



Fullscript-tested

# Assessing CoQ10 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 coenzyme Q10 (CoQ10) products distributed by Fullscript to test for potency claims. Based on US and Canadian industry guidelines, Fullscript's Medical Advisory Team defined a CoQ10 content of **100% or more** of label claims as the qualifying benchmark for quality confirmation.

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

## About CoQ10

CoQ10 is a popular dietary supplement known for its potential to support cellular energy, provide antioxidant benefits, and support patients consuming CoQ10-depleting medications. CoQ10 supplements are available in two common forms: ubiquinol and ubiquinone. Both forms of CoQ10 are also found in foods in varying amounts. To fully reap the benefits of CoQ10, your body must first convert ubiquinone, the oxidized form of CoQ10 that's often found in commercial supplements, into the active form, ubiquinol. As CoQ10 levels decline as we age, our bodies may not convert ubiquinone to ubiquinol as effectively. Issues related to potency and adulteration can also impact the safety and efficacy of these supplements.

## CoQ10 potency

The potency of CoQ10 is typically assessed using high-performance liquid chromatography (HPLC). HPLC allows for the precise quantification of CoQ10 content in a sample. The United States Pharmacopeia (USP) provides specific guidelines and monographs detailing the preparation of samples, type of HPLC column, mobile phase composition, and detection wavelength to meet the scope of validated methods. Using validated methods ensures that the CoQ10 concentration meets label claims.

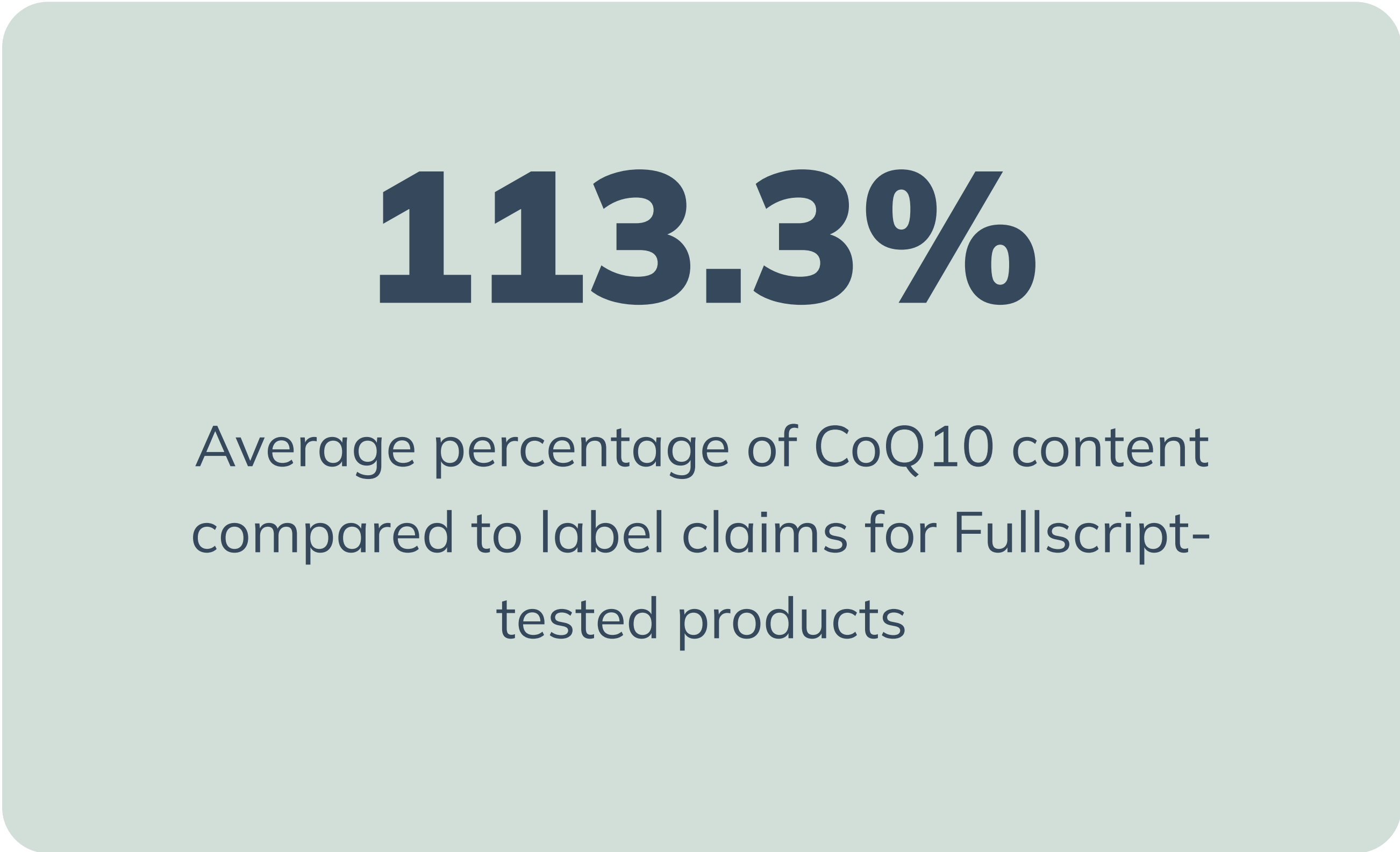
Issues with CoQ10 potency can result from variable sourcing and manufacturing standards and the degradation of the ingredient over time due to environmental factors. The absence of standardized testing methods, like HPLC, complicates these issues, leading to products that may not deliver the intended health-supporting benefits. (Pravst 2020)



Seven out of eight brands obtained online from Amazon had less than 30% of claimed CoQ10 content.

In a 2022 report on CoQ10 label claims for products sold on Amazon, supplement brand NOW Foods found that only one of the eight brands tested contained the amount of CoQ10 listed on the label. Three of the eight brands tested had vegan and vegetarian claims on their labels, but through further testing, it was revealed that the products contained animal gelatin.

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 will soon allow you to filter quality-tested products. The following are featured high-quality products that meet Fullscript’s purity standards.

Brand	SKU	Product	Results
Designs for Health	<a href="#">DFH-COQ200</a>	CoQnol (Ubiquinol) 200mg (60 softgels)	127%
Designs for Health	<a href="#">DF0294</a>	CoQnol (Ubiquinol) 100mg (60 softgels)	108%
Integrative Therapeutics	<a href="#">PP0127</a>	CoQ10 100mg (60 softgels)	105%

## Reference

1. Pravst, I., Rodríguez Aguilera, J. C., Cortes Rodriguez, A. B., Jazbar, J., Locatelli, I., Hristov, H., & Žmitek, K. (2020). Nutrients, 12(3), 784.

