

AVOCADO AND SOYBEAN

Common Names: avocado, alligator pear, soy, soybean, ASU

Scientific Names: avocado (*Persea americana*), soybean (*Glycine max*)

Effectiveness: Avocado/soybean unsaponifiable oil (ASU) may modestly improve pain and functionality in knee and hip OA.

Safety: Likely safe when used orally at appropriate doses for up to six months. Long term safety unknown.

What are avocado and soybean?

- Avocado is a dark green berry fruit with a single large seed native to Mexico and Central America.
- Soybean is a legume plant native to East Asia. Its beans are used to make tofu, soy milk, and soy based foods.
- Both avocado and soybean are high in nutrients.

What are they used for in people with rheumatic conditions?

- Combination of avocado and soybean unsaponifiable (ASU) oils may be beneficial in the management of osteoarthritis (OA).

How is it thought to work?

- Some studies suggest that avocado/soybean oils can increase collagen growth, reduce joint space narrowing, and reduce the production of substances that increase inflammation (inflammatory mediators).

Does it Work? What the Science Says:

ASU 300mg/day

- Two studies demonstrated that taking ASU 300mg/day significantly reduced the dose of NSAID needed in patients with knee OA after 2 to 3 months of use

- Another study evaluating ASU 300mg/day in knee and hip OA found ASU significantly improved pain and functionality
- However, a longer-term study (2 years) did not show any benefit of ASU in reducing joint space loss in patients with hip OA
- Well-conducted studies are limited
- ASU may improve symptoms of OA and reduce NSAID use
- May be worth trying for 4-8 weeks
- More long term trials are needed

What are possible side effects and what can I do about them?

- ASU is generally well tolerated when taken orally at appropriate doses. Stomach upset, nausea/vomiting, headaches, and migraine have also been reported.
- Patients allergic to avocado and soybean should avoid ASU.
- Allergic reactions have been reported in people with latex sensitivity ingesting avocado. Take ASU with caution.

Interactions:

With drugs:

- Based on case reports, avocado and soymilk may decrease the anticoagulant effect of warfarin, which would increase the risk of a blood clot. It is unknown if ASU would show similar results. Close monitoring of INR may be needed in patients starting or stopping ASU.

For more information about ASU, consult your physician and pharmacist.

References:

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- (3) Lequesne M, Maheu E, Cadet C, Dreiser RL. Structural effect of avocado/soybean unsaponifiables on joint space loss in osteoarthritis of the hip. *Arthritis Rheum* 2002 Feb;47(1):50-58.
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- (5) Natural Medicine Comprehensive Database
- (6) Natural Standard