

ばらつきが少なかったことを考慮すれば、調整飼料中のカテキン濃度については、本試験に重大な影響を及ぼさないものと考察された。

一方、本年度の研究においては、試験開始後 10 ヶ月目の段階にて、カテキンの投与に関連する一般状態の変化を認めなかった。なお、この時点までに死亡した動物の死因については、肉眼的所見から推定する限り、カテキンの投与に関連するものと考えられなかった。また、体重についても、カテキンの投与の影響を認めなかった。一方、摂餌量については、カテキンを最高用量である 3.0%で投与した群の雌雄において、対照群に比べて有意な増加を断続的に観察した。この現象は、この群の体重に影響が認められていないことから、カテキンの直接的な影響でなく、高用量カテキンにより飼料中の単位重量(g)当たりの栄養・カロリーなどが他群に比較して不足したことにより起因する動物の代償的行動であり、摂餌量増加によってそれらの補充を図ったものと考察された。

E. 結論

本研究は、カテキンの安全性評価の一環として、ラットを用いた混餌投与による慢性毒性・発がん性併合試験を実施している。本試験は、平成 17 年 3 月現在において試験開始後 10 ヶ月目を迎えた段階であるが、雌雄いずれの投与群にも、カテキンの投与に関連する一般状態ないし体重の変化を認めていない。ただし、摂餌量については、カテキンを最高用量である 3.0%で投与した群の雌雄において、対照群に比べて有意な増加を断続的に観察した。この現象は、この群の体重に影響が認められていないことから、カテキンの直接的な影響でなく、高用量カテキンにより飼料中の単位重量(g)当たりの栄養・カロリーなどが他群に比較して不足したことにより起因する動物の代償的行動であり、摂餌量増加によってそれらの補充を図ったものと考察された。したがって、10 ヶ月間の投与時点におけるカテキンによる影響は、雌雄共に観察されないものと結論した。

F. 健康危険情報

なし

G. 研究発表

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H. 知的所有権の取得状況

1. 特許取得

なし

2. 実用新案登録

なし

3. その他

なし

表1. 調整飼料中におけるカテキンの濃度および安定性

ロット番号	指定濃度(%)	保存 期間 (月間)	カテキン濃度(%)		保存による カテキン濃度 低下率(%)
			製造直後	保存後	
40522	0	8	0.263	0.232	11.9
40522	0.02	8	0.239	0.198	17.2
40522	0.3	8	0.410	0.393	4.1
40522	1.0	8	0.897	0.942	-5.0
40522	3.0	8	2.102	2.041	2.9

40652	0	7	0.281	0.237	15.5
40652	0.02	7	0.281	0.251	10.7
40652	0.3	7	0.481	0.417	13.4
40652	1.0	7	0.880	0.833	5.3
40652	3.0	7	2.256	2.101	6.9

40777	0	6	0.256	0.231	9.6
40777	0.02	6	0.282	0.251	11.0
40777	0.3	6	0.360	0.397	-10.2
40777	1.0	6	0.816	0.827	-1.4
40777	3.0	6	1.899	2.112	-11.2

40899	0	5	0.174	0.18	-3.2
40899	0.02	5	-	9	-
40899	0.3	5	0.262	0.379	-44.9
40899	1	5	0.757	0.831	-9.7
40899	3	5	1.668	2.236	-34.0

41025	0	3	-	-	-
41025	0.02	3	0.195	0.178	8.9
41025	0.3	3	0.210	0.352	-67.3
41025	1	3	0.738	0.762	-3.3
41025	3	3	1.821	2.236	-22.8

41116	0	2	0.162	0.194	-20.0
41116	0.02	2	0.173	0.190	-10.0
41116	0.3	2	0.301	0.329	-9.2
41116	1	2	0.555	0.867	-56.3
41116	3	2	1.510	2.160	-43.0

41344	0	2	0.180	0.178	1.6
41344	0.02	2	0.186	0.193	-3.5
41344	0.3	2	0.314	0.354	-12.8
41344	1	2	0.728	0.830	-14.0
41344	3	2	1.396	2.133	-52.8

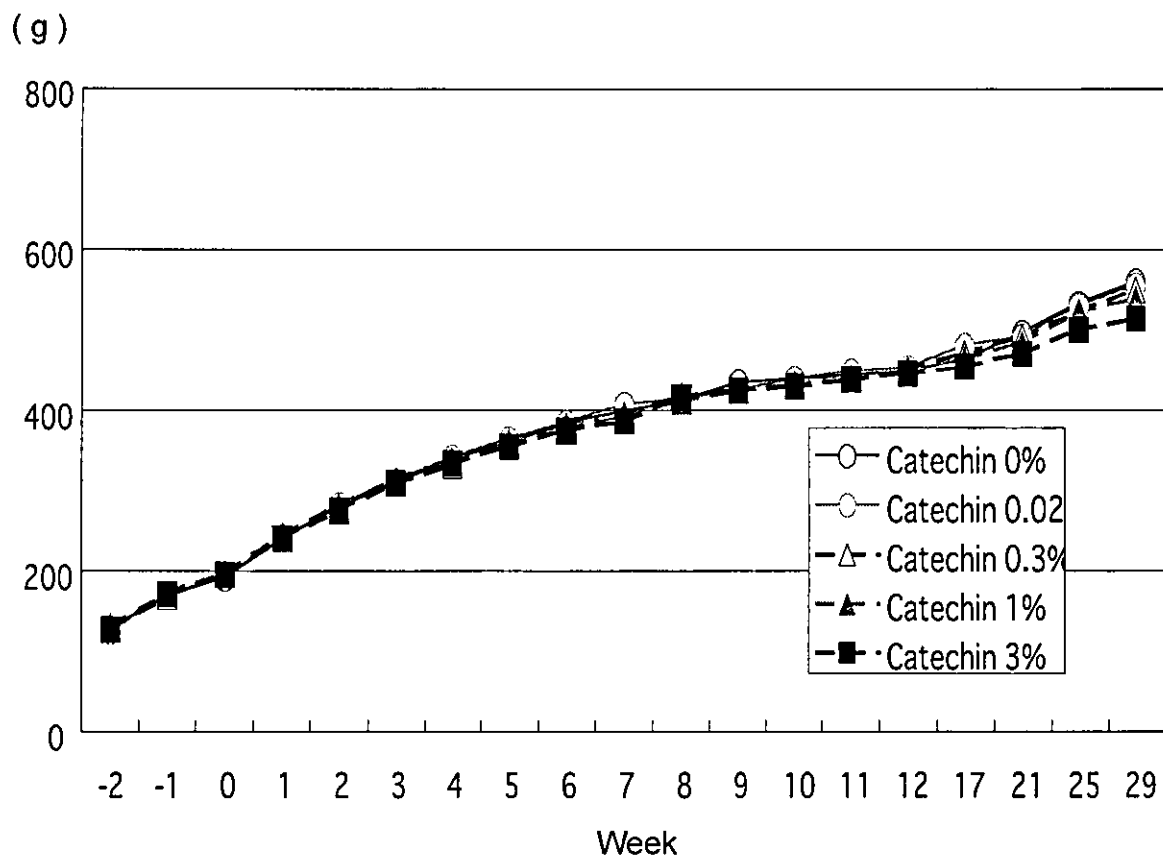


図1. 雄の体重推移

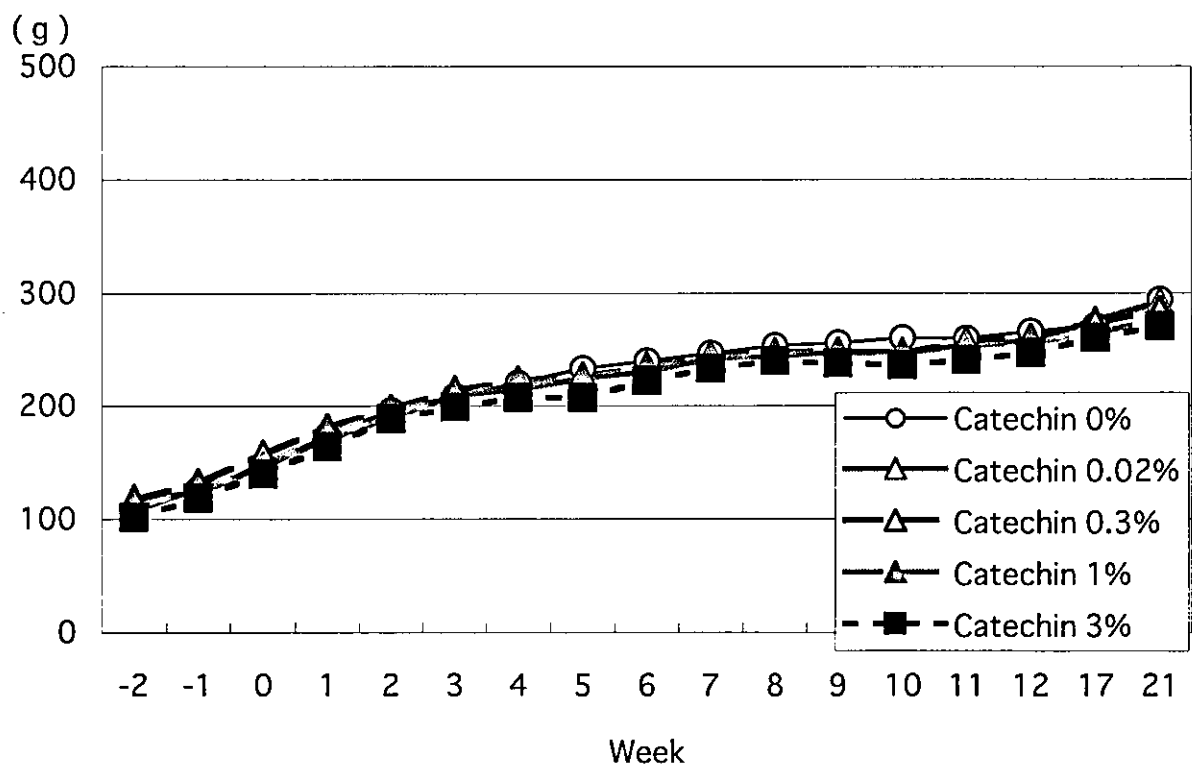


図2. 雌の体重推移

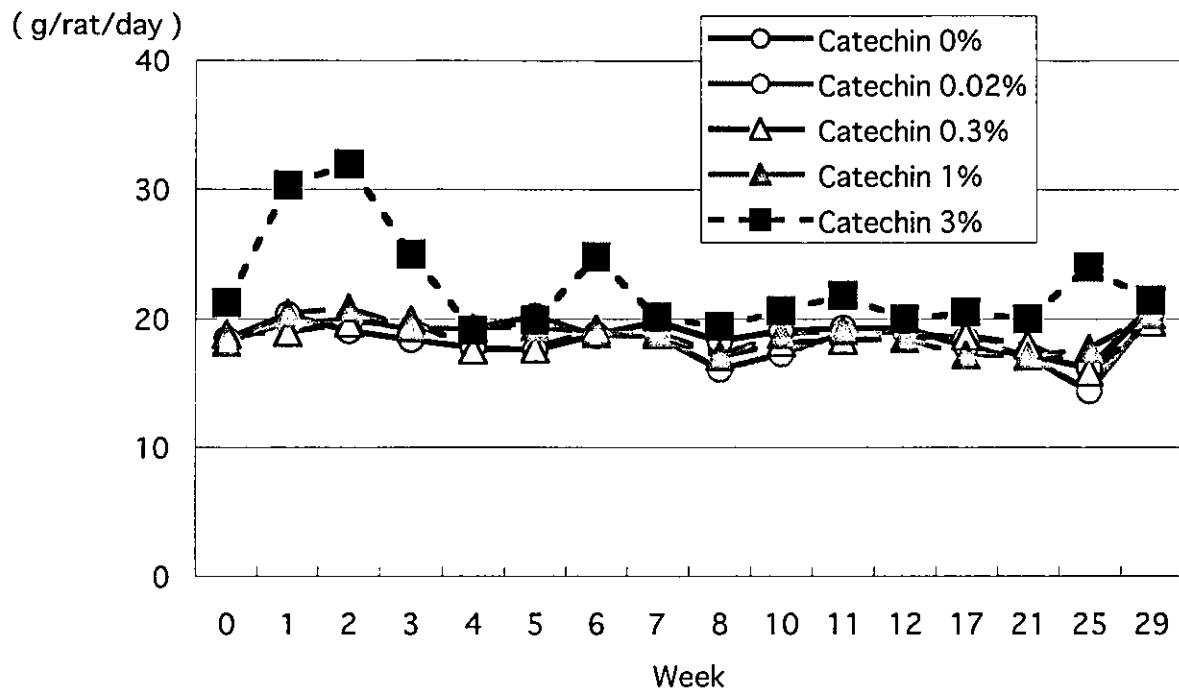


図3. 雄の摂餌量推移

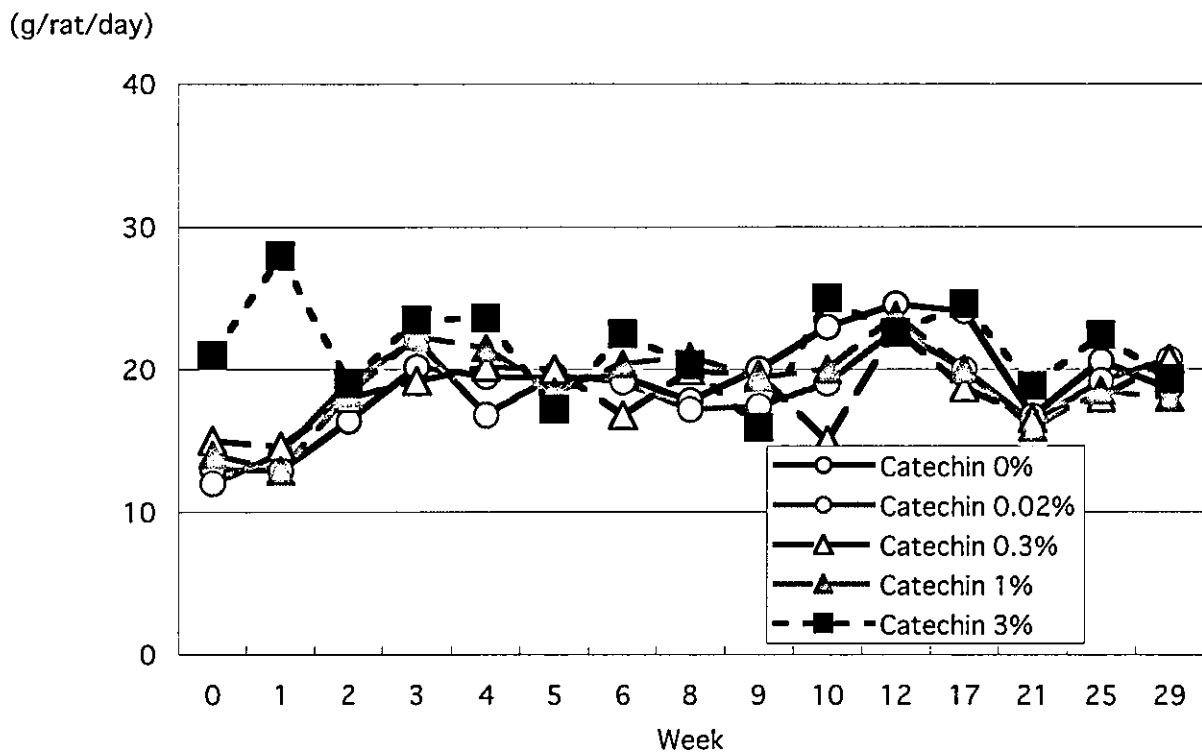


図4. 雌の摂餌量推移

研究成果の一覧表

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