

A1. Polyacrylamide gel electrophoresis (PAGE)

1.1 Native- PAGE

A slab gel composed of stacking gel (3 cm) and separating gel (6 cm) was used. Native 14-17 % gradient PAGE was performed according to the method of Davis (1964). Gel compositions are as below.

Composition	Stacking gel 3% (5 ml)	Separating gel	
		14% (3ml)	17% (3 ml)
30% Acrylamide-0.8% Bisacrylamide	0.50 ml	1.40 ml	1.70 ml
0.5 M tris-HCl, pH 6.8	0.63 ml	-	-
1.5 M tris-HCl, pH 8.8	-	0.75 ml	0.75 ml
10% Ammonium persulphate	50 μ l	30 μ l	30 μ l
TEMED	5.0 μ l	3.0 μ l	3.0 μ l
Distilled water	3.82 ml	0.82 ml	0.52 ml

1.2 SDS-PAGE

Samples were electrophoresed in a slab gel, composed of stacking gel (3cm) and separating gel (6 cm). SDS 14-17 % gradient PAGE was performed according to the method of Laemmli (1970). Compositions of the gel are as below.

Composition	Stacking gel 3% (5 ml)	Separating gel	
		14% (3ml)	17% (3 ml)
30% Acrylamide-0.8% Bisacrylamide	0.50 ml	1.40 ml	1.70 ml
0.5 M tris-HCl, pH 6.8	1.25 ml	-	-
1.5 M tris-HCl, pH 8.8	-	0.75 ml	0.75 ml
0.2 M EDTA	50 μ l	30 μ l	30 μ l
10% SDS	50 μ l	30 μ l	30 μ l
10% Ammonium persulphate	50 μ l	30 μ l	30 μ l
TEMED	5.0 μ l	3.0 μ l	3.0 μ l
Distilled water	3.10 ml	0.76 ml	0.46 ml

A2. C.P. Mice feed (082) Product by S.W.T. Co.Ltd.**Nutritional composition of mice feed**

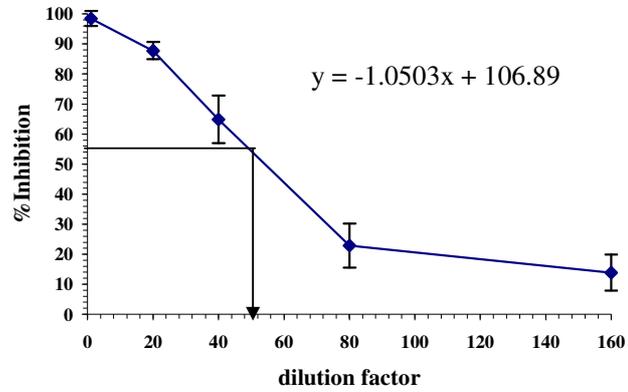
Moisture	(Max)	12%
Crude protein	(Min)	24%
Fat	(Min)	4.5%
Fiber	(Max)	5%
Metabolizable energy (swing)	Kcal/kg	3,040
Calcium		1.0%
Phosphorus (available)		0.9%
Sodium		0.20%
Potassium		1.17%
Magnesium		0.23%
Manganese	p.p.m.	171
Copper	p.p.m.	22
Zinc	p.p.m.	100
Iron	p.p.m.	180
Cobalt	p.p.m.	1.82
Potassium Iodide	p.p.m.	1
Selenium	p.p.m.	0.1

Vitamins

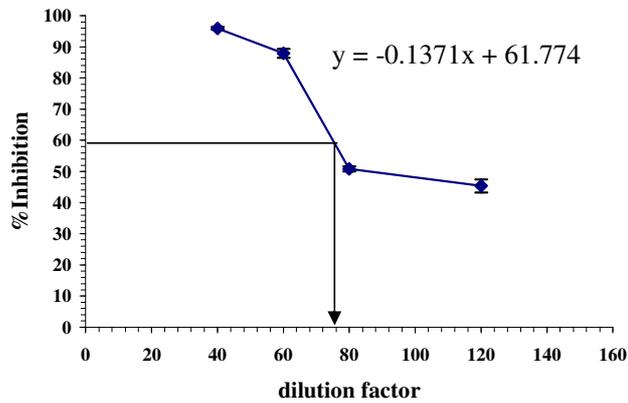
A	i.u./kg	20,000
D	i.u./kg	4,000
E	mg/kg	100
K	mg/kg	5
B1	mg/kg	20
B2	mg/kg	20
B6	mg/kg	20
B12	mg/kg	0.036

Niacin	mg/kg	100
Folic acid	mg/kg	6
Biotin	mg/kg	0.4
Pantothenic acid	mg/kg	60
Choline Chloride	mg/kg	1,500

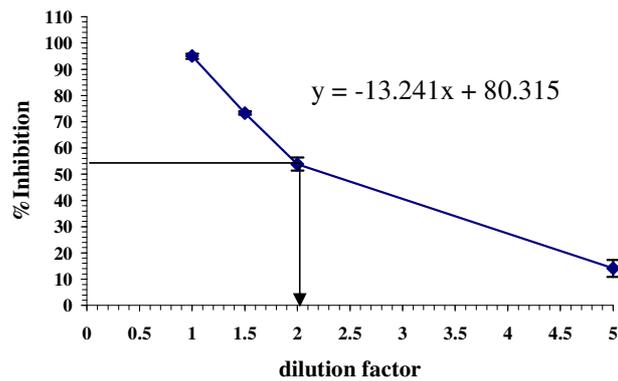
A3. Percent inhibition and dilution for 50% inhibition of salivary α -amylase by crude extract (A), proteinaceous amylase inhibitor (B) and nonproteinaceous amylase inhibitor (C).



A

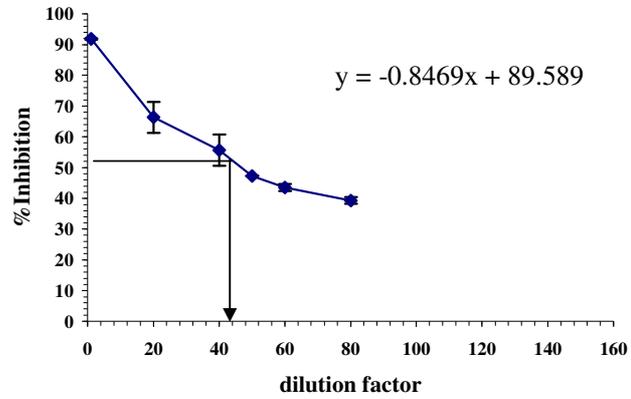


B

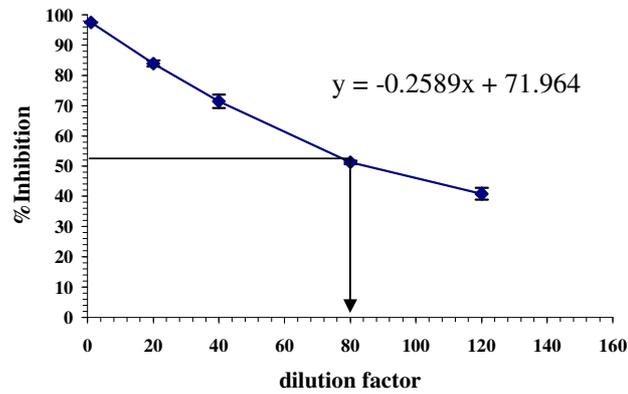


C

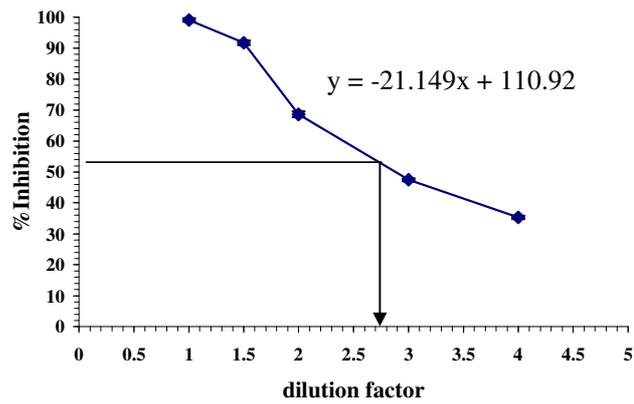
A4. Percent inhibition and dilution for 50% inhibition of pancreatic α -amylase by crude extract (A), proteinaceous amylase inhibitor (B) and nonproteinaceous amylase inhibitor (C).



A



B



C

A5. Percent inhibition and dilution for 50% inhibition of yeast maltase by crude extract.

