

# 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
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