

Reviews:

Arnoldi, A et al (2015) The health benefits of sweet lupin seed flours and isolated proteins. **J Functional Foods. 18: 550-63**

Kouris-Blazos, A (2016) Health benefits of legumes and pulses with a focus on Australian sweet lupins. **Asia Pac J Clin Nutr. 2016;25(1):1-17.**

Studies:

Health Indicator	Lupin constituent	Evidence	Reference
Satiety; controlling appetite	whole kernel	Dietary intervention study	Lee, YP et al (2006) Lupin-enriched bread increases satiety and reduces energy intake acutely. <i>Am J Clin Nutr.</i> 2006; 84: 975-980
	kernel fibre	Dietary intervention study	Archer, BJ et al. (2004) Effect of fat replacement by inulin or lupin-kernel fibre on sausage patty acceptability, post-meal perceptions of satiety and food intake in men. <i>British Journal Nutrition</i> 91: 591-599.
Reduced blood glucose and insulin response	whole kernel	Dietary intervention study	Dove, ER et al. (2011) Lupin and soya reduce glycaemia acutely in type 2 diabetes. <i>Br J Nutr.</i> 2011 Oct;106(7):1045-51.
	whole kernel	Dietary intervention study	Belski, R et al. (2010) Effects of lupin-enriched foods on body composition and cardiovascular disease risk factors: a 12-month randomized controlled weight loss trial. <i>Int J Obes.</i> 35:810-819
	kernel fibre	Dietary intervention study	Johnson, SK et al.(2003) Sensory acceptability of white bread with added Australian sweet lupin (<i>Lupinus angustifolius</i>) kernel fibre and its glycaemic and insulinaemic responses when eaten as a breakfast. <i>J. Science Food Agr.</i> 83:1366–1372
	whole kernel	Dietary intervention study	Hall, R. S., et al. (2005) Australian sweet lupin flour addition reduced the glycaemic index of a white bread breakfast without affecting palatability in healthy human volunteers. <i>Asia Pacific J. Clinical Nutrition</i> 14: 91-97
	g-conglutin	Rat feeding study	Magni, C et al. (2004). Conglutin γ , a lupin seed protein, binds insulin in vitro and reduces plasma glucose levels of hyperglycemic rats. <i>J. Nutr. Biochem.</i> 15:646.
	g-conglutin	Rat feeding study	Terruzzi, I (2001) Insulin-mimetic action of Conglutin γ , a lupin protein, in mouse myoblast. <i>Nutr Metab Cardio-vasc Dis.</i> 21:197-205
Hypotensive activity	lupin protein	Rat feeding study	Pilvi TK, et al (2006) Lupin protein attenuates the development of hypertension and normalises the vascular function of NaCl-loaded Goto-Kakizaki rats. <i>J Physiol Pharmacol.</i> 57(2):167-76.
	whole kernel	Dietary intervention study	Lee YP.(2009) Effects of lupin kernel flour-enriched bread on blood pressure: a controlled intervention study. <i>Am J Clin Nutr.</i> 89: 766
	whole kernel	Dietary intervention study	Belski, R et al. (2010) Effects of lupin-enriched foods on body composition and cardiovascular disease risk factors: a 12-month randomized controlled weight loss trial. <i>Int J Obes.</i> 35:810-819
Bowel health (reduced transit time, lower colon pH, prebiotic)	kernel fibre	Dietary intervention study	Fechner A, et al (2013) Effects of legume kernel fibres and citrus fibre putative risk factors for colorectal cancer: randomized, double-blind, crossover human intervention trial. <i>Nutr J.</i> 12:101
	kernel fibre	Dietary intervention study	Johnson SK, Chua V, Hall RS, Baxter AL. (2006) Lupin kernel fibre foods improve bowel function and beneficially modify some putative faecal risk factors for colon cancer in men. <i>British Journal of Nutrition</i> 95(2): 372-8.
	kernel fibre	Dietary intervention study	Smith, SC et al (2006) Lupin kernel fiber consumption modifies fecal microbiota in healthy men as determined by rRNA gene fluorescent in situ hybridization. <i>Eur J Nutr.</i> 2006 Sep; 45 (6):335-41
	lupin - oligosaccharides	Rat feeding study	Juskiewicz J, et al (2006) Influence of pea and lupin oligosaccharides on caecal short chain fatty acids production and nitrogen excretion patterns in rats. <i>Pol. J. Food Nutr. Sci.</i> 15/56 :77–82
	whole lupin meal	Rat feeding study	Champ M, et al (1991) Volatile Fatty Acid production from lupin meal in the caecum of the rat: the role of cell wall polysaccharides and α -galactosides. <i>Animal Feed Science and Technology</i> 32, 3177-183

Health Indicator	Lupin constituent	Evidence	Reference
Hypocholesterolemic activity	lupin protein	Dietary intervention study	Bähr et al.(2013) Lupin protein positively affects plasma LDL cholesterol and LDL:HDL cholesterol ratio in hypercholesterolemic adults after four weeks of supplementation: a randomized, controlled crossover study. <i>Nutrition Journal</i> 2013, 12:107
	lupin protein	Dietary intervention study	Bahr M, et al. (2015) Consuming a mixed diet enriched with lupin protein beneficially affects plasma lipids in hypercholesterolemic subjects: A randomized controlled trial. <i>Clinical Nutrition</i> 34: 7–14
	lupin protein	Dietary intervention study	Weise K, et al. (2010) Lupin protein compared to casein lowers the LDL cholesterol:HDL cholesterol-ratio of hypercholesterolemic adults. <i>European Journal of Nutrition</i> 49: 65–71
	kernel fibre	Dietary intervention study	Hall, R. S., et al.. (2005) Lupin kernel fibre-enriched foods beneficially modify serum lipids in men. <i>European Journal of Clinical Nutrition</i> 59: 325-33.
	lupin protein	Dietary intervention study	Nowicka G, et al. (2006) Lupin proteins in the treatment of hypercholesterolemia. <i>Atherosclerosis Supplements</i> 7: 477-477
	lupin protein	Rat feeding study	Spielmann et al., (2007) Dietary protein lowers triglyceride concentrations in liver and plasma in rats by reducing hepatic gene expression of sterol regulatory element-binding protein-1c. <i>Ann. Nutr.Metab.</i> 51:387-392
	lupin protein	Rabbit feeding study	Marchesi, M et al. (2008) Hypolipidemic and anti-atherosclerotic effects of lupin proteins in a rabbit model. <i>Brit J Nutr.</i> 100(4):707-10