# บรรณานุกรม

คู่มือการเลี้ยงไกกะทง 2517 จ์คทำโดยบริษัทอาร์เบอร์เอเคอรส์ ประเทศไทย จำกัด พิมพ์ที่ห้างหุ้นสวนจำกัด ศรีวัฒนาการพิมพ์ ปทุมวัน กรุงเทพฯ

คร. เชนรี่ แอล ฟูลเลอร์ 2517 การสร้างสูตรอาหารพลังงานสูงของสัตว์ปีก, ส้มนาเรื่องพัฒนาการค้านอาหารและการป้องกันโรคสัตว์ปีก ณ ห้องประชุมสถาบันค้นคว้าและ พัฒนาผลิตภัณฑ์อาหาร มหาวิทยาลัยเกษตรศาสตร์, 18 พฤษภาคม

มากรฐานผลิตภัณฑ์อุตสาหกรรม ผลิตภัณฑ์มันสำปะหลัง 2516 มอก. 52-2516, สำนักงานมาตรฐานผลิตภัณฑ์อุตสาหกรรม กระทรวงอุตสาหกรรม, กรุงเทพฯ

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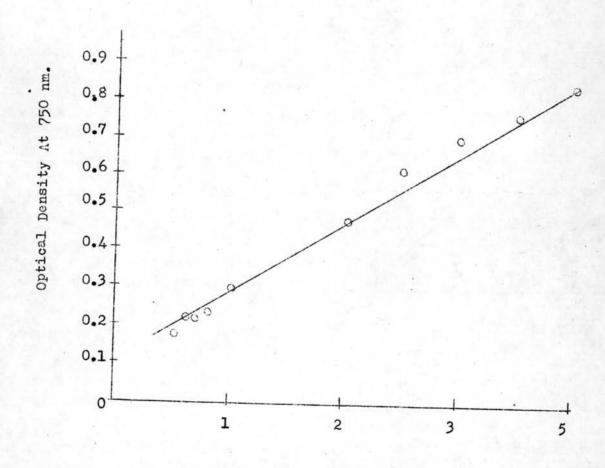
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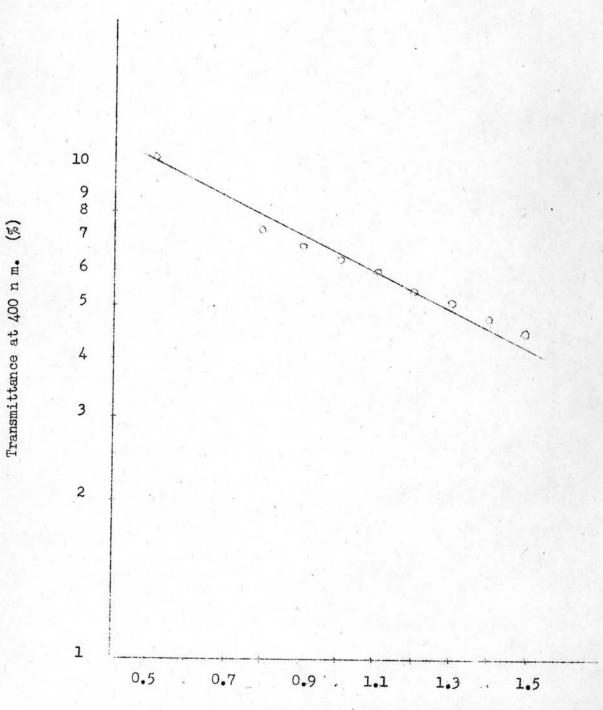
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Appendix 1 Standard Curve of Albumin for Lowry Protein



Standard Concentration of Albumin (lx10-4g)

Appendix 2 Standard curve of Phosphorus



Standard concentration of phosphorus solution (mg.P/ml.)

Appendix 3

Composition of the enrichment in commercial feed meal

I	nitial Fee	eding Period (Values ar	Final Feeding expressed in	Period g/ton)
Vitamin A (500 IU)	10	4	20	
Vitamin A + Vitamin D3 (500+100	IU) 20		15	
Vitamin B 2	4		4	
Vitamin E	20		15	
Vitamin B 12	10		10	
Vitamin K	2		2	
Vitamin C	5		5	
Biotin	1		1	
Folic acid .	1		1	
Niacin	20		15	
Calcium - D - Pantothenate	10		10	
Choline	500		500	
D L - methionine	300		300	
Manganese sulfate	150		150	
Zinc sulfate	50		50	
Copper sulfate	5		5	
Ferrous sulfate	10		10	
Ferazolidone	50		50	
Butylated hydroxytoluene	60		60	
Chlorotetracycline	10		10	
Coyden	400		400	
Soy bean oil meal (as carrier)	8,362		8,367	
	10,000		10,000	

Appendix 4

Chemical composition of each ingredient used in feed meal.

Values are expressed in percentage.

	Protein	Fat	Calcium	Phosphorus	Fiber
		+ - 1			
Corn	8.98	4.18	0.07	0.27	2.45
Fish meal # 2	55.0	5.46	7.35	3.05	1.40
Soy bean meal	45.22	3.75	0.37	0.72	7.27
Oyster shell	-	-	34.21	-	-
Calcium diphosphate	_	-	24.10	17.24	_

Reference - Chairavanort, . Personal communication

## APPENDIX 5

## Sample of Calculation

1.	Control	Feed	Meal	(Table	13)	)
- 60			Trocal	LIGOTO	1	,

Fish meal 12% in feed meal (Table 11)

Protein content of fish meal 55% (Appendix 4)

100 kg fish meal contains protein 55 kg

12 " "  $\frac{55}{100}$  x 12 = 6.60 kg

. . 100 kg feed meal contains fish meal protein 6.60 kg or 6.60 %

Fat content of fish meal 5.46% (Appendix 4)

100 kg fish meal contains fat 5.46 kg

12 " "  $\frac{5.46}{100}$  x 12 = 0.66 kg

. . 100 kg feed meal contains fish meal fat 0.66 kg or 0.66%

Calcium content of fish meal 7.35% (Appendix 4)

100 kg fish meal contains calcium 7.35 kg

12 " "  $\frac{7.35}{100} \times 12 = 0.88 \text{ kg}$ 

. . . 100 kg feed meal contains fish meal calcium 0.88 kg or 0.88%

Phosphorus content of fish meal 3.05% (Appendix 4)

100 kg fish meal contains phosphorus 3.05 kg

12 " "  $\frac{3.05}{100} \times 12 = 0.37 \text{ kg}$ 

. . 100 kg feed meal contains fish meal phosphorus 0.37 kg or 0.37%

Fiber content of fish meal 1.40% (Appendix 4)

100 kg fish meal contains fiber 1.40 kg

12 " "  $\frac{1.40}{100} \times 12 = 0.17 \text{ kg}$ 

. . 100 kg feed meal contains fish meal fiber 0.17 kg or 0.17%

2. 12.5% Yeast Replaced Fish Meal (Table 14); in control feed, amount of fish meal used = 12 Kg (Table 12)

12.5% of 12 Kg =  $0.125 \times 12$  = 1.50 Kg.

hence, amount of yeast added = 12 - 1.5 = 10.5 Kg.

protein content of yeast = 54% (Table 23)

therefore, crude protein obtained from yeast

 $\cdot = 1.50 \times 0.54 = 0.80 \text{ Kg}$ 

protein content of fish meal = 55% (Appendix 4)

therefore, crude protein obtained from fish meal

 $= 10.5 \times 0.55 = 5.78 \text{ Kg.}$ 

other nutrients in fish meal and yeast are calculated in the similar method.

3. 24% Yeast Replaced Soybean Meal (Table 19); in control feed, amount of soybean meal used = 23 Kg. (Table 12)

24% of 23 Kg. = 23 x 0.24 = 5.52 Kg.

hence, amount of yeast added = 5.52 Kg.

and the amount of soybean meal used = 23 - 5.52 = 17.48 Kg.

protein content of yeast = 54% (Table 23)

therefore, crude protein obtained from yeast

 $= 5.52 \times 0.54 = 2.97 \text{ Kg}$ 

protein content of soybean meal = 45.22% (Appendix 4)

therefore, crude protein obtained from soybean meal

 $= 17.48 \times 0.4522 = 7.91 \text{ Kg.}$ 

other nutrients in soybean meal and yeast are calculated in the similar mtehod.

#### Vita

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