

whether or not the filarial diseases are a threat to the economy and welfare of the peoples of East Africa. As a start, extensive surveys were carried out in order to establish the exact distribution of bancroftial infection throughout Tanganyika. During this work many tens of thousands of bloodslides were taken at night and where possible adults were examined for the late manifestations of the disease—viz. hydrocoele and elephantiasis.

The results of this work suggest that in only a few places throughout the Territory is bancroftiasis a disease of sufficient importance to warrant attempts being made to eradicate it or to carry out mass treatment campaigns. The areas in which very high rates of the disease were found are Ukara Island in Lake Victoria, a small area on the northern shores of Lake Nyasa, a number of places on the coast and an extensive area in the Southern Province where hydrocoele rates of over 30% amongst adult males were found.

During these surveys the incidence of *Acanthocheilonema perstans* infection was determined and this was found to be most prevalent in the Southern Province. A further extensive focus was found in the districts west of Lake Victoria extending in a south-west direction towards Lake Tanganyika. It is interesting to note that in this latter area which is free of bancroftiasis, a large number of elephantiasis cases were seen, and it has been suggested that they may be due to *A. perstans* infection.

Preliminary surveys have been made for onchocerciasis, and *Simulium naevei* pupae were found on freshwater crabs in the Kilosa District of Tanganyika, and *Simulium dammosum* pupae were obtained at Ngombe. No clinical cases of the disease were found, however. It is hoped that further onchocercal studies will be carried out in highland areas where onchocerciasis may occur. A large-scale survey of this nature is to commence shortly in Kenya.

Biochemical investigations have recently been instituted to investigate fluids in filarial cases—i.e. hydrocoele fluid and elephantoid tissue fluid, and non-bancroftiasis cases are being investigated.

The therapeutic effect of a variety of drugs has been tested against bancroftial and onchocercal infections in Tanganyika and Kenya. Follow-up studies are necessary in work of this nature and it is hoped that a full report will be published shortly.

With the building of the permanent laboratory it has been possible to commence work on problems of filarial transmission. Colonies of *Aedes aegypti* and *Culex fatigans* are maintained in the insectary and a start has been made to maintain a colony of *Anopheles gambiae*.

A number of monkeys—*Cercopithecus aethiops* infected with *Dirofilaria aethiops* are kept for transmission experiments and patients from the Government Hospital who are found to harbour *Microfilariae bancroftii* are asked to volunteer. The main investigation being carried out is to determine the minimal microfilarial level in the blood at which a person is infectious (and therefore a danger to other members of the community). Various subsidiary experiments follow on this work and involve the sectioning and examination of infected mosquitoes and the examination of mosquito dejecta in which microfilariae are sometimes found.

THE MONOTONOUS DIET OF THE AFRICAN

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THE title of this article is purposely provocative and this is written in the hope that others will produce information about appetising foods readily obtainable by and for Africans.

Two tribes are mentioned here chiefly because I spent about fourteen years among each of them.

The principal food of the Kikuyu tribe is called by a word which is often used as a general term for food, "irio".

Irio is usually composed of beans and maize boiled together until soft when uncooked potatoes, bananas, greens and salt are added and the whole cooked until it becomes a thick heavy lump. It is often eaten without anything else, either hot or cold. Any part over does for a morning snack (as near as they ever come to having breakfast).

Other foods regularly eaten by Kikuyus in their reserve: sweet potatoes, several kinds of beans, peas, millet, white potatoes, yams, cassava, taro (called ndoma), bananas (many varieties), sugarcane, meat, milk.

Eaten mostly by children: berries, honey, locusts, passion fruit.

Foods recently added to their diet: bread, cabbage, tea, sugar, onions, rice, coffee, sardines, curry, chicken, eggs, game.

Meat may be added to the above list. Formerly it was eaten on rare and special occasions, eaten in huge quantities, barely cooked at all and devoured by the men.

Kinds of meat eaten now: beef, goat, sheep, pork, chicken, game. The great drawback to this improvement is that it is so seldom well cooked.

Gruel is an important item in Kikuyu diet. I have often seen the women finishing gruel-making with beautifully clean hands. I assure you they were not like it when they began! Gruel is made by the women. They grind the corn on a long flat stone using another smaller stone as pestle. The gruel is made of maize, bullrush millet (mwere), kaffir corn (muhia), small yellow millet (mukombe), wimbi (mugembe).

The Kikuyu tribe did very well in their food when I lived among them (1915 to 1928 inc.). No one went hungry except in famine time. Then everyone was hungry except gangs of young men who roved from garden to garden taking what they could before the war cry could be raised. Ordinarily the diet was varied, abundant and cheap.

Food of one of the Coast tribes (Giriama):

These people seem to conform to the eating habits of ancient peoples in

that their diet consists of a bulky starchy mass which is rolled bit by bit in the fingers and dipped into a sauce or stew which makes it appetising and varied. Call the starchy mass *sima* or *wali* and the relish *kitoweo*. The *sima* is nearly always made of maize meal, fairly well cooked into a very thick porridge. It may consist of brown rice (their own growing) or cassava root, or bananas. *Kitoweo* is made of *kunde* (a red bean), *podzo* (a small round green bean), stewed beef or goat, boiled fish or shark, prawns or chicken. *Tui* is a great favourite. This is coconut, ground and soaked in water, then wrung out in a long slender basket made for that purpose.

Their gruel is made usually of maize meal but well cooked. They add *tui* to it and sugar if they can. They also make gruel of rice when they have a crop.

Other items in the Giriama diet are:

Bananas, raw, boiled, fried in ghee. Sweet potatoes, roasted in the ashes or boiled and mashed. Extras and unusual items are cashew nuts, ground nuts, and cassava boiled or roasted. The Giriama have good oranges but they prefer to sell rather than eat them but are very careless about the care of the trees. Although the Giriama ate beef every week and the Kikuyu seldom ate it, tapeworm was much more common in the Kikuyu hospital than it was in the larger hospital at the Coast. My explanation for that is that the Giriama made their small portions of beef into well cooked stew, while the Kikuyu gulped down beef that was barely cooked at all.

It is necessary to mention among Coast diets the sap of the palm tree. Many of the old men seldom eat solid food. They will take toddy, but vastly prefer the stronger arrack.

Africans can, and sometimes do, serve a meal in their home that is appetising and nourishing. Here are a few that I have been given when at work or visiting in the reserves.

In Kikuyuland: A plate of boiled potatoes and a bowl of stewed chicken eaten with a spoon and accompanied with bananas.

A chicken rolled in mud and baked, then quartered and spitted over an open fire. This was served with baked sweet potatoes and a roasted maize cob.

A fellow worker who did a lot of safari always left a boy in camp who sat over a tiny fire all day keeping a pot of beans simmering. Those beans tasted very good indeed when a couple of tired young men got back to camp.

In the Ruanda country a favourite feast consists of a drum of sweet potatoes well boiled and in a separate pot most of a goat stewed with salt, pepper and curry. A plate of the potatoes with a small bowl of this stew made a tasty meal.

In conclusion I have two suggestions:

(A) An investigation in this and nearby territories for foods which are

pleasant and available to the average African, and which are of good food value. There must be many people who know of good African foods which are deserving of wider fame.

(B) Some modification of the wartime British restaurant. This for industrial areas of towns and large estates. I am not suggesting a charity. I suggest a place where good plain well-cooked food will be available to workers when they need it. If well managed, the Africans could afford to pay the costs of such a place and employers would greatly benefit from an increase in efficiency and good will among their workers. If a man had a bowl of hot gruel before going to work, and in the middle of his working day (say at 11.00 or 12.00) one of the meals described above, the quality and quantity of his work would be stepped up. This would not interfere with the customary evening meal which is so important to the African as a family affair or a social event.

There must be thousands of African workers who finish their day about 8 p.m. (on most farms, in all hotels and some in our own homes). These men arriving at their own quarters are apt to pour a *kibabu* of maize meal into boiling water, stir it a little and eat it almost at once. This gives a feeling of repletion but very little food is absorbed into the system! How to deal with this form of malnutrition is difficult. The answer is to face the problem, get acquainted with facts and realise the urgency to do what we can to alleviate the present conditions.