5. Title: Food Composition and Some of the Vitamin Content in the Common Thai Diet.

Principal Investigation: Prasertsri Sitachitt, Ph.D.

Associate Investigators: Nitaya Chaisirivatana
LTC Florence M. Berger, AMSC
Krishna Chutima, Ph.D.
LTC Dale R. Snyder, MC

Objective The objective of this study is to determine the basic value of foods specified by the Dietitian, CRC as components of diets and of specifically prepared food (recipes) that will be used in planning menus for patients in the Clinical Research Center.

The basic values to be obtained will be those commonly encountered in tables of food composition. These are as follows:

1. Proximate composition (calories, water, protein, fat, ash, total carbohydrate, crude fiber).
2. Minerals (calcium, magnesium, phosphorus, sodium, potassium).

Progress 1. A list (Table 1) of foods furnished by the Dietitian for proximate analysis contains 17 items. The average values of proximate and mineral analyses of each food are shown in Table 1.

2. Mineral content of 47 food items has been analyzed (Table 2).

3. One hundred and twenty-seven dishes have been prepared by weighing food raw before cooking and then preparing them as they would be served to the individual patients.

All the recipes used were checked for the optimum amount of ingredients used. Proximate and mineral analyses are now being performed on these dishes.

Summary 1. The average values of the proximate analysis of 17 foods has been completed.

2. Mineral analyses of 47 food items has been completed.
3. One hundred and twenty—seven dishes have been prepared.
Proximate and mineral analyses are now being conducted.

Table I. Mean values of proximate analysis of some foods

Name of Foods	Moisture gm%	Fat gm%	CHO gm%	Protein gm%	Crude Fiber gm%	Ca mg%	Mg mg%	P mg%	Na mg%	K mg%	Ash gm%
1. Kiamchai	89.01	0.22	67.24	1.04	1.1	57.00	32.80	19.14	2013.88	149.96	2.32
2. Kongchai	64.97	0.22	29.11	1.44	1.1	65.38	49.27	25.39	2030.5	255.94	3.34
3. Tangchai	62.38	0.36	17.21	2.4	2.1	368.43	176.60	437.74	7764.28	555.07	15.55
4. Chaipo	72.78	0.49	14.75	1.1	2.3	84.59	79.88	25.94	4068.80	202.75	8.58
5. Tao Hoo Yee	63.73	4.5	8.02	11.7	0.84	133.34	106.09	109.46	4304.80	114.95	11.21
6. Soybean (Curd) (yellow) (cooked)	77.72	2.4	4.74	13.11	0.51	92.24	97.22	158.58	495.88	46.17	1.52
7. Pork Sausage (cooked)	21.88	49.07	9.65	16.9	1.0	24.20	54.68	63.22	1162.19	130.07	1.50
8. Mungbean Skin off (cooked)	66.53	0.58	22.01	9.3	0.90	26.15	44.19	82.24	12.84	137.41	0.68
9. Woonsen (cooked)	84.04	0.08	14.84	0.24	0.74	61.29	0.16	3.85	9.95	8.19	0.06
10. Small sago (cooked)	81.01	0.2	18.8	0.03	0.07	14.39	4.83	3.18	20.47	9.85	0.07
11. Big sago (cooked)	76.75	0.04	23.92	0.11	0.14	51.02	4.06	3.19	17.53	10.40	0.06
12. Tubtim	84.36	0.09	15.25	0.05	0.2	28.08	2.53	1.22	59.74	N.D.	0.05
13. Lodchong	88.62	0.15	10.51	0.35	0.24	77.91	4.74	6.66	7.13	N.D.	0.13
14. Rice noodle (round) (cooked)	82.34	0.07	15.62	1.69	0.25	15.68	4.27	23.50	12.00	N.D.	0.03
15. Chico	80.72	1.02	15.40	0.53	2.0	62.02	21.00	9.01	35.19	211.32	0.33
16. Rambutan	87.17	0.2	10.54	0.9	0.95	30.43	21.36	24.13	40.79	136.40	0.24
17. Chinese Flower (cooked)	88.76	0.33	6.67	2.0	1.7	205.46	44.63	72.59	35.83	483.16	0.54

Table 2. Minerals Content of Foodstuffs

No.	Name	Sodium mg%	Potassium mg%	Calcium mg%	Magnesium mg%	Phosphorus mg%
1	Kluay tord	341	479	107	76	104
2	Fermented egg	664	165	85	13	98
3	Salted egg	2502	149	114	119	251
4	Khao Mao Tord	44	394	18	59	92
5	Khanom Mohkaeng	100	262	34	17	45
6	Khaoneo Mamuang	445	139	6	18	23
7	Khao Tom Phud	270	171	19	33	21
8	Khaoneo Sangkhaya	447	263	43	29	83
9	Khaoneo Tud	352	84	13	17	28
10	Khaoneo Moon	402	70	23	18	26
11	Khaoneo Dang	52	374	26	31	61
12	Curry Puff	392	236	44	31	69
13	Namkathi Durian	33	332	9	22	38
14	Khanomkluay	124	190	27	16	16
15	Mustard Green, Pickled.	1615	366	111	46	52
16	Garlic, Pickled.	1009	78	87	37	41
17	Khanom Piakpoon	45	253	73	9	30
18	Tamleung leaves	8	189	51	24	46
19	Basil leaves	8	141	248	74	45
20	Sweet Basil	74	213	86	58	36
21	Pepper	8	116	370	56	182
22	Small shrimp, dried.	2957	446	1189	244	666
23	Mushroom. dried	5	53	26	16	11
24	Bitter Melon, big	6	257	37	20	22
25	Bitter Melon, small	3	343	43	31	14
26	Eggplant, purple	18	294	61	13	62
27	Fish suace, Tipparos Brand	8970	351	56	65	29
28	Fish sauce, Cuttle Fish Brand	8832	345	33	19	31

Table 2. (Continued)

No.	Name	Sodium mg%	Potassium mg%	Calcium mg%	Magnesium mg%	Phosphorus mg/%
29	Fish sauce, Aeroplane Brand	9706	226	35	25	11
30	Fish sauce, Flying Horse Brand	9154	285	38	20	14
31	Pineapple	15	212	55	12	21
32	Eggplant, smal	13	184	136	21	82
33	Kui—chai	10	287	98	37	17
34	Cha—om leaves	27	29	61	31	136
35	Geerlig's cheese	12	109	82	75	98
36	Taro	11	102	84	8	39
37	Small shrimp, salted, fermented.	13524	268	1559	62	168
38	Basil seeds	37	1156	1600	350	400
39	Takrai	24	363	152	20	116
40	Sen mee rardna	320	107	48	14	30
41	Tamarind, pulp	182	1185	153	109	149
42	Kuichai flower	10	244	23	17	15
43	Smoked milk fish	409	1096	4407	131	2812
44	Pepper, dried	44	120	1275	76	156
45	Dried fish, ground	199	167	246	11	28
46	Se Sek Chai	4589	63	128	121	140
47	Pork sausage	295	345	162	74	204