

MEMORANDUM

The database search for potential sales of DHEA between 1985 and 1994 encompassed the following sources.

Magazine Advertisements

A review was conducted to locate advertisements for the sale of DHEA in magazines focused on aging, bodybuilding, disease, health and fitness, nutrition, and sports. Of the following magazines identified, we were able to find ads for DHEA in only Muscle and Fitness and Shape magazines. DHEA was not advertised in Shape before 1997. DHEA was not advertised in Muscle and Fitness before 1994, although there were many ads between 1987 and 1990 advertising Mexican yam and diosgenin as "DHEA sources."

Aging

- Modern Maturity
- Prevention
- Senior Citizen News
- Over 50 and Fit

BodyBuilding

- Modern Muscle
- Muscle and Fitness

Health and Fitness

- Consumer Reports on Health
- Fitness
- In Health
- Men's Fitness
- Men's Health
- Self
- Shape

Nutritional and Dietary Supplements

- FDA Consumer
- Nutrition Action Health Letter

Sports

- Bicycling
- Bicycling Guide
- Runner's World
- Walking

Dietary Supplement Retailers

Twenty-three Bay Area vitamin and food supplement retailers were contacted; the various store employees stated that any sales of DHEA (some did not market DHEA) were commenced after January, 1995. The following is a list of the stores contacted:

- Apple Health Foods (Redwood City)
- Cochrane's Health Foods (San Mateo)
- Co-op Supermarket (Palo Alto)
- Country Sun Natural Foods (Palo Alto)
- The Diet Center (Menlo Park)
- E&W Natural Way (Mountain View)
- Earthbeam Natural Foods (Burlingame)
- Forever Living Products (Redwood City)
- GNC, General Nutritional Centers (Palo Alto)
- Health Concepts (San Mateo)
- Healthway Foods (Mountain View)
- The Herbal Home (Menlo Park)
- Herbalife (Millbrae)
- Losinsky Enterprises (Burlingame)
- Mannatech (Menlo Park)
- Nature's Health Foods (Menlo Park)
- Nature's Sunshine Products (Redwood City)
- Peggy's Health Center (Los Altos)
- Roseland Nutritional Inc. (Redwood City)
- Sunshine Health Shop (Millbrae)
- Universal Health Products (Woodside)
- Vitamin Express (San Francisco)
- Whole Life-Nature's Cupboard Health Foods (Menlo Park)

Vitamin and Supplement Suppliers

The following vitamin and supplement suppliers, culled from advertisements appearing in 1992, 1994 and 1997 issues of Muscle and Fitness magazine, were contacted. Of those selling DHEA, the majority of the suppliers had commenced selling after mid-year 1995, and none had begun selling DHEA before Genelabs' IND was announced on [May, 1994].

- Absolute Body Solutions
- Adonis Sports Products/SK Nutrition
- Affordable Nutrition
- American Inc.
- Anabol Naturals
- Athlete's Nutrition Center

Atlas Operations
Atletika 800-621-2602
Bodybuilding and Fitness National
BP International
Castlewood Nutrition Systems
Dexter Sports Supplements
Enrich, Inc. 80-466-4843
Fitness Connection
Fitness Systems Manufacturing Corp.
G+G Products
Hardbody Enterprises
Health Depot
Healthy Choice
Hops, Inc.
The Iron Warehouse
JBN Enterprises
Muscle Headquarters
National Nutritional Wholesalers
Nutrition Discounters
Nutrition Express
Nutrition and Fitness
Nutrition Supplement Warehouse
Nutrition Warehouse of America
Payless Vitamin Outlet (Fox Nutrition)
Peak Nutrition
Physical Addictions
Power Nutrition
The Power Store
Power System
Power System Products
ProSource
ProBody Warehouse
Real Growth Health Products
S+S Enterprises 800-456-3955
Success Sports Supplements
Superior Supplements
Ultralab Nutrition
Vita Life 800-247-6263
Vitamin Discounters
Vitamin Wholesalers
Wainscott International Corp.
Warehouse Sports Sales
Weider's Victory

Manufacturers and Major Brands of DHEA

Also contacted were several of the larger brands of DHEA and listed below. All brands represented that they have sold DHEA for no more than one year, although one suggested that it had made sales, albeit small and insignificant, before 1996.

Body Ammo
 Futurebiotics
 Natrol
 Schiff, a division of Weider Nutritional
 Twin Labs

Trade Associations and Other Associations

Also contacted were the following trade associations:

The American Academy of Pain Management
 The American Association of Naturopathic Physicians
 The American College for Advancement in Medicine
 The American Herbalist Guide
 The American Holistic Health Association
 The American Preventive Medical Association
 Chemical Manufacturers Association
 The Consultant's Association for Natural Industry
 Council for Responsible Nutrition
 The International Foundation for Homeopathy
 The International Society for Orthomolecular Medicine
 The National Center for Homeopathy
 National Nutritional Foods Association
 Pharmaceutical Research and Manufacturers of America
 World Natural Bodybuilding Federation

Most associations had no information available. However, the head of the science and quality assurance department at the National Nutritional Foods Association informed Genelabs that DHEA was not on a list of dietary supplement ingredients in use before October 15, 1994 compiled by Sidley & Austin, counsel for the NNFA.

Recent Literature on DHEA

Two database search engines were utilized: NERAC, an information retrieval company based in Tolland, Connecticut, with engineering, scientific and business databases, and EBSCO, a magazine database.

Nearly all scientists, doctors, company representatives, and trade association representatives quoted in recent books and magazine articles about DHEA agree that after 1985 and before DSHEA, DHEA was available only by prescription.

A vice-president of Weider Health Products was quoted in the Nutrition Action Health Letter saying prior to DSHEA, supplement companies were afraid to distribute DHEA widely because they feared regulatory action by the FDA.

A 1995 article in Muscle and Fitness discussed DHEA's possible benefit as an anti-aging elixir, then concluded that DHEA was currently not available for that purpose.

BRUNO HITTLE
GENELABS TECHNOLOGIES, INC.
505 PENOBSCOT DRIVE
REDWOOD CITY CA 94063
(650)369-9500

SHIP DATE: 19APR00
ACC# 109389838

ACTUAL WGT: 10 LBS MAN-WT

TO: DOCKETS MANAGEMENT BRANCH
FDA, DEPT. OF HLT & HUMAN SVCS
12420 PARKLAWN DRIVE
ROOM 1-23
ROCKVILLE MD 20857

4149 9556 6812



REF: 4234-2217/JEFF HEGALL

PRIORITY OVERNIGHT THU

CAD# 0033139 19APR00

Deliver by:

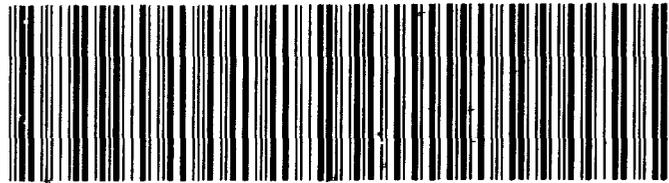
TRK# 4149 9556 6812 Form 0201

20APR00

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