DSHEA:
The Dietary Supplement Health and Education Act of 1994

Amended the FD&C Act
Defined Dietary Supplements (DS)
Established Regulatory Framework
  Food and Drug Administration (FDA)
  As foods, not as drugs
Established rules for what a label should contain
Gave FDA authority to write DS specific CGMP
Created the Office of Dietary Supplements at NIH
NIH is the Nation’s Medical Research Agency

• Department of Health & Human Services
• 27 Institutes and Centers—ODS is part of NIH
• Total NIH Budget for 2013: >$30 billion
• NIH funding for supplement and nutrition research: $1.2 billion
• Grants, Contracts, Cooperative Agreements

www.nih.gov
The legislation directed that:

- The purposes of the Office are:
  - (1) to explore more fully the potential role of dietary supplements as a significant part of the efforts of the United States to improve health care; and:
  - (2) to promote scientific study of the benefits of dietary supplements in maintaining health and preventing chronic disease and other health-related conditions.
The duties of the Director of ODS are to:

- (1) conduct and coordinate scientific research within the National Institutes of Health relating to dietary supplements and the extent to which the use of dietary supplements can limit or reduce the risk of diseases such as heart disease, cancer, birth defects, osteoporosis, cataracts, or prostatism;
- (2) collect and compile the results of scientific research relating to dietary supplements, including scientific data from foreign sources or the Office of Alternative Medicine;
- (3) serve as the principal advisor to the Secretary and to the Assistant Secretary for Health and provide advice to the Director of the National Institutes of Health, the Director of the Centers for Disease Control and Prevention, and the Commissioner of Food and Drugs on issues relating to dietary supplements…
- (4) compile a database of scientific research on dietary supplements and individual nutrients; and
- (5) coordinate funding relating to dietary supplements for the National Institutes of Health.
ODS Strategic Plan 2010-2014

STRENGTHENING KNOWLEDGE AND UNDERSTANDING OF DIETARY SUPPLEMENTS

http://ods.od.nih.gov
Table 1: Areas of Focus and Related Programs and Activities

<table>
<thead>
<tr>
<th>Research &amp; Training</th>
<th>Population &amp; Nutrient Initiatives</th>
<th>Research Resources</th>
<th>Collaborations with Federal Agencies</th>
<th>Translating Research Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>CARBON * Training &amp; Career Development</td>
<td>Develop Tools/Analytical Models for Population Studies</td>
<td></td>
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<tr>
<td>Dietary Supplement Research Practicum</td>
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</table>

* Congressionally Mandated Program
Office of Dietary Supplements FY2017
Extramural Grant Portfolio by Supplement Category code
69 grants valued at $10.9M co-funded across 12 NIH Institutes & Centers

Botanicals, $4,797,368
Fatty Acids, $828,287
Folate, $127,929
General Nutrition, $312,456
Iron, $200,000
Minerals, $524,000
Other Supplements, $1,023,500
Other Vitamins, $1,515,482
Probiotics, $75,000
Protein, $158,000
Vitamin D, $1,382,327
DIETARY SUPPLEMENT ANALYTICAL METHODS AND REFERENCE MATERIALS PROGRAM (AMRM)

The AMRM Program is responsible for the development and dissemination of reliable analytical methods and reference materials and conducts outreach efforts in order to enhance laboratory capabilities and improve analysis of dietary ingredients and supplements and nutrient biomarkers.

Search for Select Analytical Methods and Reference Materials Publications

Combine keywords with AND, NOT and OR, or use " " to search a phrase. Enter a substance, plant, matrix, method, compound, etc. to query a curated list of publications on available reference materials, methods, and educational resources.

[Search Help] [List all materials]

- AMRM Program Overview
  Program history, goals, structure, and accomplishments

- AMRM Program Areas
  Analytical Methods

AMRM Home | AMRM Overview | AMRM Program Areas | Organizations & Resources | FAQ | Glossary
Figure 1: CARBON Program publications, 1999-2019
VITAMIN E QUICKFACTS

Vitamin E is a fat-soluble nutrient found in many foods. In the body, it acts as an antioxidant, helping to protect cells from the damage caused by free radicals. Free radicals are compounds formed when our bodies convert the food we eat into energy. People are also exposed to free radicals in the environment from cigarette smoke, air pollution, and ultraviolet light from the sun.

The body also needs vitamin E to boost its immune system so that it can fight off invading bacteria and viruses. It helps to widen blood vessels and keep blood from clotting within them. In addition, cells use vitamin E to interact with each other and to carry out many important functions.

How much vitamin E do I need?
The amount of vitamin E you need each day depends on your age. Average daily recommended intakes are listed below in milligrams (mg) and in International Units (IU).

Package labels list the amount of vitamin E in foods and dietary supplements in IU.

<table>
<thead>
<tr>
<th>Age</th>
<th>Vitamin E (mg)</th>
<th>IU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birth to 6 months</td>
<td>4 mg</td>
<td>(6 IU)</td>
</tr>
<tr>
<td>Infants 7-12 months</td>
<td>5 mg</td>
<td>(7.5 IU)</td>
</tr>
<tr>
<td>Children 1-3 years</td>
<td>6 mg</td>
<td>(9 IU)</td>
</tr>
<tr>
<td>Children 4-8 years</td>
<td>7 mg</td>
<td>(10.4 IU)</td>
</tr>
<tr>
<td>Children 9-13 years</td>
<td>11 mg</td>
<td>(16.4 IU)</td>
</tr>
</tbody>
</table>

Many foods have vitamin E including vegetable oils (such as wheat germ, sunflower, and safflower oils), nuts (such as almonds), seeds (such as sunflower seeds), and green vegetables (such as spinach and broccoli).
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