

表1-1 Body weight at mating

	Body weight		
	n	Male	Female
<i>Control</i>			
Wild-type mice	12	29.6±0.9	24.6±3.7
PPAR $\alpha$ -null mice	12	29.7±2.6	22.7±0.8
<i>DEHP, F0</i>			
Wild-type mice	12	27.1±1.5 <sup>a</sup>	22.1±0.9 <sup>a</sup>
PPAR $\alpha$ -null mice	12	28.1±1.5	24.3±2.4
<i>DEHP, F1</i>			
Wild-type mice	12	27.3±3.7 <sup>a</sup>	21.3±2.1 <sup>a</sup>
PPAR $\alpha$ -null mice	12	28.8±2.2	22.7±1.3

Figures represent the mean±SD

<sup>a</sup>Significantly different from respective control (p<0.05)

表1- 2 Fertility and reproductive performance of mating mice

	Control	0.05% DEHP-F1	0.05% DEHP-F2
<i>Wild-type mice</i>			
No. Fertile/No. cohabited	12/12	12/12	12/12
Pups born per pair	6.8±1.9	4.8±1.6 <sup>b</sup>	4.3±2.2 <sup>b</sup>
Live pups per pair <sup>a</sup>	6.3±2.1	3.1±2.4 <sup>b</sup>	2.7±2.5 <sup>b</sup>
Percentage of live pups (%)	92.6	64.6	62.8
<i>PPAR<math>\alpha</math>-null mice</i>			
No. Fertile/No. cohabited	12/12	12/12	12/12
Pups born per pair	6.3±1.8	6.3±2.1	5.9±0.9
Live pups per pair <sup>a</sup>	5.3±2.1	5.6±2.9	4.8±1.6
Percentage of live pups (%)	86.9	88.9	81.4

Figures represent the mean±SD

<sup>a</sup>Pups surviving for 16 weeks

<sup>b</sup>Significantly different from control group (p<0.05)

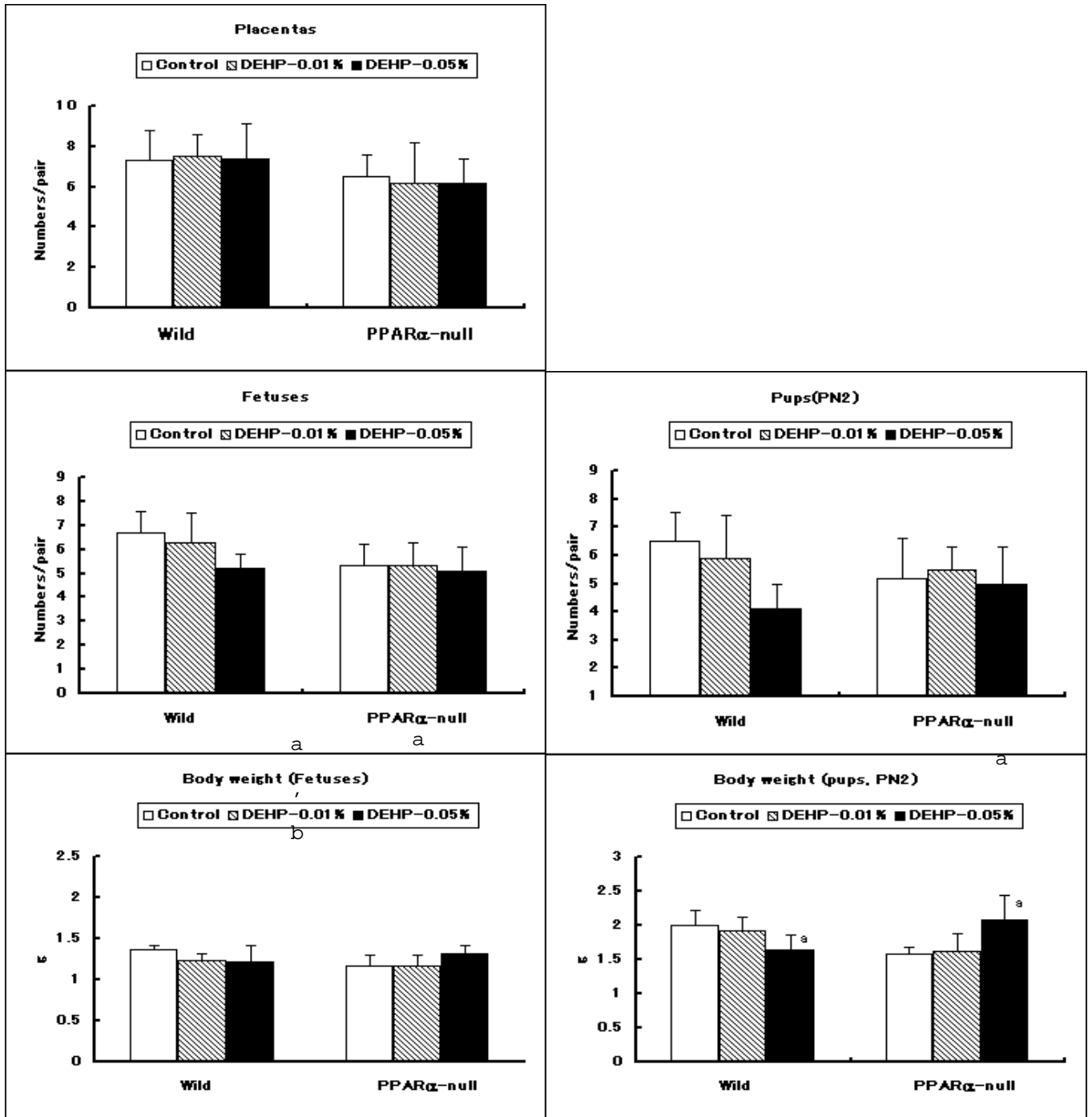


图 1-1 DEHP 处理对胎盘、胎儿和仔鼠数量的影响

表 1-3 胎儿和仔鼠肝脏中的甘油三酯 (mg/g)

	Fetuses		Pups	
	Male	Female	Male	Female
<i>Wild-type mice</i>				
Control	1.2±0.3	1.4±0.2	12.3±4.9	9.4±1.1
0.05% DEHP	1.3±0.4	1.9±1.1	12.2±4.6	7.9±2.1
<i>PPAR<math>\alpha</math>-null mice</i>				
Control	1.3±0.4	1.5±0.3	34.0±2.7	28.8±8.8
0.05% DEHP	1.4±0.3	1.8±1.1	31.2±6.2	25.6±6.9

Each group consisted of 6 samples

Figures represent the mean±SD

表1- 4 Triglyceride concentrations in maternal liver and serum

	Pregnant mice	Postpartum mice
	Liver (mg/g)	
<i>Wild-type mice</i>		
Control	11.2±0.1	12.6±2.9
0.05% DEHP	11.5±1.9	13.6±2.3
<i>PPARα-null mice</i>		
Control	12.8±1.1	15.5±2.0
0.05% DEHP	13.6±1.6	17.0±3.0
Serum (mg/ml)		
<i>Wild-type mice</i>		
Control	1.51±0.33	1.09±0.31
0.05% DEHP	0.82±0.20 <sup>a</sup>	0.65±0.08 <sup>a</sup>
<i>PPARα-null mice</i>		
Control	1.88±0.47	1.30±0.21
0.05% DEHP	1.73±0.40	1.16±0.37

Each group consisted of 6 samples

<sup>a</sup>Significantly different from control (p<0.05)

表1- 5 Serum testosterone levels in male mice

		Testosterone
<i>Wild-type mice</i>		
	n	
F0, control	6	7.5±3.6
F0, DEHP	6	2.2±1.8 <sup>a</sup>
F1, control	6	7.0±3.0
F1, DEHP	6	2.2±1.8 <sup>a</sup>
F2, DEHP	6	1.4±0.7 <sup>a</sup>
<i>PPARα-null mice</i>		
F0, control	6	1.3±1.1
F0, DEHP	6	1.5±1.1
F1, control	6	0.8±0.4
F1, DEHP	6	0.8±0.2
F2, DEHP	6	0.9±0.1

<sup>a</sup>Significantly different from respective control (p<0.05)

表2-1 Effects of phthalates on the PPAR -related hepatic enzymes

Treatment	m. w	PT	PH	DBF	VLCAD	TP $\alpha$	TP $\beta$	CYP4A
Control		1.00±0.11	1.00±0.16	1.00±0.08	1.00±0.08	1.00±0.32	1.00±0.11	1.00±0.31
Diethylphthalate	222.24	0.98±0.16	1.02±0.01	1.63±0.40	1.04±0.03	1.32±0.47	1.18±0.18	1.08±0.28
Dibutylphthalate	278.34	1.04±0.26	1.20±0.04	0.92±0.05	0.92±0.07	1.64±0.19 <sup>a</sup>	1.17±0.07	1.51±0.27 <sup>a</sup>
Butylbenzylphthalate	312.37	1.44±0.04 <sup>a</sup>	1.16±0.06	1.43±0.36 <sup>a</sup>	0.95±0.05	1.90±0.18 <sup>a</sup>	1.32±0.06 <sup>a</sup>	1.82±0.11 <sup>a</sup>
Dicyclohexylphthalate	330.42	1.25±0.18	1.08±0.07	1.94±0.43 <sup>a</sup>	0.97±0.04	1.96±0.33 <sup>a</sup>	1.34±0.13 <sup>a</sup>	1.56±0.25 <sup>a</sup>
Diethylhexylphthalate	390.56	1.59±0.14 <sup>a</sup>	1.59±0.06 <sup>a</sup>	2.14±0.27 <sup>a</sup>	1.22±0.01 <sup>a</sup>	2.60±0.28 <sup>a</sup>	1.73±0.19 <sup>a</sup>	2.69±0.54 <sup>a</sup>
Diethylhexyl adipate	370.57	1.31±0.18 <sup>a,t</sup>	1.37±0.07 <sup>a</sup>	1.71±0.55 <sup>a</sup>	1.34±0.07 <sup>a</sup>	2.67±0.19 <sup>a</sup>	1.78±0.26 <sup>a</sup>	2.24±0.30 <sup>a,b</sup>
Correlation <sup>c</sup>		*	*	*	**	*	*	**

<sup>a</sup>Significantly different from control (p<0.05)

<sup>b</sup>Significant difference between diethylhexylphthalate and diethylhexyladipate treatments

<sup>c</sup>Correlation between molecular weight and induction of several enzymes