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[1] 芦春斌, 张伟, 刘标. 抗草甘膦转基因大豆饲料对雄性小鼠脾淋巴细胞体外增殖的影响[J]. 大豆科学, 2012, 31(02): 291-294. [doi:10.3969/j.issn.1000-9841.2012.02.028]
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抗草甘膦转基因大豆饲料对雄性小鼠脾淋巴细胞体外增殖的影响

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摘要: 以雄性昆明鼠为动物模型, 对亲本 (F₀) 和子一代 (F₁) 短期 (30 d) 及长期 (90 d) 喂食抗草甘膦转基因大豆饲料后, 取其脾脏, MTT法检测脾淋巴细胞增殖情况。结果表明: 短期喂食实验过程中, 在0、2、7、14和30 d取样时, 转基因大豆饲料对亲本 (F₀) 实验的雄性小鼠脾脏淋巴细胞体外增殖均无显著性影响 (P>0.05), 在长期 (90 d) 喂食实验过程中, 抗草甘膦转基因大豆饲料对亲本 (F₀) 小鼠脾脏淋巴细胞体外增殖也无显著性影响 (P>0.05)。同样, 在30 d的短期和90 d的长期喂食实验过程中, 抗草甘膦转基因大豆饲料对子一代 (F₁) 雄性小鼠脾脏淋巴细胞体外增殖也均无显著抑制作用 (P>0.05)。表明短期 (30 d) 及长期 (90 d) 喂食含抗草甘膦转基因大豆饲料对亲本及子一代雄性小鼠脾脏淋巴细胞体外增殖均无显著性影响, 且无遗传积累效应。

Abstract: In recent years, there have been a notable concerns on the safety of genetically modified (GM) foods, especially transgenic soybean. To evaluate effects of soybean on immunological function and possible genetic effects for progeny in male mice, male Kunming mice were fed with glyphosate feed for short-term of 30 and long-term of 90 days. Cell proliferation of spleen lymphocyte was analyzed with MTT assay. The sampling time was 0, 2, 7, 14 and 30 day. For progeny test, male mice and female fed with transgenic soybean feed were mated and produced progeny F₁. There were no significant adverse effects on cell proliferation of spleen for parent mice at different time during 30 day feeding trial (P>0.05). It was also showed that cell proliferation of spleen was not affected for long-term of 90 days. For progeny, no adverse effect on cell proliferation of spleen was found both for 30 and 90 days. It was showed that there was no significant adverse effect on cell proliferation of spleen for parent and progeny male mice during 30 and 90 day feeding trial of transgenic soybean. There was no possible potential of genetic toxicology in male mice fed with transgenic soybean.

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