript's Medical Advisory Team defined **100% or more** of label claims as the qualifying benchmark for quality confirmation.

Learn more about [Fullscript's commitment to quality](#).

## About vitamin B6

Vitamin B6 encompasses six interconvertible compounds: pyridoxine, pyridoxal, and pyridoxamine, along with their 5'-phosphate esters. The biologically active form, pyridoxal 5'-phosphate (P5P), functions as a coenzyme in over 100 enzymatic reactions, primarily in amino acid metabolism, neurotransmitter synthesis (e.g., serotonin, dopamine, gamma-aminobutyric acid (GABA)), gluconeogenesis, heme biosynthesis, and modulation of homocysteine levels. (Abosamak 2023)

## Clinical applications

Vitamin B6 supplementation is utilized in various clinical scenarios, including:

- **Vitamin B6 deficiency:** The Centers for Disease Control and Prevention (CDC) estimates 10% of Americans are deficient in vitamin B6. Deficiency is characterized by symptoms such as irritability, depression, confusion, and peripheral neuropathy. (Pfeiffer 2013)
- **Pregnancy:** Vitamin B6 is often used in combination with doxylamine. (Sahakian 1991)

## Patient considerations

Certain populations are more susceptible to vitamin B6 deficiency:

- **Older adults:** Age-related changes can impair B6 metabolism and absorption. (Russell 2001)
- **Individuals on dialysis:** Dialysis can lead to significant B6 losses. (Brown 2023)
- **Alcohol-dependent individuals:** Alcoholism interferes with B6 metabolism and increases excretion. (Vech 1975)

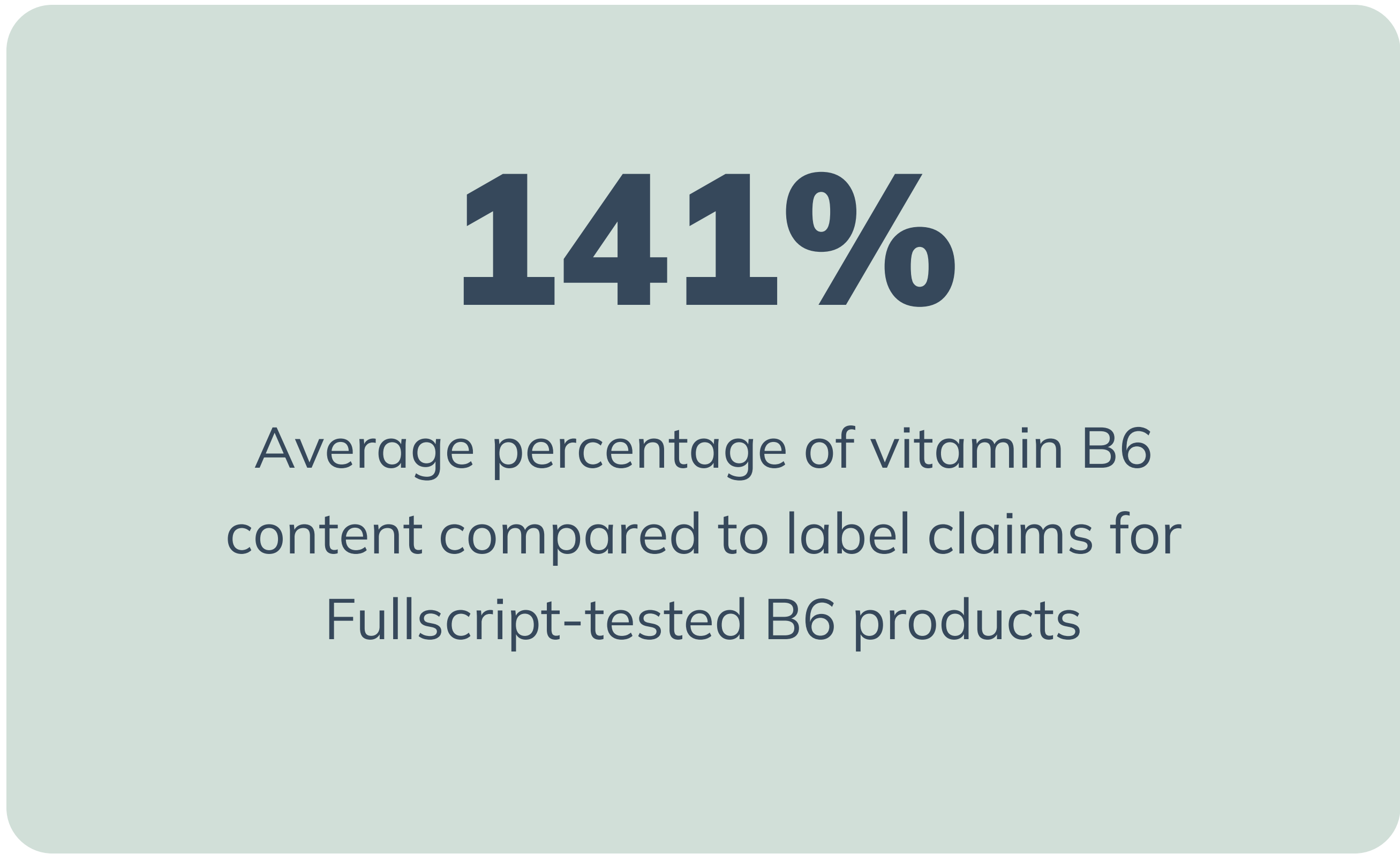


- **Pregnant and lactating women:** Women have increased requirements during pregnancy and lactation. (Allen 2012)
- **Individuals on certain medications:** Drugs such as isoniazid, hydralazine, and penicillamine can inactivate pyridoxal phosphate (PLP), leading to deficiency. (Wilson 2019)

To learn more about vitamin B6, check out our [ingredient library](#).

## Did you know?

Some overage of primary ingredients is necessary for product shelf life. The US Food and Drug Administration (FDA) mandates that dietary supplements meet label claims until expiration. Manufacturers, therefore, add extra ingredient amounts to ensure compliance. Delivery formats with less integrity, such as gummies and liquids, lose potency faster and require additional overage amounts.



## Featured Fullscript-tested products

The Fullscript catalog experience allows you to filter Fullscript-tested products. The following are featured high-quality products that meet Fullscript’s potency standards.

Product	SKU	Results
Pure Encapsulations P5P 50	<a href="#">PUR-P56</a>	141.4%

### References

1. Abosamak, N. R., & Gupta, V. (2023). StatPearls.
2. Pfeiffer, C. M., Sternberg, M. R., Schleicher, R. L., Haynes, B. M., Rybak, M. E., & Pirkle, J. L. (2013). Journal of Nutrition, 143(6), 938S–947S.
3. Sahakian, V., Rouse, D., Sipes, S., Rose, N., & Niebyl, J. (1991). Obstetrics and Gynecology, 78(1), 33–36.
4. Romoli, M., Perucca, E., & Sen, A. (2020). Epilepsy & Behavior, 103(Pt A), 106861.
5. Russell, R. M. (2001). Journal of Nutrition, 131(4 Suppl), 1359S–1361S.
6. Brown, M. J., Ameer, M. A., Daley, S. F., et al. (2025). StatPearls.
7. Vech, R. L., Lumeng, L., & Li, T. K. (1975). Journal of Clinical Investigation, 55(5), 1026–1032.
8. Allen, L. H. (2012). Advances in Nutrition, 3(3), 362–369.
9. Wilson, M. P., Plecko, B., Mills, P. B., & Clayton, P. T. (2019). Journal of Inherited Metabolic Disease, 42, 629–646.

