TOXCENTER (Toxicology Center Database)

STN® THE CHOICE OF PATENT EXPERTS™

Subject Coverage

- Adverse Drug Reactions
- Air Pollution
- Animal Venom
- Antidotes
- Carcinogenesis via Chemicals
- Chemically Induced Diseases
- Drug Evaluations
- Environmental Pollution
- Food Contamination
- Mutagenesis
- Occupational Hazards
- Pesticides and Herbicides
- Radiation Teratology
- Toxicological Analysis
- Waste Disposal

File Type

Bibliographic

Features

Thesauri	Biosystematic Code (/BC), MeSH Tree Number (/MN), Chemical Name (/CN), Organism (/ORGN), Controlled Term (/CT), Supplementary Term (/ST), Geographic Term (/GT)		
Alerts (SDIs)	Weekly or monthly (Weekly is the default)		
CAS Registry Number® Identifiers	☑	Page Images	☐
Keep & Share	☑	SLART	☑
Learning Database	☐	Structures	☐

Record Content

- Bibliographic data
- Abstracts
- Indexing terms
- CAS Registry Numbers

File Size

More than 14.4 million records (08/2019)

Coverage

1907-present

Updates

Weekly

Language

English

Database Producer

Chemical Abstracts Service
2540 Olentangy River Road
P.O. Box 3012
Columbus, Ohio 43210-0012 USA
Phone: 800-753-4227 (North America)
Phone: 614-447-3700 (worldwide)
Fax: 614-447-3751
Email: help@cas.org

Sources

• ANEUPL	Aneuploidy File
• BIOSIS	1946 to the present
• CAplus[SM]	1907 to the present
• CIS	CIS Abstracts
• CLINICALTRIALS.GOV	ClinicalTrials.gov
• CRISP	Toxicology Research Projects
• DART	Development and Reproductive Toxicology File
• EMIC	Environmental Mutagen Information Center File
• EPIDEM	Epidemiology Information System
• ETIC	Environmental Teratology Information Center File
• FEDRIP	Federal Research in Progress
• HAPAB	Health Aspects of Pesticides Abstract Bulletin
• HMTC	Hazardous Materials Technical Center File
• IPA	1970 to the present
• ISRCTN	ISRCTN Register of Clinical Trial Numbers
• MEDLINE®	1946 to the present
• PESTAB	Pesticides Abstracts
• PPBIB	Poisonous Plants Bibliography
• RISKLINE	Swedish National Chemicals Inspectorate
• TSCATS	Toxic Substances Control Act Test Submissions

User Aids

- Online Helps (HELP DIRECTORY lists all help messages available)
- STNGUIDE

Cluster

- ALLBIB
- AUTHORS
- BIOSCIENCE
- CASRNS
- COMPANIES
- CORPSOURCE
- ENVIRONMENT
- FOOD
- FORMULATIONS
- HEALTH
- MEDICINE
- PHARMACOLOGY
- TOXICOLOGY

STN Database Cluster information:
http://www.stn-international.com/en/customersupport/customer-support#cluster+%7C+subjects+%7C+features

Search and Display Field Codes

The fields that allow left truncation are marked with an asterisk (*).

Search Field Name	Search Code	Search Examples	Display Codes
Basic Index * (contains single words from the title (TI), abstract (AB), named person (NA), chemical name (CN), supplementary term (ST), controlled term (CT), geographic term (GT), organism (ORGN), biosystematic codes (BC), and gene name (GEN) fields, as well as CAS Registry Numbers (RN))	None (or /BI)	S GROWTH FACTOR S HEPATITIS S ?ALLEL? S 79-07-2 S MEDICAL DEVICE# (L) MANUFACTURER# S HOME (S) INTERVENTION	AB, BC, CN, CT, GEN, GT, NA, ORGN, RN, ST, TI
Abstract * **(1)**	/AB	S ANTIPSYCHOT?/AB S INDUCED-ARRHYTHMIA/AB S ?TOXIC?/AB S (HAND (S) TREMOR#)/AB	AB
Accession Number	/AN	S 2001:3269/AN	AN
Author (includes inventor and editor) **(2)**	/AU	S SCOTT, M?/AU	AU, SO
Author Group	/AUTH	S BROOKS A?/AUTH	AUTH
Author Identifier	/AUID	S 0000-0002-6514-2355/AUID	AUID
Biosystematic Code **(3,4,5)** Superterm **(6)**	/BC	S PURPLE BACTERIA/BC S 85306/BC S HOMINIDAE/BC AND 57-88-5	BC
Chemical Name **(5,7)** (contains names from the chemical name (CN) and CAS Registry Number (RN) fields)	/CN	S INTERLEUKIN?/CN S SAL-I/CN	CN, RN
Chemical Name Segment *	/CNS	S ?FLUOR?/CNS	CN, RN
Classification Code **(8)** (Concept Code)	/CC	S GENERAL BIOLOGY?/CC S "FORESTRY AND FOREST PRODUCTS"/CC S 28:08.04/CC S 60-2/CC S 10006/CC	CC
Clinical Trial Numbers	/NCT	S ISRCTN02140505/NCT S NCT00005487/NCT	NCT
Collaborator	/AUCL	S BEGAY JACK/AUCL	AUCL
Comment	/CM	S TOXICOL?/CM	CM
Controlled Term **(5,10,11)** (includes main terms)	/CT	S SUNSCREENING AGENTS/CT S (HYPERTENSION (L) BL)/CT S *MEDICARE/CT S F3.375.100./CT	CT
Corporate Source **(9,12)** (Patent Assignee)	/CS	S FORD/CS S SURGERY DEPARTMENT/CS S ROSIGLITAZONE STUDY GROUP/CS	CS
Country of Publication **(13)** (code and text)	/CY	S L1 AND US/CY	CY
Digital Object Identifier **(32)**	/DOI (or /FTDOI)	S 10.3109/?/DOI	FTDOI, DOI
Document Type (code and text) **(14)**	/DT (or /TC)	S L1 AND J/DT	DT
Duration Begin, Date (Initial Project Date) **(15,16)**	/DB	S DB>=2000	DB
Duration End, Date (Final Project Date) **(15,16)**	/DE	S DE>=2000	DE
Electronic Publication Date **(15,22)**	/EPD	S 21 DEC 2012	EPD, SO
Electronic Publication Year **(15,22)**	/EPY	S 2013/EPY	EPY, SO
Email Address **(17)**	/EML	S A.DAY@UTORONTO.CA/EML	CS, EML
Entry Date **(15)**	/ED	S L8 AND ED>=20020600	ED, UP
Field Availability (code and text)	/FA	S L7 AND RN/FA	Not displayed

Search and Display Field Codes (cont'd)

Search Field Name	Search Code	Search Examples	Display Codes
File Segment	/FS	S CAPLUS/FS AND MODULATION S CLINICAL TRIALS.GOV/FS	FS
Gene Name **(13)**	/GEN	S C-JUN/GEN S HUMAN APOE GENE/GEN	GEN
Grant Number **(22)**	/GN	S P30 CA016672/GN	GN
Grant Organization **(22)**	/GO	S NCI/GO	GO
Group Author	/AUGR	S DANACOL GROUP/AUGR	AUGR
Geographic Term **(3,5)**	/GT	S (PALEARCTIC REGION (S) AFRICA)/GT S UK/GT	GT
Index Term (contains single words from the named person (NA), chemical name (CN), supplementary term (ST), controlled term (CT), geographic term (GT), organism (ORGN), and biosystematic codes (BC) fields, as well as CAS Registry Numbers (RN))	/IT	S GENETIC ENGINEERING/IT S (BACTERIA (L) VIRUS)/IT S (CYTOTOXIN (S) PROTEIN)/IT S 64-17-5/IT	BC, CN, CT, GT, NA, ORGN, RN, ST
International Standard (Document) Number (contains CODEN, ISBN, and ISSN) **(17)**	/ISN	S LANCAO/ISN S 0022-3263/ISN S 9971-62-253-X/ISN	ISN, SO
Inventor **(18)**	/IN	S BUSH R?/IN	AU
Journal Title Code **(10)**	/JTC	S 9892302/JTC S AN7/JTC	SO
Journal Title, Full and Abbreviated **(19)**	/JT	S DRUG SAF./JT	JT, SO
Language (code and text) **(20)**	/LA	S L8 AND EN/LA	LA
Meeting Date **(3,15,21)**	/MD	S MD>20010600	MD, SO
Meeting Location **(3)**	/ML	S ORLANDO/ML	ML, SO
Meeting Organizer **(3,9)**	/MO	S ONCOLOGISTS/MO	MO, SO
Meeting Title **(3)**	/MT	S (ANNUAL AND SCIENTI?)/MT	MT, SO
Meeting Year **(3,14)**	/MY	S MY>=2001	MD, MY, SO
Named Person or Institution **(22)**	/NA	S MOZART?/NA	NA
Number of Contract **(33)**	/NC	S DE07085/NC S NCI/NC	NC
Number of Report **(22)**	/NR	S NASA-00001502/NR S NASA/NR	NR, SO
Order Number **(23)**	/ON	S NTIS-OTS0590168/ON	ON
Organism Name **(3,5)** (includes Superterms) **(6)**	/ORGN	S RODENTIA/ORGN AND L1 S HUMANS+ALL/ORGN AND L1	ORGN
Other Source **(24)**	/OS	S (2001:9177 AND IPA)/OS	OS
Patent Country **(18)**	/PC (or /PCS)	S US/PC	PC, PI
Patent Number **(18,31)**	/PN (or /PATS)	S US4561876/PN	PI
Patent Number/Kind Code	/PNK	S US2005233010/PNK	PNK
Publication Date **(15,19)**	/PD	S PD>=20020100	PD, PI, SO
Publication Year **(15,19)**	/PY	S 2001-2002/PY	PI, PY, SO
Section **(25)** (code and text)	/SC	S DRUG ANALYSIS/SC S 8/SC	SC
Source (contains publication title, publication date, collation information (volume, issue, pagination), meeting information, patent information, editor, publisher, number of report, space flight mission, investigator, and affiliation, CODEN, ISSN, and ISBN)	/SO	S EPA/OTS/SO S (NEW DRUGS AND 19 AND 1)/SO S (UK AND PAT)/SO S FLIGHT EXPERIMENT/SO S SCIENCE PUBLISHER/SO S (JPCHAX AND ASAP)/SO S NASA00027887/SO	SO
Summary Language **(26)** (code and text)	/SL	S DE/SL	SL

Search and Display Field Codes (cont'd)

Search Field Name	Search Code	Search Examples	Display Codes
Supplementary Term **(5,27,28)**	/ST	S ANTIDOTES/ST S CARDIAC DRUGS/ST S CHEMISTRY/ST (L) MAJOR CONCEPTS/FA	ST
Update Date **(15)**	/UP	S L1 AND UP>=20020600	ED, UP
Unique Ingredient Identifier **(22)**	/UNII	S 9RMU91N5K2/UNII	UNII
Uniform Resource Locator **(3)**	/URL	S HTTP://WWW.BIOSCIENCE?/URL	SO, URL
Zip Code **(30)**	/ZP	S 02139/ZP	CS, ZP

(1) Available for all file segments except ANEUPL and ETIC.
(2) Available for all file segments except TSCATS.
(3) Available for BIOSIS file segment only.
(4) The /BC field is a subset of the /ORGN field.
(5) There is an online thesaurus associated with this field.
(6) Enter HELP STERMS at an arrow prompt in the file for a list of superterms.
(7) Available for BIOSIS, CAPLUS, DART, EMIC, ETIC, IPA and MEDLINE file segments.
(8) Contains code, text, and major terms for BIOSIS file segment; contains CA section and subsection for CAPLUS file segment; contains code and text for IPA file segment; contains the code for the CIS file segment; contains the TSCA Section for the TSCATS file segment.
(9) Search with implied (S) proximity is available in this field.
(10) Available for DART, EMIC and MEDLINE file segments only.
(11) MeSH Tree Numbers are also searched in this field. (L) proximity is available with Qualifiers. Postings for MeSH headings do not include narrower terms, while MeSH Tree Numbers do include all narrower levels.
(12) Available for BIOSIS, CAPLUS, CIS, CRISP, DART, EMIC, FEDRIP, IPA, MEDLINE, PESTAB AND TSCATS file segments.
(13) Available for CAPLUS and MEDLINE file segments only.
(14) Available for ANEUPL, BIOSIS, CAPLUS, CIS, DART, EMIC, ETIC, IPA, MEDLINE and PESTAB file segments.
(15) Numeric search field that may be searched using numeric operators or ranges.
(16) Available for FEDRIP file segment only.
(17) Available for BIOSIS, DART, EMIC, and MEDLINE file segment only.
(18) Available for BIOSIS and CAPLUS file segments only.
(19) Available for all file segments except CRISP, FEDRIP and TSCATS.
(20) Available for all file segments except EPIDEM, PPBIB and TSCATS.
(21) When the meeting date is multiple days, e.g., 5-10 FEB 2001, only the first and last days are searchable.
(22) Available for MEDLINE file segment only.
(23) Available for TSCATS file segment only.
(24) Available for BIOSIS, CAPLUS, EMIC, FEDRIP, IPA and MEDLINE file segments only.
(25) Available for IPA file segment only.
(26) Available for IPA file segment only.
(27) Available for ANEUPL, BIOSIS, CIS, CRISP, EMIC, EPIDEM, ETIC, FEDRIP, HMTC, IPA, MEDLINE, PPBIB, RISKLINE and TSCATS file segments.
(28) Search single words from the CAPLUS ST field in /BI or /IT.
(29) Available for CRISP, EPIDEM, FEDRIP file segments only
(30) Available for CRISP and FEDRIP file segments only.
(31) Either STN or Derwent format may be used.
(32) Available in BIOSIS and MEDLINE file segments only. Unable to EXPAND on this field.
(33) Available for DART, and EMIC file segments only.

Limiting Search Codes

Only an L-number for an answer set created in TOXCENTER may be limited.

Search Field Name	Search Code	Search Examples
Animal subject	/ANIMAL	S L3/ANI **(1)**
English language records	/ENGLISH	S L1/ENG,HUM **(1,2)**
Female subject	/FEMALE	S L2/FEM **(1)**
Human subject	/HUMAN	S L1/HUM **(1)**
Male subject	/MALE	S L2/MALE **(1)**

(1) The code may be abbreviated to the first three letters.
(2) An answer set may be limited to more than one subject area.

Chemical Name (/CN) Thesaurus

All Relationship Codes can be used with both the SEARCH and EXPAND command in the Chemical Name (/CN) thesaurus.

Code	Content	Example
ALL	All associated terms (SELF, CN, RN, RR, EC, UF, USE, HM, PA, INDX, NOTE, PNTE, RE)	E CHAETOGLOBOSINS+ALL/CN E 8057-37-2+ALL/CN
AUTO **(1)**	Automatic Relationship Code (SELF, USE)	E BROMOACETIC ACID+AUTO/CN
HM	Heading Mapped to (SELF, RN, RR, CN, EC, HM)	E NEOSPORIN+HM/CN
NOTE	Notes associated with the term (SELF, CN, RN, EC, RR, INDX, PA, NOTE, PNTE, RE)	E SERICYSTATIN+NOTE/CN E EC 2.4.1.119+NOTE/CN
PFT	Preferred and Forbidden Terms (SELF, CN, RN, EC, RR, UF, USE)	E COMBRETASTATIN+PFT/CN
RN	CAS Registry Number associated with the name or name associated with CAS Registry Number (SELF, CN, RN, EC)	S MANGANESE CHLORIDE+RN/CN E 20603-88-7+RN/CN
RR	Associated CAS Registry Numbers (SELF CN, RN, EC, RR)	E FLUVALINATE+RR/CN E 7773-01-5+RR/CN E 9RMU91N5K2+RR/CN
XUSE	USE and UF terms from the current MeSH (SELF, USE, UF)	E 6-CHRYSENYLAMINE+XUSE/CN S 6-CHRYSENAMINE+XUSE/CN

(1) Automatic relationship is SET OFF. When SET REL is ON, the result of EXPAND without any relationship code is the same as described for AUTO.

Field Descriptors for the /CN Thesaurus

Code	Description
→	Self
CN	Chemical Name and Enzyme Name
EC	Enzyme Commission Numbers
HM	Heading Mapped To
INDX	Indexer Note
NOTE	Scope Note
PA	Pharmacological Action
PNTE	Previous Indexing Note
RE	Reference
RN	CAS Registry Number
RR	Related Registry Numbers
UF	Used For Term
USE	Used Term

Controlled Term (/CT) Thesaurus

All Relationship Codes can be used with both the SEARCH and EXPAND command in the Controlled Term (/CT) thesaurus.

The /CT thesaurus contains the current Controlled Terms. MeSH Tree Numbers are searchable terms in the /CT thesaurus.

The /CT and /MN Thesaurus have the same EXPAND capabilities except when expanding MeSH Tree Numbers. The /CT Thesaurus will expand the same Tree Number hierarchy, while the /MN Thesaurus will expand the MeSH terms corresponding to the various MeSH Tree Numbers.

Code	Content	Example
ALL	All associated terms (BT, SELF, MN, DC, NOTE, INDX, ENTC, AQ, PNTE, HNTE, ONTE, MHTH, BXTH, PA, UF, USE, QUSE, NT, QLF, QA, QCAT, QNOTE, QINDX, QHNTE, QONTE, QUF, RT)	E PEPTIC ULCER+ALL/CT E C6.405.748+ALL/CT
AUTO **(1)**	Automatic Relationship Code (Preferred Terms and Qualifiers) (SELF, USE, QUSE)	E NASAL SINUSES+AUTO/CT E ADV EFF+AUTO/CT
BT	Broader Terms (BT, SELF, MN)	E PREGNANCY TESTS+BT/CT
HIE	Hierarchy (Broader and Narrower Terms) (BT, SELF, MN, NT)	E RECEPTORS, DRUG+HIE/CT
KT	Keyword Terms (multiword phrases containing the term) (SELF, KT)	S SHOCK+KT/CT
MN	Tree Number and descriptor class (SELF, MN, DC)	E PROSTHESIS FAILURE+MN/CT
NOTE	Notes associated with the term (SELF, MN, NOTE, INDX, ENTC, AQ, PNTE, HNTE, ONTE, MHTH, BXTH, PA)	E RHINOVIRUS+NOTE/CT
NT	Narrower Terms (SELF, MN, NT)	S NEURONS+NT/CT
PFT	All Preferred and Forbidden Terms (SELF, MN, ENTC, AQ, UF, USE)	E FIBRIN TISSUE ADHESIVE+PFT/CT
QLF	Qualifier and associated terms (SELF, AQ, QUSE, QLF, QA, QCAT, QNOTE, QINDX, QHNTE, QONTE, QUF)	S ADVERSE EFFECTS+QLF/CT
QPFT	Qualifier Preferred (SELF, QUSE, QLF, QUF)	E PSYCHOLOGY+QPFT/CT
RT	Related Terms (SELF, MN, RT)	E ETHICS+RT/CT
STD	Standard (Broader, Narrower, and Related Terms) (BT, SELF, MN, NT, RT)	S SPINAL CORD+STD/CT E PNEUMONIA+STD/CT
UF	Used For Terms (Forbidden Terms) (SELF, MN, UF)	E SEX BEHAVIOR+UF/CT
USE	Used Terms (Preferred Terms) (SELF, MN, USE)	E JOINT TUBERCULOSIS+USE/CT
XUSE	USE and UF terms from the current MeSH (SELF, USE, UF)	E RADICULITIS+XUSE/CT

(1) Automatic relationship is SET OFF. When SET REL is ON, the result of EXPAND without any relationship code is the same as described for AUTO.

Field Descriptors for the /CT Thesaurus

Code	Description
→	Self
AQ	Allowable Qualifier
BT	Broader Term
BXTH	Backwards Cross Reference Thesaurus
DC	Descriptor Class
ENTC	Entry Combination
HNTE	History Note
INDX	Indexer Note
KT	Keyword Terms
MH	MeSH Heading
MHTH	MH Thesaurus
MN	MeSH Tree Number
NOTE	Scope Note, Consider Also Terms
NT	Narrower Term
ONTE	Online Note
PA	Pharmacological Action
PNTE	Previous Indexing Note
QA	Qualifier Abbreviation
QCAT	Allowable Categories
QHNTE	Qualifier History Note
QINDX	Qualifier Indexer Note
QLF	MeSH Qualifier (subheading)
QNOTE	Qualifier Scope Note
QONTE	Qualifier Online Note
QUF	Qualifier Use For
QUSE	Qualifier Use
RT	Related Term
UF	Used For Term
USE	Used Term

Geographic Term (/GT) Thesaurus

All Relationship Codes can be used with both the SEARCH and EXPAND command in the Geographic Term (/GT) thesaurus.

Code	Content	Example
ALL	All associated terms (BT, SELF, UF, USE, NT)	E TANZANIA+ALL/GT
AUTO **(1)**	Automatic Relationship Code (SELF, USE)	E GOLD COAST+AUTO/GT
BT	Broader Terms (BT, SELF)	E POLAND+BT/GT
KT	Keyword Terms (multiword phrases containing the term) (SELF, KT)	E GERMANY+KT/GT
NT	Narrower Terms (SELF, NT)	E AFRICA+NT/GT
PFT	Preferred and Forbidden Terms (SELF, UF, USE)	E DDR+PFT/GT
STD	Standard (Broader and Narrower Terms) (BT, SELF, NT)	E PALEARCTIC REGION+STD/GT
UF	Used For Terms (Forbidden Terms) (SELF, UF)	E IVORY COAST+UF/GT
USE	Used Terms (Preferred Terms) (SELF, USE)	E ABYSSINIA+USE/GT

(1) Automatic relationship is SET OFF. When SET REL is ON, the result of EXPAND without any relationship code is the same as described for AUTO.

Field Descriptors for the /GT Thesaurus

Code	Description
→	Self
BT	Broader Term
KT	Keyword Term
NT	Narrower Term
UF	Used For Term
USE	Used Term

MeSH Tree Number (/MN) Thesaurus

In the MeSH Tree Number (/MN) Thesaurus, all Relationship Codes can only be used with the EXPAND command.

The /CT and /MN Thesaurus have the same EXPAND abilities except when expanding MeSH Tree Numbers. The /CT Thesaurus will expand the same Tree Number hierarchy, while the /MN Thesaurus will expand the MeSH terms corresponding to the various MeSH Tree Numbers.

The /MN thesaurus does not have any postings. When searching, it is necessary to edit the field code to /CT.

Code	Content	Example
ALL	All associated terms (BT, SELF, MN, MH, DC, NOTE, INDX, ENTC, AQ, PNTE, HNTE, ONTE, MHTH, BXTH, PA, UF, USE, QUSE, NT, QLF, QA, QCAT, QNOTE, QINDX, QHNTE, QONTE, QUF, RT)	E GRANULOMA+ALL/MN E C23.550.+ALL/MN
AUTO **(1)**	Automatic Relationship Code (Preferred Terms and Qualifiers) (SELF, USE, QUSE)	E PANCREATIC CHOLERA+AUTO/MN
BT	Broader Terms (BT, SELF, MN, MH)	E ILLUSIONS+BT/MN
HIE	Hierarchy (Broader and Narrower Terms) (BT, SELF, MN, MH, NT)	E CHLAMYDIA+HIE/MN
KT	Keyword Terms (multiword phrases containing the term) (SELF, KT)	E SHOCK+KT/MN
MN	Tree Number and descriptor class (SELF, MN, MH, DC)	E ABSCESS+MN/MN
NOTE	Notes associated with the term (SELF, MN, MH, NOTE, INDX, ENTC, AQ, PNTE, HNTE, ONTE, MHTH, BXTH, PA)	E SPINAL NERVES+NOTE/MN
NT	Narrower Terms (SELF, MN, MH, NT)	E TOOTH+NT/MN
PFT	Preferred and Forbidden Terms (SELF, MN, MH, ENTC, AQ, USE, UF)	E PROSTHESIS FAILURE+PFT/MN
QLF	Qualifier and associated terms (SELF, QUSE, QLF, QA, QCAT, QNOTE, QINDX, AQ, QHNTE, QONTE, QUF)	E AE+QLF/MN
QPFT	Qualifier Preferred (SELF, QUSE, QLF, QUF)	E METABOLISM+QPFT/MN
RT	Related Terms (SELF, MN, MH, RT)	E AIR BAGS+RT/MN
STD	Standard (Broader, Narrower, and Related Terms) (BT, SELF, MN, MH, NT, RT)	E ALCOHOLISM+STD/MN E C21.613.455.571.+STD/MN
UF	Used For Terms (Forbidden Terms) (SELF, MN, MH, UF)	E IODIDE PEROXIDASE+UF/MN
USE	Used Terms (Preferred Terms) (SELF, MN, MH, USE)	E OPHTHALMIA+USE/MN
XUSE	USE and UF Terms from the current MeSH (SELF, USE, UF)	E ARSENIC POISONING+XUSE/MN

(1) Automatic relationship is SET OFF. When SET REL is ON, the result of EXPAND without any relationship code is the same as described for AUTO.

Field Descriptors for the /MN Thesaurus

Code	Description
→	Self
AQ	Allowable Qualifier
BT	Broader Term
BXTH	Backwards Cross Reference Thesaurus
DC	Descriptor Class
ENTC	Entry Combination
HNTE	History Note
INDX	Indexer Note
KT	Keyword Terms
MH	MeSH Heading
MHTH	MH Thesaurus
MN	MeSH Tree Number
NOTE	Scope Note, Consider Also Terms
NT	Narrower Term
ONTE	Online Note
PA	Pharmacological Action
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QA	Qualifier Abbreviation
QCAT	Allowable Categories
QHNTE	Qualifier History Note
QINDX	Qualifier Indexer Note
QLF	MeSH Qualifier (subheading)
QNOTE	Qualifier Scope Note
QONTE	Qualifier Online Note
QUF	Qualifier Use For
QUSE	Qualifier Use
RT	Related Term
UF	Used For Term
USE	Used Term

Organism (/ORGN) Thesaurus

All Relationship Codes can be used with both the SEARCH and EXPAND command in the Organism (/ORGN, /BC) thesaurus.

Code	Content	Example
ALL	All associated terms (BT, SELF, NOTE, UF, USE, NT, RT, BC)	E RODENTIA+ALL/ORGN
AUTO **(1)**	Automatic Relationship Code (SELF, USE)	E PISCES+AUTO/ORGN
BT	Broader Terms (BT, SELF)	E BOVIDAE+BT/ORGN
HIE	Hierarchy (BT, SELF, NT)	E PISCES+HIE/ORGN
KT	Keyword Terms (multiword phrases containing the term) (SELF, KT)	E VIRUSES+KT/ORGN
NOTE	Notes associated with the term (SELF, NOTE)	E PROTOZOA+NOTE/ORGN
NT	Narrower Terms (SELF, NT)	E AMPHIBIA+NT/ORGN
PFT	Preferred and Forbidden Terms (SELF, UF, USE)	E PISCES+PFT/ORGN
RT	Related Terms (SELF, RT)	E RODENTS+RT/ORGN
STD	Standard (Broader, Narrower, and Related Terms) (BT, SELF, NT, RT)	E AVES+STD/ORGN
UF	Used For Terms (Forbidden Terms) (SELF, UF)	E SALIENTIA+UF/ORGN
USE	Used Terms (Preferred Terms) (SELF, USE)	E BC25990+USE/ORGN

(1) Automatic relationship is SET OFF. When SET REL is ON, the result of EXPAND without any relationship code is the same as described for AUTO.

Field Descriptors for the /ORGN Thesaurus

Code	Description
→	Self
BC	Biosystematic Codes
BT	Broader Term
KT	Keyword Term
NOTE	Scope Note
NT	Narrower Term
RT	Related Term
UF	Used For Term
USE	Used Term

Supplementary Term (/ST) Thesaurus

All Relationship Codes can be used with both the SEARCH and EXPAND command in the Controlled Term (/ST) thesaurus.

Code	Content	Example
ALL	All associated terms (BT, SELF, NOTE, UF, USE, NT, RT)	E ANIMAL HUSBANDRY+ALL/ST
AUTO **(1)**	Automatic Relationship Code (SELF, USE)	E PEDIATRICS+AUTO/ST
BT	Broader Terms (BT, SELF)	E ALLERGY+BT/ST
HIE	Hierarchy (Broader and Narrower Terms) (BT, SELF, NT)	E HUMAN MEDICINE+HIE/ST
KT	Keyword Terms (multiword phrases containing the term) (SELF, KT)	E DENTAL+KT/ST
NOTE	Scope Notes (SELF, NOTE)	E DENTAL MEDICINE+NOTE/ST
NT	Narrower Terms (SELF, NT)	E AGRICULTURE+NT/ST
PFT	Preferred and Forbidden Terms (SELF, UF, USE)	E ANTIVIRAL – DRUG+PFT/ST
RT	Related Terms (SELF, RT)	E TOXICOLOGY+RT/ST
STD	Standard (Broader, Narrower, and Related Terms) (BT, SELF, NT, RT)	E CLINICAL IMMUNOLOGY+STD/ST
UF	Used For Terms (Forbidden Terms) (SELF, UF)	E ANTIVIRAL – DRUG+UF/ST
USE	Used Terms (Preferred Terms) (SELF, USE)	E ANTIVIRAL+USE/ST

(1) Automatic relationship is SET OFF. When SET REL is ON, the result of EXPAND without any relationship code is the same as described for AUTO.

Field Descriptors for the /ST Thesaurus

Code	Description
→	Self
BT	Broader Term
KT	Keyword Term
NOTE	Scope Note
NT	Narrower Term
RT	Related Term
UF	Used For Term
USE	Used Term

DISPLAY and PRINT Formats

Any combination of formats may be used to display or print answers. Multiple codes must be separated by spaces or commas, e.g., D L1 1-5 CN CO. The fields are displayed or printed in the order requested.

Hit-term highlighting is available in all fields except CM, CP, ED, MY, PC, and PY. Highlighting must be ON during SEARCH to use the HIT, KWIC, and OCC display formats.

Format	Content	Examples
AB **(1)**	Abstract	D AB
AN	Accession Number	D AN FS
AU (IN) **(2)**	Author or Inventor	D AU 1-5
AUCL	Collaborator	D AUCL
AUGR	Group Author	D AUGR
AUID	Author Identifier	D AUID
BC **(3)**	Biosystematic Code	D BC
CC **(4)**	Classification Code (Concept Code)	D CC 1 8
CM **(5)**	Comment	D CM SO
CN **(6)**	Chemical Name	D RN CN
CP **(4)**	Copyright Notice	D CP
CS **(7)**	Corporate Source (includes ZP)	D CS
CSS **(8)**	Supporting Organization (Sponsoring Agency)	D CSS
CT **(9)**	Controlled Term	D CT
CY **(10)**	Country of Publication	D CY
DB **(11)**	Duration Begin, Date (Initial Project Date)	D DB DE
DE **(11)**	Duration End, Date (Final Project Date)	D DB DE
DN	Document Number	D DN
DOI (FTDOI) **(29)**	Digital Object Identifier	D DOI or D FTDOI
DT (TC) **(12)**	Document Type	D DT
ED (UP)	Entry and Last Updated Dates	D 1 3 5 ED
EML **(9,13)**	E-mail Address	D EML AU
EPD **(5,13)**	Electronic Publication Date	D EPD
EPY **(5,13)**	Electronic Publication Year	D EPY
FS	File Segment	D FS 2,7
GEN **(10)**	Gene Name	D GEN
GN **(5)**	Grant Number	D GN
GO **(5)**	Grant Organization	D GO
GT **(3)**	Geographic Term	D GT
ISN **(13,14)**	International Standard (Document) Number (CODEN, ISBN, ISSN)	D ISN
JT **(13,14)**	Journal Title	D JT
JTA **(13,15)**	Journal Title, Abbreviated	D JTA
JTF **(13,16)**	Journal Title, Full	D JTF
LA **(17)**	Language	D LA
MD **(3,13)**	Meeting Date	D MD
ML **(3,13)**	Meeting Location	D ML
MO **(3,13)**	Meeting Organizer	D MO
MT **(3,13)**	Meeting Title	D MT
MY **(3,13)**	Meeting Year	D MY
NA **(5)**	Named Person or Institution	D NA
NC **(8)**	Number of Contract	D NC
NCT	Clinical Trial Numbers	D NCT
NR **(5,13)**	Number of Report	D NR
ON **(18)**	Order Number	D ON
ORGN **(3)**	Organism	D ORGN
OS **(19)**	Other Source	D OS
PC (PCS) **(13,20)**	Patent Country	D PC
PD **(13,14)**	Publication Date	D PD
PI **(20, 28)** (PN, PATS)	Patent Information	D PI
PNK	Patent Number/Kind Code	D PNK
PY **(13,14)**	Publication Year	D PY
RN **(21)**	CAS Registry Number and Chemical Name	D RN
RNK **(30)**	Rank, Relevance Score	D RNK
RNKM **(30)**	Rank Multifiles	D RNKM
SC **(22)**	Section	D SC

DISPLAY and PRINT Formats (cont'd)

Format	Content	Examples
SL **(23)**	Summary Language	D SL
SO	Source	D TI SO
ST **(24)**	Supplementary Term	D ST
TI **(25)**	Title	D TI
UNII **(5,13)**	Unique Ingredient Identifier	D UNII
URL **(3,13)**	Uniform Resource Locator	D URL
ZP **(26)**	Zip Code	D ZP
ABS	AN, CP, AB	D ABS
ALL	AN, CP, DN, TI, AU, AUID, CS, CSS, ON, NC, PI, SO, DOI, CM, CY, DT, FS, NCT, OS, LA, SL, ED, DB, DE, AB, SC, CC, BC, CT, ST, NA, GT, ORGN, RN, CN, UNII, GEN, GO, GN	D ALL
AUTH	AUY, AUCL, AUGR	D AUTH
BIB	AN, CP, DN, TI, AU, AUID, CS, CSS, ON, NC, PI, SO, DOI, CY, DT, FS, NCT, OS, LA, SL, ED, DB, DE, GO, GN (BIB is the default)	D L2 3 BIB
CBIB	AN, DN, compressed bibliographic information	D CBIB
DALL	ALL, delimited for post processing	D DALL
IABS	ABS, indented with text labels	D IABS
IALL	ALL, indented with text labels	D IALL
IBIB	BIB, indented with text labels	D IBIB
IND	AN, CP, SC, CC, BC, CT, ST, NA, GT, ORGN, RN, CN, UNII, GEN	D IND
SCAN **(25,27)**	TI, CM, CN (random display without answer numbers)	D SCAN
HIT	Fields containing hit terms	D HIT
HITIND	IND	D HITIND
KWIC	Hit terms with 20 words on either side (Keyword in Context)	D KWIC NOH
OCC **(25)**	Number of occurrences of hit terms and fields in which they occur	D OCC 1-6

(1) Available in all file segments except ANEUPL and ETIC.
(2) Available in all file segments except TSCATS.
(3) Available in BIOSIS file segment only.
(4) Available in BIOSIS, CAPLUS, CIS, IPA, and TSCATS file segments only.
(5) Available in MEDLINE file segment only.
(6) Available in BIOSIS, CAPLUS, DART, EMIC, ETIC, IPA, and MEDLINE file segments.
(7) Available in BIOSIS, CAPLUS, CIS, CRISP, DART, EMIC, FEDRIP, IPA, MEDLINE, PESTAB, AND TSCATS file segments.
(8) Available for CRISP, EPIDEM, FEDRIP file segments only
(9) Available in DART, EMIC, and MEDLINE file segment only.
(10) Available in CAPLUS and MEDLINE file segments only.
(11) Available in FEDRIP file segment only.
(12) Available in ANEUPL, BIOSIS, CAPLUS, CIS, DART, EMIC, ETIC, IPA, MEDLINE and PESTAB file segments.
(13) Custom display only.
(14) Available in all file segments except CRISP, FEDRIP, and TSCATS.
(15) Available in ANEUPL, CAPLUS, DART, EMIC, EPIDEM, ETIC, HAPAB, HMTC, IPA, MEDLINE, PESTAB, PPBIB, and RISKLINE file segments.
(16) Available in BIOSIS, CAPLUS, DART, ETIC, IPA, MEDLINE, and PESTAB file segments.
(17) Available in all file segments except EPIDEM, PPBIB, and TSCATS.
(18) Available in TSCATS file segment only.
(19) Available in BIOSIS, CAPLUS, EMIC, FEDRIP, IPA, and MEDLINE file segments only.
(20) Available in BIOSIS and CAPLUS file segments only.
(21) Available in all file segments except CRISP and FEDRIP.
(22) Available in IPA file segment only.
(23) Available in BIOSIS and IPA file segments only.
(24) Available in ANEUPL, BIOSIS, CAPLUS, CIS, CRISP, EMIC, EPIDEM, ETIC, FEDRIP, HMTC, IPA, MEDLINE, PPBIB, RISKLINE, and TSCATS file segments.
(25) No online display fee for this format.
(26) Available for CRISP and FEDRIP file segments only.
(27) SCAN must be specified on the command line, i.e., D SCAN or DISPLAY SCAN.
(28) Patent numbers are available in STN and Derwent format. The format for DISPLAY, PRINT, SELECT, and SORT is set using the SET PATENT command. STN is the default format. Enter SET PAT DERWENT to change to the Derwent format. To reset to the STN format, enter SET PAT STN.
(29) Available in BIOSIS and MEDLINE file segments only.
(30) The RNK and RNKM formats display only the hit term occurrence ranking for the record, with the following line: RELEVANCE SCORE ##. RNK is for the single file environment, while RNKM is for the multifile environment.

SELECT, ANALYZE, and SORT Fields

The SELECT command is used to create E-numbers containing terms taken from the specified field in an answer set.

The ANALYZE command is used to create an L-number containing terms taken from the specified field in an answer set.

The SORT command is used to rearrange the search results in either alphabetic or numeric order of the specified field(s).

Field Name	Field Code	ANALYZE/ SELECT (1)	SORT
Abstract **(2)**	AB	Y **(3)**	N
Accession Number	AN	Y	N
Author (Inventor) **(4)**	AU	Y	Y
Author Group	AUTH	Y	Y
Author Identifier	AUID	Y	Y
Biosystematic Code **(5)**	BC	Y	N
CAS Registry Number **(6)**	RN	Y **(3)**	N
Chemical Name **(7)**	CN	Y	N
	NAME	Y **(3)**	N
Chemical Name and CAS Registry Number	CHEM	Y **(3)**	N
Citation	CIT	Y **(8,9)**	N
Classification Code **(10)** (Concept Code)	CC	Y	N
Clinical Trial Numbers	NCT	Y	Y
CODEN	CODEN	N	Y
Collaborator	AUCL	Y	Y
Comment	CM	Y **(8,35)**	N
Controlled Term **(10)**	CT	Y	N
Corporate Source **(12)** (Patent Assignee)	CS	Y	Y
Country Of Publication **(13)**	CY	Y	Y
Document Number	DN	Y	Y
Document Type **(14)**	DT	Y	Y
Duration Begin, Date **(15)** (Initial Project Date)	DB	Y	Y
Duration End, Date **(15)** (Final Project Date)	DE	Y	Y
Electronic Publication Date **(24)**	EPD	Y	Y
Electronic Publication Year **(24)**	EPY	Y	Y
E-mail Address **(11)**	EML	Y	Y
File Segment	FS	Y	Y
GenBank Number **(16)**	GENBANK	Y **(3)**	N
	GBN	Y **(3)**	N
Gene Name	GEN	Y	Y
Grant Number	GN	Y	Y
Grant Organization	GO	Y	Y
Group Author	AUGR	Y	Y
Geographic Term **(5)**	GT	Y	Y
International Standard Book Number	ISBN	N	Y
International Standard (Document) Number **(17)**	ISN	Y **(18)**	N
International Standard Serial Number	ISSN	N	Y
Inventor **(19)**	IN	Y	Y
Journal Title, Abbreviated and Full **(17)**	JT	Y	Y
Journal Title, Abbreviated **(20)**	JTA	Y **(21)**	Y
Journal Title, Full **(22)**	JTF	Y **(21)**	Y
Journal Title Code **(17)**	JTC	N	Y
Language **(23)**	LA	Y	Y
Meeting Date **(5)**	MD	Y	Y
Meeting Location **(5)**	ML	Y	Y
Meeting Organizer **(5)**	MO	Y	Y
Meeting Title **(5)**	MT	Y	Y
Meeting Year **(5)**	MY	Y **(8)**	Y
Named Person or Institution **(24)**	NA	Y	N
Number of Contract **(25)**	NC	Y	Y
Number of Report **(26)**	NR	Y	Y

SELECT, ANALYZE, and SORT Fields (cont'd)

Field Name	Field Code	ANALYZE/ SELECT (1)	SORT
Occurrence Count of Hit Terms	OCC	N	Y
Organism **(5)**	ORGN	Y	N
Order Number **(27)**	ON	Y	Y
Other Source **(28)**	OS	Y	Y
Patent Country **(19)**	PC	Y **(8)**	Y
	PCS	Y **(8)**	Y
Patent Information **(19)**	PI	Y **(29)**	Y
Patent Number **(19)**	PN	Y	Y
	PATS	Y	Y
Patent Number/Kind Code	PNK	Y **(8)**	N
Publication Date **(18)**	PD	Y	Y
Publication Year **(18)**	PY	Y	Y
Section **(20)**	SC	Y	Y
Source	SO	Y **(8,31)**	N
Summary Language **(32)**	SL	Y	Y
Supplementary Term **(33)**	ST	Y	N
Supporting Organization **(25)** (Sponsoring Agency)	CSS	Y	Y
Title	TI	Y (default)	Y
Treatment Code **(14)**	TC	Y **(34)**	Y
Uniform Resource Locator **(5)**	URL	Y	Y
Unique Ingredient Identifier **(24)**	UNII	Y	N
Zip Code **(6)**	ZP	Y	Y

(1) HIT may be used to restrict terms extracted to terms that match the search expression used to create the answer set, e.g., SEL HIT TI.
(2) Available in all file segments except ANEUPL and ETIC.
(3) Appends /BI to the terms created by SELECT.
(4) Available in all file segments except TSCATS.
(5) Available for the BIOSIS file segment only.
(6) Available in all file segments except CRISP and FEDRIP.
(7) Available in BIOSIS, CAPLUS, DART, EMIC, ETIC, IPA, and MEDLINE file segments.
(8) SELECT HIT and ANALYZE HIT are not valid with this field.
(9) Extracts first author, publication year, volume, and first page with a truncation symbol appended and with /RE appended to the terms created by SELECT.
(10) Available in BIOSIS, CAPLUS, CIS, IPA and TSCATS file segments only.
(11) Available in DART, EMIC, and MEDLINE file segment only.
(12) Available in BIOSIS, CAPLUS, CIS, CRISP, DART, EMIC, FEDRIP, IPA, MEDLINE, PESTAB, AND TSCATS file segments.
(13) Available in CAPLUS and MEDLINE file segments only.
(14) Available in ANEUPL, BIOSIS, CAPLUS, CIS, DART, EMIC, ETIC, IPA, MEDLINE and PESTAB file segments.
(15) Available in FEDRIP file segment only.
(16) Available in BIOSIS and MEDLINE file segments only.
(17) Available in all file segments except CRISP, FEDRIP, and TSCATS.
(18) Selects or analyzes CODEN, ISSN, and ISBN with /ISN appended to the terms created by SELECT.
(19) Available for BIOSIS and CAPLUS file segments only.
(20) Available in ANEUPL, CAPLUS, DART, EMIC, EPIDEM, ETIC, HAPAB, HMTC, IPA, MEDLINE, PESTAB, PPBIB, and RISKLINE file segments.
(21) Appends /JT to the terms created by SELECT.
(22) Available in BIOSIS, CAPLUS, DART, ETIC, IPA, MEDLINE, and PESTAB file segments.
(23) Available in all file segments except EPIDEM, PPBIB, and TSCATS.
(24) Available in MEDLINE file segment only.
(25) Available for CRISP, EPIDEM, FEDRIP file segments only
(26) Available in MEDLINE file segment only.
(27) Available in TSCATS file segment only.
(28) Available in BIOSIS, CAPLUS, EMIC, FEDRIP, IPA, and MEDLINE file segments only.
(29) Selects or analyzes the patent number and appends /PN to the terms created by SELECT.
(30) Available in IPA file segment only.
(31) Selects or analyzes CODEN, ISSN, and ISBN with /SO appended to the terms created by SELECT.
(32) Available in BIOSIS and IPA file segments only.
(33) Available in ANEUPL, BIOSIS, CAPLUS, CIS, CRISP, EMIC, EPIDEM, ETIC, FEDRIP, HMTC, IPA, MEDLINE, PPBIB, RISKLINE, and TSCATS file segments.
(34) Appends /DT to the terms created by SELECT.
(35) Selects or analyzes the PMID values with /DN appended.

Sample Records

DISPLAY IALL (BIOSIS File Segment)

```
ACCESSION NUMBER:    2011:95669  TOXCENTER
COPYRIGHT:           Copyright (c) 2011 The Thomson Corporation
DOCUMENT NUMBER:     PREV201100132307
TITLE:               Methods for Genotyping Verotoxin-Producing Escherichia
                     coli
AUTHOR(S):           Karama, M.; Gyles, C. L. [Reprint Author]
CORPORATE SOURCE:    Univ Guelph, Dept Pathobiol, Guelph, ON N1G 2W1, Canada
                     cgyles@uoguelph.ca
SOURCE:              Zoonoses and Public Health, (OCT 2010) Vol. 57, No. 7-8,
                     pp. 447-462.
                     ISSN: 1863-1959.
DIGITAL OBJECT IDENTIFIER: 10.1111/j.1863-2378.2009.01259.x
DOCUMENT TYPE:       Article
                     General Review; (Literature Review)
FILE SEGMENT:        BIOSIS
OTHER SOURCE:        BIOSIS 2011:132307
LANGUAGE:            English
ENTRY DATE:          Entered STN: 15 Mar 2011
                     Last Updated on STN: 15 Mar 2011
ABSTRACT:
Verotoxin-producing Escherichia coli (VTEC) is annually incriminated in more
than 100 000 cases of enteric foodborne human disease and in losses amounting
to $US 2.5 billion every year.  A number of genotyping methods have been
developed to track VTEC infections and determine diversity and evolutionary
relationships among these microorganisms.  These methods have facilitated
monitoring and surveillance of foodborne VTEC outbreaks and early
identification of outbreaks or clusters of outbreaks.  Pulsed-field gel
electrophoresis (PFGE) has been used extensively to track and differentiate
VTEC because of its high discriminatory power, reproducibility and ease of
standardization.  Multiple-locus variable-number tandem-repeats analysis (MLVA)
and microarrays are the latest genotyping methods that have been applied to
discriminate VTEC.  MLVA, a simpler and less expensive method, is proving to
have a discriminatory power comparable to that of PFGE.  Microarrays are
successfully being applied to differentiate VTEC and make inferences on genome
diversification.  Novel methods that are being evaluated for subtyping VTEC
include the detection of single nucleotide polymorphisms and optical mapping.
This review discusses the principles, applications, advantages and
disadvantages of genotyping methods that have been used to differentiate VTEC
strains.  These methods have been mainly used to differentiate strains of O157:
H7 VTEC and to a lesser extent non-O157 VTEC.
CLASSIFICATION CODE: Pathology - General   12502
                     Toxicology - General and methods   22501
                     Physiology and biochemistry of bacteria   31000
                     Medical and clinical microbiology - Bacteriology   36002
SUPPLEMENTARY TERMS: Major Concepts
                     Toxicology; Infection; Methods and Techniques; Human
                     Medicine (Medical Sciences)
SUPPLEMENTARY TERMS: Diseases
                     foodborne infection: bacterial disease, toxicity
SUPPLEMENTARY TERMS: Chemicals & Biochemicals
                     verotoxin: toxin
SUPPLEMENTARY TERMS: Methods & Equipment
                     genotyping: laboratory techniques, genetic techniques;
                     microarray: laboratory techniques, genetic techniques;
                     optical mapping: laboratory techniques, genetic
                     techniques; pulsed-field gel electrophoresis:
                     electrophoretic techniques, laboratory techniques;
                     Multiple-locus variable-number tandem-repeats analysis:
                     laboratory techniques, genetic techniques
SUPPLEMENTARY TERMS: Miscellaneous Descriptors
                     single nucleotide polymorphism
```

```
ORGANISM:            Classifier
                        Enterobacteriaceae   06702
                     Super Taxa
                        Facultatively Anaerobic Gram-Negative Rods; Eubacteria;
                        Bacteria; Microorganisms
                     Organism Name
                        Escherichia coli (species): pathogen, serovar-O157:H7
                     Taxa Notes
                        Bacteria, Eubacteria, Microorganisms
ORGANISM:            Classifier
                        Hominidae   86215
                     Super Taxa
                        Primates; Mammalia; Vertebrata; Chordata; Animalia
                     Organism Name
                        human (common): host
                     Taxa Notes
                        Animals, Chordates, Humans, Mammals, Primates,
                        Vertebrates
```

DISPLAY IALL (CAPLUS File Segment)

```
ACCESSION NUMBER:    2001:187664  TOXCENTER
COPYRIGHT:           Copyright 2011 ACS
DOCUMENT NUMBER:     CA135192719022
TITLE:               Methods for assessing complement activation
AUTHOR(S):           Hugli, Tony E.; Stoughton, Roland B.
CORPORATE SOURCE:    ASSIGNEE: The Scripps Research Institute
PATENT INFORMATION:  US 6297024 B1 2 Oct 2001
SOURCE:              (2001) U.S., 28 pp., Cont.-in-part of U.S. Ser. No.
                     173,579.
                     CODEN: USXXAM.
COUNTRY:             UNITED STATES
DOCUMENT TYPE:       Patent
FILE SEGMENT:        CAPLUS
OTHER SOURCE:        CAPLUS 2001:719020
LANGUAGE:            English
ENTRY DATE:          Entered STN: 16 Nov 2001
                     Last Updated on STN: 19 Mar 2002
ABSTRACT:
Methods for measuring in vivo activation of the lectin pathway by measuring
mannan-binding serine protease activity (MASP) are provided.  The methods are
accomplished by C3a and C4a levels in in vitro activated EDTA plasma.  In
particular, the increase in C3a and/or C4a as a function of time is an
indicator of the amount of activated MASP in EDTA plasma.  Methods are also
provided for measuring the alternate and classical pathways of complement
activation, exclusive of the lectin pathway, and thereby disorders associated
therewith.  To perform such measurements, Futhan or other serine protease
inhibitor is added to blood or plasma, containing a divalent metal ion chelator,
and C3a and C4a are measured.
CLASSIFICATION CODE: 15-4
SUPPLEMENTARY TERMS: Miscellaneous Descriptors
                     complement activation MASP1 MASP2 lectin pathway; C3a C4a
                     C5a chelator drug screening; transplant rejection
                     autoimmune disease complement activation
REGISTRY NUMBER:     80295-42-7 (complement C3a)
                     80295-49-4 (complement C4a)
                     80295-54-1 (complement C5a)
                     172306-56-8 (MASP serine protease)
                     214915-11-4 (MASP-1 serine protease)
                     214915-16-9 (MASP-2 serine protease)
                     60-00-4 (EDTA)
                     37259-58-8 (Serine protease)
                     14127-61-8 (Calcium ion)
REGISTRY NUMBER:     82956-11-4; 77-92-9
```

DISPLAY IALL (IPA File Segment)

```
ACCESSION NUMBER:    2001:153071  TOXCENTER
COPYRIGHT:           Copyright 2001 ASHP
DOCUMENT NUMBER:     38-10342
TITLE:               Gender gap narrows in smoking prevalence, deaths
AUTHOR(S):           anon
SOURCE:              American Journal of Health-System Pharmacy, (May 15
                     2001) Vol. 58, pp. 852, 854.
                     CODEN: AHSPEK. ISSN: 1079-2082.
DOCUMENT TYPE:       Journal
FILE SEGMENT:        IPA
OTHER SOURCE:        IPA 2001:10342
LANGUAGE:            English
ENTRY DATE:          Entered STN: 16 Nov 2001
                     Last Updated on STN: 16 Nov 2001
ABSTRACT:
It was announced that the gap in smoking prevalence between men and women
has closed to less than 5 percentage points; women now account for 39% of
all smoking related deaths, a proportion that has more than doubled since
1965, according to the latest U.S. Surgeon General's report on smoking.
Women who smoke not only share the same health risk as men but are also
faced with health consequences that are unique to women, including
pregnancy complications, problems with menstrual function, and cervical
cancer.  The report also states that nicotine addiction appears generally
similar between the sexes, however, women's regulation of nicotine intake
may be less precise than men's.
Elvira deC. Weiss
SECTION CODE:        22 Sociology, Economics and Ethics; 4 Toxicity
CLASSIFICATION CODE: 12:00 Autonomic drugs
SUPPLEMENTARY TERMS: Miscellaneous Descriptors
                     Nicotine; smoking; women
                     Autonomic drugs; nicotine; women
                     Smoking; cigarettes; women
                     Cigarettes; smoking; women
                     Women; smoking; cigarettes
                     Toxicity; nicotine; women
                     Sex; consumers; smoking
                     Death; cigarettes; smoking
                     Pregnancy; cigarettes; smoking
                     Cervix neoplasms; cigarettes; smoking
REGISTRY NUMBER:     54-11-5 (Nicotine)
```

DISPLAY IALL (MEDLINE File Segment)

```
ACCESSION NUMBER:    2012:377043  TOXCENTER
DOCUMENT NUMBER:     PubMed ID: 22336149
TITLE:               Arsenic, organic foods, and brown rice syrup
AUTHOR(S):           Jackson Brian P; Taylor Vivien F; Karagas Margaret R;
                     Punshon Tracy; Cottingham Kathryn L
CORPORATE SOURCE:    Trace Element Analysis Core Laboratory, Department of
                     Earth Sciences, Dartmouth College, Hanover, New Hampshire
                     03755, USA  BPJ@dartmouth.edu
SOURCE:              Environmental health perspectives, (2012 May) Vol. 120,
                     No. 5, pp. 623-6. Electronic Publication Date: 13 Feb
                     2012.
                     Journal code: 0330411. E-ISSN: 1552-9924. L-ISSN:
                     0091-6765.
                     Report No.: NLM-PMC3346791.
DIGITAL OBJECT IDENTIFIER: 10.1289/ehp.1104619
COMMENT:             Comment in: Environ Health Perspect. 2012 May;120(5):A204.
                     PubMed ID: 22549048
COUNTRY:             United States
DOCUMENT TYPE:       Journal; Article; (JOURNAL ARTICLE)
                     (RESEARCH SUPPORT, N.I.H., EXTRAMURAL)
                     (RESEARCH SUPPORT, U.S. GOV'T, NON-P.H.S.)
```

FILE SEGMENT: MEDLINE
OTHER SOURCE: MEDLINE 2012430909
LANGUAGE: English
ABSTRACT:
BACKGROUND: Rice can be a major source of inorganic arsenic (Asi) for many sub-populations. Rice products are also used as ingredients in prepared foods, some of which may not be obviously rice based. Organic brown rice syrup (OBRS) is used as a sweetener in organic food products as an alternative to high-fructose corn syrup. We hypothesized that OBRS introduces As into these products.

OBJECTIVE: We determined the concentration and speciation of As in commercially available brown rice syrups and in products containing OBRS, including toddler formula, cereal/energy bars, and high-energy foods used by endurance athletes.

METHODS: We used inductively coupled plasma mass spectrometry (ICP-MS) and ion chromatography coupled to ICP-MS to determine total As (Astotal) concentrations and As speciation in products purchased via the Internet or in stores in the Hanover, New Hampshire, area. Discussion: We found that OBRS can contain high concentrations of Asi and dimethyl-arsenate (DMA). An "organic" toddler milk formula containing OBRS as the primary ingredient had Astotal concentrations up to six times the U.S. Environmental Protection Agency safe drinking water limit. Cereal bars and high-energy foods containing OBRS also had higher As concentrations than equivalent products that did not contain OBRS. Asi was the main As species in most food products tested in this study.

CONCLUSIONS: There are currently no U.S. regulations applicable to As in food, but our findings suggest that the OBRS products we evaluated may introduce significant concentrations of Asi into an individual's diet. Thus, we conclude that there is an urgent need for regulatory limits on As in food.
CONTROLLED TERM: *Arsenic: AN, analysis
Cereals: CH, chemistry
Child
Child, Preschool
*Food Contamination: AN, analysis
Humans
Infant
*Oryza sativa: CH, chemistry
*Sweetening Agents
REGISTRY NUMBER: 7440-38-2 (Arsenic)
CHEMICAL NAME: Sweetening Agents
UNIQ INGREDIENT ID: N712M78A8G
GRANT ORGANIZATION: United States NIEHS NIH HHS
GRANT NUMBER: P20 ES018175; P42 ES007373

DISPLAY IALL (ANEUPL File Segment)

ACCESSION NUMBER: 2002:348890 TOXCENTER
DOCUMENT NUMBER: ANEUPL-83-001787
TITLE: MICROTUBULE ORGANIZING CENTERS DURING THE CELL CYCLE OF 3T3 CELLS.
AUTHOR(S): BROOKS R F; RICHMOND F N
SOURCE: Journal of Cell Science, (1983) 61 231.
CODEN: JNCSA.
FILE SEGMENT: ANEUPL
LANGUAGE: English
ENTRY DATE: Entered STN: Dec 2002
Last Updated on STN: Dec 2002
SUPPLEMENTARY TERMS: Miscellaneous Descriptors
AGENT TEST RESULTS; MAMMAL MOUSE CELL CULTURE; COLCEMID
REGISTRY NUMBER: 477-30-5

DISPLAY IALL (CIS File Segment)

```
ACCESSION NUMBER:    2002:523046  TOXCENTER
DOCUMENT NUMBER:     CIS-01-01633
TITLE:               Toxicological profile for alpha-, beta-, gamma- and
                     delta-hexachlorocyclohexane (Update)
AUTHOR(S):           Anonymous
CORPORATE SOURCE:    Agency for Toxic Substances and Diseases Registry (ATSDR)
SOURCE:              U.S. Department of Health and Human Services, Public
                     Health Service, Agency for Toxic Substances and Disease
                     Registry, Division of Toxicology/Toxicology Information
                     Branch, 1600 Clifton Road NE, E-29, Atlanta, GA 30333,
                     USA, July 1999. xix, 273p. Illus. Approx. 860 ref..
DOCUMENT TYPE:       Book; (Monograph)
FILE SEGMENT:        CIS
LANGUAGE:            English
ENTRY DATE:          Entered STN: Dec 2002
                     Last Updated on STN: Dec 2002
ABSTRACT:
This profile was prepared in accordance with guidelines set by the US Agency
for Toxic Substances and Disease Registry and the EPA.  The key literature
related to the toxic effects of hexachlorocyclohexane is identified and
reviewed.  Contents: public health statement; health effects; chemical and
physical information; production, import, use and disposal; potential for human
exposure; analytical methods; regulations and advisories; glossary.  Health
hazards include: neurologic effects (dizziness, seizures); haematological
changes; effects on the immune system; liver and kidney damage; changes in
reproductive hormone levels in the blood; animal studies show reproductive
effects, genotoxicity and cancerogenicity (liver cancer). (Update of CIS
99-234).
CLASSIFICATION CODE: 120
SUPPLEMENTARY TERMS: Miscellaneous Descriptors
                     HEXACHLOROCYCLOHEXANE; TOXICOLOGY; TOXICITY EVALUATION;
                     HEALTH HAZARDS; USA; CRITERIA DOCUMENT; TOXIC EFFECTS;
                     LITERATURE SURVEY; EXPOSURE EVALUATION; LIMITATION OF
                     EXPOSURE; GLOSSARY; SKIN ABSORPTION; NEUROLOGICAL EFFECTS;
                     CARCINOGENIC EFFECTS; HAEMATOLOGICAL EFFECTS; IMMUNOTOXIC
                     EFFECTS; MUTAGENIC EFFECTS; ANTIFERTILITY EFFECTS; HEPATIC
                     DAMAGE; RENAL DAMAGE; DETERMINATION IN BIOLOGICAL MATTER;
                     LEGISLATION
REGISTRY NUMBER:     319-84-6; 319-85-7; 319-86-8; 58-89-9; 608-73-1
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DISPLAY IALL (CRISP File Segment)

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ACCESSION NUMBER:    2002:562111  TOXCENTER
DOCUMENT NUMBER:     CRISP-2000-TW00927-03
TITLE:               TAXOL EFFECTS ON SIGNALING PATHWAYS IN OVARIAN CELLS
AUTHOR(S):           HORWITZ S B
CORPORATE SOURCE:    ALBERT EINSTEIN COLL OF MED, 1300 MORRIS PARK AVENUE,
                     BRONX, NY 10461:NEW YORK
SUPPORTING ORGANIZATION (SPONSORING AGENCY): U.S. DEPT. OF HEALTH AND HUMAN
                     SERVICES;  PUBLIC HEALTH SERVICE;  NATIONAL INSTITUTES OF
                     HEALTH, FOGARTY INTERNATIONAL CENTER
SOURCE:              Crisp Data Base National Institutes of Health.
DOCUMENT TYPE:       (Research)
FILE SEGMENT:        CRISP
LANGUAGE:            English
ENTRY DATE:          Entered STN: Dec 2002
                     Last Updated on STN: Dec 2002
ABSTRACT:
DESCRIPTION  Taxol is a natural product which has significant antitumor
activity in a large number of human tumors.  It has recently become appreciated
that in addition to stabilizing microtubules and blocking cell cycle progress,
taxol can alter gene expression by interacting with the MAP-kinase signal
transduction pathway.  Previous studies from the foreign and US PIs had
demonstrated that tyrosine phosphorylation of the adaptor protein, Shc, and
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formation of Shc/grb2/SOS complexes occurs in a taxol-treated murine macrophage cell line. The investigators propose to extend these observations to examine human ovarian carcinoma cells. The specific aims are to: 1. Study the effect of taxol on activation of the MAP-kinase pathway in human ovarian carcinoma cell lines; 2. Study the effect of taxotere and other taxol analogs compared to that of taxol on the activation of the Ras/MAPK signaling pathway and the relationship of this activity to effects on microtubule stabilization and cytotoxicity; 3. Compare taxol and taxotere in MAPK signaling pathway in taxol-sensitive and taxol-resistant human ovarian carcinoma cells.

SUPPLEMENTARY TERMS: Miscellaneous Descriptors
paclitaxel; antineoplastic; biological signal transduction; microtubule; chemical structure function; pharmacokinetics; drug adverse effect; drug resistance; drug screening ,evaluation; gene expression; human tissue; immunoprecipitation; phosphorylation; electrophoresis; tissue ,cell culture; cytotoxicity; analog; apoptosis; enzyme activity; mitogen activated protein kinase; cell proliferation

DISPLAY IALL (DART File Segment)

ACCESSION NUMBER: 2002:582299 TOXCENTER
DOCUMENT NUMBER: DART-TER-2001532
TITLE: Basic fibroblast growth factor (bFGF) induces branching and dilatation of developing renal tubules leading to cyst formation.
AUTHOR(S): Li Z; Liu X H; Xu L; Jerebstova M; Ye X; Ray P E
CORPORATE SOURCE: Centers for Molecular Physiology and Genetic Medicine, Children's Research Institute, Children's National Medical Center, Washington, DC.
SOURCE: Pediatr Res 2002 Apr;51(4 Pt 2):435A. PEDIATRIC RESEARCH, ISSN: 0031-3998.
DOCUMENT TYPE: Abstract; (MEETING ABSTRACT)
FILE SEGMENT: DART
LANGUAGE: English
ENTRY DATE: Entered STN: Dec 2002
Last Updated on STN: Dec 2002

DISPLAY IALL (DART File Segment) (cont'd)

ABSTRACT:
BACKGROUND: Increased expression of bFGF has been detected in dysplastic kidneys. However, the role of bFGF and the signaling pathways modulating its activity in developing kidneys are not completely understood. OBJECTIVE: To determine whether bFGF modulates the growth of rat metanephric kidneys (MK) and define the signaling pathways involved in this process. DESIGN/METHODS: MK (n = 80) from 15 day old rat embryos were grown in serum free DMEM-F12 media in the presence or absence of bFGF (5-20 ng/mL), bFGF neutralizing antibodies, 8-Bromo-cAMP (10(-3) M) and Isoproterenol (10(-5) M). Immunohistochemistry and in situ hybridization studies were done using the following markers of cell differentiation: WT-1, Pax, Factor VIII, BF-2; alpha-smooth muscle action, vimentin, Dolichos biflorus agglutinin. Cell apoptosis and proliferation were detected with the TUNEL assay, PCNA, (3H)-thymidine, and cell counts. The number and length of branching developing tubules were measured by morphometric analysis using a computerized program. Cultured primary stromal mesenchymal cells (SMC) were grown and treated as described above for the MK. MAPK kinase (MEK 1-2) and cAMP activity were determined by Western blots and ELISA respectively. To determine the effects of bFGF in vivo, MK were infected with rAd vectors carrying either a secreted 18 kD form of bFGF or the beta-galactosidase gene, and transplanted under the kidney capsule of adult rats (n = 6 each group). Results were evaluated by one-way analysis of variance using the Newman-Keuls test. P values of less than 0.05 were considered significant. RESULTS: Basic FGF increased the branching of developing tubules and induced the growth of peritubular mesenchymal stromal and endothelial cells. These changes were partially inhibited by 8-Bromo-cAMP and Isoproterenol. Basic FGF increased (5 folds) the number of SMC through a

MEK 1-2-dependent signaling pathway. cAMP blocked these effects. Transplanted MK infected with rAd-bFGF, but not with rAd-beta-gal, showed increased renal growth, angiogenesis, tubulogenesis, and formation of cystic structures. CONCLUSIONS: Basic FGF induces renal growth and facilitates the formation of tubular cystic structures at least partially through a MEK 1-2-dependent signaling pathway that could be inhibited by cAMP, both in vitro and in in vivo.

CONTROLLED TERM: Check Tags: Animal
Rats
*Fibroblast Growth Factor 2: PH, PHYSIOLOGY
*Kidney Tubules: EM, EMBRYOLOGY
*Kidney Tubules: CY, CYTOLOGY
*Kidney Tubules: EN, ENZYMOLOGY
Tissue Culture
Cell Division
Apoptosis
Mitogen-Activated Protein Kinases: ME, METABOLISM
Immunohistochemistry
Enzyme-Linked Immunosorbent Assay
Blotting, Western
Signal Transduction

REGISTRY NUMBER: 103107-01-3 (Fibroblast growth factor 2)

CHEMICAL NAME: EC 2.7.1.- (Mitogen-activated protein kinases)

DISPLAY IALL (EMIC File Segment)

ACCESSION NUMBER: 2002:453936 TOXCENTER

DOCUMENT NUMBER: EMIC-110877

TITLE: Impact of dimethyl sulfoxide and examples of combined genotoxicity in the SOS chromotest.

AUTHOR(S): Gebel T; Koenig A

CORPORATE SOURCE: Medical Institute of General Hygiene and Environmental Health, University of Goettingen, Windausweg 2, D-37073, Goettingen, Germany. tgebel@gwdg.de

SOURCE: Mutation Research, (1999 Aug 18) 444 (2) 405-11. Journal Code: NNA. ISSN: 0027-5107.

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

FILE SEGMENT: EMIC

OTHER SOURCE: EMIC MED-99453366

LANGUAGE: English

ENTRY DATE: Entered STN: Dec 2002
Last Updated on STN: Dec 2002

ABSTRACT:
The bacterial SOS chromotest with Escherichia coli PQ37 was used for the assessment of genotoxicity of combined xenobiotic treatments. The modulation of test compound genotoxicity by dimethyl sulfoxide (DMSO), a common solvent for test compounds, was assessed as well. It was shown that DMSO modulated SOS chromotest genotoxicity of several xenobiotics: in comparison to test compound dissolution in water, the commonly used addition of 3.2% (v/v) DMSO as solvent lead to a significant increase in the genotoxicity of K(2)RhCl(5) and beta-propiolactone (BPL). However, the effects of cisplatin decreased significantly when DMSO was added. Thus, albeit DMSO is not genotoxic in this test itself, it can interfere with SOS chromotest responses. Further experiments were performed in the absence of DMSO. BPL and cisplatin in combination showed an over-additive synergism in SOS genotoxicity as well as K(2)RhCl(5) and cisplatin did. Addition of Pd(NH(3))(4)Cl(2) and NaAsO(2), which are non-genotoxic in the SOS chromotest, did not enhance the K(2)RhCl(5)- or BPL-mediated SOS sfiA induction. Nevertheless, at the highest subcytotoxic dose of NaAsO(2) tested (200 microM), a slight yet significant suppression of BPL-mediated SOS genotoxicity was observed. These results confirm that the SOS chromotest is a useful tool for the rapid evaluation of the combined genotoxicity of compound mixtures. However, the use of DMSO as test solvent has to be taken with caution.

CONTROLLED TERM: Cisplatin: TO, TOXICITY
Colorimetry
*Dimethyl Sulfoxide: PD, PHARMACOLOGY

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                    *Escherichia coli: DE, DRUG EFFECTS
                    *Escherichia coli: GE, GENETICS
                    *Mutagenicity Tests
                    *SOS Response (Genetics): DE, DRUG EFFECTS
SUPPLEMENTARY TERMS: Miscellaneous Descriptors
                    Taxonomic Name: ESCHERICHIA COLI,PQ37
                    Test Object: BACTERIA
                    EFFECTS ON NUCLEIC ACIDS: DNA DAMAGE-SOS INDUCTION-SFIA
                    MISCELLANEOUS CATEGORY: AGENT INTERACTIONS
REGISTRY NUMBER:    67-68-5 (DMSO)
                    57-57-8 (BETA-PROPIOLACTONE)
                    15663-27-1 (CISPLATIN)
                    65980-75-8 (DIPOTATASSIUM PENTACHLORORHODATE)
                    13815-17-3 (TETRAAMMINEPALLADIUM(2+) DICHLORIDE)
                    7784-46-5 (SODIUM ARSENITE)
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DISPLAY IALL (EPIDEM File Segment)

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ACCESSION NUMBER:   2002:352326  TOXCENTER
DOCUMENT NUMBER:    EPIDEM-008891
TITLE:              THE RELATION OF DIET, CIGARETTE SMOKING, AND ALCOHOL
                    CONSUMPTION TO PLASMA BETA-CAROTENE AND ALPHA-TOCOPHEROL
                    LEVELS.
AUTHOR(S):          STRYKER W S; KAPLAN L A; STEIN E A; STAMPFER M J; SOBER A;
                    WILLETT W C
SOURCE:             AM. J. EPIDEMIOL., (1988) 127 (2) 283-296.
DOCUMENT TYPE:      Journal
FILE SEGMENT:       EPIDEM
ENTRY DATE:         Entered STN: Dec 2002
                    Last Updated on STN: Dec 2002
ABSTRACT:
THE RELATION OF DIET AND NUTRITIONAL SUPPLEMENTS, CIGARETTE USE, ALCOHOL
CONSUMPTION, AND BLOOD LIPIDS TO PLASMA LEVELS OF BETA-CAROTENE AND
ALPHA-TOCOPHEROL WAS STUDIED AMONG 330 MEN AND WOMEN AGED 18-79 YEARS.  DIETARY
CAROTENE, PREFORMED VITAMIN A, AND VITAMIN E INTAKE WERE ESTIMATED BY A
SELF-ADMINISTERED SEMIQUANTITATIVE FOOD FREQUENCY QUESTIONNAIRE.  THE
CORRELATION OF DIETARY CAROTENE WITH PLASMA BETA-CAROTENE WAS REDUCED IN
SMOKERS COMPARED WITH NONSMOKERS (R = 0.02 VS. 0.44 AMONG MEN; R = 0.19 VS.
0.45 AMONG WOMEN).  SMOKERS HAD MUCH LOWER PLASMA LEVELS OF BETA-CAROTENE THAN
DID NONSMOKERS (GEOMETRIC MEAN 8.5 VS. 15.3 MICROGRAMS FOR MEN; 17.3 VS. 26.3
MICROGRAMS/DL FOR WOMEN) DESPITE ONLY SLIGHTLY LOWER INTAKES OF CAROTENOIDS.
IN MULTIPLE REGRESSION ANALYSES, MEN WHO SMOKED ONE PACK PER DAY HAD 72% (95%
CONFIDENCE INTERVAL (CI) 58-89) OF THE PLASMA BETA-CAROTENE LEVELS OF
NONSMOKERS AFTER ACCOUNTING FOR DIETARY CAROTENE AND OTHER VARIABLES; FOR
WOMEN, THE CORRESPONDING PERCENTAGE WAS 79% (CI 64-99).  IN SIMILAR MODELS, MEN
DRINKING 20 G OF ALCOHOL PER DAY HAD 76% (CI 65-88) OF THE BETA-CAROTENE LEVELS
OF NONDRINKERS; WOMEN HAD 89% (CI 73-108) OF THE LEVELS OF NONDRINKERS.  AN
INTERACTION TERM FOR CAROTENE INTAKE AND SMOKING WAS STATISTICALLY SIGNIFICANT
IN A MODEL COMBINING BOTH SEXES.  THESE RESULTS SUGGEST THAT PLASMA LEVELS OF
BETA-CAROTENE AMONG SMOKERS AND, PERHAPS, HEAVY CONSUMERS OF ALCOHOL MAY BE
REDUCED SUBSTANTIALLY BELOW LEVELS DUE TO DIFFERENCES IN DIET.  THE CORRELATION
OF CALORIE-ADJUSTED INTAKE OF VITAMIN E WITH LIPID-ADJUSTED PLASMA LEVELS OF
VITAMIN ALPHA-TOCOPHEROL WAS 0.53 FOR MEN (N = 137) AND 0.51 FOR WOMEN (N =
193) AND DID NOT DIFFER BY ALCOHOL CONSUMPTION AND CIGARETTE USE; THESE
CORRELATIONS WERE LARGELY ACCOUNTED FOR BY USE OF VITAMIN SUPPLEMENTS.  IN
LINEAR REGRESSION MODELS, VITAMIN E INTAKE AND PLASMA LIPIDS WERE SIGNIFICANT
PREDICTORS OF PLASMA ALPHA-TOCOPHEROL LEVELS./DRUG THERAPY
SUPPLEMENTARY TERMS: Miscellaneous Descriptors
                    VITAMIN E; CAROTENE; LYCOPENE; BETA-CAROTENE; VITAMIN A;
                    ADOLESCENCE; ADULT; AGED; ALCOHOL DRINKING; ADMINISTRATION
                    AND DOSAGE; BLOOD; CROSS SECTIONAL STUDIES; DIET; FEMALE;
                    HUMAN; MALE; MIDDLE AGE; SMOKING; ANALYSIS; PLASMA;
                    NUTRITION; EPIDEMIOLOGIC METHODS; LIPIDS; BODY WEIGHT;
                    STATISTICS; CALORIC INTAKE
REGISTRY NUMBER:    59-02-9; 36-88-4; 502-65-8; 7235-40-7; 68-26-8
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DISPLAY IALL (ETIC File Segment)

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ACCESSION NUMBER:    2002:503699  TOXCENTER
DOCUMENT NUMBER:     ETICBACK-49739
TITLE:               EFFECTS OF TERBUTALINE SULFATE ON FETAL CARDIAC FUNCTION
AUTHOR(S):           PETERSEN R; CARTER L S; CHESCHEIR N C; KATZ V L; CEFALO R
                     C
SOURCE:              AM J OBSTET GYNECOL, (1989)  (161) 509-512.
                     CODEN: AJOGA.
DOCUMENT TYPE:       Journal
FILE SEGMENT:        ETIC
LANGUAGE:            English
ENTRY DATE:          Entered STN: Dec 2002
                     Last Updated on STN: Dec 2002
SUPPLEMENTARY TERMS: Miscellaneous Descriptors
                     Taxonomic Name: CAVIA PORCELLUS, HARTLEY
                     Test Object: MAMMAL, GUINEA PIG
                     Assay Method: VIABILITY, FERTILITY AND MORTALITY;
                     CARDIOVASCULAR SYSTEM; GROWTH
                     Maternal Effects: MATERNAL WEIGHT CHANGES; MATERNAL
                     CARDIOVASCULAR SYSTEM
                     Route Of Administration: SUBCUTANEOUS; INTRAPERITONEAL
REGISTRY NUMBER:     23031-32-5 (TERBUTALINE SULFATE)
                     9005-49-6 (HEPARIN)
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DISPLAY IALL (FEDRIP File Segment)

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ACCESSION NUMBER:    2003:105024  TOXCENTER
DOCUMENT NUMBER:     FEDRIP-00199078
TITLE:               Neuropsychological Functioning in Persian Gulf War Era
                     Veterans
AUTHOR(S):           White Roberta F., Ph.D.
CORPORATE SOURCE:    110326; Department of Veterans Affairs Research and
                     Development (15), 810 Vermont Ave. N.W., Washington, D.C.
                     20420 United States of America
FILE SEGMENT:        FEDRIP
OTHER SOURCE:        FEDRIP 200301-000167
LANGUAGE:            English
ENTRY DATE:          Entered STN: 6 May 2003
                     Last Updated on STN: 6 May 2003
BEGIN DATE (INITIAL PROJECT YEAR): 19960501
ABSTRACT:
PERSIAN GULF SYNDROME; INTERVIEWS; ENVIRONMENTAL EXPOSURE; AFFECTIVE SYMPTOMS
Abstract  Many Persian Gulf War (PGW) veterans have reported a significant
decline in their health since returning from the War.  These symptoms have
included excessive fatigue skin rash, Joint pain, headaches, and disturbances
of concentration and memory according to the Persian Gulf Registry
questionnaires completed by 12,774 veterans.  These veterans may have been
exposed to several neurotoxicants ranging from diesel fuels, oil fire smoke,
pesticides, and biological or chemical weapons.  In addition, some of the
reported health symptoms overlap with symptoms of post-traumatic stress
disorder (PTSD), multiple chemical sensitivity (MCS), and chronic fatigue
syndrome (CFS).  Cognitive impairments have been noted in exposures to the
previously mentioned neurotoxicants and in the three disorders noted above.  In
order to document these impairments in PGW veterans, neuropsychological tests
of known validity and sensitivity have been used.  OBJECTIVES: This study
evaluates the neuropsychological functioning of PGW-era veterans who are
seeking treatment for any type of health or adjustment complaint.  PGW deployed
veterans will be compared with non-deployed veterans.  The purpose of the group
comparisons is to isolate factors that may differentiate Persian Gulf War
veterans from non-Gulf War veterans who served during the same time period.  In
this way, we hope to better understand the constellation of health complaints
popularly referred to as Gulf War Syndrome."  RESEARCH PLAN/ METHODS: All
research subjects will be administered the previously mentioned
neuropsychological battery.  In addition, a standardized set of questionnaires
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and interviews will also be administered to identify health symptoms including physical and mental health conditions. These instruments permit diagnosis PTSD, MCS, CFS and other psychiatric disorders. The PGW veterans will be compared with non deployed veterans. Data from these groups will also be compared with those from a non-treatment seeking research sample of PGW veterans who are being studied using the same neuropsychological instruments. FINDINGS: The project's funding has ceased however, we are currently in a non-funded extension period in order to complete the data collection phase. To date, there are 137 subjects enrolled in the studs including 121 men and 16 women. As per Pi this project has ended as of 12/99.
SUPPLEMENTARY TERMS: Miscellaneous Descriptors
FEDRIP; RPROJ; va; U.S. DEPT. OF VETERANS AFFAIRS; PERSIAN GULF SYNDROME INTERVIEWS ENVIRONMENTAL EXPOSURE AFFECTIVE SYMPTOMS

DISPLAY IALL (HAPAB File Segment)

L11 ANSWER 2 OF 5987 TOXCENTER COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002:311239 TOXCENTER
DOCUMENT NUMBER: HAPAB-72-02714
TITLE: Determination of total bromine and of bromate in barley and malt.
AUTHOR(S): Brookes P A; Martin P A
SOURCE: J. Inst. Brewing London, (1972) 78 (2) 165-169. Ref: 17.
FILE SEGMENT: HAPAB
ENTRY DATE: Entered STN: Dec 2002
Last Updated on STN: Dec 2002
ABSTRACT:
Improved techniques for the determination of bromine and bromate in barley and malt were devised since published methods were found unsatisfactory. Bromate was determined directly on an aqueous extract of barley using an iodometric amplification reaction. Sodium molybdate/potassium fluoride reagent, potassium iodide solution, sulfuric acid, and starch solution were added to the extract and a titration was carried out with 0.02N sodium thiosulfate. Recoveries ranged from over 100% in wheat flour pellets and barley to as low as 85% in malt flour. Total bromine was determined using the same reaction after ashing the sample in an oxygen combustion flask and oxidizing the resulting bromide to bromate. It was necessary to dry steeped and germinating barleys for four hr at 105 DEG in order to grind samples and obtain satisfactory combustion. 1972
REGISTRY NUMBER: 7726-95-6

DISPLAY IALL (HMTC File Segment)

ACCESSION NUMBER: 2002:353910 TOXCENTER
DOCUMENT NUMBER: HMTC-94-0001885
TITLE: EVALUATION OF XE-340 AS A TRAPPING MEDIUM FOR AIRBORNE ORGANOCHLORINE PESTICIDES
AUTHOR(S): Yeboah P O; Kilgore W W
SOURCE: Bulletin of Environmental Contamination and Toxicology 33(l):13-19, (1984)
FILE SEGMENT: ***HMTC***
LANGUAGE: English
ENTRY DATE: Entered STN: Dec 2002
Last Updated on STN: Dec 2002
ABSTRACT:
Amberlite XAD, a porous polymer sorbent, is the most popular and least expensive commercial sampling system available to evaluate airborne organochlorine pesticides. However, its presampling cleanup procedure is lengthy. An alternative system which is just as effective but less time-consuming than XAD is the XE-340 system. XE-340 is a solid sorbent that incorporates activated carbon and polymeric principles. This paper presents the results of XE-340 sampling efficiency tests using seven organochlorine pesticides: alphachlordane, gamma-chlordane, lindane, heptachlor, heptachlor expoxide, aldrin, and dieldrin. Vapor pressures, fortification levels, and percent recoveries are presented.
SUPPLEMENTARY TERMS: Miscellaneous Descriptors

alpha-chlordane; gamma-chlordane; U036; lindane; U129; heptachlor; U129; dieldrim; P037; Characteristics; Monitoring; Substance Identification; Chemical Industry; Agricultural Chemicals; Pesticides; Monitoring Methods; Air Analysis; Halogenated Organics
REGISTRY NUMBER: 319-84-6

DISPLAY IALL (PESTAB File Segment)

ACCESSION NUMBER: 2002:346703 TOXCENTER
DOCUMENT NUMBER: PESTAB-81-2783
TITLE: Hydrogen peroxide and hydroxyl radical: intermediates in indirect photolysis reactions in water.
AUTHOR(S): Draper W M; Crosby D G
CORPORATE SOURCE: Dep. Anim. Dairy & Vet. Sci., Utah State Univ., Logan, UT 84322
SOURCE: Journal of Agricultural and Food Chemistry, (1981) 29 (4) 699-702. Ref: 22.
CODEN: JAFCA.
DOCUMENT TYPE: (Periodical)
FILE SEGMENT: PESTAB
ENTRY DATE: Entered STN: Dec 2002
Last Updated on STN: Dec 2002
ABSTRACT:
Thiobencarb (benthiocarb; I) photodecomposes slowly to thiobencarb S-oxide (II) in aqueous solutions exposed to sunlight. The rate of photodecomposition of I in water was greatly increased by addition of small amounts of hydrogen peroxide, tryptophan, or methylene blue. In these solutions, 2-hydroxythiobencarb (III), 3-hydroxythiobencarb (V), II, and N-monoethylthiobencarb (IV) were isolated as photooxidation products of I; the distributions of these products were similar in each case. Thiobencarb did not undergo reaction with photochemically generated, singlet molecular oxygen but was oxidized by hydroxyl radical (Fenton's reagent) to III, V, and II. The free radical photooxidation of I in aqueous acetone was unique; II and IV were among the photoproducts but the phenols, III and V, were absent. These results demonstrate the involvement and common intermediacy of hydrogen peroxide and hydroxyl radical in indirect photolysis reactions in aqueous solutions of hydrogen peroxide, tryptophan, and methylene blue. (Author abstract reprinted by permission of the American Chemical Society.)
REGISTRY NUMBER: 28249-77-6

DISPLAY IALL (PPBIB File Segment)

ACCESSION NUMBER: 2002:351132 TOXCENTER
DOCUMENT NUMBER: PPBIB-03654
TITLE: Trans-4-hydroxy-2-hexenal: A reactive metabolite from the macrocyclic pyrrolizidine alkaloid senecionine.
AUTHOR(S): Segall H J; Wilson D W; Dallas J L; Haddon W F
SOURCE: Science, (1985) 229 (Aug 2) 472-475.
FILE SEGMENT: PPBIB
ENTRY DATE: Entered STN: Dec 2002
Last Updated on STN: Dec 2002
ABSTRACT:
The toxicity of macrocyclic pyrrolizidine alkaloids in the livers of man and animals has been attributed to the formation of reactive pyrroles from dihydropyrrolizines. Now a novel metabolite, trans-4-hydroxy-2-hexenal, has been isolated from the macrocyclic pyrrolizidine alkaloid senecionine, in an in vitro hepatic microsomal system. Other alkenals such as trans-4-hydroxy-2-nonenal have previously been isolated from microsomal systems when treated with halogenated hydrocarbons or subjected to lipid peroxidation. The in vivo pathology caused by trans-4-hydroxy-2-hexenal appears to be identical to that previously attributed to reactive pyrroles. there are similarities between the toxic effects of this alkenal and those of centrilobular hepatotoxins such as CCl4 and other alkenals formed during lipid peroxidation.
SUPPLEMENTARY TERMS: Miscellaneous Descriptors
Chemical analysis; Senecio; Compositae; Liver; Hepatic

microsomal enzyme; Centrilobular necrosis; Hepatotoxic
REGISTRY NUMBER: 130-01-8

DISPLAY IALL (RISKLINE File Segment)

ACCESSION NUMBER: 2002:624842 TOXCENTER Full-text
DOCUMENT NUMBER: RISKLINE-2001120009
TITLE: Toxicology and carcinogenesis studies of p,p'-Dichlorodiphenyl sulfone in F344/N rats and B6C3F1 mice (feed studies)
AUTHOR(S): Anonymous
SOURCE: National Toxicology Program Technical Report Series, (2001) 501 262 p.
FILE SEGMENT: RISKLINE
LANGUAGE: English
ENTRY DATE: Entered STN: 13 Jul 2004
Last Updated on STN: 29 Nov 2005

ABSTRACT:
p,p'-Dichlorodiphenyl sulfone is used as a starting material in the production of polysulfones and polyethersulfones and as a component in reactive dyes in the textile industry; it is also a by-product of pesticide production. p,p'-Dichlorodiphenyl sulfone was nominated for study by the National Cancer Institute because of its history of high production and use, the prospect of increased production and use, and the absence of adequate toxicity testing. Male and female F344/N rats and B6C3F, mice were exposed to p,p'-dichlorodiphenyl sulfone (greater than 99% pure) in feed for 14 weeks or 2 years. Genetic toxicology studies were conducted in Salmonella typhimurium, cultured Chinese hamster ovary cells, and mouse bone marrow. 14-week study in rats. Groups of 10 male and 10 female F344/N rats were fed diets containing 0, 30, 100, 300, 1,000, or 3,000 ppm p,p'-dichlorodiphenyl sulfone (equivalent to average daily doses of approximately 2, 6, 19, 65, or 200 mg p,p'-dichlorodiphenyl sulfone/kg body weight) for 14 weeks. All rats survived until the end of the study. Mean body weights of groups exposed to 300 ppm or greater were significantly less than those of the controls. Liver weights of groups exposed to 100 ppm or greater and kidney weights of 1,000 and 3,000 ppm male rats were significantly greater than those of the controls. Centrilobular hepatocyte hypertrophy of the liver was observed in most male rats exposed to 100 ppm or greater and in all female rats exposed to 300 ppm or greater, and the severities were increased in 300 ppm males and 1,000 and 3,000 ppm males and females. The incidences of nephropathy in 1,000 and 3,000 ppm female rats were significantly increased. Dose-related increases in severity of nephropathy were observed in male rats. 14-week study in mice. Groups of 10 male and 10 female B6C3F1 mice were fed diets containing 0, 30, 100, 300, 1,000, or 3,000 ppm p,p'-dichlorodiphenyl sulfone (equivalent to average daily doses of approximately 3.5, 15, 50, 165, or 480 mg/kg) for 14 weeks. All mice survived until the end of the study. Mean body weights of groups exposed to 300 ppm or greater were significantly less than those of the controls. Liver weights of groups exposed to 300 ppm or greater were significantly increased. Centrilobular hypertrophy of the liver was observed in most males exposed to 100 ppm or greater and in all females exposed to 1,000 or 3,000 ppm, and the severities generally increased with increasing exposure concentration. 2-year study in rats. Groups of 50 male and 50 female rats were fed diets containing 0,10 (males), 30,100, or 300 (females) ppm p,p'-dichlorodiphenyl sulfone for 105 weeks. Dietary concentrations of 10, 30, and 100 ppm resulted in average daily doses of approximately 0.5, 1.5, and 5.0 mg/kg to males. Dietary concentrations of 30, 100, and 300 ppm resulted in average daily doses of approximately 1.6, 5.4, and 17 mg/kg to females. Additional groups of 10 male and 10 female rats were fed the same p,p'-dichlorodiphenyl sulfone-containing diets for 18 months and bled for plasma determinations of p,p'-dichlorodiphenyl sulfone at approximately 2 weeks and 3, 12, and 18 months. Survival of all exposed groups of male and female rats was similar to that of the control groups. Mean body weights of 30 and 100 ppm males were generally less than those of the controls during the latter part of the study, and mean body weights of 100 and 300 ppm female rats were less from weeks 30 and 18, respectively. Feed consumption by the exposed groups was similar to that by the controls throughout the study. The incidences of centrilobular hepatocyte

hypertrophy in 100 ppm male and 100 and 300 ppm female rats were significantly greater than those in the controls. The incidences of bile duct hyperplasia and centrilobular degeneration were also significantly increased in 100 and 300 ppm females. No neoplasms were related to chemical exposure. 2-year study in mice. Groups of 50 male and 50 female mice were fed diets containing 0, 30, 100, or 300 ppm p,p'-dichlorodiphenyl sulfone for 105 to 106 weeks. Dietary concentrations of 30, 100, and 300 ppm delivered average daily doses of approximately 4, 13, and 40 mg/kg to males and approximately 3, 10, and 33 mg/kg to females. Additional groups of 10 male and 10 female mice were fed the same p,p'-dichlorodiphenyl sulfone-containing diets for up to 12 months; three mice in each group were bled for plasma determinations of p,p'-dichloro-diphenyl sulfone at approximately 2 weeks or 3 or 12 months. Survival of all exposed groups of male and female mice was similar to that of the control groups. Mean body weights of 300 ppm mice were less than those of the controls throughout most of the study. Feed consumetion by the exposed groups was similar to that by the controls throughout the study. The incidences of centdlobular hepatocyte hypertrophy in all exposed groups of male mice and in 100 and 300 ppm females were significantly greater than those in the controls. The incidence of eosinophilic foci in 300 ppm females was significantly increased. No neoplasms were related to chemical exposure. Pharmacokinetics. Of p,p'-Dichlorodiphenyl sulfone. p,p'-Dichlorodiphenyl sulfone is rapidly absorbed from the gut and metabolized by a saturable process. Although some p,p'-dichlorodiphenyl sulfone is eliminated unchanged in feces and urine, most of the elimination is via metabolism. Mathematical modeling of the toxicokinetics supports the view that p,p'-dichlorodiphenyl sulfone induces enzymes involved in its metabolism. Genetic toxicology. p,p'-Dichlorodiphenyl sulfone was not mutagenic in any of several strains of Salmonella typhimurium, with or without metabolic activation enzymes (S9). Results of the sister chromatid exchange test in cultured Chinese hamster ovary cells were judged to be negative in the presence of S9 and equivocal in the absence of S9, but no induction of chromosomal aberrations was noted, with or without S9. In contrast to the in vitro results, positive results were obtained in an acute in vivo mouse bone marrow micronucleus assay with p,p'-dichlorodiphenyl sulfone administered by intraperitoneal injection three times over a dose range of 200 to 800 mg/kg. Conclusions. Under the conditions of these 2-year feed studies, there was no evidence of carcinogenic activity of p,p'-dichlorodiphenyl sulfone in male F344/N rats exposed to 10, 30, or 100 ppm or in female F344/N rats exposed to 30, 100, or 300 ppm. There was no evidence of carcinogenic activity of p,p'-dichlorodiphenyl sulfone in male or female B6C3F1 mice exposed to 30, 100, or 300 ppm. Exposure to p,p'-dichlorodiphenyl sulfone for 2 years caused increased incidences of nonneoplastic lesions of the liver in male and female rats and mice.
SUPPLEMENTARY TERMS: Miscellaneous Descriptors
ANIMAL; acute toxicity; subacute toxicity; chronic toxicity; carcinogenicity; genetic toxicity; toxicokinetics; liver; dose response; textile industry; pesticides
REGISTRY NUMBER: 80-07-9

TOXCENTER

DISPLAY IALL (TSCATS File Segment)

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ACCESSION NUMBER:    2002:612111  TOXCENTER
DOCUMENT NUMBER:     TSCATS-452426
TITLE:               MUTAGENICITY EVALUATION OF HEXAMETHYLDISILOXANE. FINAL
                     REPORT.
CORPORATE SOURCE:    LITTON BIONETICS INC
ORDER NUMBER:        NTIS/OTS0572722
SOURCE:              EPA/OTS; Doc #86940001687.
FILE SEGMENT:        TSCATS
ENTRY DATE:          Entered STN: Dec 2002
                     Last Updated on STN: Dec 2002
ABSTRACT:
Hexamethyldisiloxane did not produce responses in the L5178Y mouse lymphoma
cells which indicated consistent genetic activity.  Several scattered increases
appeared to be the result of spurious fluctuations and cytotoxicity.  The only
evidence of a genotoxic response was the induction of chromosome aberrations
under non-activation test conditions.  These data can be considered evidence
for weak clastogenic activity.
CLASSIFICATION CODE: TSCA Sect. 8D Rec 04/28/94
SUPPLEMENTARY TERMS: Miscellaneous Descriptors
                     INDUS HLTH FOUNDATION INC; HEXAMETHYLDISILOXANE (CAS#
                     107-46-0); HEALTH EFFECTS; GENOTOXICITY; GENE MUTATIONS;
                     MAMMALS; MICE; IN VITRO
REGISTRY NUMBER:     107-46-0
```

EXPAND in /BC Thesaurus

```
=> E FUNGI+ALL/BC

E1           0   BT3  Super Taxa/BC
E2           0     BT2  Super Taxa Terms/BC
E3       27236       BT1  Plantae/BC
E4       11787         -->  Fungi/BC
E5       11785           UF   15000/BC
E6       11787           UF   15000  Fungi/BC
E7        8930           NT1  Ascomycetes/BC
E8        5155           NT1  Basidiomycetes/BC
E9       30548           NT1  Fungi Imperfecti or Deuteromycetes/BC
E10        197           NT1  Myxophyta/BC
E11       2547           NT1  Phycomycetes/BC
********** END **********
```

EXPAND in /CN Thesaurus

```
=> E SERICYSTATIN+ALL/CN

E1           0   -->  Sericystatin/CN
E2           6     USE  CSTA protein, human/CN
********** END **********
```

EXPAND in /CT Thesaurus

```
=> E SUNSCREENING AGENTS+ALL/CT
E1            0     BT4   J Technology, Industry, Agriculture/CT
E2            0      BT3   Technology, Industry, and Agriculture/CT
E3          824       BT2   Household Products/CT
E4            0     BT4   D Chemicals and Drugs/CT
E5            0      BT3   Chemical Actions and Uses/CT
E6            3       BT2   Specialty Uses of Chemicals/CT
E7         2453        BT1   Cosmetics/CT
E8            0    BT5   D Chemicals and Drugs/CT
E9            0     BT4   Chemical Actions and Uses/CT
E10           0      BT3   Pharmacologic Actions/CT
E11           1       BT2   Therapeutic Uses/CT
E12        3476        BT1   Dermatologic Agents/CT
E13           0   BT6   D Chemicals and Drugs/CT
E14           0    BT5   Chemical Actions and Uses/CT
E15           0     BT4   Pharmacologic Actions/CT
E16           0      BT3   Physiological Effects of Drugs/CT
E17           0    BT5   D Chemicals and Drugs/CT
E18           0     BT4   Chemical Actions and Uses/CT
E19           3      BT3   Specialty Uses of Chemicals/CT
E20        1861       BT2   Protective Agents/CT
E21        6182        BT1   Radiation-Protective Agents/CT
E22        1885         -->   Sunscreening Agents/CT
E23        1885         MN    D27.505.696.706.776.800./CT
E24        1885         MN    D27.505.954.444.695./CT
E25        1885         MN    D27.720.269.800./CT
E26        1885         MN    D27.720.799.763.764./CT
                         DC    an INDEX MEDICUS major descriptor
                         NOTE  Chemical or physical agents that protect the
                               skin from sunburn and erythema by absorbing or
                               blocking ultraviolet radiation.
                         INDX  D25-26 qualif
                         AQ    AD AE AN CH CL CS CT DU EC HI IP ME PD PK PO RE
                               SD ST TO TU
                         HNTE  72(66)
                         MHTH  NLM (1966)
E27           0          UF    Agents, Sunscreening/CT
E28           0          UF    Sunscreens/CT
E29         900          NT1   Zinc Oxide/CT
E30           9          RT    Sun Protection Factor/CT
********** END **********
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EXPAND in /GT Thesaurus

=> E AFRICA+ALL/GT

```
E1           0   BT3  Geopolitical Locations/GT
E2           0     BT2  Geographic Classifiers/GT
E3        2827       BT1  Ethiopian region/GT
E4           0   BT3  Geopolitical Locations/GT
E5           0     BT2  Geographic Classifiers/GT
E6       38036       BT1  Palearctic region/GT
E7        3188         -->  Africa/GT
E8           9           NT1  Angola/GT
E9          52           NT1  Benin/GT
E10         15           NT1  Botswana/GT
E11          1           NT1  Burkina-Faso/GT
E12          5           NT1  Burundi/GT
E13         57           NT1  Cameroon/GT
E14          8           NT1  Central African Republic/GT
E15          7           NT1  Chad/GT
E16         19           NT1  Congo/GT
E17          0           NT1  Congo River/GT
E18          5           NT1  Djibouti/GT
E19          3           NT1  Equatorial Guinea/GT
E20          4           NT1  Eritrea/GT
E21         67           NT1  Ethiopia/GT
E22         11           NT1  Gabon/GT
E23         26           NT1  Gambia/GT
E24        105           NT1  Ghana/GT
E25         10           NT1  Guinea/GT
E26         11           NT1  Guinea-Bissau/GT
E27         26           NT1  Ivory Coast/GT
E28        162           NT1  Kenya/GT
E29          6           NT1  Lesotho/GT
E30          5           NT1  Liberia/GT
E31         36           NT1  Madagascar/GT
E32         32           NT1  Malawi/GT
E33         24           NT1  Mali/GT
E34          9           NT1  Mauritania/GT
E35         28           NT1  Mozambique/GT
E36         12           NT1  Namibia/GT
E37         15           NT1  Niger/GT
E38        432           NT1  Nigeria/GT
E39          9           NT1  Rwanda/GT
E40          0           NT1  Sao Tome and Principe/GT
E41         45           NT1  Senegal/GT
E42          8           NT1  Sierra Leone/GT
E43         13           NT1  Somalia/GT
E44        842           NT1  South Africa/GT
E45         55           NT1  Sudan/GT
E46          7           NT1  Swaziland/GT
E47        102           NT1  Tanzania/GT
E48         15           NT1  Togo/GT
E49         86           NT1  Uganda/GT
E50          9           NT1  Zaire/GT
E51         39           NT1  Zambia/GT
E52         71           NT1  Zimbabwe/GT
E53         44           NT1  Algeria/GT
E54        411           NT1  Egypt/GT
E55         13           NT1  Libya/GT
E56        162           NT1  Morocco/GT
E57        125           NT1  Tunisia/GT
********** END **********
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EXPAND in /MN Thesaurus

```
=> E D27.720.269.800.+ALL/MN
E1                BT4   J Technology, Industry, Agriculture/MN
E2                 BT3   Technology, Industry, and Agriculture/MN
E3                  BT2   Household Products/MN
E4                BT4   D Chemicals and Drugs/MN
E5                 BT3   Chemical Actions and Uses/MN
E6                  BT2   Specialty Uses of Chemicals/MN
E7                   BT1   Cosmetics/MN
E8               BT5   D Chemicals and Drugs/MN
E9                BT4   Chemical Actions and Uses/MN
E10                BT3   Pharmacologic Actions/MN
E11                 BT2   Therapeutic Uses/MN
E12                  BT1   Dermatologic Agents/MN
E13             BT6   D Chemicals and Drugs/MN
E14              BT5   Chemical Actions and Uses/MN
E15               BT4   Pharmacologic Actions/MN
E16                BT3   Physiological Effects of Drugs/MN
E17              BT5   D Chemicals and Drugs/MN
E18               BT4   Chemical Actions and Uses/MN
E19                BT3   Specialty Uses of Chemicals/MN
E20                 BT2   Protective Agents/MN
E21                  BT1   Radiation-Protective Agents/MN
E22                   -->   D27.720.269.800./MN
E23                   MH    Sunscreening Agents/MN
                       DC    an INDEX MEDICUS major descriptor
                       NOTE  Chemical or physical agents that protect the
                             skin from sunburn and erythema by absorbing or
                             blocking ultraviolet radiation.
                       INDX  D25-26 qualif
                       AQ    AD AE AN CH CL CS CT DU EC HI IP ME PD PK PO RE
                             SD ST TO TU
                       HNTE  72(66)
                       MHTH  NLM (1966)
E24                    UF    Agents, Sunscreening/MN
E25                    UF    Sunscreens/MN
E26                    RT    Sun Protection Factor/MN
********** END **********
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EXPAND in /ORGN Thesaurus

```
=> E RODENTIA+ALL/ORGN

E1           0   BT6  Super Taxa/ORGN
E2           0     BT5  Super Taxa Terms/ORGN
E3     1369945       BT4  Animalia/ORGN
E4     1293434         BT3  Chordata/ORGN
E5     1291289           BT2  Vertebrata/ORGN
E6     1219228             BT1  Mammalia/ORGN
E7      449350               -->  Rodentia/ORGN
E8        2699                 UF   86265/ORGN
E9           0                 UF   BC86265/ORGN
E10          4                 NT1  Abrocomidae/ORGN
E11         39                 NT1  Anomaluridae/ORGN
E12          5                 NT1  Aplodontiidae/ORGN
E13          9                 NT1  Bathyergidae/ORGN
E14         24                 NT1  Capromyidae/ORGN
E15         35                 NT1  Castoridae/ORGN
E16      21967                 NT1  Caviidae/ORGN
E17        208                 NT1  Chinchillidae/ORGN
E18      19987                 NT1  Cricetidae/ORGN
E19         37                 NT1  Ctenodactylidae/ORGN
E20          5                 NT1  Ctenomyidae/ORGN
E21         20                 NT1  Dasyproctidae/ORGN
E22          6                 NT1  Dinomyidae/ORGN
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E23           7                NT1  Dipodidae/ORGN
E24          14                NT1  Echimyidae/ORGN
E25          22                NT1  Erethizontidae/ORGN
E26          32                NT1  Geomyidae/ORGN
E27           7                NT1  Gliridae/ORGN
E28          42                NT1  Heteromyidae/ORGN
E29           4                NT1  Hydrochoeridae/ORGN
E30          29                NT1  Hystricidae/ORGN
E31      417448                NT1  Muridae/ORGN
E32          14                NT1  Octodontidae/ORGN
E33           5                NT1  Pedetidae/ORGN
E34           0                NT1  Petromyidae/ORGN
E35           6                NT1  Platacanthomyidae/ORGN
E36           3                NT1  Rhizomyidae/ORGN
E37         367                NT1  Sciuridae/ORGN
E38          13                NT1  Seleviniidae/ORGN
E39           7                NT1  Spalacidae/ORGN
E40           2                NT1  Thryonomyidae/ORGN
E41           9                NT1  Zapodidae/ORGN
E42      449350                RT   Rodents/ORGN
********** END **********
```

EXPAND in /ST Thesaurus

=> E ANIMAL HUSBANDRY+ALL/ST

```
E1            0   BT3  Major Concepts/ST
E2            0     BT2  Major Concept Terms/ST
E3        56097       BT1  Agriculture/ST
E4        16871         -->  Animal Husbandry/ST
                          NOTE Studies of the breeding, feeding, housing, and
                               management of animals used to produce consumer
                               goods.
                          NOTE For studies of disease and health care of
                               domesticated or zoo animals, see Veterinary
                               Medicine.  For studies of fish rearing, see
                               Aquaculture.  For studies of the care and
                               breeding of laboratory or zoo animals in
                               artificial environments, see Animal Care.
E5         1462           RT   Aquaculture/ST
E6         4355           RT   Animal Care/ST
E7        22378           RT   Veterinary Medicine/ST
********** END **********
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