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## Glossary and Acronyms

AAP	American Academy of Pediatrics
ACE	Angiotensin-converting enzyme
Action	Demonstrated effects in various biological systems that may or may not have physiological significance
ADD	Attention deficit disorder
AGE	Advanced glycosylation end product
AI	Adequate Intake
AMD	Age-related macular degeneration
APTT	Activated partial thromboplastin times
Association	Potential interactions derived from epidemiological studies of the relationship between specific nutrients and chronic disease
ATBC	Alpha-Tocopherol, Beta-Carotene (Cancer Prevention Study)
AUC	Area under the curve
AVED	Ataxia and vitamin E deficiency
Bioavailability	Accessibility of a nutrient to participate in unspecified metabolic and/or physiological processes

BMI	Body mass index
CARET	Carotene and Retinol Efficacy Trial
Carotenodermia	Yellow discoloration of the skin with elevated plasma carotene concentrations
$\alpha$ -CEHC	2,5,7,8-tetramethyl-2-(2'-carboxyethyl)-6-hydroxychroman
$\gamma$ -CEHC	2,7,8-trimethyl-2-(2'-carboxyethyl)-6-hydroxychroman
CHAOS	Cambridge Heart Antioxidant Study
CHD	Coronary heart disease
CLAS	Cholesterol Lowering Atherosclerosis Study
CSFII	Continuing Survey of Food Intakes by Individuals—a survey conducted by the Agricultural Research Service, U.S. Department of Agriculture
CV	Coefficient of variation: mean $\div$ standard deviation
DDS	Delayed dermal sensitivity
DHA	Dehydroascorbic acid
DNA	Deoxyribonucleic acid
Dose-response assessment	Second step in a risk assessment, in which the relationship between nutrient intake and adverse effect (in terms of incidence or severity of the effect) is determined
DRI	Dietary Reference Intake
DTH	Delayed-type hypersensitivity
EAR	Estimated Average Requirement
F <sub>2</sub> -isoprostane	Indicator of oxidative lipid damage and free-radical generation
FAO	Food and Agriculture Organization of the United Nations
Fore milk	Human milk collected at the beginning of an infant feeding

FOX	Ferrous oxidation/xylenol orange
FNB	Food and Nutrition Board
FT <sub>3</sub>	Free triiodothyronine
Function	Role played by a nutrient in growth, development and maturation
GSH	Reduced glutathione
GSHPx	Selenium-dependent glutathione peroxidases
GSSG	Oxidized glutathione
Gun blue	Lubricant solution containing selenious acid, nitric acid, and copper nitrate
H <sub>2</sub> O <sub>2</sub>	Hydrogen peroxide
Hazard identification	First step in a risk assessment, which is concerned with the collection, organization, and evaluation of all information pertaining to the toxic properties of a nutrient
HDL	High-density lipoprotein
Hind milk	Human milk collected at the end of an infant feeding
HIV	Human immunodeficiency virus
HOCl	Hypochlorous acid
HOPE	Heart Outcomes Prevention Evaluation
HPLC	High-performance liquid chromatography
IAEA	International Atomic Energy Agency
ICAM-1	Intracellular cell adhesion molecule
IOM	Institute of Medicine
Kashin-Beck disease	Human cartilage disease found in some of the low-selenium intake areas in Asia
Keshan disease	Human cardiomyopathy that occurs only in selenium-deficient children
LDL	Low-density lipoprotein

LOAEL	Lowest-observed-adverse-effect level—lowest intake (or experimental dose) of a nutrient at which an adverse effect has been identified
LPL	Lipoprotein lipase
Lycopenodermia	Deep orange discoloration of the skin resulting from high intakes of lycopene-rich food
MHC	Major histocompatibility complex
MONICA Project	Monitoring Trends and Determinants in Cardiovascular Disease Project
MPOD	Macular pigment optical density
MUFA	Monounsaturated fatty acid
NADH	Nicotinamide adenine dinucleotide
NADPH	Nicotinamide adenine dinucleotide phosphate
NEC	Necrotizing enterocolitis
NHANES	National Health and Nutrition Examination Survey—survey conducted periodically by the National Center for Health Statistics of the Centers for Disease Control and Prevention
NHIS	National Health Interview Survey
NO	Nitric oxide
NOAEL	No-observed-adverse-effect level—highest intake (or experimental dose) of a nutrient at which no adverse effect has been observed
NRC	National Research Council
ORAC	Oxygen radical absorbance capacity
Oxidative stress	Imbalance between the production of various reactive species and the ability of the organism's natural protective mechanisms to cope with these reactive compounds and prevent adverse effects
OxLDL	Oxidized low-density lipoprotein
8-OxodG	8-Oxo-7,8-dihydro-2'-deoxyguanosine—a product of oxidative DNA damage

PHS	Physicians' Health Study
Provitamin A carotenoids	$\alpha$ -Carotene, $\beta$ -carotene, and $\beta$ -cryptoxanthin
PUFA	Polyunsaturated fatty acid
RBC	Red blood cell
RDA	Recommended Dietary Allowance
Risk assessment	Organized framework for evaluating scientific information, which has as its objective a characterization of the nature and likelihood of harm resulting from excess human exposure to an environmental agent (in this case, a nutrient); it includes the development of both qualitative and quantitative expressions of risk
Risk characterization	Final step in a risk assessment, which summarizes the conclusions from steps 1 through 3 of the risk assessment (hazard identification, dose-response, and estimates of exposure) and evaluates the risk; this step also includes a characterization of the degree of scientific confidence that can be placed in the UL
Risk management	Process by which risk assessment results are integrated with other information to make decisions about the need for, method of, and extent of risk reduction; in addition, risk management considers such issues as the public health significance of the risk, the technical feasibility of achieving various degrees of risk control, and the economic and social costs of this control
RNA	Ribonucleic acid
RNI	Recommended Nutrient Intake
RNS	Reactive nitrogen species
ROS	Reactive oxygen species
SD	Standard deviation
SE	Standard error

Selenite and selenate	Inorganic selenium, the forms found in many dietary supplements
Selenomethionine and selenocysteine	Major dietary forms of selenium
Selenosis	Selenium toxicity characterized by hair loss and nail sloughing
SEM	Standard error of the mean
SOD	Superoxide dismutase
TBARS	Thiobarbituric acid reactive substances, a nonspecific measure of lipid peroxidation
TD	Tardive dyskinesia
$\alpha$ -TE	$\alpha$ -Tocopherol equivalent
TEAC	Trolox equivalent antioxidant capacity
$\alpha$ -Tocopherol	The only form of vitamin E that is maintained in human plasma and thus it is the only form utilized to estimate the vitamin E requirement.
TRAP	Total radical-trapping antioxidant capability
$\alpha$ -TTP	$\alpha$ -Tocopherol transfer protein
UF	Uncertainty factor—number by which the NOAEL (or LOAEL) is divided to obtain the UL; the size of the UF varies depending on the confidence in the data and the nature of the adverse effect
UL	Tolerable Upper Intake Level
USDA	U.S. Department of Agriculture
USP	U.S. Pharmacopeia
VCAM-1	Vascular cell adhesion molecule
Vitamin E	The 2 <i>R</i> -stereoisomeric forms of $\alpha$ -tocopherol ( <i>RRR</i> -, <i>RSP</i> -, <i>RRS</i> -, and <i>RSS</i> - $\alpha$ -tocopherol)
VLDL	Very low density lipoproteins
WHO	World Health Organization