collaboration with FAO on many aspects of nutritional problems in Latin America, particularly with an eye toward endemic goitre. Also, the conference more clearly articulated its raison d'être. Its organizers hoped to provide nutritional recommendations to governments for observance and to inspire educated people in these countries to take practical action. Lastly, the organizers expressed the hope that the research of Latin American nutrition experts -- which had become more clearly defined during the previous two years -- would be followed by programmes funded by the United Nations Program of Technical Assistance for Economic Development.[134] This last move further reinforced the emerging character of FAO and WHO as organizations providing advice and research but not programmes. The types of programmes sought fell along a broad spectrum of perceived treatments for malnutrition and hunger. They included the following: school feeding, industrial worker feeding, pregnant and nursing women feeding, and nutrition education.[135] Many of these types of projects were underway by the time of the third conference in 1953. Moreover, the conference advocated national nutrition programmes designed to raise nutritional levels of all populations in Latin America.

As far as the composition of these programmes, the conference stressed the possibility of joint work with FAO and Unicef on milk conservation programmes (dried skim milk production and distribution) as well as many school-based nutrition projects.[136] Protein supplies figured prominently into the nature of these projects.[137] According to protein experts Autret and van Veen, attendees of an international nutrition conference, "the ideal solution of this problem would be a generous milk supply to all infants and children" although this was impractical in many developing countries.[138] Autret and van Veen emphasized milk substitutes such as soy milk, fish flour and other high-protein mixtures as alternative solutions to the problem to which one British professor remarked most negatively. Countering the very assertion that

---

134*Report of the Second Conference on Nutrition Problems in Latin America* , Rio de Janeiro, Brazil, 5-13 June 1950, Washington, D.C., FAO, August 1950, p. 2.

135Ibid.

136'Informe de la Tercera Conferencia sobre Los Problemas De Nutricion En La America Latina, Caracas, Venezuela, del 19 al 28 de octubre de 1953', sponsored by FAO and WHO, Washington, D.C., Oficina Sanitaria Panamericana, publicaciones Científicas no. 12, December 1954, pp. 2-5.

137See: *Report of the Third Conference on Nutrition Problems in Latin America, Caracas, Venezuela, 19-28 October 1953*, Rome, FAO, FAO Nutrition Meetings Report Series no. 8, June 1954, pp. 20-27.

138M. Autret and A. G. van Veen, 'Possible Sources of Proteins for Child Feeding in Underdeveloped Countries', in *Third International Congress of Nutrition, held in Amsterdam September 13th - 17th 1954*, Amsterdam, Stichting tot Wetenschappelijke Voorlichting op Voedingsgebied, reprinted from *Voeding*, 16, 1955, pp. 178-193, on p. 178.

there was a protein deficit, he stated, "It would be a great mistake...if those interested in human nutrition should for a moment imagine that supplementation of the native diet with some cheap protein food is the only effective answer to this tremendous problem of providing adequate food for large native populations."[139] The professor further implied that protein formulas were merely stop-gap, short-term measures while "the improving of native husbandry, the decreasing of wastage, the widening of education-especially of woman [sic]- and...the controlling of population increases, may...provide the only lasting solutions."[140] These conferences along with expert committee meetings formed the backbone of a research, programmatic, policy cycle. Conferences applauded efforts participants found useful which in turn led to increased funding. Expert committees thought through fundamental research problems, proposed future research projects and possible programmes. Administrators at FAO, WHO, and Unicef, were tuned to the outcomes of these conferences and committees and frequently carried out actions accordingly.

Dissecting FAO's Hunger Thinking: The Early-1950s

Rapid developments in FAO accompanied the agency's evolving nutritional interests. By 1953, FAO had transferred itself to more spacious headquarters in Rome where it had five major technical divisions: Agriculture, Economics, Fisheries, Forestry, and Nutrition as well as numerous branches. Although the move was cumbersome, for Aykroyd it provided the "opportunity for unburdening the organization of any unsuitable staff members".[141] In spite of FAO's constitutional commitment to improving the nutritional status of the world population, the Nutrition Division was simply maintained as other components of the organization grew and expanded.[142] FAO documentation does not convey how the department ostensibly responsible for FAO's central mission, nutrition, lost momentum. Phillips, who

---

[139]Professor A. C. Frazer, comment in discussion of M. Autret and A. G. van Veen, 'Possible Sources of Proteins for Child Feeding in Underdeveloped Countries', in *Third International Congress of Nutrition, held in Amsterdam September 13th - 17th 1954*, Amsterdam, Stichting tot Wetenschappelijke Voorlichting op Voedingsgebied, reprinted from *Voeding*, 16, 1955, 178-193, on p. 193.

[140]Ibid. Professor Frazer's remarks were clearly in the minority and had been for a couple of years. The FAO Conference in late 1953 had asked for focused attention on cheap protein-rich foods and encouraged collaboration between FAO, Unicef, and WHO to further this end. See: *Report of the 7th Session of The Conference 23 November - 11 December 1953*, Rome, FAO, March 1954, pp. 94-5, 120.

[141]Aykroyd, op. cit., note 38 above, p. 3.

[142]R. W. Phillips, *FAO: its origins, formation and evolution 1945-1981*, Rome, FAO, 1981.

eventually served as FAO's Deputy Director-General, believed that the importance accorded nutrition reflected the lack of support originating in developing countries. Phillips related:

> Even though the name of the organization is [the] Food and Agriculture Organization...nutrition has always been sort of hidden away as one of the smaller units...in the early days of the field programme the nutrition people were always complaining that they were brought in at the end of a project rather than at the beginning and that was because countries themselves didn't have the motivation and the interest to put nutrition out front in their agriculture planning.[143]

Perhaps more tellingly, Phillips told how he pushed the nutritionists "to get the lead out" and sell nutrition to the countries that needed it.[144] FAO allocations to its individual divisions were computed based on country requests and such requests for nutritional aid were sparse enough to elicit concern from the Joint FAO/WHO Expert Committee on Nutrition late in 1954. The committee's report confirms Phillips' allegations and also indicated that countries were hesitant to file requests with the Nutrition Division after the division failed to meet its obligations in 1953.[145]

Although each division hypothetically worked on nutritional concerns, their investigations generally did not take into account strictly nutritional science, such as the work of the Nutrition Division. Previous programmes had concentrated on raw food supplies and not on nutritional content; this was a tradition that was difficult to break. Among the central concerns of the Agriculture Division, which rapidly came to command roughly half of the organization's resources, were animal disease control and animal production, plant development, and land and water use. These were far more tangible needs in developing countries' agriculture and health ministries than nutrition alone. The Economics Division concentrated on statistical compilation and interpretation of indicators related to the other divisions. Along with Agriculture, Economics had the lion's share of support and influence in FAO.[146] The Fisheries Division concerned itself with all aspects of fish and fish products. The Forestry Division sought rational forestry management policies.

---

[143]Ralph W. Phillips, interview, 8 September 1995.

[144]Ibid.

[145]*Joint FAO/WHO Expert Committee On Nutrition: Report on the Fourth Session*, Rome, FAO, FAO Nutrition Meetings Report Series no. 9, July 1955, p. 19.

[146]Ralph W. Phillips, interview, 8 September 1995.

The Nutrition Division worked on many projects -- from food surveys to nutrition education. Aykroyd believed that their most important task was "to ensure that FAO does not forget its own parent [i.e. nutrition]" and in this vein "to keep the other Divisions and Member Governments aware of it and its implications."[147] The content of a brochure printed in 1954 entitled *The Mission of FAO* suggested that perhaps the Nutrition Division had been failing in its efforts to keep nutrition on the agenda. Cold War quasi-political writing propounded that with expanded and improved radio and motion picture, "great numbers of people who live wretchedly have realized the contrast between their own conditions and those of the better-off countries. This makes it psychologically unwise and politically dangerous not to do everything possible to improve their standards of living."[148] The pamphlet neglected to mention the work of Aykroyd's division, and more impressively, failed to state specifically that FAO's premiere purpose -- according to its constitution the raising of nutritional levels -- remained its supreme objective. Rather, the authors cited "action to increase the world's food supplies" as being of "imperative importance" and identified the fields of "agriculture, forestry, and fisheries" as the regions in which this aim could be advanced.[149] It seemed to be no editorial error that these fields corresponded to three out of FAO's five divisions and excluded nutrition.

In spite of the low organizational enthusiasm for the Nutrition Division, Aykroyd managed to conduct numerous activities effectively. Aykroyd's central concerns were with scientific analysis since only this could provide the necessary foundation for serious field work. When FAO nutrition expert Reh complained that there was too little emphasis on field work at INCAP, Aykroyd's response summed up his proclivities. He wrote:

> Unquestionably there is need for further fundamental research on problems of nutrition in underdeveloped countries. Satisfactory practical programs must be based on adequate scientific knowledge. Unless active research is being carried out, the field worker is sometimes in danger of following an approach to practical problems which is scientifically speaking obsolete.[150]

---

[147]Aykroyd, op. cit., note 48 above, p. 238.

[148]*The World Food Problem: The Mission of FAO*, 2nd ed., Rome, FAO, March 1954, p. 2.

[149]Ibid., p. 1.

[150]W. R. Aykroyd, letter to Emma Reh, 30 October 1950, FAO Archives, 57.1A5.

Aykroyd's interest in scientific "certainties" undoubtedly fuelled his drive for ongoing food survey and composition activities, the breadth of which had been stunted for years. In 1953 Aykroyd noted that until then, only proteins and fats had been considered for appraisals -- probably the result of the multi-institutional focus on protein.[151] One year later, likely inspired by Aykroyd's life-long interest in beriberi, the same report included micronutrients such as vitamins A, C, B_1, riboflavin, niacin, and iron. This report led Aykroyd to elucidate how these food composition tables could help in the fight against hunger. After explaining how such factors were of central importance in human diets, he continued writing as though national diets could be changed as easily as individual diets: "If careful judgment is exercised the present tables can, however, be used to obtain valuable information which can be applied in measures to make good deficiencies in national diets."[152] FAO had a macro-perspective on hunger throughout the world and when characterizations were made of the hungry, they fell squarely on the contents of "national diets." FAO's approach resonated with the essence of the HOLN nutritional surveys and serious laboratory research, the usefulness of which was questioned by some.

Two women who wrote a pragmatic psychological study of food habits in 1952 remarked critically that cultural, circumstantial, and personal discrepancies in food choice

> become more important in the light of the League of Nations' assumption that the allocation of food budgets is a matter of intelligent choices. 'Intelligent' in respect to what?-the values of one's family, one's class, one's caste, the neighborhood, the nation, or something more inclusive than all of these? It is true that these discrepancies constantly tend to disappear, but the evidence here indicates that **there is a serious difference at present between local dietary practice and scientific theory**. (emphasis mine)[153]

The authors continued to question, with remarkable insight, the troubling and tempestuous relationship between nutritional scientists and ordinary people.

---

[151]C. Chatfield, *Food Composition Tables - for international use*, 1st ed., Rome, FAO Nutritional Studies no. 3, 1953, p. iii.

[152]C. Chatfield, *Food Composition Tables - Minerals and Vitamins for international use*, 2nd ed., Rome, FAO Nutritional Studies no. 11, 1954, p. iii.

[153]Margaret Cussler and May L. De Give, *'Twixt The Cup And The Lip: Psychological and Socio-Cultural Factors Affecting Food Habits*, New York, Twayne Publishers, 1952, pp. 20-21. I tried in vain to locate biographical information on Cussler and De Give which might have shed more light on their striking insights.

According to the authors, the "encyclical authority [of nutritional science]...endows certain foods with the same kind of *mana*, or special supernatural power, as was attributed to certain articles of diet in primitive societies. Other food items are as rigidly tabooed."[154] This type of criticism was rare for its scathing nature and brutal commentary on the essence of international health organizations' nutritional ideology.

A few sites of concentration for FAO efforts, right from the time of Orr's departure, were the rice-eating countries of Asia where the Nutrition Division believed that it could play a major role in improving nutritional status and warding off beriberi. At times, however, it seemed FAO's primary interest rested with expanding work for scientists, not the diets of nations. In reference to beriberi and its history, FAO stated that "The whole problem needs re-examination in the light of modern knowledge and the experience gained in certain countries."[155] Thus, as with many disorders vitaminic and otherwise, despite Funk's proclamation that all the nutritional problems had been solved as far as science ought to be concerned, policy makers and others felt a profound need for more research, newer examinations, and more advanced studies. Their training demanded scientific discipline, not necessarily long-term development strategies or community health work.

Fundamental questions about the efficacy and relevance of nutritionists persisted. In the FAO report on rice, the writers commented that "The prospect that practical application will be given to the findings and recommendations of nutrition workers is more promising that [sic] it has been in the past."[156] There was a pronounced sense that science was not readily translated into pragmatic applications. For example, programmes to encourage the consumption of brown rice over white polished rice, thereby preserving its protective qualities and thiamine content, had been troubled for years. In the words of two critics, "Food by fiat, eating by edict, was not so easy as it looked."[157] Toward the end of the FAO rice report, the committee's opinion of research seemed reversed, and it "declared that the time has come for a new and vigorous campaign to raise nutritional levels in rice-eating countries. How can this best be organized and along what lines should it progress?"[158] The unexpected answer, especially given the earlier leaning toward "practical programs" was: "In the

---

[154]Ibid., p. 21.

[155]*Rice and Rice Diets*, Washington, D.C., FAO Nutritional Studies no. 1, 1948, p. 6.

[156]Ibid., p. 7.

[157]Cussler and De Give, op. cit., note 153 above, p. 164. For a description of the hypocritical food habits of consumers and producers see: P. R. Cannon, *Recent Advances in Nutrition with Particular Reference to Protein Metabolism*, Lawrence, Kansas, University of Kansas Press, 1950, pp. 3-9.

[158]*Rice and Rice Diets*, op. cit., note 155 above, p. 49.

first place, more research is needed. It has been pointed out again and again in this survey that existing knowledge is inadequate at many points...There is clearly need for more trained nutrition research workers, units and laboratories in rice-eating areas in general."[159] This final remark suggested that while it was openly recognized that research was not leading to the types of applications desired, more research would do so.

In the view of FAO and WHO, programmes that benefited people would naturally radiate outward from a centre built upon solid scientific research. Although this ideology stirred confusion about the purpose of researchers, especially when tangible results were rarely seen, this tactical approach worked well in rice-eating countries compared to African nations where vast inadequacies were the chief concern. The types of research that might be applied to Africa, frequently used Europe as their subject. One hefty tome published in 1950 studied the physiology of human starvation in-depth and included an experiment recreating famine-like conditions. The study, however, was designed with Europe's circumstances in mind, not Africa's.[160]

In order to further solidify its place in the making of public health nutritional research and policies, FAO aggrandized the position of the "nutrition expert". FAO created a heroic image, not far from Paul de Kruif's *Hunger Fighters*, for the expert nutrition worker.[161] This development seeped into FAO publications subtly. In Greece, one FAO consultant pointed out how the expert approach was effective in government dealings:

> It was, in fact, necessary to do everything possible to create an awareness of the problems of nutrition and of the need for specialized knowledge in attacking them. This was not easy, particularly since such problems had previously often been dealt with by people lacking expert knowledge. A certain aggressiveness had to be exhibited at times. Instead of waiting for governmental and other agencies to recognize the need for help and to ask for her services, the nutritionist

---

[159]Outside of increased food distribution the most pressing needs for nutritional improvement were "machinery and personnel...to develop practical nutrition programs. National nutrition organization and committees can greatly assist such development." *Rice and Rice Diets*, op. cit., note 155 above, p. 49.

[160]A. Keys, J. Brozek, J., Henschel, A., O. Mickelsen, and H. L. Taylor, *The Biology of Human Starvation*, Minneapolis, University of Minnesota Press, 1950. Nutrition problems persisted in Europe well into the following decade and were mentioned at FAO/WHO symposia throughout the 1950s. See, for example: *Report of the Symposium on Education and Training in Nutrition in Europe*, 1960, Rome, FAO, FAO Nutrition Meetings Report Series no. 26.

[161]See: Paul de Kruif, *Hunger Fighters*, New York, Harcourt, Brace and Company, 1928.

> followed the method of offering them for any appropriate task, large or small. In this way the value of an expert approach could often be demonstrated, and request for help soon became numerous.[162]

The nutrition expert was placed on high as the ultimate hunger problem-solver.[163] Any nutritional problem a country had could be solved with substantive advice from a UN expert, though Aykroyd warned that the notion "to get as many technicians as possible into the field to advise governments directly is misguided".[164] FAO vaguely reported in 1953 that governments receiving FAO advice were increasingly willing to co-operate "in applying the required data."[165] FAO and WHO defined the protocol for their advisers in certain terms: they would provide advice only when a member country, preferably a co-operative one, requested it. The job of the experts, in this light, was not to blaze trails through malnourished areas and spread the gospel of their solutions. To the contrary, they would stay put in Rome or Geneva until they were needed and wanted.

FAO attempted to respond with expertise to all requests which originated in member countries. On the African continent, however, FAO meekly reported that the progress of its experts had been slow and in 1953 admitted that "the resources of FAO cannot be equal to the requirements of all areas of Africa where FAO's assistance has been sought."[166] The first years of idealism were wearing thin, and with this evolution, FAO was coming to see that hunger problems loomed larger than the solutions. Aykroyd couched the situation in optimistic terms and drew a parallel between the vigorous work of FAO and the story of David and Goliath. "David did kill Goliath,"

---

[162]A. G. Tsongas, *Nutrition Work In Greece*, FAO Nutritional Studies no. 7, Rome, FAO, 1951, p. 20. Unicef's aid to post-war rehabilitation was enormous, providing supplies of supplementary food to over a million children each day in Greece up through 1951. (pp. 36-7)

[163]A later FAO publication designed for experts in FAO's Nutrition Division provided the following fitting definition for the nutrition expert: "Experts must be imbued with faith, the spirit of self-sacrifice, and, in addition to their technical qualifications have the qualities of pioneers and be able to work under adverse circumstances. Experts are sent to young and poor countries to help them reach a higher technical and economic level from which vantage point they will be able to acquire and enjoy all the facilities of the industrialized countries. When that day dawns, experts should be ready to leave, happy that their mission has been accomplished." M. Autret, H. Teulon, M. de Crescenzo, *Guide for the use of Experts of the Nutrition Division of FAO*, Rome, February 1964, 64/B/11066.p, p. 80.

[164]Aykroyd, op. cit., note 38 above, p. 2.

[165]*Report of the Council of FAO, Seventeenth Session, 15-24 June 1953.* Rome, FAO, 1953, pp. 7-8.

[166]Ibid., p. 6.

wrote Aykroyd, "but the issue of the struggle was undecided when he was choosing smooth stones out of the brook."[167]

Unicef and Technical Advice

Countries and ministries of health were not the only bodies from which FAO and WHO hoped to receive requests. Both agencies also looked forward to providing technical advice to Unicef. When Aykroyd realized early in 1950 that Unicef would continue to exist for at least a few more years, he wrote to McDougall that relations should be formalized. Specifically, this meant that "If Unicef is developing what it calls a nutrition program in any country, arrangements should be made for FAO to provide (at Unicef expense) technical experts who can advise...and keep it on sound lines."[168] Aykroyd believed that Unicef's nutrition projects, particularly in supplementary feeding, were grossly misguided and felt that FAO deserved inclusion. The present arrangements were unsuitable to Aykroyd since Unicef was making all of its own plans with governments and inviting FAO to observe only after projects were solidified.[169] At a presentation to the Unicef Executive Board in 1950, he toted the FAO view and pushed for joint procedures:

> We [at FAO] feel that wherever and whenever Unicef is undertaking a program in the field of child and maternal nutrition, that program should be linked with FAO activities in the country...Hitherto FAO/Unicef relations have been on an informal and friendly basis. We think, however, that in order to ensure the coordination which is needed, somewhat more definite arrangements are required.[170]

Aykroyd's call for co-ordination seemed a logical requirement since Unicef lacked technical staff and wished for its projects, nutrition especially, to be aligned with scientific norms. The catch -- that FAO expected Unicef to pay for the experts provided -- irritated Unicef considerably. According to Aykroyd, the Unicef Executive Board and Pate were reluctant to undertake such a financial arrangement.[171]

---

[167]Aykroyd, op. cit., note 48 above, p. 243.

[168]W. R. Aykroyd, letter to F. L. McDougall, 28 July 1950, FAO Archives, 57.1A6.

[169]Ibid.

[170]W. R. Aykroyd, 'Statement to the Executive Board, Unicef', 28 November 1950, FAO Archives, RG 57.1 series H1, p. 5.

[171]W. R. Aykroyd, letter to Acting Director-General, 'Report on meeting of the Executive Board of Unicef, Lake Success, November 27-28, 1950', 30 November 1950, FAO Archives, 57.1C1, p. 2. Some of Unicef's hesitation probably arose from similar problems with WHO's scrutiny of Unicef

Unicef eventually succumbed to pressure and, by joint agreement with WHO and FAO, the Unicef Executive Board prescribed its staff to seek technical advice and approval from FAO and WHO on any project it wished to implement.[172] The consequent ladder of approval created problems and frustrations for Unicef as well as FAO.[173] According to Phillips, the problems were essentially administrative insofar as Unicef had different programming procedure from FAO. FAO had a biannual funding programme which was difficult to co-ordinate with Unicef's approach. Phillips noted that "Unicef was often running with a project before FAO could catch up with its input."[174] From Heyward's perspective at Unicef, the issue had more to do with autonomy and competence than budget deadlines. Heyward asserted that FAO continually manipulated Unicef to provide FAO with funds for its technical staff. Not only did projects require technical approval, but FAO technicians could require that FAO technical staff be hired for project implementation. This loophole provided the impetus for controversy. Furthermore, Unicef found itself hopelessly behind in project implementation because it would take months for a project to receive approval from FAO divisions, then, if technical staff were required, many more months were needed to position them in the project.[175]

In spite of Unicef's serious concerns with FAO's advice, FAO's influence, particularly in the 1950s, remained substantial, especially after Rajchmann's departure from Unicef's Executive Board in 1953. Rajchmann, an influential advocate as Chairman of the Board, had been one of the masters of Unicef's policy. He had encouraged the Board to approve projects for milk conservation and distribution in developing countries. Although his considerable field experience had led him to doubt the utility of other more complex programmes in developing countries, he believed that milk could make a difference. This simple treatment dovetailed nicely with Pate's pragmatic ideology.[176] During the mid-1950s, Unicef relied more heavily on FAO's and WHO's technical advice. Following the sweeping tenor of protein interest set by

---

health projects. Aykroyd believed, however, that this conflict had been largely resolved, "at any rate on paper." (p. 2.)

[172]E. J. R. Heyward, interview, 12 September 1995.

[173]WHO had similar problems, which did not involve nutrition issues, with Unicef until 1957. E. J. R. Heyward, op. cit., note 70 above, p. 6.

[174]Ralph W. Phillips, interview, 8 September 1995.

[175]E. J. R. Heyward, interviews, New York, 5 May 1995 and 12 September 1995.

[176]Ibid. It has been alternatively submitted that Rajchmann approached nutrition work in the developing countries very cautiously, since he feared the Unicef's potential for positive impact was tiny. See: Al Davidson, interview conducted by John Charnow, 1 November 1983, Unicef Archives, interview file, p. 11.

FAO and WHO, in 1953 Pate looked favourably toward the promotion of fish flour, vegetable milk, and other products to treat malnutrition in underdeveloped countries. Before progressing with newer programmes, Pate would request further broad advice from FAO.[177]

During the early-1950s, much of the technical advice FAO provided encompassed five major areas: reducing crop waste and losses, increasing agricultural yield, extending land utilization, improving rural working conditions, and raising nutritional levels and standards of living.[178] In this latter area, FAO's work focused on a few key areas: milk conservation, home economics, and high-protein foods. WHO worked with FAO to produce a booklet on milk pasteurization in 1953.[179] Similar work was carried out with Unicef and included research on locally available protective foods for children. The strongest nutritional collaboration among the three organizations, at least during these early years, involved FAO and Unicef. In 1953 they began work on a soybean milk plant in Indonesia and fish flour in several countries.[180] The home economics programme essentially called for greater teaching of a melange of subjects -- from fostering modern hygienic conditions in the home to improving women's status.[181] Notably, the bulk of FAO's technical assistance in developing countries came from its technical assistance programme, which was responsible for fellowships and consultancies.[182]

The Third Joint FAO/WHO Expert Committee On Nutrition

Marking an important shift in focus, the Joint FAO/WHO Expert Committee met for its third session in the Gambia. The move represented the newly excited focus on nutrition in developing countries, particularly in Africa, which had grown out of the Brock-Autret report on kwashiorkor. The consultants invited to formulate the third report reflected the continuity of the committee as well as the weight accorded a few chosen scientists. Between the first and third sessions, the only individuals to remain on the Committee from FAO were Aykroyd and V. N. Patwardhan, the Director of Nutrition Research Laboratories in Coonoor, India. Representing WHO, Dr. J. F.

177'Executive Director General Progress Report', September 1953, E/ICEF/236.

178*Report of the Council of FAO*, op. cit., note 165 above, p. 13.

179See: *Milk pasteurization: planning, plant operation and control*, Rome and Geneva, FAO AND WHO, 1953.

180*Report of the Council of FAO*, op. cit., note 165 above, p. 23.

181Ibid., p. 24.

182Ibid., pp. 24-5.

Brock remained as did the recently resigned chief of the WHO Nutrition Section, Clements. They were joined by Platt of the LSHTM and the MRC, Dr. Trowell of the Uganda Medical Service, Waterlow, by then a senior research fellow at University College of the West Indies, and Autret. The latter list displays clearly how heavily WHO weighted African nutrition problems, especially kwashiorkor. Brock and Autret had written their groundbreaking tome on the subject, Trowell had avidly pursued kwashiorkor since approximately 1937 when he called it "infantile pellagra",[183] Waterlow had been following up his work on fatty liver disease (by then identified as kwashiorkor). Platt's interest in African malnutrition had long been at the centre of his research, most notably in the Nyasaland Field Survey and colonial malnutrition work. It therefore came as a surprise to no one that the committee "while not neglecting the broader aspects of the problem of under- and mal- nutrition in mothers and children, concentrated its attention on protein deficiency and its effect on child health."[184] The unwieldy phrase "protein deficiency and its effect on child health" was nothing but a euphemism for kwashiorkor and the committee placed both under the broader heading of "protein malnutrition". In a decisive move to magnify the issue of protein malnutrition as it related only to children, the committee stated that "Malnutrition in mothers has been considered rather as a factor contributing to malnutrition in children than as a particular problem in itself."[185] Evidently, malnutrition in adults, mothers especially, was to be couched in terms of the deleterious effect on children. While a nutritional emphasis on children could be traced through the recent history of war-time Europe, there had been considerable weight given to the importance of an adequately nourished *population*. The committee's decision showed their peaked interest in one exciting and interesting malady, namely kwashiorkor, and their accompanying heightened concern for the plight of children. According to the committee, "In the fields of medicine, public health, and medical research, attention has recently shifted from disease due to deficiency of vitamins and minerals to what can provisionally be called protein malnutrition."[186] The committee did not explain the aetiology of this change -- such as increased prevalence -- but rather justified its corresponding shift with the increased nutritional interest in all medical fields.

---

[183]See: H. C. Trowell, 'Pellagra in African children', *Archives of Disease in Childhood*, 1937, **12**, p. 193.

[184]*Joint FAO/WHO Expert Committee On* Nutrition, op. cit., note 101 above, p. 4.

[185]Ibid.

[186]Ibid., p. 5.

In addition to kwashiorkor, the report mentioned marasmus, which it delineated from kwashiorkor by explaining that it was severe undernutrition. The key difference was that marasmus occurred after prolonged carbohydrate and fat deprivation (in addition to protein) whereas protein malnutrition involved only a lack of adequate protein. Although the committee highlighted these distinctions, it backtracked on the stiff headings and explained that combinations of protein malnutrition and undernutrition were common throughout the "underdeveloped nations". Kwashiorkor stood apart from marasmus, characterized by inanition, during its initial phases since an apparently well-fed child could be afflicted. The committee was concerned that hunger and undernutrition, which were easily identifiable, would overshadow kwashiorkor and therefore stressed the need to place kwashiorkor and other malnutritional diseases in the diagnostic nutritional lexicon.[187]

In a peculiarly curt manner, the committee suggested that undernutrition and protein malnutrition were caused by four factors: food supply, population growth, economics, and ignorance.[188] Keeping the focus on protein, the committee recommended high-protein formulas for the treatment of protein malnutrition, and dietetic changes for its prevention. Overall nutritional improvements could best be made through increased production of productive foods and particular interest should be placed in exploiting protein production.[189] By sequestering protein malnutrition from undernutrition, the committee effectively produced a focused recipe for research and programmes. Since the causal factors of undernutrition and malnutrition were tremendous and unmanageable, the committee decided to focus on areas where it believed progress could be made. Thus, out of its five recommendations to FAO and WHO, four directly mentioned protein malnutrition and none mentioned undernutrition or marasmus by name.[190] Unicef was asked to work with FAO and WHO on government requests for protein improvement projects.

The break this committee made from previous work by dwelling on protein-related issues was profound and influential. The meeting itself generated enough attention to deserve a press release from the UN Department of Public Information which optimistically suggested that with continued progress, the incidence of protein

---

[187]Ibid., pp. 6-7.

[188]Ibid., pp. 8-10.

[189]Ibid., p. 10-17, 25. Protein production could be boosted, for example, by interbreeding goats, improvement of pulse and cereal storage, and fish pond culture. (pp. 26-27)

[190]Ibid., pp. 19-20.

malnutrition could "be reduced to relative insignificance within ten or twenty years."[191] For the public, then, the issue was sufficiently broad to warrant attention. More strikingly, for doctors and nutritionists protein was capturing interest in a way in which hunger and undernutrition had not, and the committee worked to reinforce and build on it. The basis for this development related to the medicalization of hunger. Any nutrition worker could look at a picture of a starving child, make a diagnosis, and prescribe a possible regimen. By the same token, a child suffering from undernutrition-induced stunted growth presented more subtle, but superficially mundane symptoms that a trained professional could also locate. Kwashiorkor, on the other hand, had **inspired** nutrition workers. Its character was considerably different from any other hunger-related illness they had previously encountered. There were intense physiological and biological changes that occurred in an afflicted child -- changes which could be measured, explored, and otherwise examined. It was not simply a matter of investigating a child's weight-for-age as was the case for undernutrition. Rather, it seemed that chemical changes could hypothetically be tracked and elaborate techniques for diagnosing the disease could be invented. Kwashiorkor, in many senses, was the state-of-the-art hunger disease. Its character and alleged prevalence promised ongoing interest from the scientific community.

Resonances of Protein and Population

The interest in protein malnutrition of the Joint FAO/WHO Expert Committee rapidly permeated discussion of nutrition throughout the world. The Nutrition Committee for South and East Asia, inspired by the expert committee's report, expressed extensive concern for protein malnutrition. Although the committee could not confirm the incidence of protein malnutrition and felt that the prevalent form of kwashiorkor differed from the African version, it agreed that protein malnutrition demanded action. It also stressed, independently, the need for safe and adequate weaning methods and the treatment of other deficiency diseases.[192]

Far less discussed than the means for coping with malnutrition were the reasons for addressing it. Frequently, it seemed that scientists were interested in the problem because of the inherent scientific value of malnutrition. Broadly stated,

---

[191]'Protein Malnutrition -- "a problem of fundamental importance"', 1954, UN Department of Public Information, E/1145, FAO/701, UN Archives, CF9D 79, folder A023.

[192]*Report of the Nutrition Committee for South and East Asia: third meeting, Bandung, Indonesia, 23-30 June 1953*, Rome, FAO, November 1953, FAO Nutrition Meetings Report Series no. 6, pp. 1-16.

however, three central motives appeared for nutritional development: altruism, an expansion of raw materials and opening of new markets, and political stability.[193] Increasingly, the primary methods for obtaining these formidable ends differed immensely, and newer research sparked broader thought. Platt, who was playing an influential role on expert committees and in the nutritional community, believed that small demonstration projects might be one key to development, a view shared by many expert committee on nutrition colleagues. However, Platt further believed that nutritional work should be brought down to the lowest common denominator -- namely, the family -- in order to produce effective programmes.[194] Platt played a delicate and extremely important role in injecting Western medical knowledge coloured by international exposure into the perspective of committees. In the view of Scrimshaw, one of his colleagues, "Platt trained people from all over the world particularly from Africa and was one of the people who had a very good international nutritional perspective, probably more than anybody in the U.S. at the time."[195] Contrary to much of the research-oriented rhetoric that emanated from FAO and WHO meetings that Platt attended, in one speech he suggested that sufficient evidence had been collated by 1953 to justify increased food supplies and improved nutritional training. While Platt's position was not controversial, his articulation for action was unusual. Although Platt supported research, particularly nutritional surveys, he believed that they should automatically be tied to follow-up pragmatic projects, a view rarely trumpeted by many of his scientific colleagues. Platt believed that the 'whats' were known -- what to eat and what to grow -- but the 'hows' -- namely how to improve food supplies -- remained shrouded.[196] To complicate matters further, racism lingered in the air breathed by the public and the nutritionists, frequently in the form of tales of African's acute laziness or another people's moronic behaviour. Platt believed this myth to be sufficiently significant to deserve public explanation. He empirically demonstrated that far from being lazy, Africans worked harder (and burned more calories) than Europeans.[197] Nevertheless, tales of ignorance were favourites at nutritional meetings for they highlighted the difficulty in changing customs and placed their work high on a pedestal. One participant in a symposium highlighted the paternalistic way in which many viewed their work in the developing countries when

---

[193]B. S. Platt, 'Food and its production', contribution to Symposium on Development of Tropical and Sub-Tropical Countries, London, Arnold, 1953, 97-128, p. 97.

[194]Ibid., pp. 98, 104.

[195]Nevin S. Scrimshaw, interview, 25 July 1995.

[196]Pirie, op. cit., note 193 above, pp. 98-99.

[197]Ibid., p. 102.

he cited a plant pathologist who introduced healthy potatoes in China only to find the Chinese weeded them out since they appeared different from the norm.[198] This arrogant sense of knowing what was best for native peoples was deeply embedded in the character of many early development projects. Nutrition continued to be seen as one aspect of the white man's burden in developing countries. While it would be highly subjective and difficult to investigate how these attitudes influenced and transformed nutritional policies, it is important to note that they were common and formed part of the complex calculus of nutritional thought.

In 1953, FAO, WHO, and the Josiah Macy Jr. Foundation sponsored an unusual protein malnutrition conference in Jamaica. Because protein malnutrition was garnering such wide public health attention and differences in clinical interpretation of the disease persisted, Aykroyd, R. C. Burgess, Clements, Waterlow, and Dr. Fremont-Smith of the Macy Foundation called for the conference.[199] The casual conference format and the conference publication -- a nearly verbatim record of the proceedings-- provide a superb record of contemporary thinking on nutrition in relation to protein. At issue was an accurate description and classification for kwashiorkor. Waterlow pointed out that clinicians knew kwashiorkor when they saw it, but could not describe it precisely. Thus, the topic of the conference was as semantic as it was scientific: terms and clinical indicators had to be agreed on. Early in the conference, a few members were sceptical about even delineating protein malnutrition from chronic hunger or starvation. One tête-à-tête proceeded as follows:

> **Waterlow**:...But will you accept protein depletion as the end result, however it is brought about?
> **Gyorgy**: I don't accept it.
> **Rao**: But, Dr Waterlow, do you include the effect of a low intake of protein also?
> **Waterlow**: I am saying that a low intake either of protein or of factors influencing protein synthesis will lead to an organism depleted of protein.
> **Gyorgy**: I can't accept that. What do you do in complete starvation? Would you not lose protein too?[200]

---

[198]Platt, op. cit., note 126 above, p. 116.

[199]J. C. Waterlow (ed), *Protein Malnutrition - Proceedings of a conference in Jamaica 1953, sponsored by FAO WHO and Josiah Macy Jr. Foundation, New York*, Cambridge, University Press, 1953, pp. viii-xiii. Clements, in particular, had long been an advocate for research on protein malnutrition. R. C. Burgess, interview, 12 July 1996.

[200]Ibid., p. 5.

Waterlow explained to the conference participants that the endgame for his laboratory work and that of others was to cure and prevent kwashiorkor. Acknowledging that kwashiorkor was one acute type of protein malnutrition, he justified their work on it by stating that work on the seriously ill baby would be "the quickest way to the heart of the problem."[201] According to Waterlow, he and other clinicians were not disinterested in less severe forms of malnutrition, they just wanted to find the best solution as quickly as possible. As the four-session conference moved on, conflict and uncertainty characterized the proceedings. Dr. Rao of Bombay questioned all previous terminology defining marasmus, kwashiorkor, marasmic kwashiorkor, and protein malnutrition. He called such labels a "compromise" that emerged from the Joint Expert Committee meeting in the Gambia. Rao explained the confusion: "We are still not quite sure what is malnutrition or generalized undernutrition, what is kwashiorkor, whether one is the beginning and the other is the end. That is why we again come back and are begging the question once again."[202] The conference hardly cleared the air on this matter. R. F. A. Dean, who had conducted outstanding research in Uganda for the MRC, refused to use the term 'protein malnutrition' throughout the proceedings.[203]

The focus of Dean's work in Uganda, the use of vegetable proteins in the treatment of kwashiorkor, drew substantial attention, as did the broader issue of treatment regimens. In general, the participants agreed that high-protein was the key to treatment and that locally available sources should be exploited. Gopalan, an Indian, stressed in particular the nature of kwashiorkor's incidence in rural settings, far from hospitals that were providing technically advance aid which included the questionable use of blood transfusions.[204] He and Cicely Williams emphasized simplicity over all other considerations.[205] Williams had continued to exert considerable influence over nutritional policies at the UN agencies, as evidenced in high-level agency correspondence. In a letter from Aykroyd to Heyward, then the Unicef Deputy Director, Aykroyd enclosed a copy of a Williams article and applauded

---

[201]Ibid., pp. 1-2.

[202]Ibid., p. 14.

[203]Ibid., p. 141.

[204]Gopalan was than an increasingly prominent nutritionist on the international scene. After receiving his M.D. from Madras Medical College, he was inspired by the Bengal Famine to pass up a lucrative medical practice in favour of a career in nutrition. From 1946 to 1949 he worked at the MRC as the first Nuffield Foundation Fellow from India. At the time of the conference in Jamaica, he was a Rockefeller Foundation Fellow. C. Gopalan, biodata of C. Gopalan, 1996, Gopalan personal collection.

[205]Ibid., pp. 197, 202.

her emphasis on nutritional education. Aykroyd felt, however, that Williams had exaggerated the potential impact of local educational programmes and overlooked food scarcity and poverty since, based on his experience, "attempts to teach people better habits of diet were discouraging because the response tended to be 'We cannot feed our children and ourselves properly because we have no means of obtaining the right foods'."[206] In spite of his reservations, Aykroyd had marked respect for Williams' thinking as he concluded, "I think that Cicely Williams's article will repay careful study on the part of those of us who are trying to work our policies and programs for improving child nutrition in the under-developed countries."[207] Williams had remained a steadfast proponent of breastfeeding and other basic solutions to malnutrition that she had encouraged on the Gold Coast. In an article she wrote the same year as the Jamaica conference, she lamented how paediatricians continued to neglect malnutrition because much information remained inaccessible.[208] In Williams' view, great strides could be made if medical training covered childhood malnutrition. Her attitudes mirrored those of many of her peers who were enraged by the low status accorded nutritional science by medical schools. Further frustration came from the failure of nutritionists to contextualize appropriately nutritional problems located in the developing world. This western-centrism that informed so much nutritional work at the time was increasingly discussed during the mid-1950s. An editorial in the *Lancet* posited, "it is vital to ensure that the instruction they [doctors] will give relates to the actual dietary habits of the country in which it is to be applied, and not simply to those of the countries which produce most of the textbooks."[209] Unfortunately for local people interested in medicine, they were usually excluded from attendance at medical school; such training was reserved for colonialists except perhaps in the case of Thailand.[210] These opinions inspired FAO's nutrition education policy which had, since 1951, promoted nutrition education training in developing countries.[211]

Waterlow summed up general thinking on protein at the beginning of the Macy Conference when he remarked that "most of us [scientists present] think that protein

---

[206]W. R. Aykroyd, letter to E. J. R. Heyward, Rome, 15 March 1954, FAO Archives, 57.1C1.

[207]Ibid.

[208]Cicely D. Williams, 'Kwashiorkor', *J.A.M.A.*, 5 December 1953, 1280-1285, on p. 1282.

[209]'Better nutrition', *Lancet*, 21 May 1955, 1061-62, on p. 1062.

[210]Nevin S. Scrimshaw, interview, 25 July 1995.

[211]Jean W. McNaughton, 'A review of FAO's activities in nutrition education and training 1949-1977', paper presented at International Conference on Nutrition Education, Oxford, 31 August-7 September 1977, Unicef Archives, PR-NU-002, p. 2.

deficiency in the broad sense is probably the commonest deficiency in the world".[212] At a conference rife with disagreement, no one raised a voice in protest to this contention. Waterlow's comment signalled to all participants and to FAO, WHO, and Unicef, that the tide had fully shifted: protein deficiency, though difficult to diagnose, could be widely considered the greatest nutritional problem facing humankind. His words radiated outward along with the words and studies of his peers and although perhaps they were but opinions, not policy statements, they did guide policy, especially in the case of Unicef. It is crucial to note that most of the scientists involved in such conferences did not view themselves as policy makers in any sense. Clements, the former head of the WHO Nutrition Section, summed up the purpose of this conference when he pointed out that they had not assembled "to solve problems, because they are not solved round a table; nor simply to exchange information, nor to make formal recommendations. I think our main purpose has been to clarify our minds."[213] Clements was not alone in his estimation of such conferences. Aykroyd wrote in an article on FAO that

> The value of international meetings is often questioned...The multiplicity of international meetings, indeed, strains the resources of smaller countries in respect of both personnel and finance...The formal recommendations adopted at international meetings are often of quite secondary significance. If all the recommendations of international meetings had been acted upon, the world would be unrecognisably different.[214]

Certainly, however, recommendations and even discussion points had ramifications. The conference participants in Jamaica, for example, recommended small scale fish processing plants in Chile, funded by Unicef as well as other more elaborate operations.[215] There was no comment made in response by Unicef, however, as the organization was conspicuously unrepresented.

Unicef's Milk

From Unicef's inception through the 1950s, the cornerstone of its nutritional programme and arguably of all its projects, was the milk conservation programme

---

[212]Waterlow, op. cit., note 199 above, p. 16.

[213]Ibid., p. 276.

[214]Aykroyd, op. cit., note 48 above, p. 237.

[215]Waterlow, op. cit., note 199 above, p. 253.

(MCP). Unicef initiated MCP in 1948 in an effort to boost milk supplies and production in war-ravaged countries. Orr's advocacy of milk before the war had solidified the development organizational view that milk was a super-food, capable of providing the most effective nourishment. With the technical expertise of WHO and FAO, Unicef provided equipment and funding for milk pasteurization centres to be established, often jointly with government funding.[216] As was the case with FAO's and WHO's independent nutritional programmes, initial interest remained within European borders. By 1951, however, Unicef consciously transferred its emphasis to developing countries.[217] After MCP had shown success in Europe, Unicef received requests for assistance from Turkey, Israel, Egypt, Latin America, and eventually, Africa. The outcome of these requests was extensive work in the Middle East and fewer projects in Latin America and Africa. While the radically deficient infrastructures of the developing countries challenged Unicef staff to innovate, the project focus remained on distributing milk to school-aged children.[218] Unicef's milk obsession frustrated Aykroyd and his FAO staff terribly. In a letter to FAO's Director-General, Aykroyd explained that Unicef's supplementary feeding programmes had gotten out-of-control after 1949 when "Unicef frequently initiated supplementary feeding programs limited almost entirely to the distribution of skimmed milk, without prior consultation with FAO either at headquarters or in the field."[219] Apparently, however, Unicef was coming around to FAO's perspective on the need to incorporate education into such programmes and to plan for the day when milk contributions ended.[220]

Toward the end of 1953, Maurice Pate, the Executive Director of Unicef, in his 'General Progress Report', expressed frustration about the inability of Unicef milk conservation and mass health campaigns to have any noticeable impact on undernourishment in economically underdeveloped countries. In particular, he felt that Unicef lacked programmes that could be sustained by the countries themselves. Moreover, the limits of MCP had become clear, and the administration, under the tutelage of FAO, decided to pursue other child feeding programmes based on vegetable milk, fish flour, and other emerging products. Only with such developments

---

[216]Ron Hill, 'Unicef history project: milk conservation programme', 1983, New York, Unicef Archives, CF/HIST/-81, pp. 4-6.

[217]'Unicef assistance for child nutrition', op. cit., note 62 above, p. 24.

[218]Hill, op. cit., note 216 above, pp. 15-24.

[219]W. R. Aykroyd, letter to Director-General, 8 January 1952, FAO Archives, 57.1C1.

[220]Ibid.

could Unicef hope to ameliorate the plight of malnourished children.[221] In a gesture emblematic of Unicef's shifting priorities, in1953 it removed the words 'International' and 'Emergency' from its name and became the United Nations Children's Fund.[222] The shift could be easily seen in the realignment of allocations. By 1953 eighty-five percent of Unicef funds was allotted to long-term programmes while the remainder targeted emergency aid; ninety-five percent of all funding was earmarked to aid underdeveloped countries.[223] In the area of infant and childhood malnutrition, Unicef was beginning to stress three main areas: maternal nutritional improvement, distribution of nutritious local foods for infants and children, and nutrition education.[224]

Unicef's perceived need for high-protein fish flour and similar products marked the influence of the nutritionists at FAO and WHO on Unicef policies. Without in-house technical support, Unicef relied on its field staff and FAO and WHO experts for evaluations of nutrition problems, methods of development, and international credibility. While fighting for a permanent extension of Unicef's work in 1953, a Unicef representative reassured the U.S. Congress that Unicef aid was technically sound since "WHO gives technical approval to all health projects prior to voting of aid by the Unicef Board, and FAO gives similar approval to milk conservation and other types of Unicef-aided food conservation projects."[225] Reflecting these strong inter-organizational bonds, Pate commented in 1955 that although it was not Unicef's place to develop new high-protein foods such as soybeans, and peanut and cottonseed flours, "Unicef obviously has a strong interest in seeing this developed under the stimulation and co-ordination of FAO, or FAO and WHO."[226] Thus, as the development of other protein solutions progressed slowly, milk remained the central component of Unicef's nutritional work. As U.S. milk surpluses skyrocketed, Unicef decided to take advantage of the supply and provide for long-term (minimum of 4 years) feeding programmes which sought to use milk as a springboard for community-wide nutrition education. The scope of the milk project, which was most prominent in

---

[221]Maurice Pate, 'Executive Director's General Progress Report', New York, September 1953, E/ICEF/236, p. 4.

[222]See: Sir Robert Jackson, 'Foreword', in Black, op. cit., note 42 above, p. 10.

[223]See: Martha M. Eliot, 'Martha M. Eliot, U.S. Representative on the Executive Board, Statement to Congressional Committee', 1953, Unicef Archives, CF-NYH-09R.H1/C/02.09, box T006, pp. 1, 10.

[224]'The improvement of child nutrition with special reference to inter-agency action', 3 February 1953, New York, E/ICEF/217, p. 8.

[225]See: Eliot, op. cit., note 223 above, pp. 12-13.

[226]Maurice Pate, 'Executive Director's general progress report', New York, February 1955, E/ICEF/281, pp. 19-20.

Central America, was enormous. Unicef's feeding programmes accounted for fifteen percent of the global annual export of dried milk.[227] In spite of ongoing criticism of milk projects, school feeding remained popular. At a Unicef Regional Directors' reunion, one participant presented the pros and cons of school feeding and asked whether Unicef should increase its commitment to such projects. His evaluation concluded that the pros outweighed the cons and that the effort should further expand.[228]

As was apparent in the reports of the first few meetings of the Joint FAO/WHO Expert Committee on Nutrition, protein needs of children permeated nutrition thought. A programme that did not address protein deficits, according to the experts, would be of no use. Thus, in 1954, Pate noted that Unicef had pumped up its skim milk operation and had distributed one quarter of the U.S. milk surplus -- nearly 100 million pounds of dry skim milk powder. Further, contacts with officials in Africa began reflecting promising possibilities for future co-operation.[229] A year later, however, it was apparent that at least as far as Unicef-aided milk plants were concerned, Africa was the laggard. Out of 121 operational Unicef-assisted plants, none was in Africa, and out of 171 authorized, only one was in Africa and only 26 were in developing nations.[230] Pate remarked that "while a dry milk surplus and unused capacity for milk drying exist in several countries, at the same time large number of children in other countries lack sufficient amounts of high quality protein, such as contained in dried skim milk."[231] Dried skim milk, believed Unicef, was the best manner to improve childhood nutrition in the countries where Unicef operated. Moreover, the steady supply of U.S. government surplus assured at least short-term distribution to other childhood nutritional programmes. In spite of the abundance of milk, the Executive Director stressed the development of alternative protein products which could make "a significant impact on the long-range problem of protein malnutrition in children in underdeveloped countries".[232]

---

[227]'Unicef assistance for Child Nutrition', op. cit., note 62 above, p. 25.

[228]David R. Hunter, 'Is school feeding a type of program on which Unicef should concentrate more than it does now?', New York, presentation at Regional Directors' Conference, 30-31 March 1953, Unicef Archives, CF-NYHQ-05ANS-002, pp. 1-2.

[229]Maurice Pate, 'Executive Director's General Progress Report', New York, February 1954, E/ICEF/248, p. 6.

[230]Pate, op. cit., note 226 above, p. 13.

[231]Ibid., p. 15.

[232]Maurice Pate, 'Executive Director's General Progress Report', New York, July 1955, E/ICEF/300, p. 39.

Forging Hunger Programmes in the Developing World

Scientists in the 1950s who staked an interest in the improvement of health conditions in the developing world found themselves in a developmental quandary involving quick-fix solutions and long-term, horizontal planning. Historian Anne Hardy has argued that in the early-1940s, as malnutrition emerged as an international problem, "technical solutions by no means replaced structural planning as the dominant ethos of the international nutrition community."[233] Although the same clearly held true for the 1950s, technical solutions certainly maintained an advantage. While FAO and WHO consultants were constantly firing a barrage of ideas at their respective nutrition departments, few had palpable holistic alternatives to supersede the popular vertical solutions of the day. FAO was exceptionally frustrated by Unicef and WHO's association with its supplies. Jean Ritchie, a British nutritionist working in the field for FAO, wrote Aykroyd of her difficulties in Bangkok:

> in the minds of the Public Health Departments and Governments in general the Unicef's supplies of D.D.T., dried milk etc. are associated with WHO, who get credit for bearing gifts with them. Until we have something to offer in the way of laboratory equipment or other such supplies associated with TA [technical assistance] personnel, the competition will be tough.[234]

Thus, in spite of widespread rhetorical support for broad-based horizontal structures, tangible results in the form of fertilizer, milk distribution, immunization, and nutritional education were associated with success. Although these methods were couched rhetorically in terms of broader, horizontal programmes, the UN agencies found the latter expensive and difficult to implement and manage. Unicef's decision to promote milk supplementation emerged from the U.S. government's offer of millions of pounds of surplus dried skim milk that **could** save lives. Could the administration, on the grounds of principle, turn down this life-saving substance? The answer was a resounding, though initially reluctant, no. Unicef staff understood the possibility that this dried skim milk supply could evaporate and leave behind no lasting improvements. Aykroyd at FAO had stressed that only temporary results would be achieved and that

---

[233]Hardy, op. cit., note 21 above, p. 62.

[234]Jean Ritchie, letter to W. R. Aykroyd, Bangkok, 28 October 1950, FAO Archives, 57.0A1, p. 2.

few of the neediest children would be benefited.[235] However, Unicef chose to move onward and try to incorporate milk into horizontal programming.

A few scientists hailed horizontal solutions as the only worthwhile methodology for meaningfully improving nutritional status. Not surprisingly, the small number who had extensive experience in the field making observations on a village level were the leading proponents of such action. Platt, a leading Africanist, was an exceptionally articulate advocate for thoughtful plans to prevent malnutrition. Like his peers at FAO, WHO, and Unicef, Platt was baffled by the complexity and knowledge required for effective programmes. In 1952 he pessimistically declared that "experience of the application of knowledge about the prevention of malnutrition in rural African communities is so meagre [that the topic can scarcely be approached]."[236] Coming from one of the most prominent and seasoned nutritionists, these words summed up the virgin nature of effective development programmes. Nevertheless, Platt did not abandon thoughts of engaging in development work that operated on a village level though he readily acknowledged the need for the spheres of horizontal and vertical improvements to overlap: "it is rapidly being realized that technical authorities must be well-informed about conditions in the villages in which they work."[237] In a similar context, Platt criticized the development establishment's designation of ignorance (of indigenous peoples) as the cause of poor development and assigned the blame equally to the government officials and authorities with influence on nutritional issues.[238]

Although lacking a solid basis for action, Platt and others energetically promoted the improvement of health for mothers and children in the developing world as the central priority for international health work. According to their arguments, healthy women could improve food supplies and practice responsible breastfeeding to play a major role in development.[239] D. B. Jelliffe, a nutrition consultant for WHO and physician with extensive experience in Sudan, Nigeria, and India, recognized that infant nutrition was a central nutritional concern in developing countries and through WHO published his classic monograph on the subject, *Infant Nutrition in the*

---

[235]W. R. Aykroyd, 'Statement to the Executive Board, Unicef', 28 November 1950, FAO Archives, RG 57.1 series H1, p. 3.

[236]B. S. Platt, 'Malnutrition In African Mothers, Infants and Young Children', in *Report of the Second Inter-African (C.C.T.A.) Conference on Nutrition*, Gambia, 1952, 15-26, on p. 15.

[237]Ibid., p. 17.

[238]Ibid., pp. 20-21.

[239]For a summary of Platt's views on breastfeeding, see: B. S. Platt, 'Infant-feeding practices breast feeding and the prevention of infant malnutrition', *Proceedings of the Nutritional Society*, 1954, 13(2), pp. 94-105.

Subtropics and Tropics. Jelliffe approached the problem with a sharp, confident rhetorical style that sought to overturn the direct application of industrialized countries' medical principles to the developing world. He began his tome with the following: "A knowledge of the present situation clearly shows that it is quite useless to expect the standard Western-style textbook instructions on infant feeding to have any significance for most children in these parts of the world, who easily form the numerical majority of the global child population."[240] Jelliffe resented the use of technologies from industrialized countries in developing countries and pleaded for a culturally sound approach that would, as Platt had suggested, pay attention to communal needs and customs. Further, Jelliffe avoided placing the colossal emphasis on kwashiorkor that his peers had, and instead placed it in the wide spectrum of ills that befall malnourished children. This move sought to focus community health workers and scientists on the need for maternal and child health (MCH) centres and the need for improved infant feeding instead of the previously short-sighted focus on the aetiology of kwashiorkor.[241]

Platt's ideology, in contrast to Jelliffe's, was less certain and resonated with more idealism and less science. Platt often cited statistics that showed that up to half of all children born in the developing countries died before reaching the age of ten. Inspired by such morbid figures he asked, "Can we stand aloof and ignore this appalling state of affairs?...Why indeed has attention not been given to this before now?" In response to this question Platt explained "that the facts were not, until recently, sufficiently well established."[242] In the mind of Platt and others, the time had finally come for developmental action. Orr had initially wanted food distribution mixed with technological improvements which he believed would later lead to indigenous production. In contrast, Platt placed full emphasis on boosting indigenous production. As they had with Orr's ideology, the nutritional scientists found Platt's ideas too large to swallow. They decided to continue focusing their efforts on protein malnutrition -- treating it as the key to broader developmental progress. Agreement

---

[240]D. B. Jelliffe, *Infant Nutrition in the Subtropics and Tropics*, Geneva, WHO, 1955, p. 7.

[241]For the seminal reference work on kwashiorkor from this time period, see: H. C. Trowell, J. N. P. Davies, and R. F. A. Dean, *Kwashiorkor*, London, Edward Arnold Ltd., 1954.

[242]B. S. Platt, 'The malnourished community: care of mothers and children as a first step towards improved feeding', *Lancet*, 6 November 1954, pp. 929-31. Platt was notably a protein malnutrition expert in his own right. See: B. S. Platt, 'Protein malnutrition', *Lectures on the Scientific Basis of Medicine, Volume IV: 1954-1955*, London, Athlone Press, 1956, pp. 145-66.

came from many forums. An editorial in the *Lancet* applauded work on protein requirements and encouraged more of it.[243]

WHO

Although WHO played a major role in conferences and committees prior to 1955, it did not dwell on nutrition with the verve that FAO and Unicef had, and has thus played a relatively minor role in this history so far. In 1951, Robert Burgess replaced Clements as head of the Nutrition Section. Burgess, trained in medicine and public health, had worked before W.W.II in Malaysia with the Colonial Medical Service. While investigating malaria, he found that the role of malnutrition in morbidity and mortality was overlooked. Burgess became frustrated that his colleagues were "more interested in the parasite than in overall health."[244] At WHO, Burgess felt that the agency leadership was not very supportive or understanding of nutrition issues.[245] Nevertheless, under his leadership, by 1955, the tone and conception of nutrition in the Nutrition Section began to wax philosophic as its experts attempted to set WHO apart from the other two organizations. According to a consummate WHO document on its nutritional programme, in contrast to public health workers who focused on practical health work, "nutrition workers were devoted mainly to research into physiological and biochemical problems, and to the discovery of new facts and new nutritive factors on which an explanation of certain nutritional phenomena could be based."[246] While WHO acknowledged that such scientific work had had significant applications, the staff feared that nutrition itself had become sequestered from broader public health programmes in the developing countries. Considering the new knowledge of nutrition that could be applied in the developing countries, WHO believed that the time had come for its Nutrition Section to concentrate on specific nutrition programmes under the umbrella of its public health services.[247] WHO seemed concerned with projects that had tangible improvements in health and nutrition and indirectly condemned FAO for its tendency to stress the establishment of laboratories for food analysis, which produced feeble and expensive

---

[243]'Better nutrition', op. cit., note 209 above, pp. 1061-62.

[244]R. C. Burgess, interview, 11 July 1996.

[245]Ibid.

[246]'Outline of Nutrition Programmes in Public Health, Notes on the fight against malnutrition in the field of public health', op. cit., note 106 above, p. 1.

[247]Ibid.

results.[248] On the topic of kwashiorkor, WHO asserted that although considerable work had been done on the natural history of the disease and its treatment, the problem of prevention had not been approached in a meaningful manner.[249]

While WHO may have desired improved programmes for attacking hunger, it certainly had decided by 1956 that the centrepiece of any such programme would be protein. FAO shared this view wholeheartedly, declaring at a committee meeting in Rome that protein was "perhaps the most important of the nutrients needed by human beings and other organisms".[250] Like WHO, FAO felt that increased knowledge had endowed the organization with increased responsibilities for improving the world protein problem.[251] The presence of protein enthusiast Scrimshaw as WHO representative at this FAO committee meeting revealed that WHO's and FAO's perspectives were not fundamentally different, and there was a constant flow of information between their nutrition divisions. Like WHO, FAO too was searching for the next step in the battle to alleviate global malnutrition. Many of the programmes to date had been sub-optimally effective. In the report of a FAO/WHO nutrition seminar, the final evaluation was characteristically bleak. After two FAO/WHO workers travelled nine months in twenty-two countries to find the sixty participants, many of the participants reported "they would probably not be able to bring about any changes in their agencies at home" though they would change their personal approach to nutrition problems.[252] Such reports undoubtedly inspired WHO and FAO to change their personal approach to nutrition problems as well.

Princeton and the Protein Advisory Group (PAG)

A Macy meeting of thirty biochemists, nutritionists, paediatricians, and scientists in Princeton, New Jersey in 1955, sowed the seeds for the establishment of what would be perhaps the most influential group in nutrition work: the PAG. At the first Macy conference in Jamaica, described in this chapter, protein malnutrition and kwashiorkor comprised the centrepiece of discussion. At the Princeton conference, the same issues dominated and the conference urged the formation of an advisory

---

[248]Ibid., p. 3.

[249]Ibid., p. 37.

[250]*Protein Requirements I. Report of the FAO Committee, Rome 24-31 October 1955*, Rome, FAO, FAO Nutritional Studies no. 16, 1957, p. 47.

[251]Ibid., p. 2.

[252]F. W. Clements, *Report of an International Seminar on Education in Health and Nutrition in Baguio, Philippines*, Rome, FAO, FAO Nutrition Meetings Report Series no. 13, 1956, p. 76.

group that would function autonomously and make recommendations about all aspects of indigenously available protein sources.[253] Unicef coverage of the conference highlighted the high confidence held for the scientific possibilities of addressing protein malnutrition. History was made in Princeton -- though the laymen would not know it -- at least according to one overbearing Unicef press release: "Had you been in Princeton you would not have known that anything of importance was afoot. Had you even been in the conference room you would not have found much to excite you for there was little brilliance of oratory and no world-shattering decisions."[254] Nonetheless, at UN agency headquarters, the conference was hyped as a breakthrough for nutritional work.[255]

Following the Princeton conference, WHO, which had played a notably lesser role than Unicef and FAO in nutrition policy, planning, and programmes to date, took the initiative in 1955 of establishing a group of clinical nutritionists -- called the PAG -- to provide expert advice to FAO, WHO, and Unicef on emerging low-cost, high-protein weaning foods. At first, Aykroyd at FAO was reluctant to support such a group, believing that the technical agencies on their own could develop the foods. FAO was already attempting to procure an arrangement with Unicef for a dubious fish flour project in Chile. During an argument over technical expertise between Aykroyd and R. C. Burgess, Burgess asked Aykroyd, "'would you feed this stuff to your own child?'"[256] Aykroyd then backed down and agreed that a group of experts would be necessary. A small group of scientists also backed the plan and lobbied the agencies to support it. WHO's Director-General, Candau, was initially attracted to the concept but only after hearing Scrimshaw's enthusiasm did the plans for the group move forward. FAO could do little more than summon passive approval for the group since its leadership feared that its technical staff would be subjugated. Unicef had just recently received rather poor advice on protein from FAO and was therefore anxious to see a respectable, authoritative group consider the topic. Thus Unicef provided the PAG with an initial grant of $300,000 for its research, and the Rockefeller Foundation

---

[253]William J. Darby, 'Beginnings of PAG', in A. Sachs and P. Cormier (eds), *The PAG Compendium: The Collected Papers Issued by the Protein-Calorie Advisory Group of the United Nations System, 1956-1973*, New York, Worldmark Press, Ltd., 1975, p. xv.

[254]'Away from the TV cameras: world scientists discuss malnutrition', Princeton, Unicef, UN Archives, CF9D 79, folder A023.

[255]See 'Princeton conference on malnutrition', New York, *Unicef Staff News*, no. 174, 1 July 1955, pp. 3-6.

[256]R. C. Burgess, interview, 11 July 1996.

allocated an additional $550,000.[257] This early financial support assured the PAG of short-term influence and support. William J. Darby, the chairman of the department of nutrition at Vanderbilt University, served as the first co-ordinator and chairman of the PAG, and in that capacity worked hard to expand its size and influence.[258]

FAO and Unicef, although they posted observers at all PAG meetings, waited until 1960 to become full sponsors.[259] The PAG telegraphed to WHO, FAO, Unicef, and the UN, that protein was to be the foundation of most nutrition programmes from then on. The impressive roster of PAG members unmistakably reflected the direct line FAO and Unicef leadership had into the group. Its first members numbered six: Darby, György, King, Sebrell, Holt, and Platt. They designed and prepared the first *PAG Bulletin* which, in January 1956, was received by a small audience at WHO, FAO, and Unicef headquarters.[260] Although its formation emanated from a WHO initiative, the barrage of protein rhetoric that had come from all three organizations during the previous six years had primed the pump for vastly expanded protein activity. While the PAG influenced much of nutritional thought focused on the developing world during the subsequent years, other platforms which broadly addressed child nutritional problems continued, often outside the PAG's sphere.

Conception of Aid

Although this chapter began with Orr's idealistic aims for ending hunger still hanging in the tapestry of international debate after the war, such rhetoric rapidly dissipated during the following years. It would be a myopic reading of history to suggest that FAO, WHO, and Unicef took full responsibility for the state of hunger in the world and sought to conquer it. Although rhetorically their constitutions do assume such roles for their administrations, the UN and its member governments did not wish to endow these agencies with the broad powers that would provide opportunities to affect sweeping global development. In the UN's view, these agencies had been established in order to catalyse and aid development that countries

---

[257]William J. Darby, 'History of PAG', in A. Sachs and P. Cormier (eds), *The PAG Compendium: The Collected Papers Issued by the Protein-Calorie Advisory Group of the United Nations System, 1956-1973*, New York, Worldmark Press, Ltd., 1975, p. xxiv.

[258]William Darby, interview, 28 January 1996.

[259]Nevin S. Scrimshaw, 'Introduction', in A. Sachs and P. Cormier (eds), *The PAG Compendium: The Collected Papers Issued by the Protein-Calorie Advisory Group of the United Nations System, 1956-1973*, New York, Worldmark Press, Ltd., 1975, p. xiii.

[260]Darby, op. cit., note 253 above, p. xv.

consciously wished to pursue. The commitment the agencies felt toward nutrition was reflected in the funding levels at FAO, WHO, and Unicef. While budgets at these organizations expanded meteorically during their first years, their nutrition allocations remained low. FAO spending on its Nutrition Division represented only 5-6% of its total expenditures and consistently had the smallest budget of the five FAO divisions.[261] WHO, with a total budget approximating FAO's, gave its Nutrition Section an even smaller percentage, roughly 2-3% of its total budget throughout the 1950s.[262] Between 1947 and 1959, roughly ten percent of Unicef's budget targeted nutrition while the remainder was split between child health programmes (services and mass campaigns) and emergency relief.[263]

Speaking in 1956 at a symposium on the nutritional work of the three agencies, P. Dorolle, Deputy Director-General of WHO, summed up the pragmatic sentiment which characterized the agencies' general views, and their opinion of nutritional issues. He explained that these organizations were not empowered to "give direct services to the people of the world. Each government is responsible for the welfare of its people; international organizations, when the governments ask them, help governments to carry out that responsibility."[264] Dorolle continued, "The international organizations also do work that has a more general application. They prepare international agreements, establish standards and collect and publish information."[265] Thus, in Dorolle's view, these agencies had a rather limited and passive advisory role in the formation of nutritional programmes and policies. Dorolle's words represent the shot of realism FAO, WHO, and Unicef had to contend with after their initial years of excitement and post-war reconstruction. Nutrition, in particular, presented them with chronic problems that could scarcely be addressed by a few tactical projects such as those that had staved off epidemics in Europe and prevented massive starvation there as well.

---

261 *Report of the 8th Session of the Conference 4-25 November 1955*, Rome, FAO, March 1956, p. 114. In 1957, $986,780 out of FAO's $15,380,820 budget went for nutrition. *Yearbook of the United Nations 1957*, Office of Public Information, United Nations, New York, 1958, p. 437.

262 Figures extracted from *Official Records of WHO*, 1950-1960, and from *The First Ten Years of the World Health Organization*, Geneva, WHO, 1958. See also: J. M. Bengoa, personal correspondence, 15 February 1996. In 1957 WHO's budget was $18,425,093. *The First Ten Years of the World Health Organization*, Geneva, WHO, 1958, p. 523.

263 Ilercil, op. cit., note 63 above, pp. 40/1. Unicef's annual budget figures are misleading since more than half the budget was designated for emergency relief. That aside, its budget was nearly the same as WHO and FAO. See also: Black, op. cit. note 42 above, pp. 492-94.

264 P. Dorolle, op. cit., note 67 above, p. 2.

265 Ibid.