Aflatoxin B₁ (AFB₁) has been linked to suppressed cell-mediated immune status in human populations. However, these observations have not been validated in animal experiment. In this part we examined the effects of AFB₁ on spleen lymphocyte phenotypes and the secretion functions of CD4⁺, CD8⁺ T cells and CD3⁺CD8⁺ NK cells in rats.

**Figure 1. Flow chart of animal study design**

**Table 1. Immune parameters tested in this study**

<table>
<thead>
<tr>
<th>Surface markers</th>
<th>Immune parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD3, CD4, CD8, CD45RA</td>
<td>Interleukin-4 in CD4⁺ and CD8⁺ lymphocytes; Interferon-γ in CD4⁺ and CD8⁺ lymphocytes; Tumor necrosis factor-α in NK cells (CD3⁺CD8⁺)</td>
</tr>
</tbody>
</table>

**Figure 2. Effects of AFB₁ on body weight.** *P* < 0.05, 75 μg/kg group compared to control.

**Figure 3. Serum AFB₁-Lys adduct levels after repeated doses of AFB₁ treatment**

**Immunotoxic effects of AFB₁**

Dependent on dose and duration of exposure, AFB₁ can have either stimulatory or suppressive effects on different immune parameters in animals, as shown in table 2 and figures 4-13 (# means *p* < 0.05 as compared with the control).

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