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WASHINGTON, D.C. 20548

FOR HEARINGS
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STARTING
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STATEMENT FOR THE RECORD
HENRY ESCHWEGE, DIRECTOR
COMMUNITY AND ECONOMIC DEVELOPMENT DIVISION

FOR THE
SUBCOMMITTEE ON SCIENCE, RESEARCH, AND TECHNOLOGY
OF THE HOUSE COMMITTEE ON SCIENCE AND TECHNOLOGY

HSE03506

ON

[NUTRITION RESEARCH METHODS AND TECHNOLOGY]

MR CHAIRMAN AND MEMBERS OF THE SUBCOMMITTEE

WE ARE PLEASED TO SUBMIT THIS STATEMENT FOR YOUR CON-
SIDERATION DURING THESE HEARINGS ON HUMAN NUTRITION. WE
BELIEVE THESE HEARINGS ON NUTRITION RESEARCH METHODS AND
TECHNOLOGY ARE VERY TIMELY AND IMPORTANT BECAUSE THEY
ADDRESS SOME OF THE BASIC REASONS FOR THE PRESENT LACK OF
NUTRITION INFORMATION AND THE RELATED APPLICATION OF SUCH
KNOWLEDGE TO THE GENERAL, AS WELL AS TARGETED POPULATION
GROUPS, FOR PREVENTING NUTRITIONAL PROBLEMS AND MAIN-
TAINING A HEALTHY POPULATION. THESE HEARINGS WILL AD-
DRESS THE RESEARCH NEEDS, THE EFFORTS OF THE FEDERAL
RESEARCHERS IN ADDRESSING THESE NEEDS, AND, HOPEFULLY
WHAT CAN BE DONE TO CREATE THE PROPER ENVIRONMENT FOR
MORE RAPIDLY DEVELOPING THE NEEDED RESEARCH TOOLS AND
DATA.

THE INFORMATION PRESENTED IN THIS STATEMENT IS BASED
ON OUR ONGOING REVIEWS AND ON SEVERAL OF OUR PAST REPORTS

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ON FEDERAL HUMAN NUTRITION ACTIVITIES WHICH WE PREPARED FOR YOUR SUBCOMMITTEE AND OTHER COMMITTEES (SEE APPENDIX I.) BESIDES COVERING THE AREAS INCLUDED IN THESE HEARINGS ON FOOD COMPOSITION, NUTRIENT BIOAVAILABILITY, AND NUTRITION SURVEILLANCE, WE HAVE ALSO REPORTED ON AREAS OF HUMAN NUTRITION RESEARCH, NUTRITION STANDARDS SUCH AS THE RECOMMENDED DIETARY ALLOWANCES, NUTRITION EDUCATION AND INFORMATION, FOOD CONSUMPTION SURVEYS, FOOD LABELING, AND FOOD ASSISTANCE PROGRAMS SUCH AS THE SCHOOL LUNCH AND SCHOOL BREAKFAST PROGRAMS.

IN REVIEWING NUTRITION RESEARCH AND OTHER ACTIVITIES, WE (1) OBTAINED THE VIEWS OF MANY INDIVIDUALS ACTIVE IN RESEARCH, TEACHING, OR PRACTICE, (2) EXAMINED AVAILABLE STUDIES ON NUTRITION, AND (3) INTERVIEWED OFFICIALS AND OBTAINED DATA FROM THE VARIOUS FEDERAL AGENCIES SUPPORTING HUMAN NUTRITION ACTIVITIES.

THE NUTRITION ENVIRONMENT

FIRST WE WOULD LIKE TO REVIEW THE ENVIRONMENT OF HUMAN NUTRITION AND THEN PRESENT SOME OF OUR FINDINGS ON THE NUTRITION TOPICS YOU ARE COVERING DURING THESE HEARINGS

NUTRITION PLAYS A VITAL ROLE IN HEALTH STATUS THROUGHOUT LIFE AND GOOD NUTRITION IS MORE THAN SIMPLY GETTING THOSE NUTRIENTS CONSIDERED ESSENTIAL. WITH THE DISAPPEARANCE OF MAJOR NUTRITIONAL DEFICIENCY DISEASES IN THE UNITED STATES, NUTRITION RESEARCH HAS TURNED TO MORE ELUSIVE PURSUITS SUCH AS THE EFFECTS OF DIET ON HUMAN INTELLECT AND LIFE SPAN. THE JOB OF IDENTIFYING AND CHARACTERIZING THE MINIMUM REQUIRE-

MENTS OF SPECIFIC NUTRIENTS IS AN IMPORTANT AND UNCOM-
PLETED TASK. NUTRITION NOW INCLUDES FOOD AND NUTRIENT
EXCESSES AS WELL AS DEFICIENCIES. AS A CONSEQUENCE
/ HUMAN NUTRITION RESEARCH HAS BECOME COMPLEX AND MULTI-
DISCIPLINARY. /

THREE FACTORS UNDERLIE AND EMPHASIZE THE BROADENING
SCOPE OF HUMAN NUTRITION IN THE UNITED STATES FIRST, / IT IS
APPARENT THAT THE BEST HOPE FOR ACHIEVING ANY SIGNIFICANT
EXTENSION OF LIFE EXPECTANCY LIES IN THE AREA OF DISEASE
PREVENTION. DIET AND NUTRITION ARE MAJOR FACTORS IN PREVENT-
ING DISEASE AND OTHER HEALTH PROBLEMS. SECOND, THE ECONOMIC
COSTS OF HEALTH CARE AND DISEASE ARE A LARGE AND GROWING
BURDEN ON THE NATION'S RESOURCES IMPROVING THE AMERICAN
DIET COULD HELP EASE THAT BURDEN. ~~FINALLY~~, AN AMERICAN
PUBLIC SENSITIVE TO HEALTH AND NUTRITION IS VULNERABLE TO FADS
AND UNSUPPORTABLE CLAIMS PROMOTING VARIOUS DIETARY SUBSTANCES
AND PRACTICES, A PUBLIC THAT IS EXPOSED TO A PROLIFERATION
OF DIET BOOKS; A SEDENTARY PUBLIC THAT REQUIRES FEWER CALORIES,
BUT NEEDS THE SAME AMOUNT OF NUTRIENTS, AND A PUBLIC THAT CAN
CHOOSE FOODS FROM AMONG THOUSANDS OF FOOD ITEMS. / AS A MATTER
OF PUBLIC HEALTH POLICY, WE HAVE PREVIOUSLY RECOMMENDED THAT
THE GOVERNMENT SHOULD PROVIDE AUTHORITATIVE DIETARY GUIDANCE
FOR THE CONSUMER. (SEE GAO REPORT, "RECOMMENDED DIETARY
ALLOWANCES MORE RESEARCH AND BETTER FOOD GUIDES NEEDED,"
CED-78-169, NOVEMBER 30, 1978.)

FOOD COMPOSITION AND NUTRIENT BIOLOGICAL AVAILABILITY

IT IS ESTIMATED THAT 35,000 PROCESSED FOOD ITEMS ARE AVAILABLE TO THE AMERICAN CONSUMER. AGRICULTURAL FOOD COMMODITIES ARE SUBJECT TO CONSIDERABLE VARIATION IN NUTRIENT COMPOSITION DUE TO GENETIC AND CLIMATIC FACTORS AND ARE EXPOSED TO TECHNIQUES OF MODERN FOOD PROCESSING, STORAGE, AND COOKING WHICH CAN AFFECT THEIR COMPOSITION AND NUTRITIONAL CONTRIBUTION TO THE DIET. IF STANDARDS FOR HUMAN REQUIREMENTS ARE TO HAVE PRACTICAL APPLICATIONS, MORE CURRENT KNOWLEDGE OF THE NUTRIENT COMPOSITION OF FOODS AS CONSUMED AND EXTENT THAT NUTRIENTS ARE BIOLOGICALLY AVAILABLE FOR ABSORPTION AND DIGESTION IS ESSENTIAL. BASED ON A MARCH 1978 GAO REPORT, "FEDERAL HUMAN NUTRITION RESEARCH NEEDS A COORDINATED APPROACH TO ADVANCE NUTRITION KNOWLEDGE" (PSAD-77-156, MARCH 28, 1978), AND ON OUR ONGOING WORK IN THE AREA, WE BELIEVE ADDITIONAL RESEARCH IS NEEDED TO UPDATE AND EXPAND FOOD COMPOSITION DATA AND TO DEVELOP IMPROVED AND INEXPENSIVE METHODS FOR DETERMINING FOOD COMPOSITION AND THE BIOLOGICAL AVAILABILITY OF NUTRIENTS.

MORE CURRENT AND COMPREHENSIVE FOOD COMPOSITION DATA ARE NEEDED

CURRENT AND COMPREHENSIVE INFORMATION ON FOOD COMPOSITION IS IMPORTANT FOR PLANNING DIETS TO MEET NUTRITIONAL REQUIREMENTS. FOOD COMPOSITION TABLES SHOULD IDEALLY INCLUDE INFORMATION ON THE BIOLOGICAL AVAILABILITY OF NUTRIENTS IN FOODS AS WELL AS THE NUTRIENT COMPOSITION OF FOODS CONSUMED FOR EXAMPLE, THE IRON CONTENT OF A CERTAIN FOOD

IS ONLY PART OF THE NEEDED DATA. INFORMATION ON THE BIOLOGICAL AVAILABILITY OF IRON IS ALSO IMPORTANT BECAUSE IRON IN MEATS IS ABSORBED BY THE BODY FAR MORE EFFICIENTLY THAN THE IRON IN CEREALS. U.S. DEPARTMENT OF AGRICULTURE (USDA) TOLD US THAT ALTHOUGH IT IS A DESIRABLE GOAL TO INCLUDE BIOLOGICAL AVAILABILITY INFORMATION IN TABLES OF FOOD COMPOSITION, IT SHOULD BE RECOGNIZED THAT THERE IS NO CLEAR-CUT BASIS FOR REPORTING THE AVAILABLE PORTION OF A NUTRIENT BECAUSE MANY IMPORTANT FACTORS AFFECT UTILIZATION. WE FOUND THAT PRESENT COMPOSITION TABLES, HOWEVER, ARE OUT OF DATE AND INCOMPLETE AND DO NOT INCLUDE DATA ON SEVERAL NUTRIENTS AND FOODS.

USDA'S AGRICULTURE HANDBOOK #8 "COMPOSITION OF FOOD--RAW, PROCESSED, PREPARED," WHICH INCLUDES COMPOSITION VALUES FOR SOME 2,500 FOODS, WAS LAST REVISED COMPLETELY IN 1963; CURRENTLY IT IS BEING REVISED THE HANDBOOK CONTAINS VALUES FOR ONLY A LIMITED VARIETY OF NUTRIENTS MOREOVER, WE BELIEVE THE COMPOSITION VALUES SHOULD MORE CLOSELY REFLECT THE NUTRIENTS OF FOODS AS CONSUMED RATHER THAN AS PURCHASED

ADDITIONAL STUDIES ARE NEEDED TO DETERMINE THE EFFECT OF PROCESSING (ESPECIALLY NEWER METHODS OF PROCESSING) ON THE NUTRIENTS OF FOODS SO THAT COMPOSITION VALUES TAKE INTO ACCOUNT NUTRIENT LOSSES OCCURRING BEFORE CONSUMPTION FOR EXAMPLE, THAWING OR COOKING RESULTS IN LOSS OF CERTAIN NUTRIENTS, SUCH AS VITAMIN C THE CURRENT REVISION OF HANDBOOK #8,

WHICH STARTED WITH THE PUBLICATION OF THE DAIRY AND EGG SECTION IN NOVEMBER 1976, INTENDS TO CORRECT MANY OF THE DEFICIENCIES. WE WERE ADVISED THAT IT WILL PROVIDE UPDATED INFORMATION ON MANY MORE FOODS AND NUTRIENTS, INCLUDING FATTY ACIDS, AMINO ACIDS, AND ADDITIONAL VITAMINS AND MINERALS. USDA OFFICIALS SAID THAT EVEN WITH AN EXPANDED AND REVISED TABLE OF FOOD COMPOSITION, THERE WILL STILL BE AREAS OF INCOMPLETENESS BECAUSE OF THE LACK OF DATA FOR SOME NUTRIENTS IN SOME FOODS. USDA OFFICIALS ALSO TOLD US THEY ARE INITIATING FOUR PILOT PROJECTS TO PROVIDE MORE COMPLETE DATA ON VEGETABLES, FRUITS, LEGUMES, AND "FOOD AS EATEN" SUCH AS RAW, CANNED, AND FROZEN FOODS. THE OBJECTIVE OF EACH OF THESE FOUR PROJECTS WILL BE TO DETERMINE THE CONTENT OF ALL NUTRIENTS WITH ESTABLISHED RECOMMENDED DIETARY ALLOWANCES, AND THE MAGNITUDE AND THE VARIATION OF THE NUTRIENTS.

ONLY 7 OF 15 ESSENTIAL MINERAL ELEMENTS ARE INCLUDED IN THE USDA STANDARD REFERENCE TABLES, AND ONLY FRAGMENTARY COMPOSITION DATA EXIST ON SEVERAL ESSENTIAL VITAMINS AND CERTAIN CARBOHYDRATES. IN ADDITION, NEW STRAINS OF FRUITS AND VEGETABLES, WHICH ARE HARDIER AND MORE RESISTANT TO PESTS, PRODUCED BY DIFFERENT METHODS, ARE REPLACING STRAINS FOR WHICH NUTRIENT COMPOSITION HAD BEEN KNOWN. HIGH-TEMPERATURE, SHORT-TIME CANNING, NEW DEHYDRATION AND FREEZING TECHNIQUES, CONTINUOUS DOUGH TECHNIQUES FOR BREAD, AND HYDRO-COOLING OF PRODUCE IN THE FIELD EXEMPLIFY INNOVATIONS IN FOOD INDUSTRY PRACTICES THAT HAVE UNKNOWN EFFECTS ON NUTRIENT COMPOSITION. SIMILARLY,

PRECOOKED FROZEN FOODS, MICROWAVE HEATING, AND BOIL-IN-THE-BAG COOKERY ARE PREPARATION METHODS WHOSE EFFECT ON NUTRIENT COMPOSITION HAS NOT BEEN ASCERTAINED

MORE INFORMATION ON NUTRIENT BIOLOGICAL AVAILABILITY IS NEEDED

THE USEFULNESS OF FOODS, EVEN WITHIN THE SAME CATEGORY, VARIES TO THE EXTENT THAT NUTRIENTS ARE BIOLOGICALLY AVAILABLE FOR ABSORPTION AND DIGESTION / THE BIOAVAILABILITY OF A NUTRIENT REFERS TO THE DEGREE THAT A NUTRIENT, ONCE CONSUMED IN THE FORM OF FOOD, BECOMES AVAILABLE TO AND USEABLE BY THE BODY BIOAVAILABILITY DEPENDS ON SEVERAL FACTORS. ONE FACTOR IS THE TYPE OF FOOD PROVIDING THE NUTRIENT FOR EXAMPLE, HEME IRON, THE TYPE FOUND IN RED MEATS, IS ABSORBED FAR MORE EFFICIENTLY THAN THE IRON IN CEREAL FOODS A SECOND FACTOR IS THE OVERALL COMPOSITION OF THE DIET FOR EXAMPLE, IRON IS ABSORBED MORE EFFICIENTLY WHEN ASCORBIC ACID FROM OTHER FOODS IS PRESENT.

APART FROM BEING LIMITED IN THEIR COVERAGE OF NUTRIENTS AND FOODS AND FAILING TO CONSIDER NUTRIENT LOSSES, COMPOSITION TABLES DO NOT DISTINGUISH BETWEEN THOSE NUTRIENTS THAT ARE BIOLOGICALLY AVAILABLE FOR ABSORPTION AND DIGESTION AND THOSE THAT ARE NOT PRESENT COMPOSITION TABLES GENERALLY GIVE A TOTAL VALUE FOR A NUTRIENT EVEN THOUGH A LARGE PORTION MAY BE NUTRITIONALLY USELESS IN SOME CASES, A NUTRIENT'S CHEMICAL FORM CAN AFFECT ITS BIOLOGICAL AVAILABILITY ONE FORM OF VITAMIN E, FOR EXAMPLE, IS MORE BIOLOGICALLY USEFUL

THAN OTHER FORMS IN OTHER CASES, INTERACTIONS AMONG NUTRIENTS AND NONNUTRIENT SUBSTANCES IN FOODS CAN ALTER BIOLOGICAL AVAILABILITY. PHYTATE, A COMPONENT OF CEREALS AND PLANT FOODS, DECREASES THE AVAILABILITY OF DIETARY ZINC FOR INTES-TINAL ABSORPTION. THUS, ACCORDING TO USDA NUTRITIONISTS, CEREALS PRESUMABLY ARE NOT GOOD SOURCES OF DIETARY ZINC COMPOSITION TABLES DO NOT RECOGNIZE THE LIMITING EFFECTS OF SUCH INTERACTIONS NOR DO THEY INCLUDE COMPOSITION DATA ON NUTRIENT ANTAGONISTS (LIKE PHYTATE) IN FOODS.

IMPROVED METHODS FOR DETERMINING COMPOSITION AND BIOLOGICAL AVAILABILITY ARE NEEDED

TO DEVELOP MORE CURRENT AND COMPREHENSIVE FOOD COMPOSITION TABLES, RESEARCH IS NEEDED TO IMPROVE METHODS OF DETERMINING THE EFFECTS OF FOOD PRODUCTION, PROCESSING, AND PREPARATION PROCEDURES ON FOOD COMPOSITION AND NUTRIENT AVAILABILITY,

MOST METHODOLOGIES USED IN COMPOSITION WORK TODAY ARE ADAPTATIONS OF ANALYTICAL PROCEDURES DEvised 30 OR 40 YEARS AGO AS A RESULT, THEY ARE LABOR-INTENSIVE, TIME-CONSUMING, EXPENSIVE, AND, IN SOME CASES, HAVE BEEN FOUND TO BE UNRELIABLE. GOOD ANALYTICAL METHODOLOGY EXISTS FOR ONLY ABOUT HALF THE 75 TO 100 KNOWN DIETARY NUTRIENTS

IMPROVED COMPOSITION ANALYSIS METHODS ARE URGENTLY NEEDED FOR SEVERAL OF THE AMINO ACIDS, VITAMINS, AND MINERAL ELEMENTS IN THE CASE OF DIETARY FIBER (A SUBSTANCE OF GROWING INTEREST TO NUTRITIONISTS) DATA ARE NEEDED FOR COMPUTING ITS VARIOUS TYPES IN THE DIET

NUTRITION SURVEILLANCE

IN A NOVEMBER 1978 GAO REPORT, "FUTURE OF THE NATIONAL NUTRITION INTELLIGENCE SYSTEM" (CED-79-5, NOVEMBER 7, 1978), WE PRESENTED AN OVERVIEW OF U.S. PROGRAMS WHICH PROVIDE INFORMATION ON THE NUTRITIONAL STATUS OF THE POPULATION. SIMPLY STATED NUTRITION INTELLIGENCE IS INFORMATION ON THE NUTRITIONAL STATUS OF THE POPULATION AND ITS VARIOUS PARTS HOW EXTENSIVE ARE NUTRITIONAL IMBALANCES? WHAT ARE THEY? WHO IS AFFECTED? WHERE DO THEY LIVE? WITHOUT SUCH INFORMATION THERE IS LITTLE RATIONAL BASIS FOR PLANNED DEVELOPMENT AND MANAGEMENT OF NUTRITION POLICIES AND PROGRAMS. FURTHER, THERE IS NO ASSURANCE THAT FEDERAL FOOD PROGRAMS COSTING BILLIONS WORK EFFECTIVELY AND ECONOMICALLY AND CONTINUE IN LINE WITH CHANGING CONDITIONS

A PROPERLY DESIGNED AND COORDINATED SYSTEM OF NUTRITION INTELLIGENCE CAN SUPPLY THE TYPE OF INFORMATION NEEDED, BUT THE UNITED STATES AND OTHER COUNTRIES DO NOT HAVE SUCH A SYSTEM. WHAT IT DOES HAVE ARE SEVERAL ACTIVITIES CONDUCTED BY THE DEPARTMENTS OF AGRICULTURE AND HEALTH, EDUCATION, AND WELFARE WHICH SUPPLY SOME OF THE INFORMATION HOWEVER, THERE ARE WEAKNESSES IN THESE ACTIVITIES WHICH LIMIT THEIR EFFECTIVENESS AS AN OVERALL SYSTEM OF NUTRITION INTELLIGENCE. BOTH DEPARTMENTS, HOWEVER, HAVE TAKEN ACTIONS TO IMPROVE THEIR INDIVIDUAL ACTIVITIES AND, MORE IMPORTANTLY, CREATE A NATIONAL NUTRITION INTELLIGENCE SYSTEM WHICH COORDINATES ACTIVITIES IN BOTH AGENCIES

MUCH CONCERTED WORK REMAINS TO BE DONE BEFORE THE SYSTEM IS IMPLEMENTED SEVERAL IMPORTANT DETAILS AS TO HOW PARTS OF THE SYSTEM WILL OPERATE HAVE YET TO BE RESOLVED. IN JULY 1977 TESTIMONY BEFORE THE CONGRESS AND JUNE 1978 LETTERS TO THE SECRETARIES OF THE DEPARTMENTS, WE POINTED OUT OPPORTUNITIES TO ENHANCE ASSURANCE THAT THE NATION WILL HAVE EFFECTIVE NUTRITION INTELLIGENCE. THIS INCLUDES A PILOT STUDY AND PEER REVIEW ACTIVITIES PLUS CONGRESSIONAL FOLLOWUP OF THE IMPLEMENTATION PROCESS CONGRESSIONAL INVOLVEMENT ALSO INCLUDES SEEING THAT ADEQUATE RESOURCES ARE PROVIDED FOR THE SYSTEM.

A COMPREHENSIVE SYSTEM OF NUTRITION INTELLIGENCE REQUIRES COORDINATION OF SEVERAL COMPONENT MECHANISMS WHICH EXPERTS HAVE IDENTIFIED AS

- ASSESSMENT OF THE NUTRITIONAL HEALTH OF THE POPULATION, ITS SUBGROUPS AND GEOGRAPHICAL AREAS AT A POINT IN TIME,
- MONITORING FOR SIGNIFICANT CHANGES IN NUTRITIONAL HEALTH OVER TIME,
- SURVEILLANCE AT THE COMMUNITY LEVEL FOR INDICATIONS OF SPECIFIC NUTRITION PROBLEMS REQUIRING ACTION, AND
- EVALUATION TO ASSESS PROGRAMS DESIGNED TO IMPROVE NUTRITIONAL STATUS OR HEALTH OF TARGETED GROUPS.

WITH LIMITATIONS, EXISTING ACTIVITIES PROVIDE THE FOUR MECHANISMS WHICH GENERATE USEFUL INFORMATION ON THE NUTRITIONAL STATUS OF THE POPULATION AND SELECTED SUBGROUPS AND

ON THE EFFECTIVENESS OF FOOD PROGRAMS. WE REPORTED, HOWEVER, THAT THE ASSESSMENT AND MONITORING DATA OFTEN WAS UNTIMELY, WAS NOT SUFFICIENTLY SPECIFIC GEOGRAPHICALLY, OMITTED IMPORTANT POPULATION GROUPS, AND WAS INADEQUATE FOR EVALUATING PROGRAM EFFECTIVENESS. THE SURVEILLANCE MECHANISM HAD WEAKNESSES IN TERMS OF POPULATION GROUP AND GEOGRAPHIC COVERAGE AND RELIABILITY OF DATA. IN ADDITION, PROGRAM EVALUATION STUDIES HAVE OFTEN BEEN LIMITED IN GEOGRAPHIC COVERAGE OR HAVE ADDRESSED LIMITED TOPICS LEAVING SIZEABLE GAPS IN KNOWLEDGE CONCERNING THE IMPACT OF NUTRITION INTERVENTION PROGRAMS. FURTHER, THE EXISTING ACTIVITIES ARE FRAGMENTED AMONG SEVERAL AGENCIES AND NOT INTEGRATED INTO A COORDINATED SYSTEM.

ACTIONS BY ONE OR BOTH OF THE DEPARTMENTS OF AGRICULTURE AND HEALTH, EDUCATION, AND WELFARE TO IMPROVE NUTRITION INTELLIGENCE INCLUDE EFFORTS TO SPEED UP DATA COLLECTION AND AVAILABILITY AND IMPROVE THE UTILITY AND QUALITY OF THE DATA OBTAINED.

THE MOST IMPORTANT ACTION TAKEN, ~~BY BOTH DEPARTMENTS~~ IS ~~THEIR~~ JOINTLY DEVELOPED PROPOSAL FOR WHAT AMOUNTS TO A COMPREHENSIVE SYSTEM OF NUTRITION INTELLIGENCE. IT WAS DEVELOPED IN RESPONSE TO THE FOOD AND AGRICULTURE ACT OF 1977, WHICH REQUIRED THE SECRETARIES TO PROPOSE A SYSTEM CONSISTING OF THE NUTRITION INTELLIGENCE COMPONENTS DESCRIBED EARLIER. IN MAY 1978, THE SECRETARIES SUBMITTED THEIR PROPOSAL WHICH CENTERS AROUND FOUR INTERRELATED ELEMENTS, (1) NUTRITIONAL

AND DIETARY STATUS, (2) NUTRITIONAL QUALITY OF FOODS, (3) DIETARY PRACTICES AND KNOWLEDGE, AND (4) IMPACT OF NUTRITIONAL INTERVENTION. FOR EACH ELEMENT, THE PROPOSAL DETAILS PRESENT STATUS AND SHORTCOMINGS AND THEN OUTLINES CORRECTIVE ACTIONS.

THE PROPOSAL IS A PROGRESSIVE STEP TOWARD AN ADEQUATE SYSTEM OF NATIONAL NUTRITION INTELLIGENCE. IT RECOGNIZES THE MAJOR PROBLEMS IN EXISTING ACTIVITIES. HOWEVER, WE HAD FOUR AREAS OF MAJOR CONCERN WITH ^{However,} ~~the proposal~~ ^{de monstrates a} THE PROPOSAL, (1) LACK OF SPECIFICITY AND AGREEMENT BETWEEN THE DEPARTMENTS (2) LACK OF AGREEMENT ON HOW AN IMPORTANT DECENNIAL SURVEY WOULD BE CONDUCTED, ^{and Causes areas of concern} (3) ROLE OF THE SYSTEM IN PROGRAM EVALUATION, AND (4) INADEQUACY OF THE COORDINATION MECHANISM.

WE REPORTED OUR CONCERNS AND RELATED RECOMMENDATIONS ON MAY 18, 1978, IN TESTIMONY BEFORE THE AGRICULTURE SUB-COMMITTEE OF THE SENATE APPROPRIATIONS COMMITTEE, AND IN A JUNE 29, 1978 LETTER TO THE SECRETARIES.

TO ENSURE THAT THE DEPARTMENTS DEVELOP A SPECIFIC IMPLEMENTATION PLAN, INCLUDING AN EFFECTIVE COORDINATION MECHANISM, WE RECOMMENDED THAT APPROPRIATE CONGRESSIONAL COMMITTEES REVIEW THE STATUS OF THE PROPOSED SYSTEM AFTER SOME TIME.

SINCE OUR RECOMMENDATIONS IN MAY 1978, BOTH DEPARTMENTS OF HEALTH, EDUCATION, AND WELFARE AND AGRICULTURE HAVE BEEN WORKING ON THE IMPLEMENTATION PLAN WHICH IS NOW NEAR COMPLETION THE PLAN, WHEN COMPLETED, WILL BE SUBMITTED TO THE APPROPRIATE CONGRESSIONAL COMMITTEES FOR REVIEW

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LIST OF RECENT GAO NUTRITION-RELATED REPORTS

- 1 FORMULATED GRAIN-FRUIT PRODUCTS. PROPOSED RESTRICTIONS ON USE IN SCHOOL BREAKFAST PROGRAM SHOULD BE REEVALUATED. CED-79-12, December 26, 1978
2. RECOMMENDED DIETARY ALLOWANCES. MORE RESEARCH AND BETTER FOOD GUIDES NEEDED B-165031(3), CED-78-169, November 30, 1978.
- 3 FUTURE OF THE NATIONAL NUTRITION INTELLIGENCE SYSTEM CED-79-5, November 7, 1978
- 4 SUMMARY OF A REPORT. JOINT PROPOSAL FOR A NUTRITION SURVEILLANCE SYSTEM CED-78-144, CED-78-145, B-133192, B-164031(3), June 20, 1978
- 5 FEDERAL HUMAN NUTRITION RESEARCH NEEDS A COORDINATED APPROACH TO ADVANCE NUTRITION KNOWLEDGE. PSAD-77-156, MARCH 28, 1978; PSAD-77-156A, March 28, 1978.
6. INFORMING THE PUBLIC ABOUT NUTRITION. FEDERAL AGENCIES SHOULD DO BETTER CED-78-75, March 22, 1978
- 7 ACTIONS NEEDED TO IMPROVE THE NUTRITION PROGRAM FOR THE ELDERLY. HRD-78-58, February 23, 1978
- 8 HOW GOOD ARE SCHOOL LUNCHES? CED-78-22, February 3, 1978
9. NATIONAL NUTRITION ISSUES CED-78-7, December 8, 1977
- 10 THE NATIONAL SCHOOL LUNCH PROGRAM--IS IT WORKING? PAD-77-6, July 25, 1977
- 11 NATIONWIDE FOOD CONSUMPTION SURVEY NEED FOR IMPROVEMENT AND EXPANSION CED-77-56, March 25, 1977