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TOP HEALTH CONDITIONS

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Spleen extract



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Related Terms

- Bovine spleen, predigested spleen extract, raw spleen, spleen, spleen concentrate, spleen factors, spleen peptides, spleen polypeptides, splenopentin, tetrapeptide tuftsin, tuftsin, tuftsin (L-prolyl-L-arginine), tuftsin (Thr-Lys-Pro-Arg), water-soluble spleen extract.

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Background

- The spleen is an organ that removes worn-out red blood cells and platelets, produces certain types of white blood cells, and destroys bacteria and cellular debris. Spleen extract primarily comes from the spleens of cows or pigs.
- The primary use of spleen extract is after surgical removal of the spleen. Some studies show that spleen extract may stimulate the immune system. However, high-quality studies are lacking.
- Some concern has been raised about the safety of spleen extract, as it is made of animal spleens, and it is generally advised to avoid spleen extract from countries where bovine spongiform encephalitis (BSE or "mad cow disease") has been reported.

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Evidence Table

These uses have been tested in humans or animals. Safety and effectiveness have not always been proven. Some of these conditions are potentially serious, and should be evaluated by a qualified healthcare provider. **GRADE ***

* Key to grades

A: Strong scientific evidence for this use

B: Good scientific evidence for this use

C: Unclear scientific evidence for this use

D: Fair scientific evidence for this use (it may not work)

F: Strong scientific evidence against this use (it likely does not work)

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Tradition / Theory

The below uses are based on tradition, scientific theories, or limited research. They often have not been thoroughly tested in humans, and safety and effectiveness have not always been proven. Some of these conditions are potentially serious, and should be evaluated by a qualified healthcare provider. There may be other proposed uses that are not listed below.

- Antibacterial, antifungal, antimicrobial, antioxidant, bleeding disorders, cancer, celiac disease, common cold, Crohn's disease, dermatitis herpetiformis, emotional disorders, fatigue, flu, graft-versus-host disease (prevention), HIV/AIDS, Hodgkin's disease, immune function, kidney inflammation, leprosy, leukemia, low blood platelets, lung conditions, lupus, quality of life in HIV patients, radiation side effects, rheumatoid arthritis, sarcoidosis, sickle cell disease, spleen disorders, supplementation in preterm and very low birthweight infants, ulcerative colitis (inflammatory bowel disease), vasculitis (inflamed blood vessels).

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Dosing

Adults (18 years and older):

- There is no proven safe or effective dose for spleen extract in adults.

Children (younger than 18 years):

- There is no proven safe or effective dose for spleen extract in children.

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Safety

The U.S. Food and Drug Administration does not strictly regulate herbs and supplements. There is no guarantee of strength, purity or safety of products, and effects may vary. You should always read product labels. If you have a medical condition, or are taking other drugs, herbs, or supplements, you should speak with a qualified healthcare provider before starting a new therapy. Consult a healthcare provider immediately if you experience side effects.

Allergies

- Avoid with known allergy/hypersensitivity to spleen extract or its components, including tuftsins.

Side Effects and Warnings

- There is insufficient available evidence on the adverse effects of spleen extract.
- Tuftsins, found in spleen extract, may affect bleeding. Caution is advised in people with bleeding disorders or taking agents that affect the risk of bleeding. Dosing adjustments may be necessary.
- Use cautiously in people with Hodgkin's disease, leukemia, or lupus, due to immune effects.
- Use cautiously in people using agents that affect the nervous system.
- Use cautiously in people using pain relievers, as tuftsins may enhance the perception of pain.
- Use cautiously in children or during pregnancy or lactation, due to insufficient available evidence.
- Avoid in people with immune disorders or in those taking agents that affect the immune system, as spleen extract or tuftsins may stimulate the immune system.
- Avoid spleen extract from countries where bovine spongiform encephalitis (BSE or "mad cow disease") has been reported.
- Avoid with known allergy/hypersensitivity to spleen extract or its components, including tuftsins.

Pregnancy and Breastfeeding

- There is a lack of available scientific evidence on the use of spleen extract during pregnancy or lactation.

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Interactions

Interactions with Drugs

- Tuftsins, found in spleen extract, may affect bleeding and may interact with agents that affect the risk of bleeding. Some examples include aspirin, anticoagulants ("blood thinners") such as warfarin (Coumadin®) or heparin, anti-platelet drugs such as clopidogrel (Plavix®), and non-steroidal anti-inflammatory drugs such as ibuprofen (Motrin®, Advil®) or naproxen (Naprosyn®, Aleve®).
- Spleen extract may also interact with agents that affect the immune system, agents that affect the nervous system, antibiotics, anticancer agents, antifungals, or pain relievers.

Interactions with Herbs and Dietary Supplements

- Tuftsins, found in spleen extract, may affect bleeding and may interact with herbs and supplements that affect the risk of bleeding. Some examples include *Ginkgo biloba*, garlic, and saw palmetto. Numerous other agents may theoretically affect the risk of bleeding, although this has not been proven in most cases.
- Spleen extract may also interact with antimicrobials, anticancer herbs and supplements, antifungals, antioxidants, herbs and supplements that affect the immune system, herbs and supplements that affect the nervous system, or pain relievers.



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Attribution

- This information is based on a systematic review of scientific literature edited and peer-reviewed by contributors to the Natural Standard Research Collaboration (www.naturalstandard.com).



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The information in this monograph is intended for informational purposes only, and is meant to help users better understand health concerns. Information is based on review of scientific research data, historical practice patterns, and clinical experience. This information should not be interpreted as specific medical advice. Users should consult with a qualified healthcare provider for specific questions regarding therapies, diagnosis and/or health conditions, prior to making therapeutic decisions.

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