



Vitamin delivery doesn't change absorption rates

Dietary supplements are big business, and some supplements are now available in "sublingual" or spray forms. Sublingual supplements are a pill form that you place under your tongue and let dissolve. Theoretically, the vitamins are absorbed efficiently through the tissues lining the mouth. Sublingual product marketing often claims that the vitamins are absorbed better than standard pill supplements. Similar claims of superiority are made for spray vitamin products that are sprayed into the mouth in the form of a mist.

QUESTION: How do sublingual supplements compare with those that are swallowed?

ANSWER: In one study that measured vitamin B-12 blood levels each week for eight weeks, there was no reported difference between people taking standard B-12 supplements or sublingual supplements. A second study compared a sublingual mixture of B vitamins with normally swallowed pills containing the same vitamins. This study was measuring the capacity of the vitamins to reduce blood homocysteine levels (a cardiovascular disease risk factor). They found no difference between the two routes of

intake for lowering of blood homocysteine levels.

Q: Are there other possible advantages to sublingual or spray vitamin products?

A: For people who have difficulty swallowing pills, the sublingual and spray products might be easier to use. However, it is important to compare nutrients and dosages when comparing products as well as the form. Sublingual and spray products tend to be more expensive than standard supplements.

Ultimately, the physical form of the supplement seems to make no difference in amount absorbed as long as it can dissolve in the mouth or stomach. Once a vitamin preparation goes into the mouth, whether it is under the tongue, sprayed in the mouth or simply swallowed, it ultimately gets swallowed with saliva anyway.

Q: Are there any other routes of vitamin intake?

A: Vitamin B-12 is available as an intranasal spray product. A weekly nasal spray of B-12 has been shown to increase blood levels of the vitamin and be a reasonable alternative to vitamin B-12 injections. One intranasal B-12 spray product, called Nasco-

bal, is sold as a prescription drug product. It has undergone research to demonstrate that it raises B-12 levels in the blood as efficiently as injections.

Q: Are sublingual and spray vitamins regulated by FDA as are vitamin supplement pills?

A: No, but this seems to be a relatively little-known fact. The U.S. Food and Drug Administration states that "only products that are intended for ingestion (swallowed) may be lawfully marketed as dietary supplements. Topical products and products intended to enter the body directly through the skin or mucosal tissues, such as transdermal or sublingual products, are not dietary supplements."

This means that these products should legally be marketed and regulated as drugs if they are making any claims related to disease or effects on body structure or function. Apparently, this is why Nascobal is a prescription product.

To sum this up: For those who have no difficulty swallowing regular vitamin pills, there appears to be no clear advantage in using sublingual or spray vitamin products based on current scientific research.

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