**SOME COMMON KOREAN FOODS\***

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The Koreans are mainly vegetarian in their diet. Rice is the great staple, millet and barley being frequently substituted for it in whole or in part, especially in North Korea ; peas and beans are often mixed with the rice, and are otherwise important articles of food. Vegetables are eaten in some form at every meal. Fruits do not form an important part of the diet Meat is not much eaten by the poorer classes, but those who can afford it eat a fair amount Fish is eaten in greater quantities, especially when salted or dried. All eat some eggs and a little poultry. Milk, butter and cheese are rarely used.

The Bureau of Agriculture of the Government General publishes statistics of the food materials produced in the country. The table given below is from the report for the year 1917.

Table L Korean Food Products.

Rice 61,000,000 bu. Apples 8,500,000 lb.

Millet 19,000,000 „ Pears 7,000,000 ,,

Barley 25,000,000 „ Grapes 1500,000 „ :

Whea 6,000,000 „ Fish (value) 20,000,000 yen

Beans and Peas18,000,000 „ Cattle (owned) 1,400,000 head

Chestnuts 35,000,000 lb. Hogs „ 800,000 ,,

The figures for Cabbage, Turnips, Radishes, Potatoes, and Sweet Potatoes are not available. The first three are of great importance in the dietary, but the amounts are difficult to ascertain as they are raised in small patches by nearly every-body.

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The export and import of foodstuffs is not very great in comparison with the totals and the number of animals fed is not large. So these figures should give us a good idea of the amount of food eaten. The population was 17,058, 102 of which 83% was agricultural. Taking rice alone, it would allow each person in Korea about 400 grams (8/9 lb.) of rice a day, equal to about 1,400 Calories. If half the millet, barley,peas and beans is eaten by the people this would give them each about 800 Calories more a day. Making allowance forchildren, this would give to each adult about 1l/2 lbs. or 2,500Calories a day from these articles alone. This seems ratherhigh. Some farmers and laborers exceed this amount, butmost of my reports show less than this, averaging about 2,000Calories—my reports do not include many laborers or farmers.

We have secured reports from four dormitories for girls and women and reports from individuals covering periods of a month each. We have altogether over 100 of these reports. Balances, etc. were furnished to each individual and they reported all foods eaten at each meal. This paper is based largely on these reports, they were used to make the list of commonly eaten foods. The author has tried to find out what each food is, and something of how it is prepared, as well as calculating its food value. It is rather surprising that the lists show so small a number of foods commonly eaten. Practically all the individual reports showed only 12 to 15 different foods during the month ; and if we group soups and ‘‘pap” (밥)—rice, millet, and rice mixtures containing peas or beans—the list list would be less than ten in many cases. The following list includes practically all that were reported, there being only a comparatively small number included in the term Miscellaneous—and the amounts of these in each case were very small:—

Rice and rice mixtures, Kimchi (Korean Sauerkraut and pickled turnip), Vegetable Soups, Meat Soups, Omelets, Bean Curd (두부), Bean Sauce, Beans and Peas, “Greens,” Vermicelli, Korean Bread (떡), Pancakes, Fresh fish, Salt and Dry fish, Beef (and a little pork), Eggs, Fruits.

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KOREAN METHODS OF PREPARING FOODS. CEREALS.

Rice (밥) is cooked in a kettle with only enough water to cover it, over a quick fire of straw or brush. It is allowed to stand covered for a time after boiling, so the process is mainly one of steaming. It absorbs only about twice its weight of water, so that cooked rice is considered equal to about ⅓ its weight of dry rice. Millet is often mixed with rice and cooked as above.

Barley (pori-pap보리밥) is cooked in the same way but the Koreans say it takes so much more fuel for cooking that, though the price is lower, it is no cheaper than Dure rice.

Millet (cho-pap조밥) is cooked in the same way. The whole grain is used so it contains more “fat-soluble vitamine” than the rice. This may in part account for the larger size of the Northern Koreans who eat more millet than the people of Southern Korea.

Rice Mixed with Peas or Beans (pat-pap or kong-pap 팟밥,콩밥) is often used. This takes longer cook4ing and in the ordinary Korean home the peas and beans are not well cooked. This mixture is not so easily digested as pure rice, but it is quite a satisfactory food if well cooked Soy beans are sometimes used in this mixture though none of the samples analyzed contained them.

Gruels (chook or mi um 죽, 미음)are often made of rice and barley. Mi-um is thinner and is a common food for the sick and is also used for infants.

Steamed Bread (dawk떡) is made by taking hulled glutenous rice tied up in a bag and soaking it in water for some time, then it is steamed over boiling water. Or rice flour may be made into a dough and steamed, this is easier but not so good. It takes from ½ to 1 hour steaming and is generally allowed to stand over the hot water for another half hour or so. Then it is taken out onto a flat stone or heavy slab of wood and kneaded and beaten with a heavy mallet after which it is shaped into cakes—dumplings—and [page 4] eaten. It is quite tough and very apt to cause indigestion, especially if not quite fresh. It is not ordinarily eaten at regular meals but is quite prominent at feasts. It is frequently added to soups like dumplings.

Dumplings (wnl-pyung 월병) are made of wheat flour. The dough is rolled out thin, spread with chopped meat and the edges folded over ; they are cooked in a soup and are also eaten at feasts.

Vermicelli (kook-soo국수)is generally made from buck wheat though a poorer quality is made from wheat flour. The dough is forced through holes in the bottom of a press and the strings thus formed allowed to fall into boiling water. After cooking they are scooped out of the water and are generally served in a soup, either meat or vegetable.

BEAN AND PEA FOODS.

Bean Curd (tu-bu 두부) is the equivalent of the Japanese “tofu.” It is made by grinding soy beans after they have been soaked and cooked, a large amount of water being used in grinding them ; the liquid is then strained through a cloth and to it is added ‘concentrated mother liquid’ from sea- water to precipitate (curdle) the proteins ; the liquid part is decanted off and the curd pressed into cakes, very tender and soft, this is the ‘tu-bu’; the bean residue is also sometimes eaten, it is called ‘pi-chi’; 비지. The bean curd is not generally eaten without farther preparation ; it is commonly added to soups and stews and often made into omelets with eggs ; another palatable food is made by cooking the bean curd for a short time in bean sauce (chang 쟝) and serving this with sesame oil, pepper and onions, it is called ‘to-bu-cho-rim.’ Bean curd may be eaten without further cooking served in sauce.

Pea Curd (mook 묵) is similar to beancurd in composi- tion but quite different in preparation. Peas are soaked in water till the hulls can be easily removed. They are then ground in a mill, with water to keep all very wet. The sus- [page 5] pension is strained through a coarse sieve, the liquid let stand to allow the fine particles to settle, the supernatent liquid decanted off and thrown away, the sediment is collected and boiled for a time which coagulates the protein, it is then cool-ed and forms a jelly-like mass which is cut up and served with bean sauce, red pepper and sesame seed. The pea residue is also eaten and is called ‘pi-chi’ like the bean residue.

Bean Sauce (kan-chang 간장) is somewhat like the Japanese ‘sho-yu’ but is more salt and not sweetened. Soy beans are thoroughly boiled, mashed, made into cakes and partially aried. These cakes (mei-ju 메주) are stored for months and allowed to mold and slowly ferment: when ripe they are broken up and soaked in salt water for a long time, then strained, the solid part being dried and used as a condiment (toin-chang 된쟝) The liquid is boiled and the coagu-lated protein scum frequently removed, when sufficiently concentrated the liquid sauce is cooled and stored. This is the indispensible condiment for Koreans.

Another bean sauce (ko-cho-chang 고초장) is made by taking about equal parts of the fermented bean cakes, rice, and salt, with a large amount of red pepper, the mixture being soaked in a small amount of water till ripe. This too is very important as a condiment.

‘Kong-cha-ban’ (콩자반) is made by boiling beans in the bean sauce, they do not swell but are hard, brittle, and very salt. Sugar and sesame oil may be added when serving them.

Sprouted beans (kong-na-mul 콩나물) are very common. The beans are soaked in water and allowed to sprout When the sprouts are quite long both beans and sprouts are boiled and served—sauce is generally added.

Pea-pancakes (nok-tu-chun pyun 녹두전변) are made by soaking peas in water for to 12 to 24 hours to soften and re-move the hulls, they are then ground up while wet, salt is added to the pasty mass or batter, thin slices of vegetables are often put in and it is then fried like pancakes. Flour may be added to the pea batter.

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SOUPS AND STEWS. (Kook 국 or Chi-jim 지즘)

A variety of vegetables are boiled and flavored to suit with bean sauce and red pepper; a small piece of meat or fish is commonly added for flavor. Turnips, carrots, cabbage and onions are the common vegetables used, bean curd is often added to the soup. The amount of meat in these soups is quite small, though meat soups using fish, beef, pork, or poultry are also common. Vegetables are used in the meat soups too.

Chi-jim (지즘) corresponds more to a stew, more food and Less water.

VEGETABLES.

Kim-chi (김치) is somewhat similar to sauer-kraut. Cabbage is washed, cut up, put into jars with salt and allowed to ferment Red-pepper is always added in large amounts, and often ginger, shrimp and fish for flavor. Bean sauce is sometimes added when served. Kim-chi or one of its substitutes is the essential relish at all Korean meals. Turnips are often sliced down the same way as cabbage, this is called

‘kak-tuk-i’ (각둑이),

‘Changr-et-chi’ (쟝에치) is made by soaking turnips, onions, cucumbers, cabbage, etc. in bean sauce until ripe, it is a kimchi substitute.

Tong-chimi (통침이) is made by soaking turnips in water till they begin to ferment, adding red pepper and onions ; when ripe the turnips are taken out and sliced and served in the water in which they were fermented.

Greens are quite common foods, many kinds of leaves are used thus.

Potatoes are used in place of rice in some mountain districts, but are not ordinarily of much importance in the diet of Koreans.

Sweet potatoes are corning into use, boiled and baked. [page 7]

Chestnuts and Nuts are eaten as such, chestnuts com-monly roasted.

Dates are often added to other foods, e. g. mixed with dough and made into bread.

ANIMAL FOODS.

Eggs are eaten raw and boiled, generally hard boiled. But omelets (chi-kai 찌개) are more common. Vegetable slices, minced meat or small pieces of bean curd are mixed with the eggs which are then cooked in a small dish over the rice. Red pepper is sprinkled over the top when served.

Beef is often served in soups and stews but there are common methods besides these. ‘Chang-cho-rim’ (장조림) is made by boiling beef in water for a time, then boiling it in bean sauce ; or the bean sauce may be added to the water at first. Sesame oil is generally sprinkled over the meat when served.

‘Naw-bui-an-i’ (너븨안이) is small pieces of beef broiled over a charcoal fire and sprinkled with sugar, red-pepper, and sesame seeds when served.

‘Koi-ki-san-sook’ (고기산숙) is made by taking small pieces of meat piercing each slice with a spit, alternating pieces of meat with onions or other vegetables, then when the spit is full, it is broiled over a charcoal fire ; sprinkle with salt, red-pepper and sesame seeds, and serve with bean sauce.

Fish are cooked in several ways, one of the most common is to boil it in water to which bean sauce has been added, and serve it sprinked with red-pepper and sesame seeds, this is called ‘cho-rim’ (조림).

‘Am-chi’ (암치) is salt-fish soaked in water and then torn to pieces and broiled over a charcal fire, sesame oil is added when serving.

‘Mut-chim’ (뭇침) is dried fish soaked in water, then shredded, it is then soaked in bean sauce, sesame oil and pepper are added, it is then allowed to stand for a short time.

Fish-roe (nan-chut, 난젓) are soaked in salt water, or [page 8] preserved in brine, then boiled in clear water, ana servea with red-pepper.

A few words in conclusion as to the adequacy of the Korean diet

Except where poverty is the cause, the diet furnishes enougrh food, the average of the diets reported in my studies is about 2,400 Calories for one person for one day, not engaged in hard labor. This should be enough for the energy demands of a person of the average Korean stature. The amount of protein is about 90 grams (3 ounces), not quite equal to the older standards but ample according the later accepted standards, so far as amount is concerned, but the bulk of the rice (or other cereal) is so great that only about 75% of the protein is digested and absorbed, so that there is only a small margin of safety, if any at all. The average Korean eats at least three bowls (large ones) of rice a day, this equivalents to about 525 grams(11/6 pounds) of dry rice; five bowls a day are not unusual The common rule in calculating the amount of rice needed by Koreans is to allow 10 ‘toi’ (되), Seoul measure, equal to about 50 pounds, of rice for each person for one month, and many will eat more than this allowance. Our reports show only about 15 grams (one- half ounce) of ‘fats’ a day; this is very low in comparison with western standards. There is a possible deficiency in Calcium (lime) salts, and clearly a deficiency in ‘fat-soluble vitamine-一mainly due to lack of dairy products in the diet-

In a word, the Korean diet seems to furnish enough food for the energy requirements, but needs some correction as to quality, especially to reduce the bulk and to increase the dairy products which are the best source of ‘fat-soluble vitamine’ and a good source of Calcium.