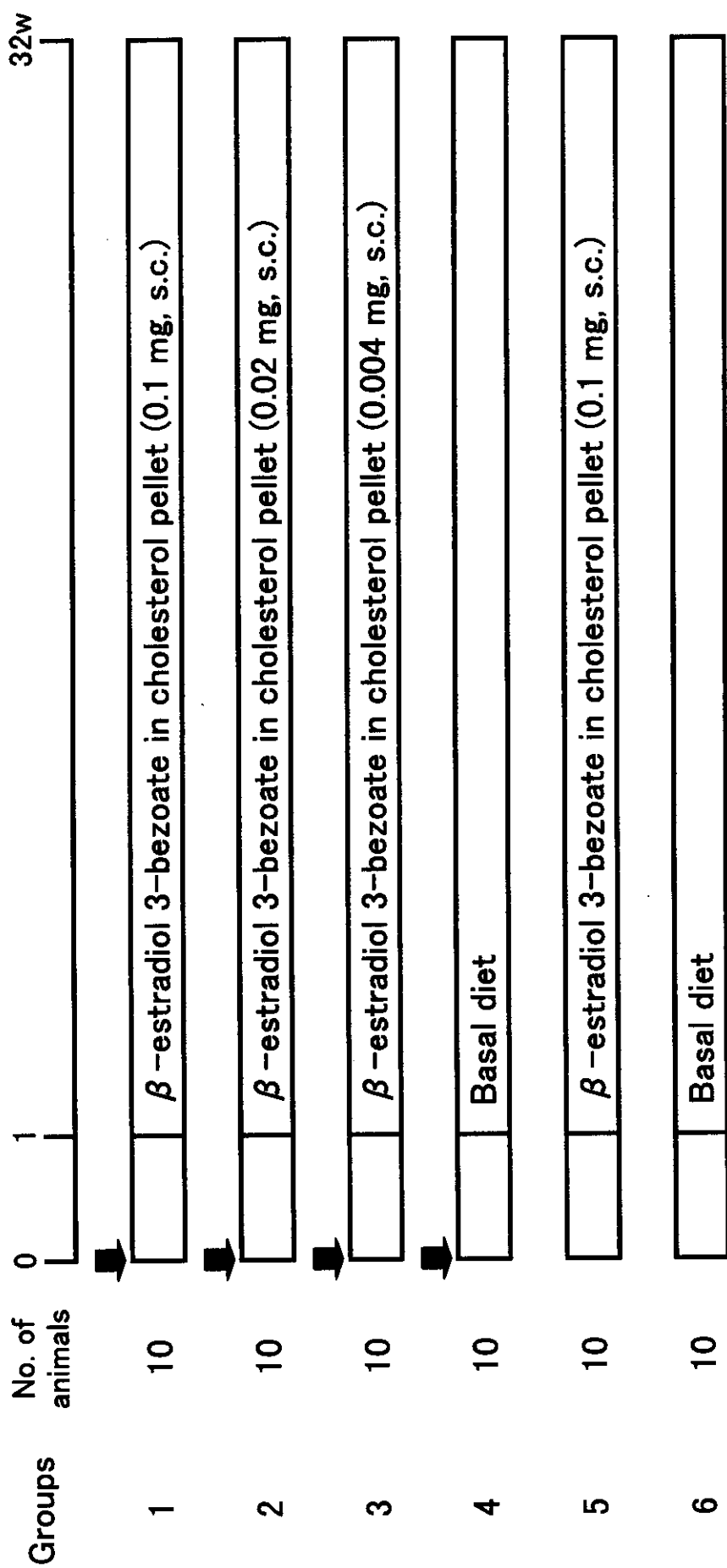


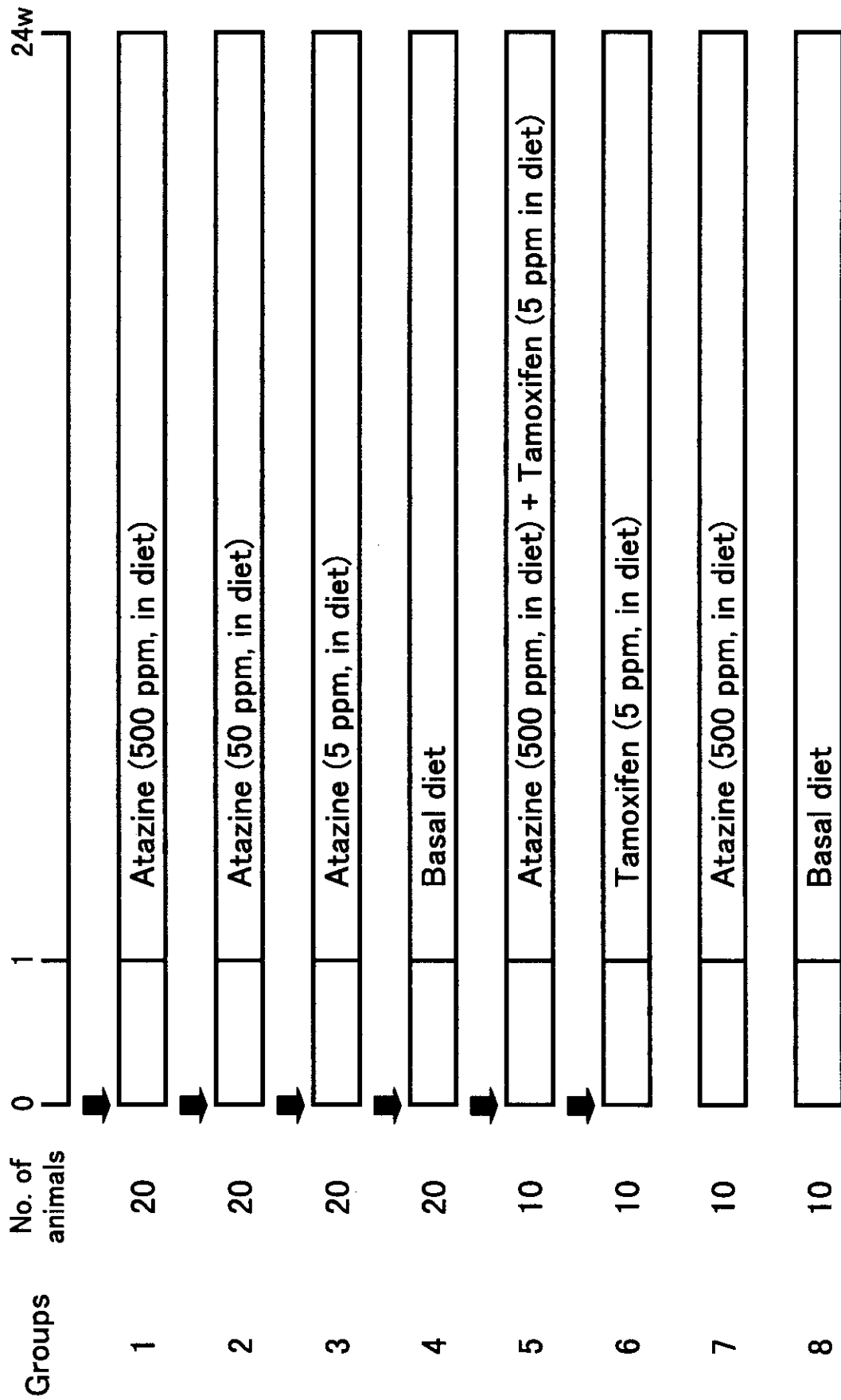
OODI



↓ : DHPN 2400 mg/kg, BW, s.c.

実験動物: F344雄性ラット、生後6週令

Fig.2 実験デザイン



↓ : DHPN 2800 mg/kg, BW, s.c.

実験動物: F344雄性ラット、生後6週令

Fig.3 実験デザイン

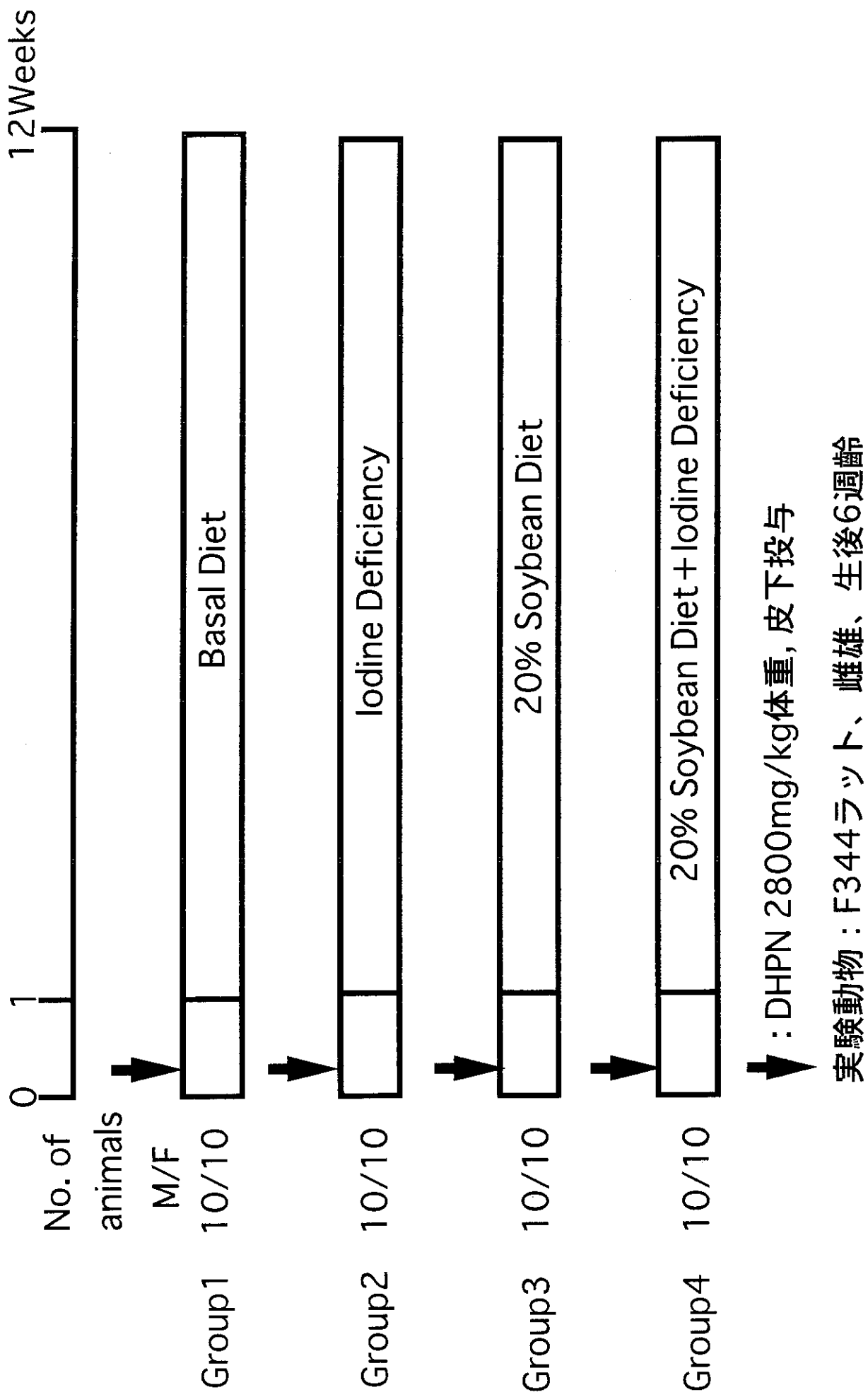
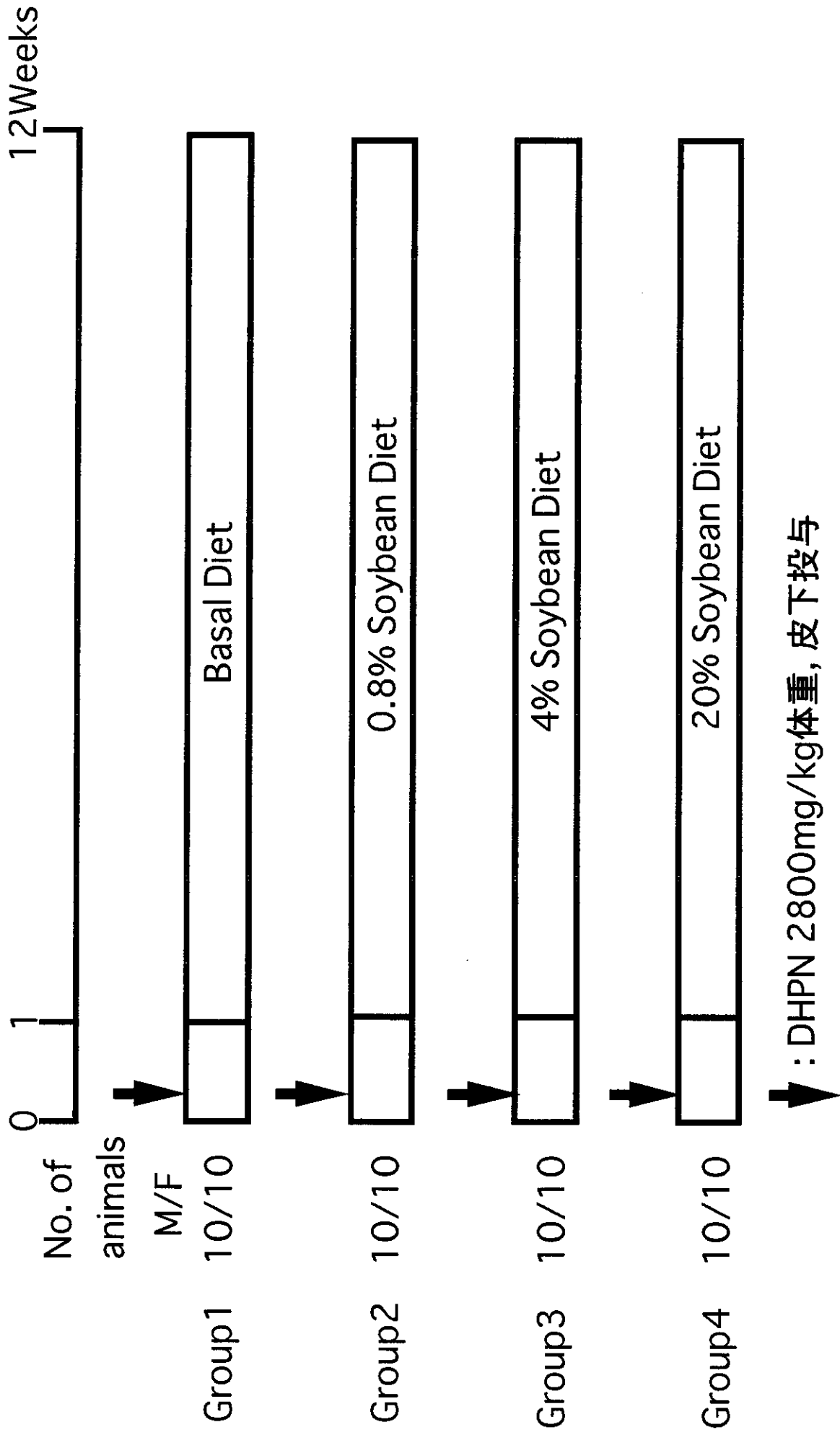


Fig.4 実験デザイン



実験動物 : F344ラット、雌雄、生後6週齢

Fig.5 実験デザイン

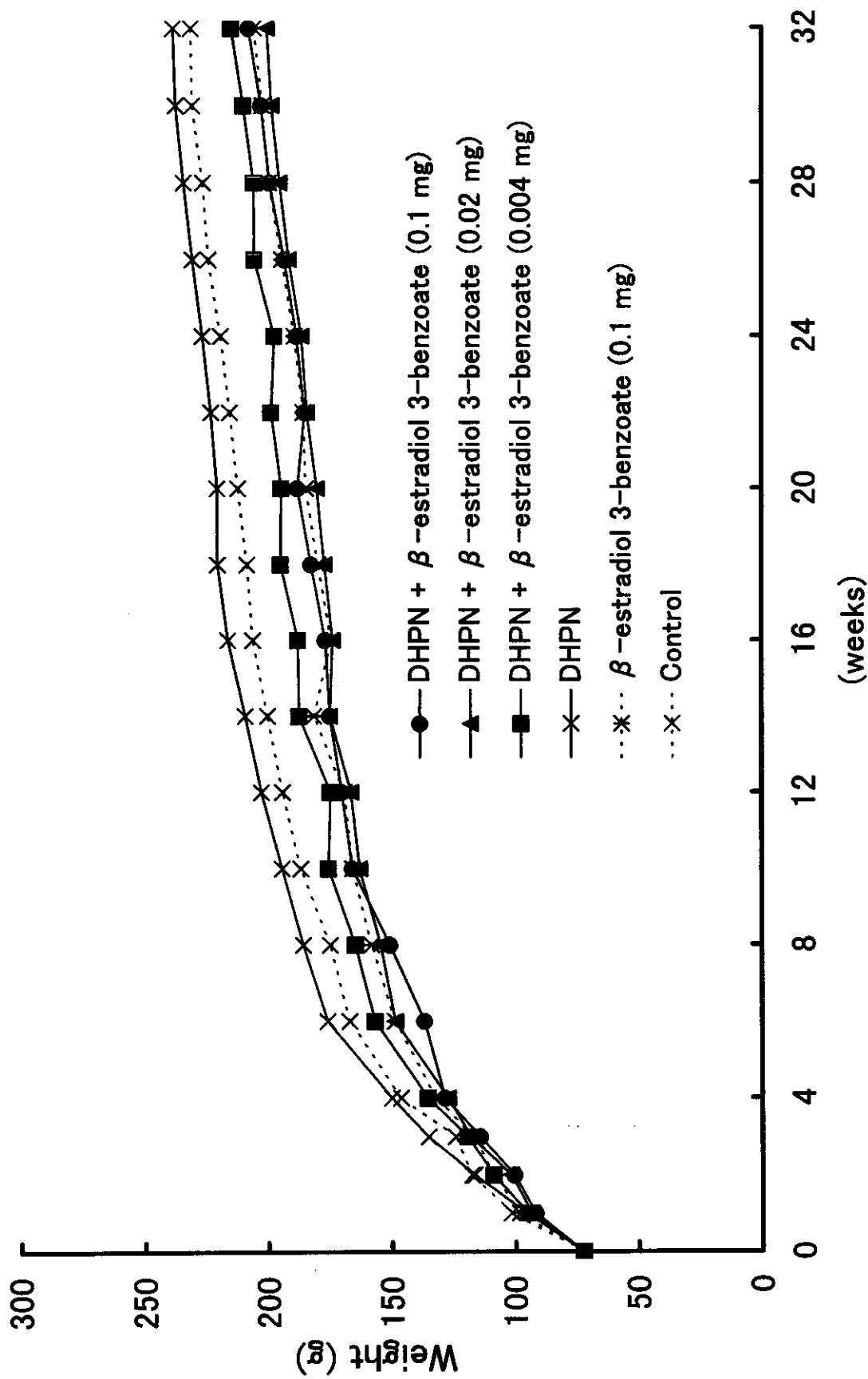


Fig.6 Body weight curves for ovariectomized rats

*: $p < 0.05$, vs DHPN
**: $p < 0.01$, vs DHPN

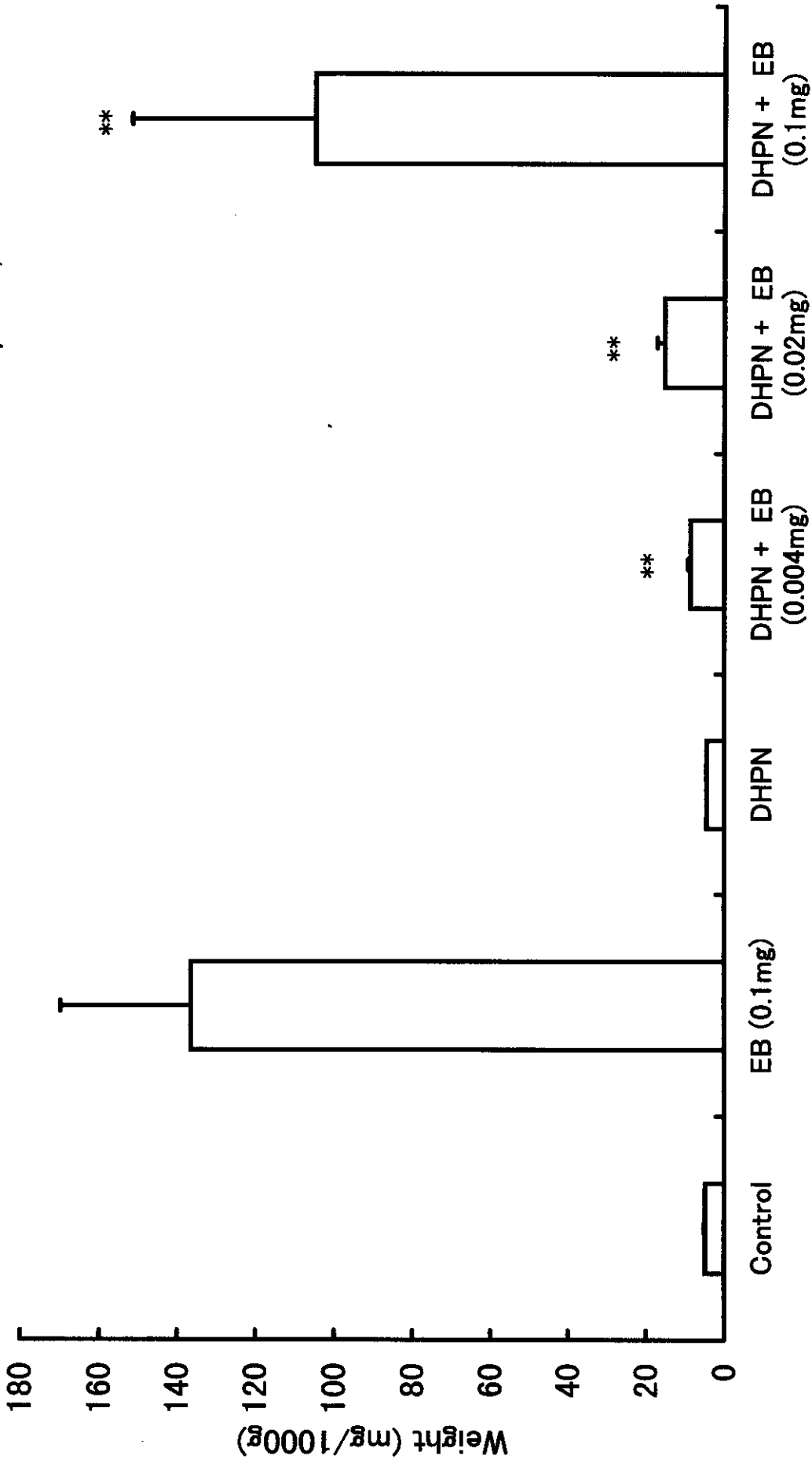


Fig.7 Relative pituitary weights of ovariectomized rats

*: p<0.05, vs DHPN
 **: p<0.01, vs DHPN

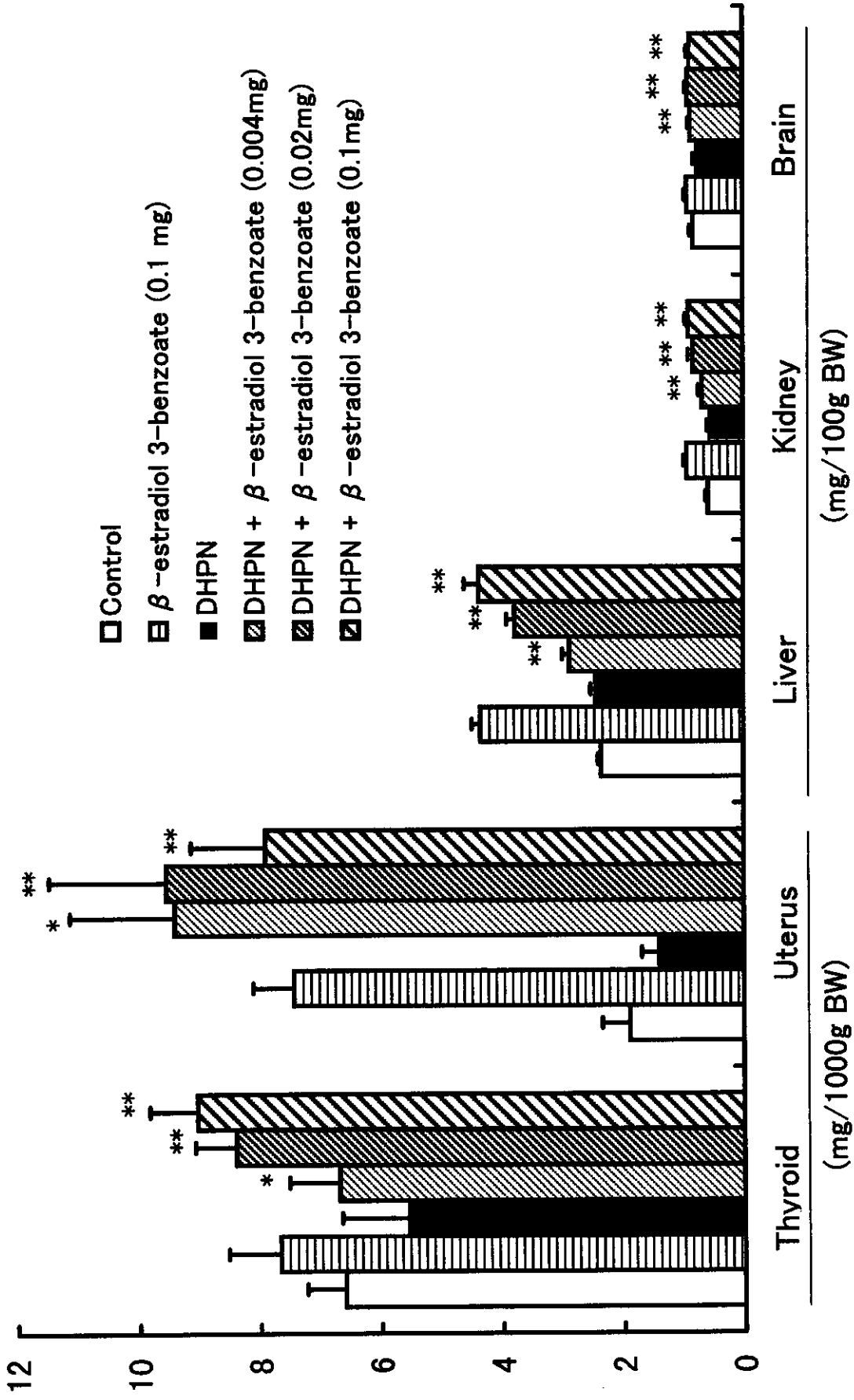


Fig.8 Relative organ weights of ovariectomized rats

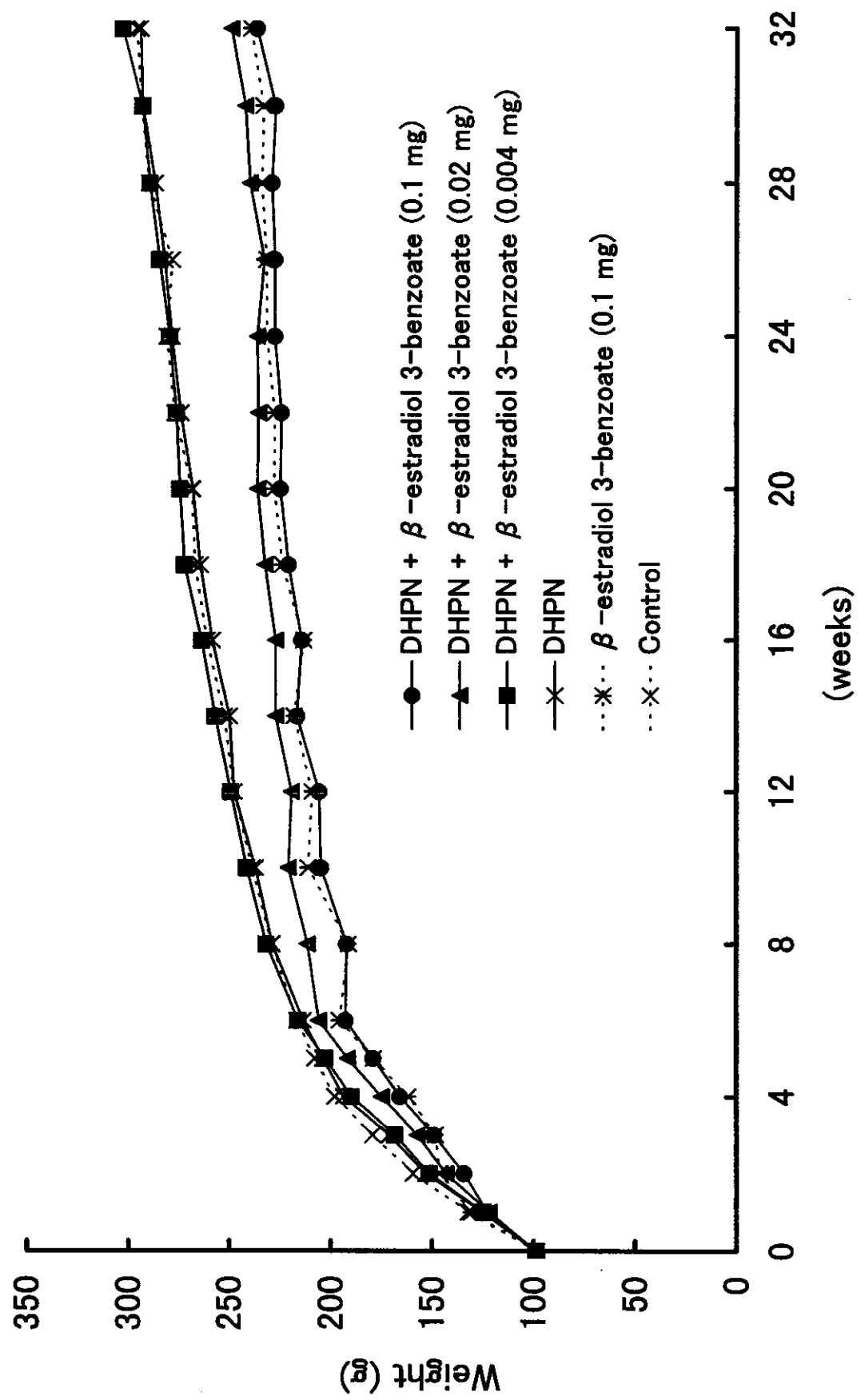


Fig.9 Body weight curves for castrated rats

OODI

** $p < 0.01$, vs DHPN

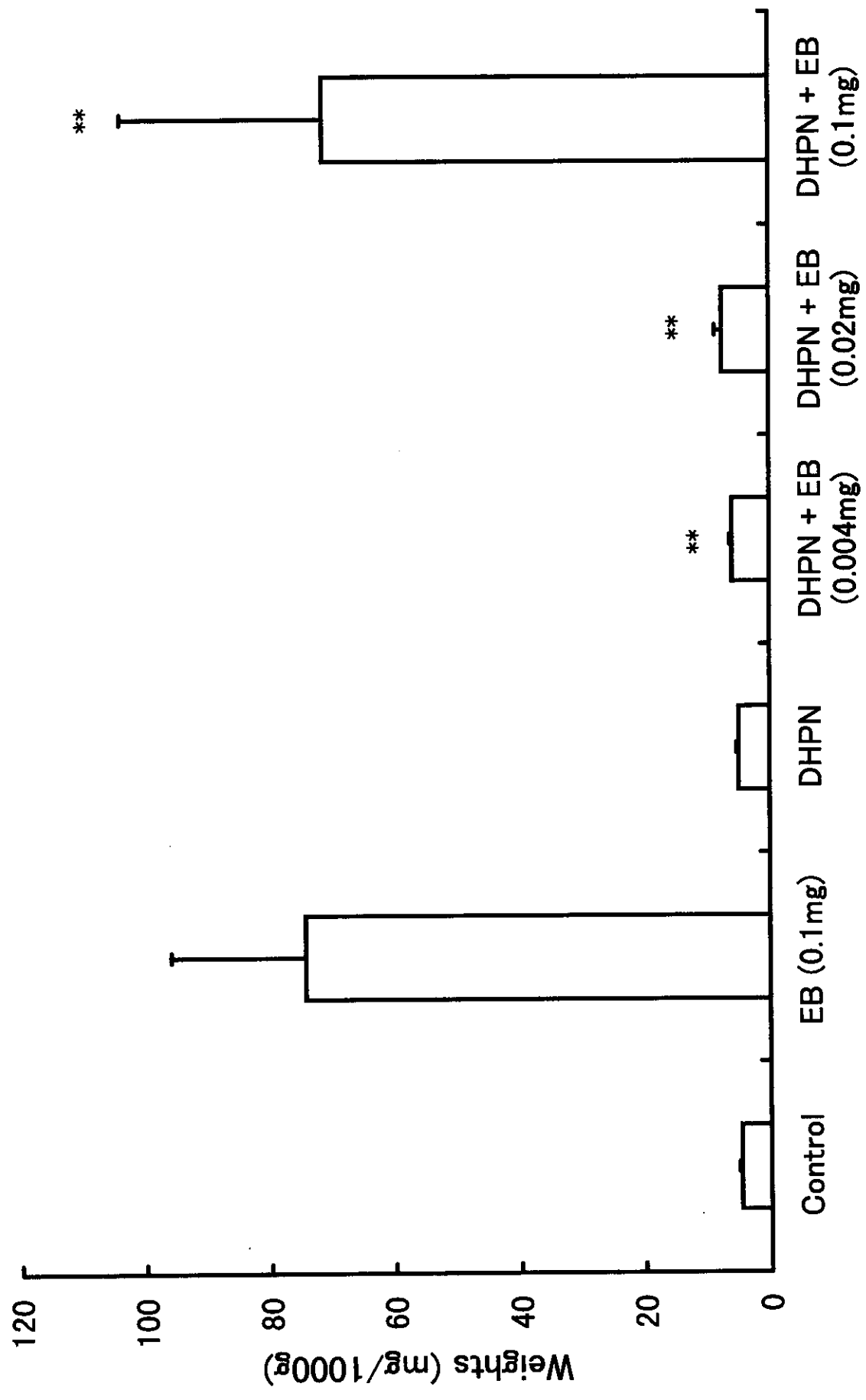


Fig.10 Relative pituitary weights of castrated rats

*: $p < 0.05$, vs DHPN
 **: $p < 0.01$, vs DHPN

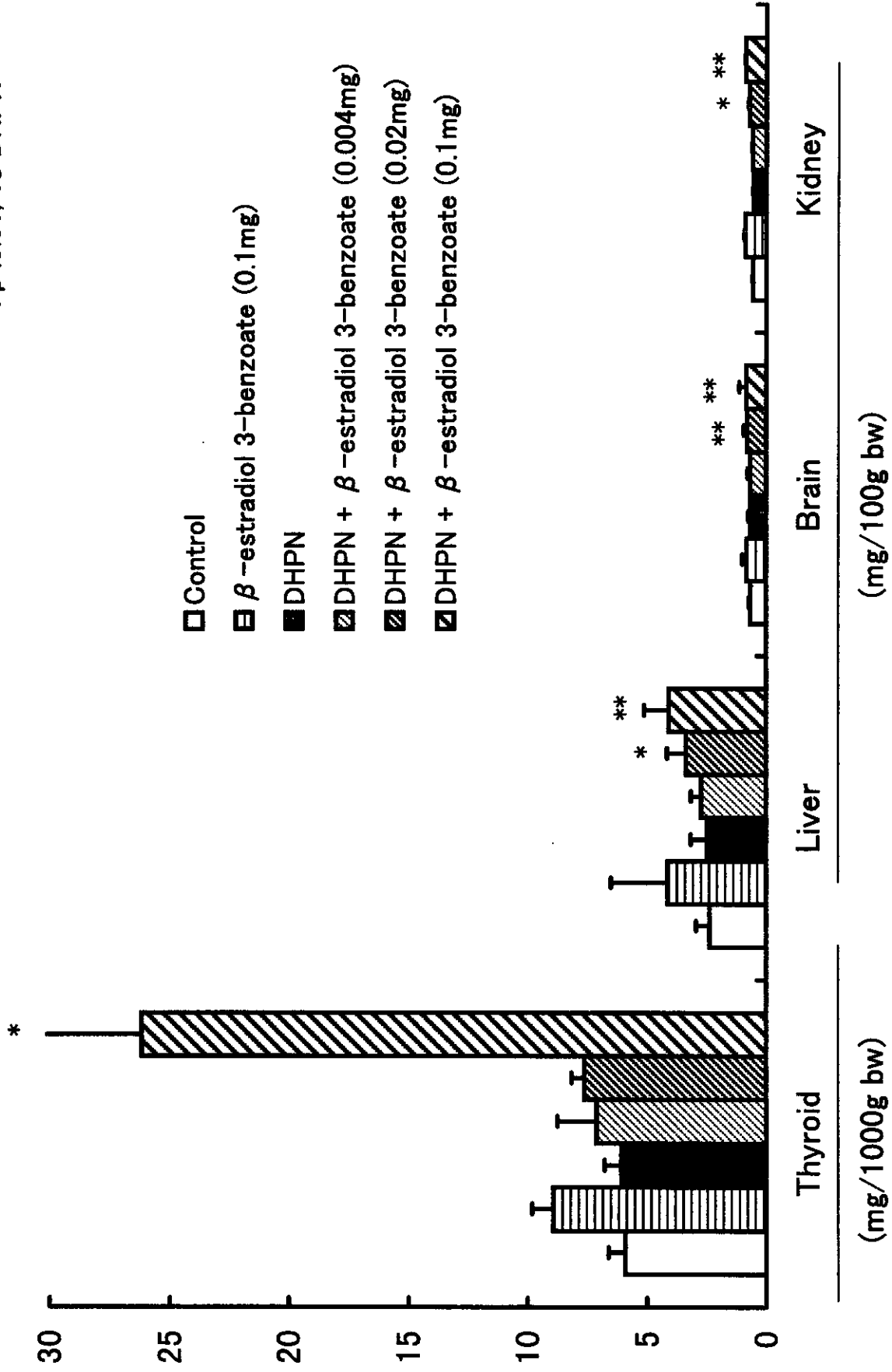


Fig.11 Relative organ weights of castrated rats

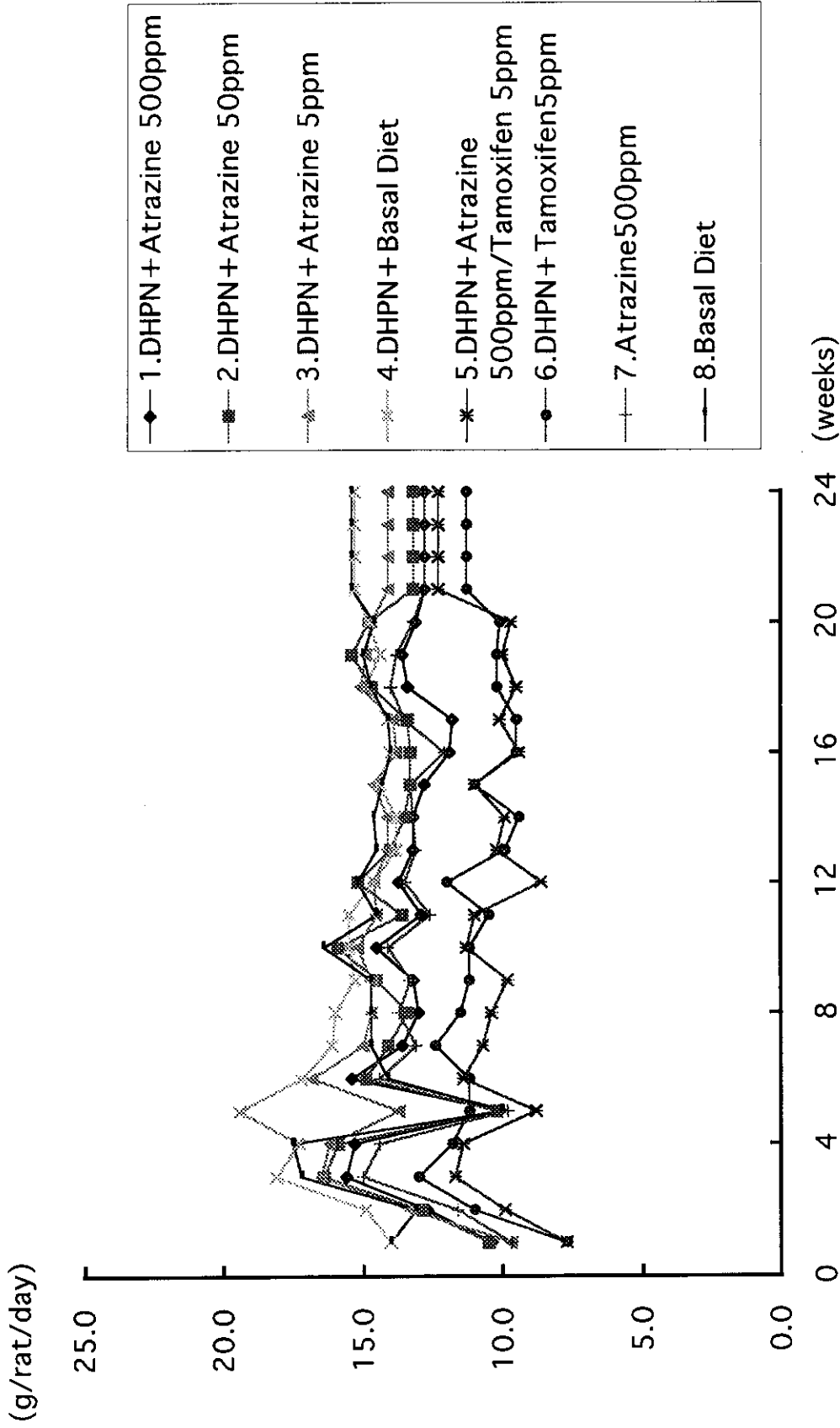


Fig.1.2 Food consumption

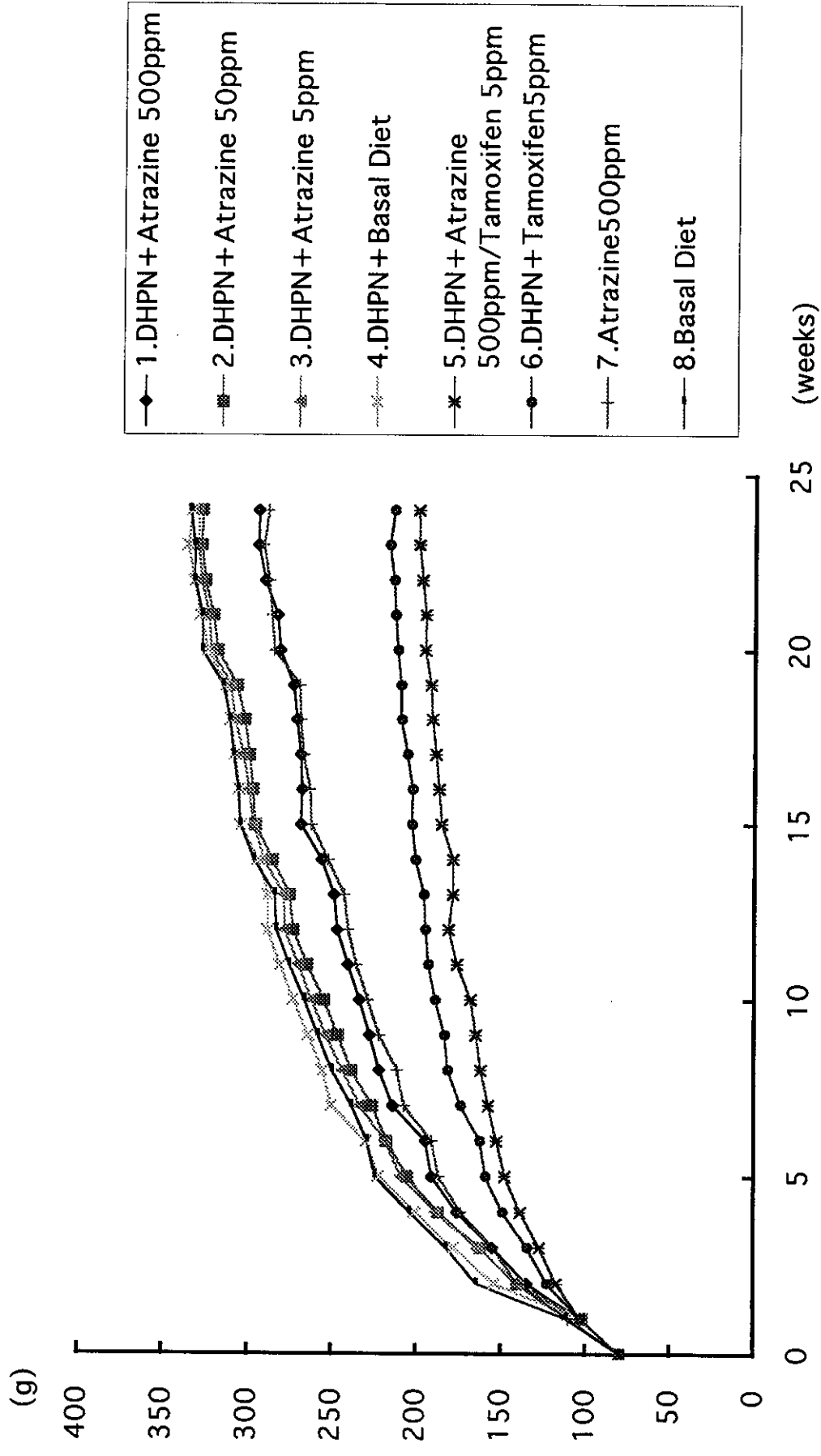
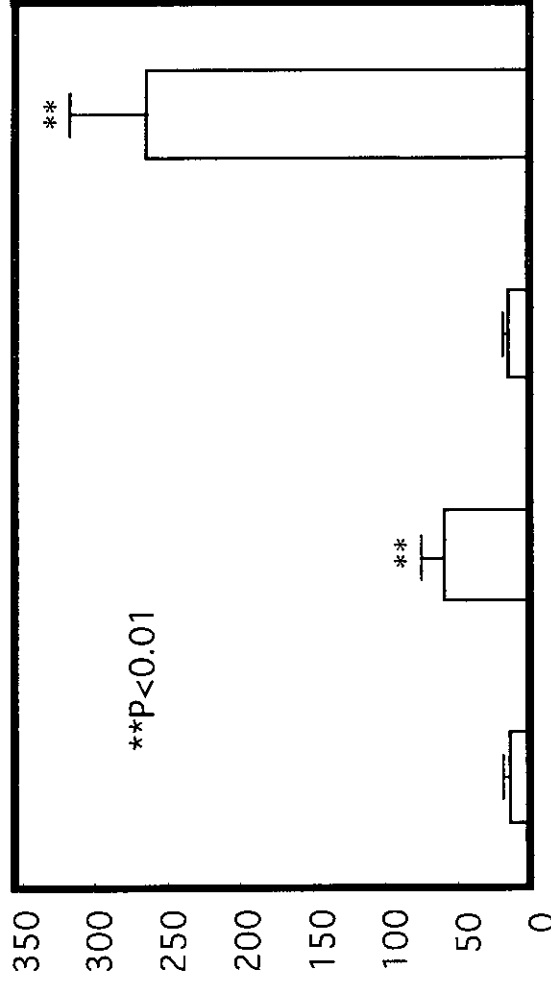


Fig.13 Body weight curves

绝对重量

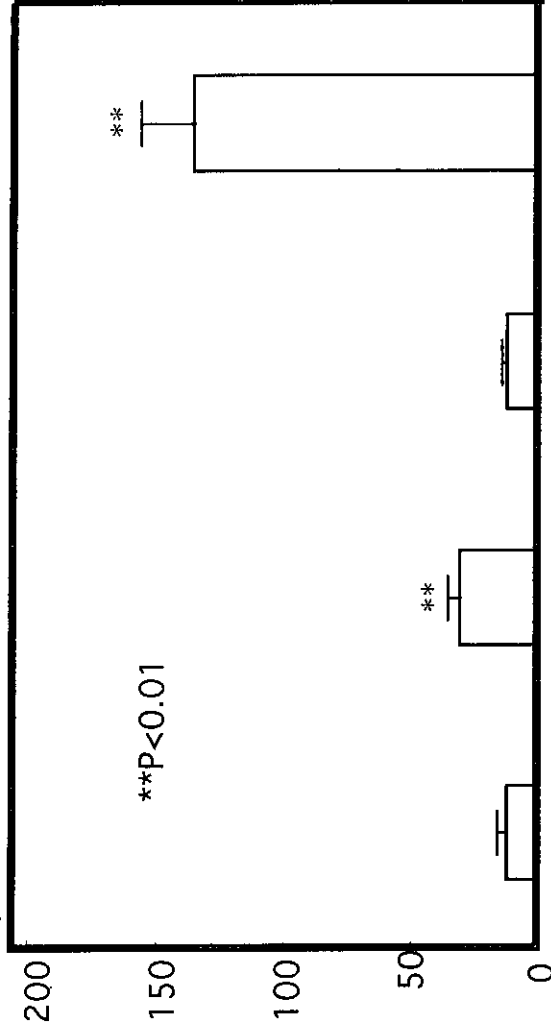
(mg)



雄

相对重量

(mg)



(mg/100g 体重)

雌

(mg/100g 体重)

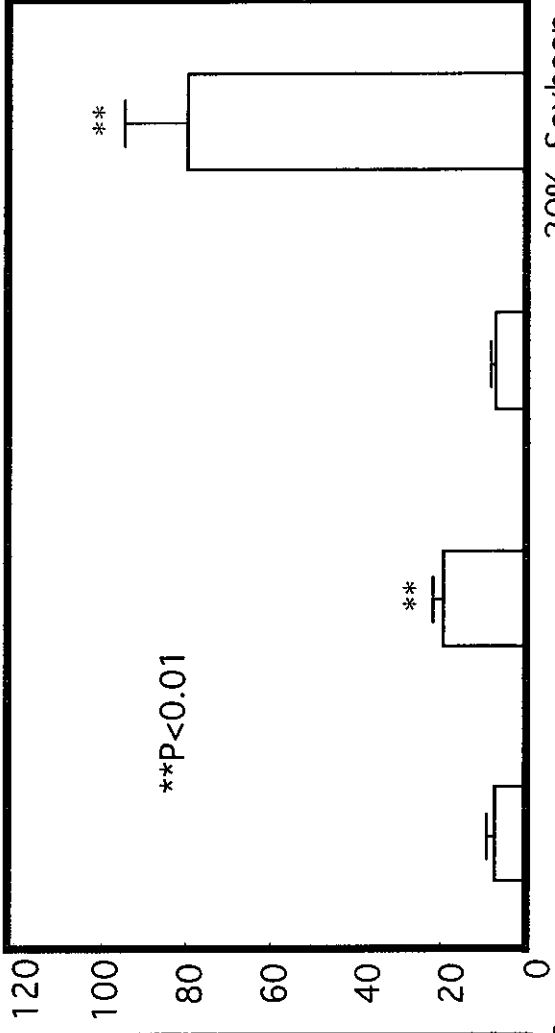
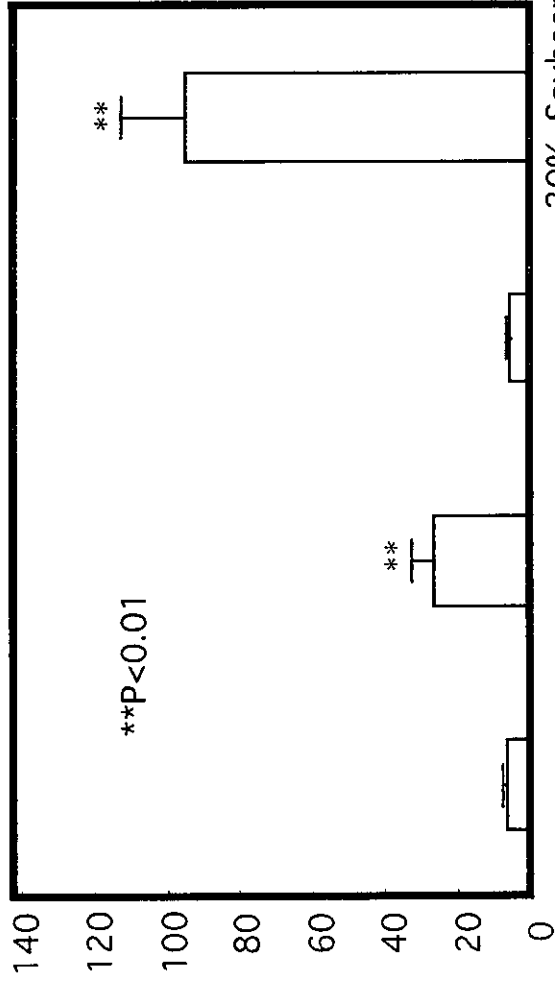


Fig.14 甲状腺重量

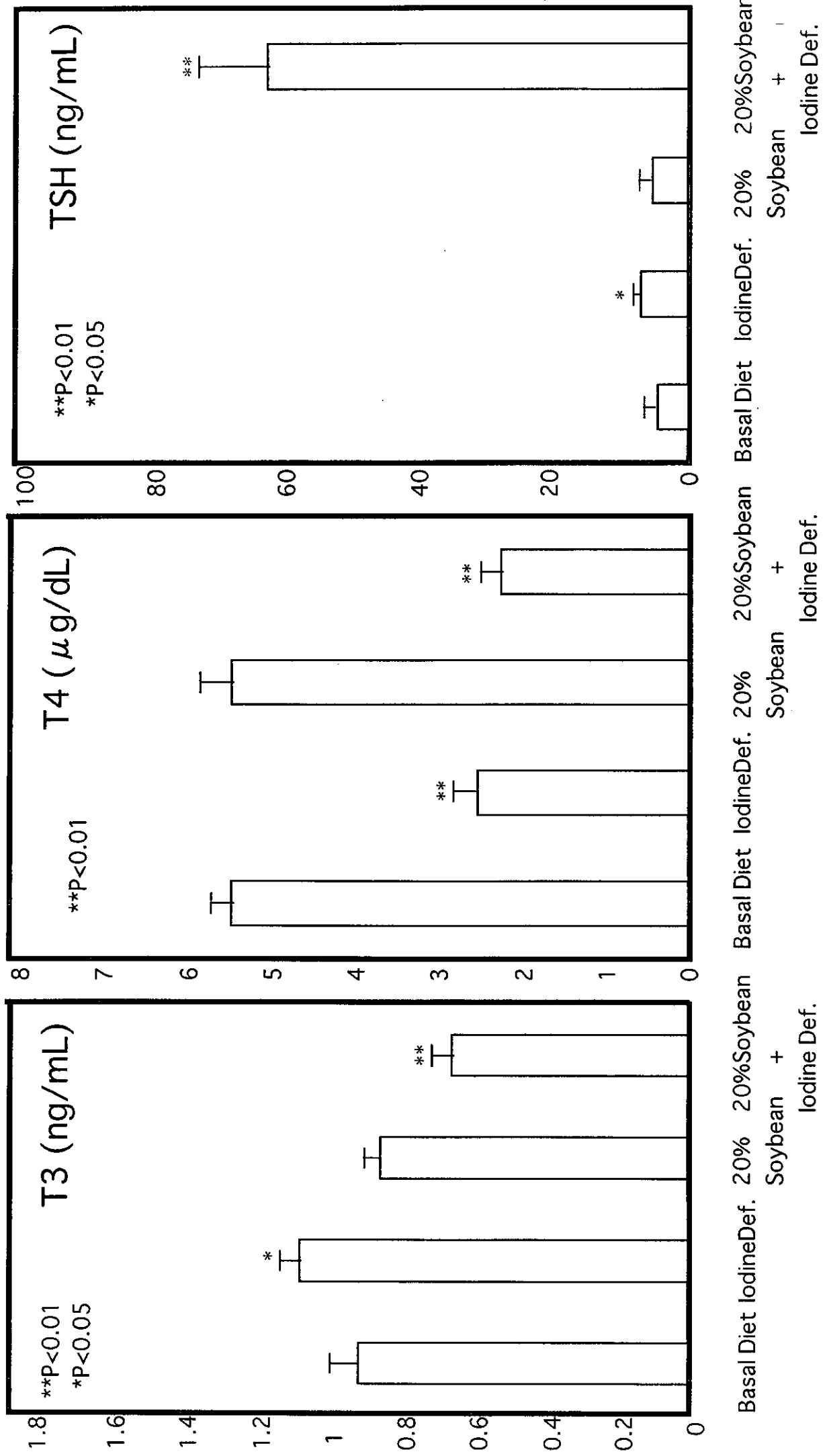


Fig.15 血清甲状腺関連ホルモン測定値 (雄)

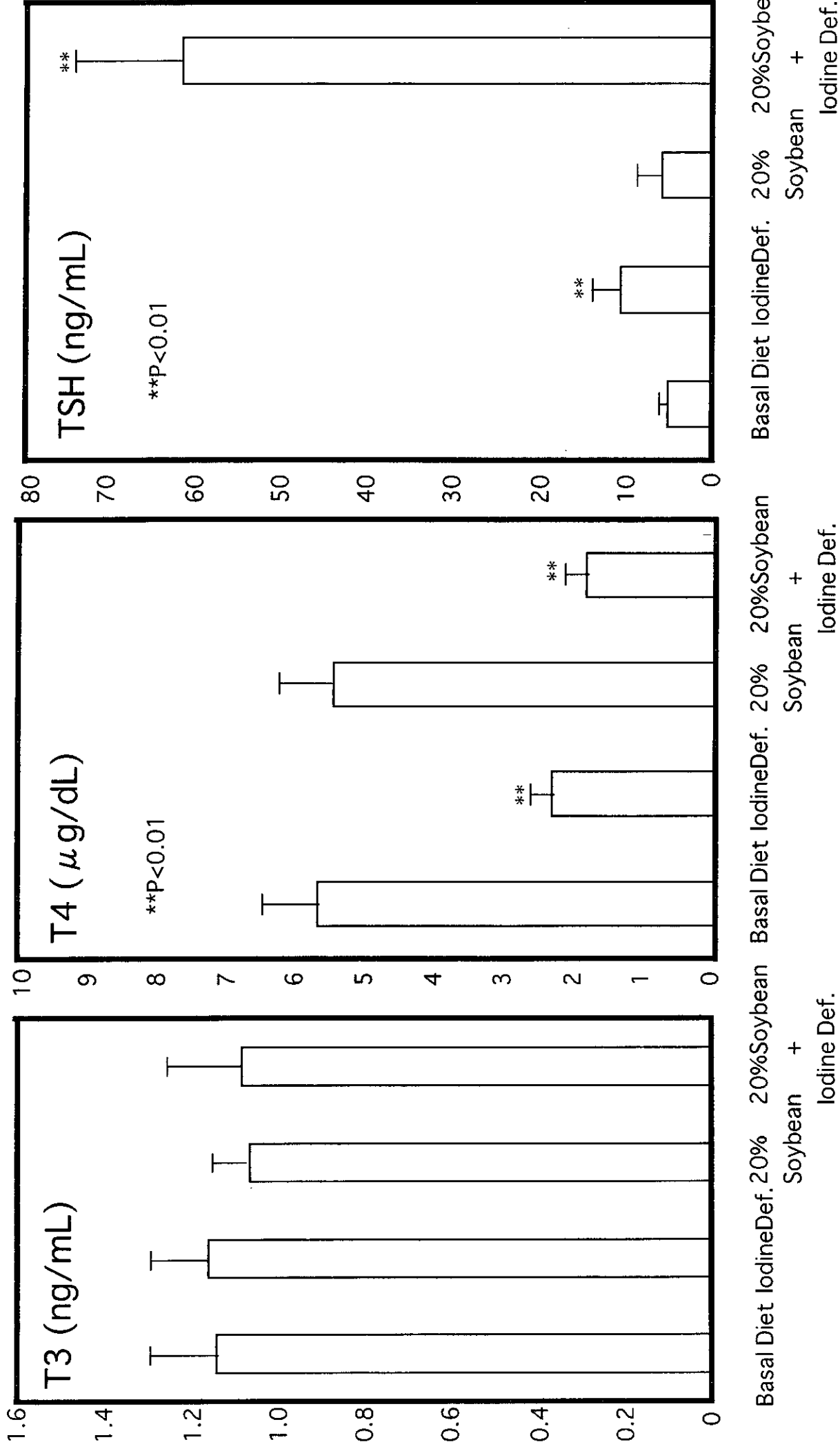
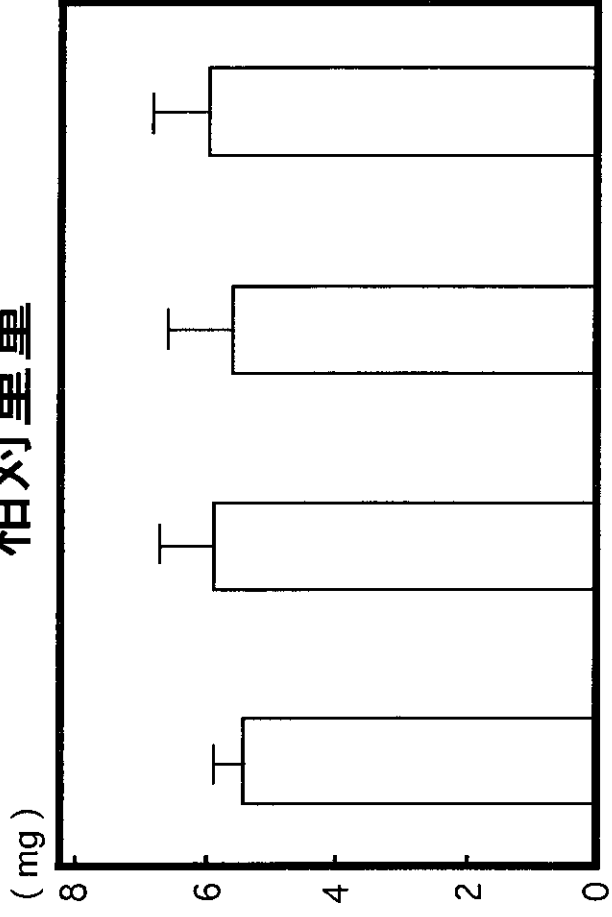
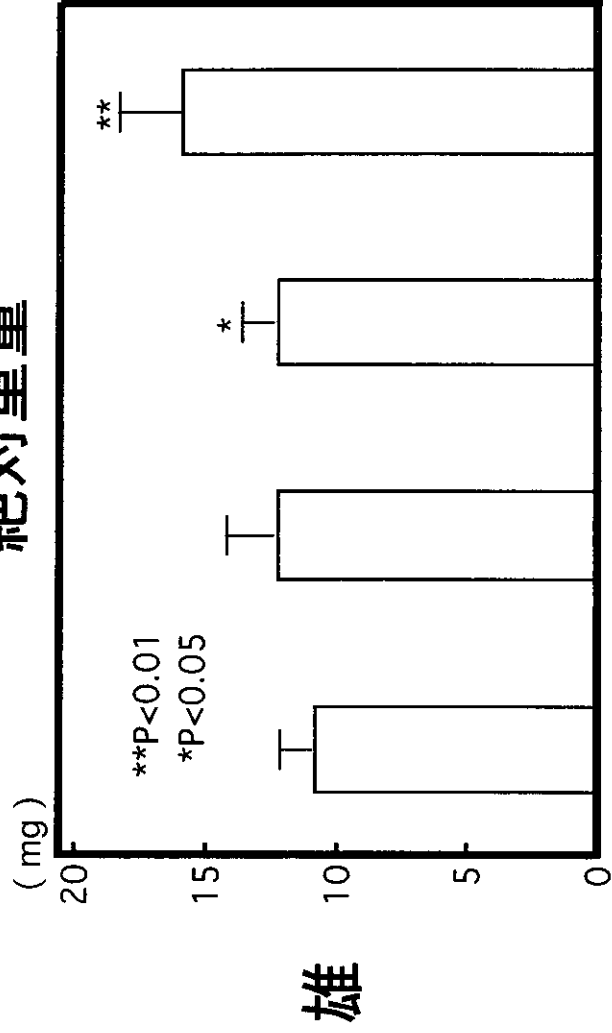


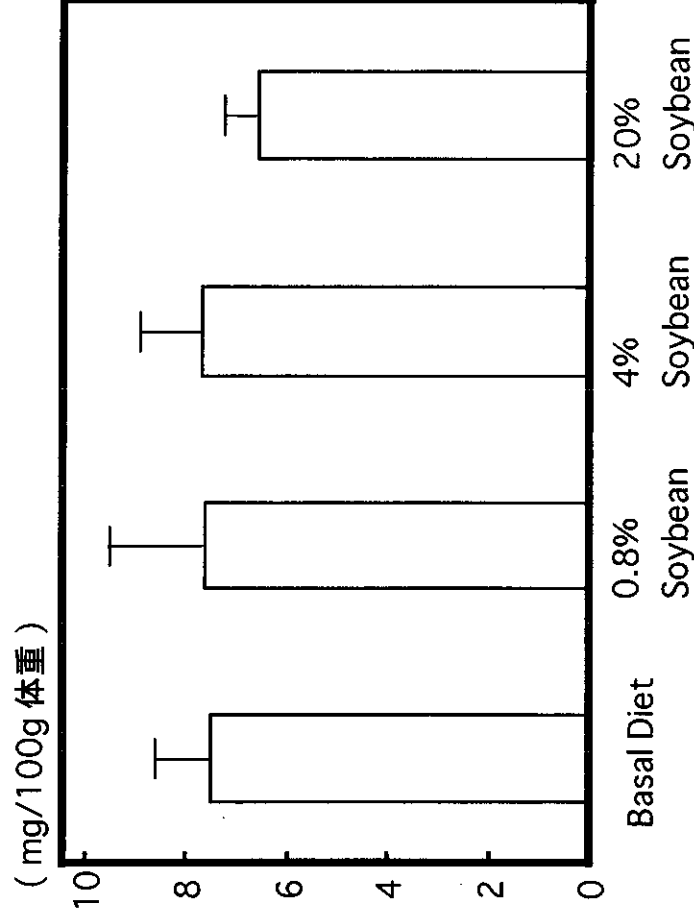
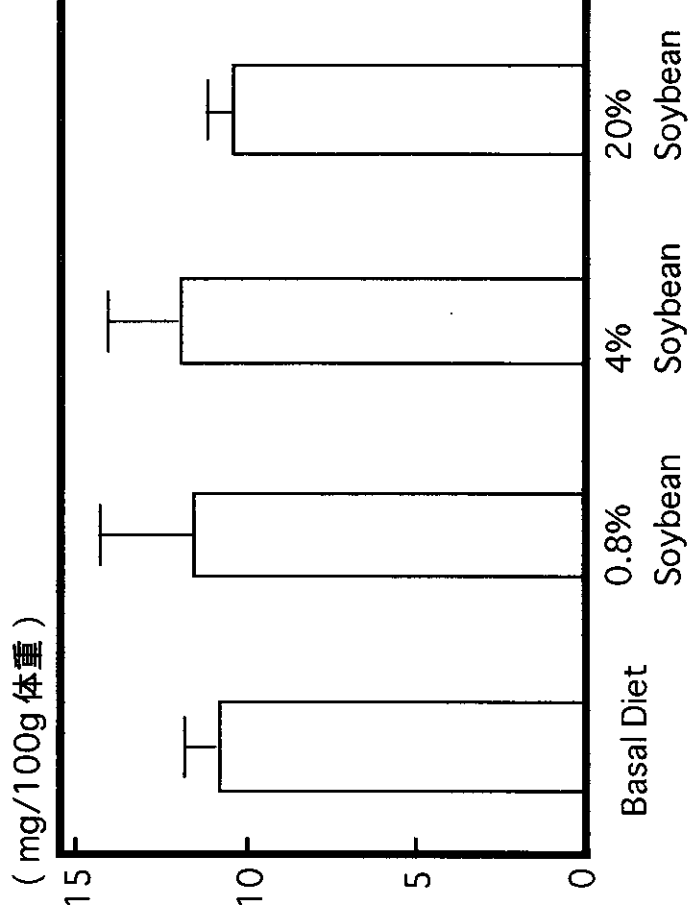
Fig.16 血清甲状腺関連ホルモン測定値 (雌)

絶対重量

相対重量



雄



雌

Fig.17 甲状腺重量

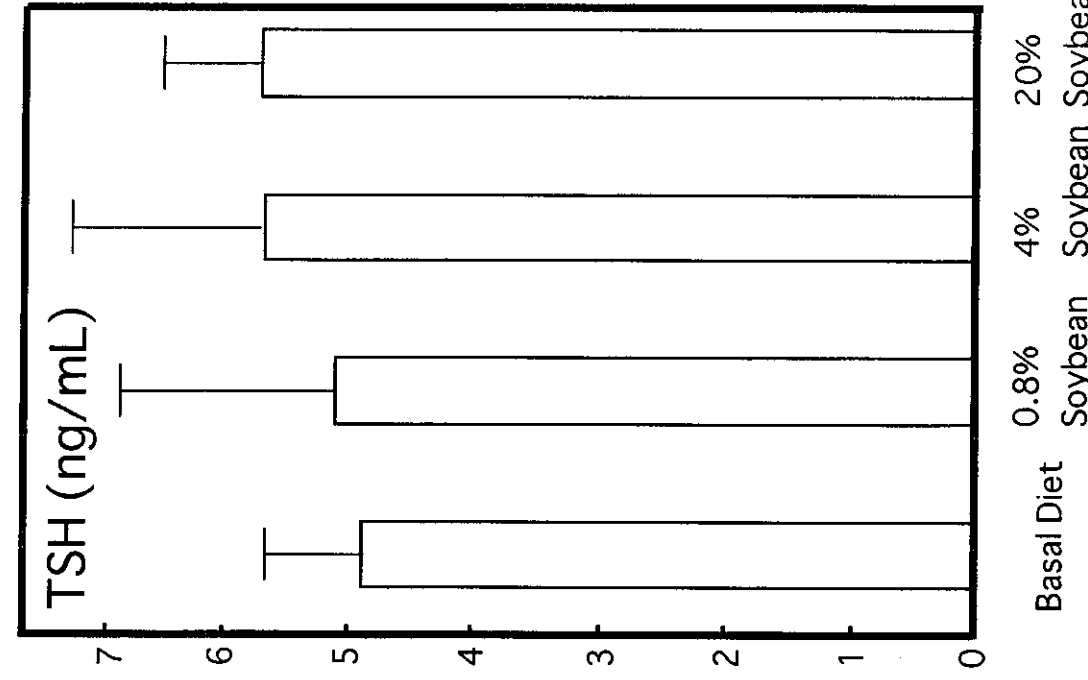
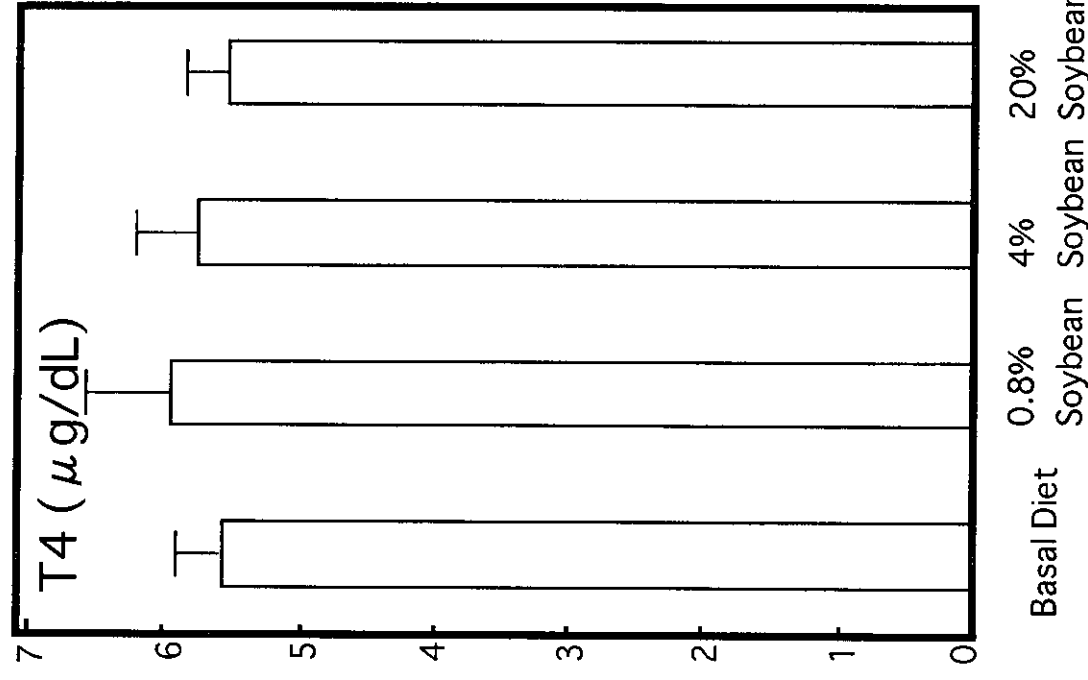
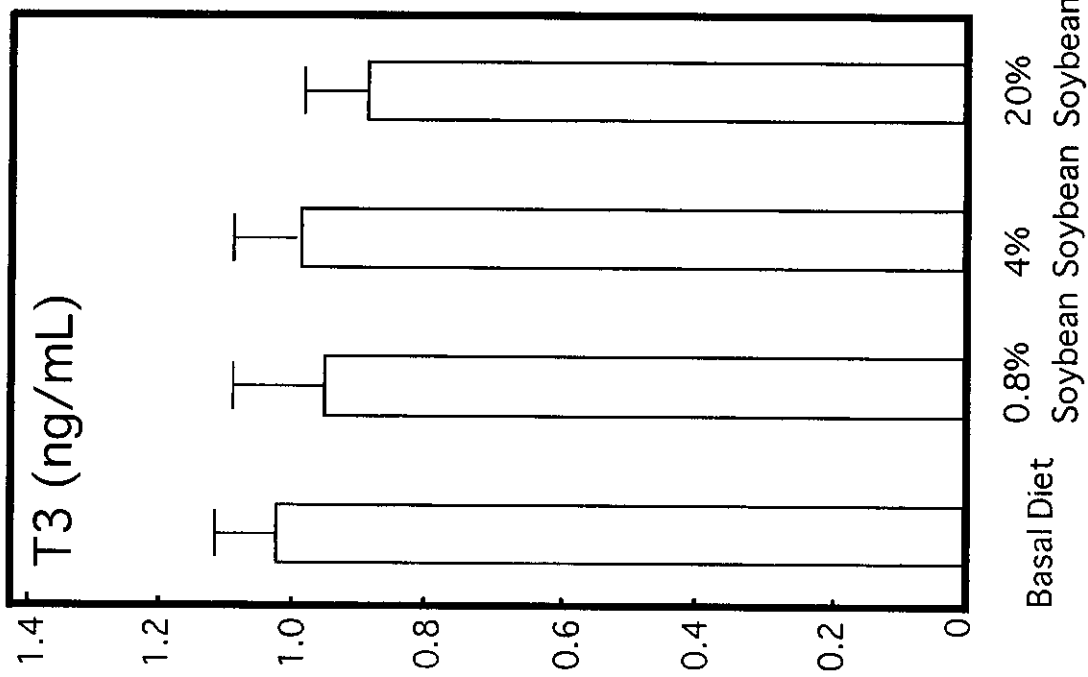


Fig.18 血清甲状腺関連ホルモン測定値 (雄)

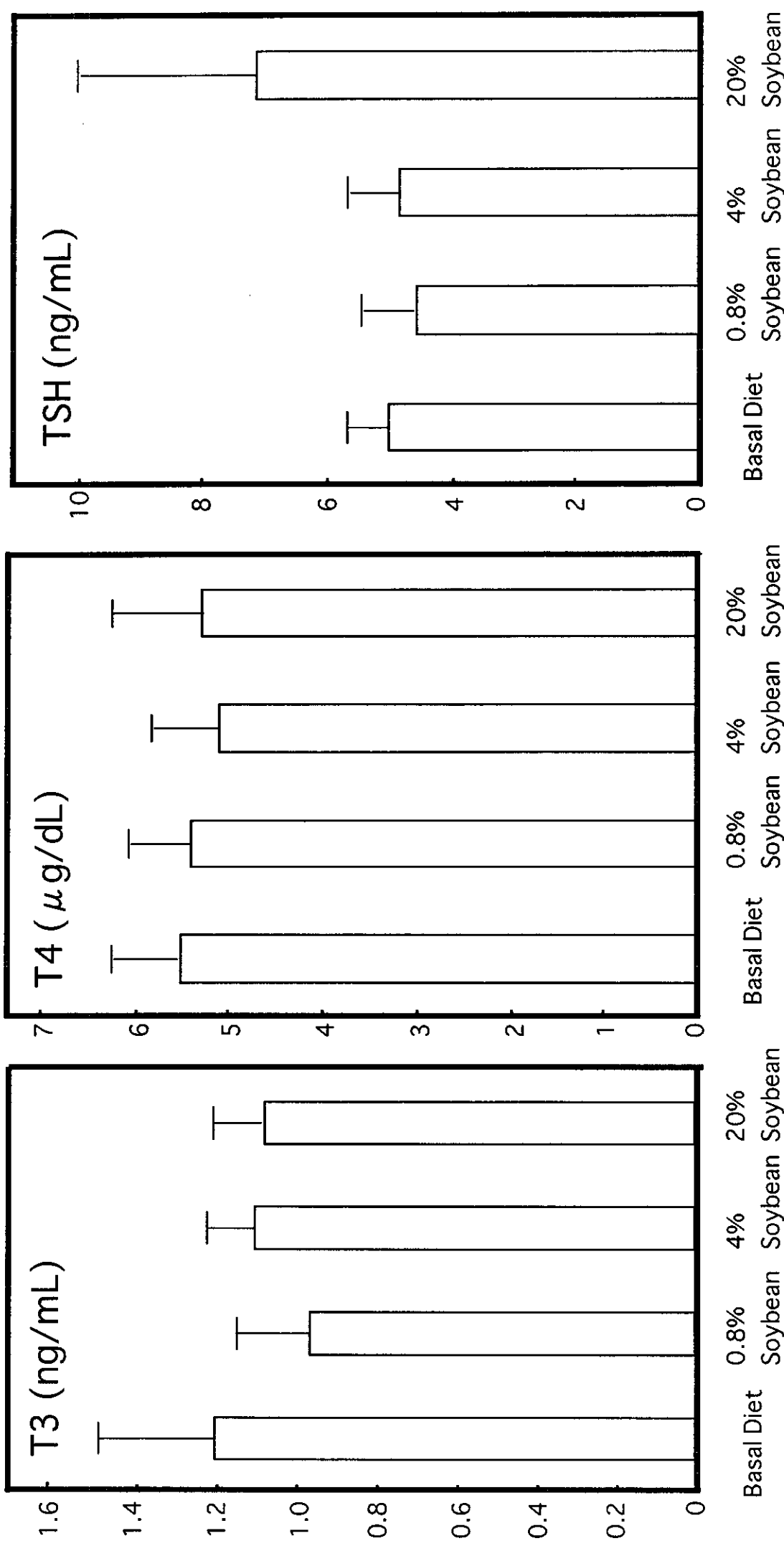


Fig.19 血清甲状腺関連ホルモン測定値 (雌)

Table1 Relative organ weight

| Treatment | No. of rats examined | Final Body Weight (g) | Relative organ weight (g/100g organ weight) | | | | | | | |
|---------------------------------|----------------------|-----------------------|---|---------------|--------------------|--------------------|-------------------|--------------------|-------------------|--|
| | | | Brain | Pituitary | Thyroid | Liver | Kidney | Testis | Epididymis | |
| 1.DHPN+Atrazine 500ppm | 20 | 295.0 ± 13.6 **## | 0.763 ± 0.04 **## | 0.003 ± 0.001 | 0.006 ± 0.001 # | 3.397 ± 0.114 **## | 0.684 ± 0.043 | 0.976 ± 0.127 ** | 0.36 ± 0.039 **# | |
| 2.DHPN +Atrazine 50ppm | 20 | 328.3 ± 18.0 | 0.685 ± 0.04 | 0.003 ± 0.000 | 0.005 ± 0.001 ** | 3.297 ± 0.149 ** | 0.669 ± 0.045 | 0.900 ± 0.050 | 0.34 ± 0.025 * | |
| 3.DHPN+Atrazine 5ppm | 20 | 330.5 ± 16.0 | 0.672 ± 0.03 | 0.003 ± 0.000 | 0.005 ± 0.001 ** | 3.136 ± 0.131 | 0.663 ± 0.038 | 0.873 ± 0.084 | 0.32 ± 0.030 | |
| 4.DHPN +Basal Diet | 20 | 333.8 ± 14.3 | 0.677 ± 0.03 | 0.003 ± 0.000 | 0.006 ± 0.001 # | 3.126 ± 0.141 | 0.682 ± 0.044 | 0.869 ± 0.107 | 0.32 ± 0.033 | |
| 5.DHPN +Atra. 500ppm/Tamox.5ppm | 10 | 200.0 ± 5.8 **## | 1.071 ± 0.03 **## | 0.004 ± 0.000 | 0.007 ± 0.001 *## | 3.327 ± 0.126 **## | 0.791 ± 0.049 **# | 1.074 ± 0.082 **## | 0.29 ± 0.048 # | |
| 6.DHPN+Tamoxifen5ppm | 10 | 214.3 ± 11.1 **## | 1.041 ± 0.06 **## | 0.003 ± 0.001 | 0.008 ± 0.002 **## | 3.130 ± 0.165 | 0.750 ± 0.030 ** | 1.087 ± 0.112 **## | 0.31 ± 0.054 | |
| 7.Atrazine500ppm | 10 | 289.2 ± 16.4 **## | 0.740 ± 0.04 **## | 0.003 ± 0.000 | 0.006 ± 0.001 # | 3.230 ± 0.140 | 0.695 ± 0.047 | 1.057 ± 0.080 **## | 0.37 ± 0.019 **## | |
| 8.Basal Diet | 10 | 335.1 ± 19.5 | 0.668 ± 0.04 | 0.003 ± 0.000 | 0.005 ± 0.001 ** | 3.199 ± 0.096 | 0.691 ± 0.113 | 0.905 ± 0.070 | 0.33 ± 0.027 | |

*: p<0.05, **: p<0.01 compared to the group 4 values.
#: p<0.05, ##: p<0.01 compared to the group 8 values.

Table 2 Incidence and multiplicity of thyroid tumors

| Sex | Groups | No. of rats examined | Adenoma | | Adenocarcinoma | |
|--------|-----------------------|-------------------------|---------------|----------------------------|----------------|----------------------------|
| | | | incidence (%) | multiplicity ^{a)} | incidence (%) | multiplicity ^{a)} |
| Male | Basal Diet | 9 | 0 | 0 | 0 | 0 |
| | Iodine Deficiency | 8 | 62.5 ** | 1.5 ± 1.7 | 25 | 0.25 ± 0.46 |
| | 20% Soybean | 10 | 0 | 0 | 0 | 0 |
| | 20% Soy.+ Iodine Def. | 9 | 100 ** | 9.4 ± 5.0 ## | 66.7 * | 0.9 ± 0.8 |
| Female | Basal Diet | 10 | 0 | 0 | 0 | 0 |
| | Iodine Deficiency | 7 | 14.3 | 0.1 ± 0.4 | 0 | 0 |
| | 20% Soybean | 10 | 0 | 0 | 0 | 0 |
| | 20% Soy.+ Iodine Def. | 10 | 90 ** ## | 4.2 ± 3.9 ## | 40 * | 0.4 ± 0.5 |

a); mean ± SD

*; p < 0.05, ** p < 0.01 vs. Basal Diet group

##; p < 0.01 vs. Iodine Deficiency group