MUSHROOMS

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MUSHROOMS IN DIETARY SUPPLEMENTS  
Mushrooms are a type of fungus grown worldwide. They are rich in vitamins, minerals, fiber, antioxidants, and protein. While you might first think of mushrooms as food, they have been used as medicine for centuries. Today, mushrooms are also used as ingredients in dietary supplement products.  
  
Many different types of mushrooms are found on dietary supplement labels, but the most common are reishi, shiitake, Cordyceps sinensis, maitake, Cordyceps militaris, lion s mane, chaga, and turkey tail. Regardless of what type they contain, mushroom supplements are marketed for numerous health benefits. Some claims are general, such as promoting vitality and immune health. Others are more specific, such as promoting healthy cellular function, enhancing cognitive performance, controlling blood sugar levels, aiding digestion, and supporting a healthy inflammatory response by the liver.  
  
The mushrooms used in dietary supplements are marketed for numerous health benefits, but there isn t enough scientific evidence to support their safety or use for any specific purpose, except as a food.  
  
When mushrooms are used in dietary supplements, they are often in the form of a powder or extract. The fruiting body often mentioned on labels is the part usually visible above ground the part you would typically eat as a food. The mycelium, also sometimes mentioned on labels, is the root of the mushroom; it can be grown more quickly and easily than the fruiting body. They both contain beneficial chemical components (polysaccarides, glucans, triterpenes etc.). However, it remains unclear if mushrooms in the form of dietary supplements deliver the same components or biological effects as when eating mushrooms as food.  
  
Mushroom extracts and powders can be produced in a variety of ways. Generally, extracts can be made by boiling fruiting bodies in hot water or alcohol. Powders can be made by grinding up the dried mycelium or fruiting body. The different processing methods and various growing conditions (in logs, sawdust, liquid, etc.) make it difficult to control and standardize the chemical makeup of these mushroom-based ingredients, which can potentially compromise both quality and consistency among batches and products.  
  
Are mushroom dietary supplements safe or effective?  
Generally, mushrooms as a food are safe to consume, but some types can be poisonous (toxic). Consuming toxic mushrooms can result in severe side effects such as nausea, diarrhea, vomitting, liver failure, and in some cases, death. Dietary supplement products shouldn t contain poisonous mushrooms, but without laboratory testing, it is difficult to know for sure.  
  
Currently there isn t enough reliable information available to support the safety, effectiveness, or appropriate use of dietary supplements that contain non-toxic mushrooms. Some dietary supplement labels with mushroom ingredients carry warning statements such as, Avoid using if you re pregnant, breastfeeding, or anticipate surgery. Side effects reported from using such products include such as nausea, vomitting, diarrhea, dizziness, skin sensitivity, headache, gastrointestinal (GI) discomfort, and allergic reactions.  
  
Are mushrooms prohibited for use?  
Mushrooms suitable for use as food or dietary supplement ingredients are not prohibited for use by Military Service Members. However, some mushrooms contain the controlled substance psilocybin (or psilocin). In addition, magic mushroom products can contain other plant-based hallucinogens (some of which are also controlled substances) and might not even contain mushrooms. Military Service Members are prohibited from using any controlled substance and any substance with mind-altering properties.