Arabino SAP

Science-based prebiotic fibre with immune-stimulating properties

Arabino SAP provides high-quality larch arabinogalactan, a safe and effective bulking laxative that helps promote gut motility, and to normalize and improve bowel function. **Arabino SAP** serves as a prebiotic and selectively stimulates the growth of beneficial gut microflora. Larch arabinogalactan has been approved by the US FDA and other authorities for its diverse benefits on human health, with potential therapeutic use as an immune-stimulating agent and cancer-protocol adjunct.

ACTIVE INGREDIENTS

Each level scoop contains:

D-Galacto-L-arabinan (arabinogalactan from *Larix occidentalis*). . . . . 4 g

This product is non-GMO and vegan friendly.

Contains no: Gluten, soy, wheat, corn, eggs, dairy, yeast, citrus, preservatives, artificial flavour or colour, starch, or sugar.

Arabino SAP contains 200 g per bottle.

DIRECTIONS FOR USE

Adults: Take 1 scoop, one to three times daily, stirred in 8 oz. of water or juice and drink immediately, or as directed by your healthcare practitioner. Always follow with additional water intake (an additional 8 oz.) and ensure optimal daily hydration (minimum of 64 oz./day).

INDICATIONS

Arabino SAP can help:

- Promote healthy gastrointestinal and immune functions.
- Manage constipation.
- Promote growth of healthy gut microflora.
- With the management of hypercholesterolemia and to foster cardiovascular health.

CAUTIONS, WARNINGS, AND CONTRAINDICATIONS

Consult a healthcare practitioner prior to use if you are pregnant or breast-feeding; if you are taking medication which inhibits peristaltic movement (e.g. opioids, loperamide); or if you have symptoms such as abdominal pain, nausea, vomiting, or fever (as these could be signs of abnormal constriction of the gastrointestinal tract, diseases of the oesophagus and/or the superior openings of the stomach [cardia], potential or existing intestinal blockage, paralysis of the intestine, megacolon, faecal impaction inflamed bowel or appendicitis). Do not use if you are experiencing a sudden change in bowel habits that have persisted for more than 2 weeks, undiagnosed rectal bleeding or failure to defaecate following the use of another laxative product; if you have diabetes mellitus in which blood sugar is difficult to regulate; or if you have difficulty swallowing. Consult a healthcare practitioner immediately if you experience chest pain, vomiting, or difficulty in swallowing or breathing after taking this product. May cause mild gastrointestinal discomfort (bloating, gas).

Larch arabinogalactan has USFDA generally recognized as safe (GRAS) status and is considered extremely safe, with minimal to no toxicity.

PURITY AND CLEANLINESS

All ingredients listed for all **Arabino SAP** lot numbers have been tested by an ISO 17025–accredited third-party laboratory for identity, potency, and purity.

ADVANTAGES AND BENEFITS TO ARABINO SAP OVER OTHER FIBRE SOURCES

- Lower rates of bloating and flatulence due to lower rate of fermentation, and no adaptation period required.
- Similar cholesterol-modulating abilities and prebiotic activity promoting a wider, more specifically proven range of probiotic growth, all at lower doses.
- Stimulates immune function and increases cytotoxic phagocytosis.
- Wider pH and temperature stability.
- Increased safety, with increased water solubility and lower viscosity.
- Neutral taste, low caloric value (1.4 kcal/g; total 17 calories per portion), and no glycemic response (3.6 g; <2% DV per portion).

Scientific Advisory Panel (SAP): adding nutraceutical research to achieve optimum health

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LARCH ARABINOGALACTAN

Larch arabinogalactan consists of galactose and arabinose side-chains in a 6:1 ratio. It is a long, densely-branched polysaccharide containing no starch, with a galactan backbone. Larch arabinogalactan is a safe and effective bulking laxative which promotes gut motility, normalizes and improves bowel function by decreasing the incidence of constipation, increasing fecal weight, and decreasing transit time. A multifunctional dietary fibre, larch arabinogalactan has been approved by the USFDA and other authorities for its diverse benefits on human health, with potential therapeutic use as an immune-stimulating agent and cancer-protocol adjunct.[1, 2]

PREBIOTIC ACTIVITY AND GASTROINTESTINAL HEALTH

Selective Stimulation of Growth of Beneficial Microflora

Evidence from human and in vitro studies demonstrate the ability of larch arabinogalactan to exhibit specific and positive effects on gastrointestinal health. It has been specifically shown to increase anaerobes such as *Bifidobacteria* and *Lactobacilli* species, while decreasing *Clostridia* and *E. coli*.[3, 4, 5, 6]

Increased Production of Short-Chain Fatty Acids and Reduction of Ammonia

Larch arabinogalactan has demonstrated the ability to lower colonic pH, stimulating an environment favoring the development of beneficial bacteria, by increasing short-chain fatty acids including acetate, propionate, and most importantly, butyrate. Acetate and propionate are used as energy sources in the brain, muscle and heart; butyrate is a major fuel source for gastrointestinal mucosal cells.[3, 7, 8, 9, 10] Larch arabinogalactan decreases the generation and absorption of ammonia in the gut,[3, 6, 11] preventing its accumulation and consequent damage to gastrointestinal epithelium.

Effects on Cardiovascular Health, Cholesterol, Diabetes, Glucose and Insulin Control

Viscous, soluble fibres are well-established as an effective method of reducing LDL cholesterol by up to 30% in combination with dietary modification, and producing clinically significant reductions in cardiovascular-disease risk. Soluble fibre intake has been associated with reduced glucose and insulin responses. These effects have been attributed to the formation of a gel-like consistency in the stomach, thereby delaying gastric emptying and absorption. Soluble fibres increase intestinal transit time, resulting in decreased absorption of carbohydrates in the upper jejunum and relieving insulin demand.[12]

High Digestive Tolerance and Advantages Over Other Fibre Sources

The highly branched structure of larch arabinogalactan provides for it to be freely soluble, dissolving completely in hot or cold water and liquids, and gives it a lower viscosity than other fibres when dissolved, allowing for increased patient compliance and ease of use.[13] It is highly stable within a wide temperature and pH range, and provides all the benefits of other fibres, with minimal to no side effects such as bloating and flatulence,[6] due to its branched structure and therefore slow rate of fermentation. A low-calorie (1.4 kcal/g) substance, larch arabinogalactan has been reported to have no glycemic response,[6] and has a neutral taste.

Immune-Stimulating

Arabinogalactans are capable of enhancing the immune response to bacterial infection by stimulating phagocytosis, competitive binding of bacterial fimbriae and bacterial opsonization particularly in Gram-negative bacterial such as *E. coli* and *Klebsiella*.[2, 14] A study by D'Adamo in a pediatric population shows a reduction in occurrence and severity of otitis media with supplemental larch arabinogalactan.[14] These immune-stimulating properties have been suggested to have potential benefits in the treatment of chronic diseases, including HIV/AIDS, chronic fatigue syndrome, viral hepatitis, and autoimmune disorders such as multiple sclerosis. Macrophages and lymphocytes treated with larch arabinogalactan exhibited a stimulatory effect of immune function in a 2005 study by Choi et al.[15] Larch arabinogalactan has been shown to increase CD4 counts while reducing susceptibility to opportunistic pathogens.[2, 14] Due to its ability to stimulate NK-cell and macrophage cytotoxicity, the immune system in general, and block the metastasis of tumour cells to the liver via inhibition of lectin receptor sites, larch arabinogalactan has been implicated as a potential adjunct to cancer therapies.[2, 14, 15, 16, 17]

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