

## 7. SUMMARY

The mixture of rice and fish with the ratio of 70:30 by weight of protein was considered to be Thai habitual weaning food. This food was studied for the protein quality and tested for the adequacy of protein in the diet for the need of young children. Fat and energy absorption were also studied. The studies were done with 6 young male children aged between 8-32 months. One of the subjects had acute febrile illness, therefore the effect of acute febrile illness on protein utilization, fat and energy absorption were also studied.

In the present study, it was found that :

1. The protein quality of the mixture of rice and fish was about 84 percent comparing to the mixture of rice and egg.
2. If growing children consume this habitual weaning food, the mixture of rice and fish in the ratio of 70:30 by weight of protein only, the protein intake adequate for their need was 1.9 g/kg/day.
3. The Thai habitual intake supplied adequate protein for young children if the amount of intake was adequate to supply their energy need.
4. The level of protein intake recommended by the 1973 FAO/WHO committee (on protein and energy requirement) was adequate for young Thai children given habitual weaning diet and adequate energy intake.

5. The fat and energy absorption in children having protein intake from the mixture of rice and fish was normal, the value was about 90 percent of the intake.

6. Acute febrile illness had effect on protein utilization. The digestibility, N-absorption, N-retention, BV and NPU were all decreased.

7. Fat and energy absorption during acute febrile illness were also decreased. Whatever the decrease of energy absorption will be, the decrease in weight gain will be proportionally observed.

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