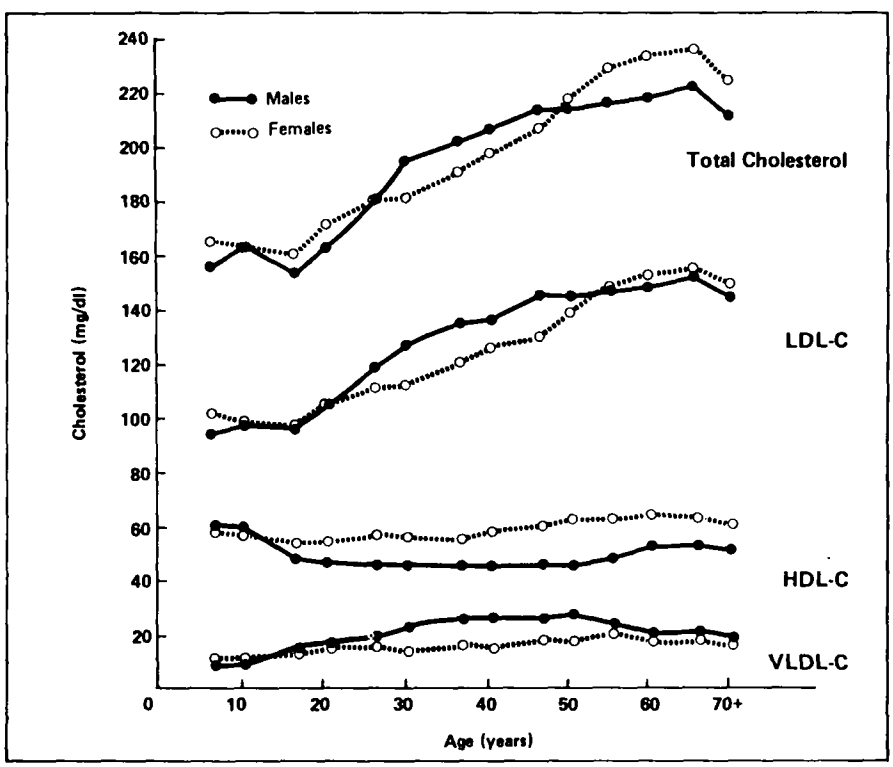
Lipid Research Clinics continue analysis

The National Institutes of Health Lipid Research Clinic program is still analyzing data collected during the 1970s and holding occasional briefings on the findings.

In a media briefing earlier this year, National Heart, Lung, and Blood Institute officials reviewed some of the data, particularly on relationships of various factors to levels of high density lipoprotein cholesterol.

Age and sex: Newborn infants have relatively high levels of HDL to low density lipoprotein, but this begins to change within a week of birth. HDL levels remain relatively constant until adolescence, when the average HDL level in males declines whereas that in females rises. That same ratio continues until about age 60, when the difference between the average levels narrows. (See figure.)



Average levels of high density lipoprotein cholesterol (HDL-C), low density lipoprotein cholesterol (LDL-C) and very low density lipoprotein cholesterol (VLDL-C) by age. (Source: NIH)

Race: While there are no significant differences in HDL and LDL levels between newborn blacks and whites, by kindergarten age on black males have higher HDL and lower triglyceride levels than white males. The same is true, to a less significant degree, for black females and white females.

Obesity: Plasma HDL levels are inversely related to obesity, with lean individuals' average 3 mg/dl higher than medium-weight individuals', and medium-weight individuals' 3 to 4 mg/dl higher than obese persons'.

Exercise: More active men and women have higher average levels of HDL than less active individuals.

Cigarette smoking: Data for cigarette smoking were examined for factors other than cigarette smoking (age, obesity, alcohol, exercise) and the results showed average HDL levels for smokers were 5.3 to 9.4 mg/dl lower than for nonsmokers.

Socioeconomic status: No definite findings are available because of other variables, but in some groups, particularly among women 20-39, persons with more education had higher HDL levels.

Diet: No correlation was found between HDL levels to total energy intake, total fat, total protein, or to any of the fatty acids examined (saturated, monounsaturated or polyunsaturated). Strong positive relationships were found between alcohol intake and HDL. Sucrose and starch intake seemed to have what was termed a "modest influence on levels of HDL cholesterol."

1981/82 world oilseed production forecast: 174.5 million tons

The summer issue of USDA's *Fats and Oils Outlook and Situation* contains a preliminary forecast that world oilseed production in 1981/82 will reach a record 174.5 million metric tons (MT), about 7% above the 1980/81 preliminary estimate. USDA estimated 1980/81 world oilseed production at 174.2 million MT.

The increase in production is expected to come from larger soybean crops in the U.S., Mexico, Brazil and Argentina, larger sunflower crops in the U.S., the Soviet Union and Europe; and larger peanut crops in the U.S. and Senegal.

More production is expected to spur more use. The U.S. 1980/81 domestic soybean crush should wind up about 1 billion bushels, according to USDA, about 8% below a year ago. A reversal is expected in 1981/82, with about a 4% increase in soybean crush. A narrowing crush margin—the difference between the cost of a bushel of soybeans and the price a crusher can get from the oil and meal produced—has been the major factor in the reduced 1980/81 crush, USDA said. Through the first nine months of the 1980/81 season, the crush margin has been as low as 10 cents and as high as 36 cents (a peak set in September 1980). The previous year, the crush margin ranged from eight cents to 84 cents. In September 1979, the margin was 84 cents, then dropped to 43 cents in January 1980. It has never recovered to that level.

USDA estimated there were about 295 million bushels (8 million MT) left over from last year's U.S. soybean crop as farmers began this year's harvest. That's about a two-month supply. If the 1981 crop is at USDA's Aug. 12 estimate of 2.02 billion bushels, and domestic usage totals 1.1 billion bushels with 825 million bushels exported, then there will be 400 million bushels left over by the time of the 1982 harvest.

Estimated 1981/82 production of soybeans worldwide is estimated by USDA at 82.34 million MT; of cottonseed, 26.9 million MT, up 4%; and of sunflower, 15.3 million MT, up 16%.

In its discussion of animal fats, USDA noted that 1980/81 edible tallow production in the U.S. may reach 1.15 billion pounds, which would about equal domestic lard production. Inedible tallow production is expected to be down slightly.

Margarine labeling rules modified

The Food and Drug Administration has modified margarine labeling requirements so that a general identifying phrase, such as "vegetable oil blend" must be used before the listing of sources of fats and oils on the label. FDA says the phrase will alert consumers that the source listing does not necessarily identify contents in decreasing order or predominance. Margarine manufacturers will be allowed to continue to indicate inclusion of vitamin A or vitamin D or both. The change also will still permit use of butter in margarines. Details: *Federal Register*, Friday, June 13, 1981, p. 31004.

FGIS seeks comments on calibration standards

The Federal Grain Inspection Service of USDA announced in July that it was considering specific methods to determine moisture, oil and protein in soybeans and sunflowers as primary references in calibration of instrumentation used to measure those three components. For use in determining oil in soybeans, FGIS proposes using AOCS Method Ac 3-44, and for oil in sunflower, AOCS Method Ai 3-75(T) (Now Ai 3-75). FGIS proposed its own method for moisture and an AACC (American Association of Cereal Chemists) method for protein. Details: *Federal Register*, Wednesday, July 22, 1981, p. 37742.

Fish isolate protein petition approved

The Food and Drug Administration has agreed to permit use of fish isolate protein as an additive in human foods. The action was requested by a Peruvian firm. Only protein from otherwise edible fish is permitted, with hexane and ethanol extraction of all fat and moisture after removal of heads, fins, tails, bones, scales, viscera and intestinal contents. Fat content may not be more than 0.5% based on AOAC methods. Details: *Federal Register*, Friday, July 24, 1981, p. 38072.

Peanut herbicide tolerances approved

The federal Environmental Protection Agency has approved tolerances for two herbicides at the rate of 0.1 parts per million in peanut hulls. The first is the herbicide S-propyl dipropylthiocarbamate. The second is the herbicide and growth regulator trifluralin. The two are produced by Stauffer Chemical Co. and Elanco Products Co., respectively, but are designed to be used together. Details: *Federal Register*, Monday, July 20, 1981, pp. 37248, 37249.