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Supplements in Ankylosing Spondylitis and Axial Spondyloarthritis

A one-page summary from "Supplements for Arthritis and Lupus: What the Evidence Really Says"

Start here. Not one guideline — ACR, ASAS-EULAR, or GRAPPA — makes any recommendation about supplements in this disease. The questions weren't considered answerable. Meanwhile exercise carries a *strong* recommendation, the only one anywhere in this whole subject.

Exercise is the treatment

Pooled across twelve trials in 1,483 people, exercise improved both disease activity and function. Supervised programs and home programs performed about equally, so cost and access aren't the barrier they seem. **One safety exception the guideline is emphatic about: no spinal manipulation if you have a fused spine or advanced osteoporosis.**

Worth taking — for bone, which matters more here than you'd think

- **Vitamin D**, 800–2,000 IU daily, plus **calcium** to a total of 1,000–1,200 mg/day from all sources (food first) if you're on prednisone.
- **Why this matters:** despite all the extra bone your spine is forming, about 14% of people with AS have osteoporosis and about 14% have had a vertebral fracture — more than double the odds compared with people without AS. And the risk goes *up*, not down, as more syndesmophytes form.
- **Ask about how your bone density scan is read.** A standard front-to-back DXA of a fused spine reads falsely high, because the extra bone in the ligaments inflates the number. The hip is the reliable site. This is worth raising by name at your next visit.

Worth taking if you're on methotrexate

- **Folic acid**, 1 mg daily or 5 mg weekly. Cuts liver enzyme abnormalities by 77% and the chance of stopping the drug by 61%.

Not supported

- **Probiotics.** This one has actually been tested here, which is more than most. A randomized trial in 63 people found no difference from placebo on any core measure, and the authors said so plainly. The gut–joint science is genuinely real and interesting; capsules are not a validated way to act on it.
- **Glucosamine and chondroitin.** There are no trials — not negative trials, none — in spondyloarthritis. These products target cartilage wear. Your disease is inflammation and new bone formation. No mechanism, no data.
- **Fish oil.** Essentially nothing in this condition, positive or negative.
- **The low-starch diet.** The source everyone cites is a 1996 conference supplement article with no randomization, no control group, no statistics, and no reported symptom outcomes — whose own authors wrote that it "requires further evaluation." Nobody has run that trial in the thirty years since. The cost isn't neutral either: unnecessary restriction, expense, and cutting fiber, which is biologically backwards if the gut really is involved.

Avoid: St John's wort (interacts with a long list of medications), red yeast rice, green tea extract capsules at high dose, vitamin E above 400 IU.

Also worth doing: stop smoking — it worsens symptoms, function, disease activity, and progression, and may blunt your response to treatment.