# Post-marketing Surveillance of Cordyceps Products in Thailand

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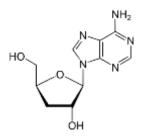
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Cordyceps sinensis



Cordyceps militaris



cordycepin

https://www.vectorstock.com/royaltyfree-vector/cordyceps-militaristraditional-chinese-herbs-vector-36357713

https://www.vectorstock.com/royaltyfree-vector/cordyceps-ophiocordycepsmedicinal-mushroom-vector-19204682 Cordyceps-based dietary supplements have become widely popular in Thailand since 2020. Despite legal restrictions prohibiting health claims, many of these products have been marketed with exaggerated benefits — such as improving kidney function, preventing cancer, and lowering blood sugar — especially on TV and social media. This has misled consumers, some of whom later developed acute kidney injuries.

#### Cordyceps in the market

- Cordyceps sinensis: DongChongXiaCao (冬蟲夏草 DŌng Chóng Xià Cǎo) or winter worm-summer grass
- Cordyceps militaris: This species can be cultivated, is considered safe, and is more affordable. It contains a high amount of a key compound called cordycepin. While cordycepin offers several health benefits—such as anti-inflammatory and anti-

While cordycepin offers several health benefits—such as anti-inflammatory and anticancer properties—**consuming it in high amounts may lead to kidney failure**, similar to the effects of certain anti-inflammatory drugs.

The research team analyzed 65 Cordyceps-containing products sold in Thailand in 2023. Key findings include:

- 58.5% contained cordycepin, a bioactive compound known for its antioxidant and anti-inflammatory effects.
- 52.3% included Cordyceps militaris, a cultivated species that is cheaper, arsenic-free, and high in cordycepin.
- However, 51.4% of products were mislabeled, stating incorrect species or lacking species information altogether.
- 10 products had no Cordyceps content at all.
- 21.5% had incomplete labeling, missing mandatory warnings like "This product is not intended to treat or prevent disease."
- 11% were either unregistered, used fake registration numbers, or used numbers that had been canceled.
- 6.2% of legally registered products were adulterated with steroids, posing serious health risks.
- 72.3% advertised online without proper authorization and made illegal therapeutic claims

## Common misleading claims included:

- Blood sugar reduction (11%)
- Immune boosting (11%)
- Lowering cholesterol (8%)
- Sexual enhancement (8%)
- Kidney rejuvenation (7%)

## Implications:

This study reveals major gaps in the regulation and enforcement of dietary supplement laws in Thailand. It urges consumers to:

- Use only registered products
- Avoid being misled by exaggerated claims
- Consult healthcare professionals before use

The findings also emphasize the need for the **Thai FDA** to strengthen **post-market surveillance** and ensure that products sold are safe, correctly labeled, and legally marketed.