

근거 문헌의 검색

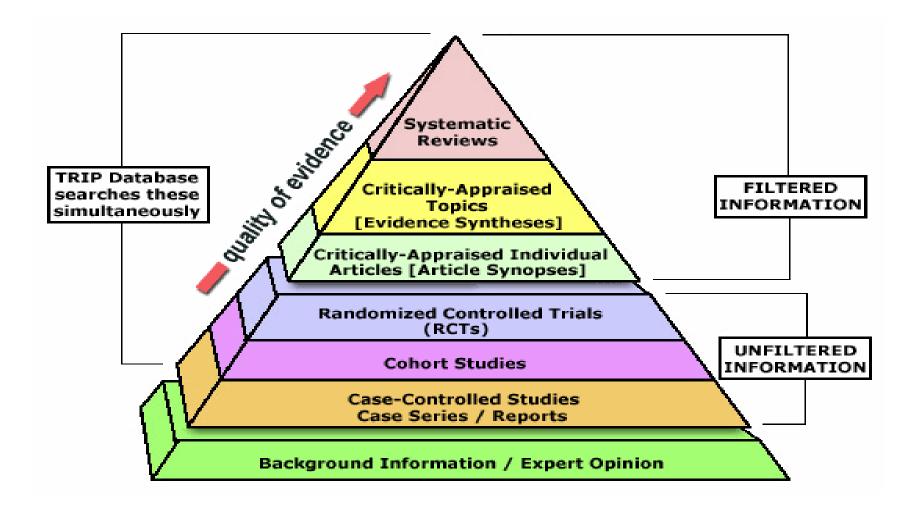


1. 체계적 문헌 고찰의 필요성

- RCT (Randomized Controlled Trials) 논문을 주제별로 정리한 결과물의 보급 필요성으로 시작됨 (1979)
- 전반적인 연구 현황을 알 수 있는 효과적인 방법 (검색 시간의 절약, 비판적 평가, 결과 해석)
- 각 연구간의 차이점 탐색
- 의사 결정 시 신뢰할 만한 근거 제공



1) Pyramid of Evidence

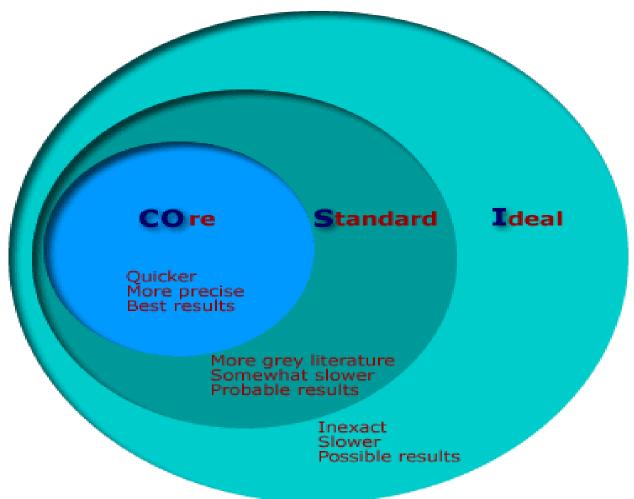


http://speechdudes.wordpress.com/tag/ebp/



2) 체계적 문헌 고찰을 위한 Database 선정

(National Medical Library의 COSI Model)





COSI (Core, Standard, Ideal) Model

- 1. Core : 핵심 DB (PubMed, Embase, Cochrane Central, CINAHL, Web of Science)
- 2. Standard : 국내문헌, 표준검색범위로 핵심잡지, Core DB 이외 특이한 DB (PsycINFO, ERIC, CANCERLIT, TOXNET, AIDSLINE)
- 3. Ideal : 이상적 검색범위로 학술대회 초록집, 미출판 문헌 진행 중인 임상시험, Google 등

(의) 체계적 문헌 고찰 논문 검색 DB

Cochrane Library

http://www.cochranelibrary.com/



4) 체계적 문헌 고찰 검색 단계

- 1. 선정된 PICO를 바탕으로 개념 정리와 검색어 선정
- 2. 선정된 검색어의 동의어 검색 (MeSH Database, 검색 연산자 OR)
- 3. 최종 검색어 간의 결합 검색 (PubMed / Advanced, 검색 연산자 AND)
- 4. 대상 Database에서 해당 검색식으로 검색
- 5. 검색 결과 수집



2. 개념 정리와 검색식 작성

- 1. 연구 주제를 바탕으로 개념 정리
- 2. 정리된 개념으로 동의어 찾기
- 3. 자연어인 키워드
- 4. 주제어 찾기
- 5. Keywords OR 주제어



1) 개념 정리

• 연구 주제에서 개념 분류

- PICO를 기반 검색어 선정
 - 1. Patient/Problem:
 Age Group / Gender
 - 2. Intervention
 - 3. Comparison [leave blank if none]
 - 4. Outcome (optional)



① 개념 정리

	cateory1	cateory2	cateory3	
	Fine Dust	Asthma	Children	
MeSH	"Dust"[Mesh]) OR "Particulate Matter"[Mesh] OR	"Asthma"[Mesh]	"Child"[Mesh]	
Keywords	"Aerosols" [Mesh] fine dust OR particulate matter OR suspended particulate matter OR atmospheric aerosol particles OR atmospheric particulate matter OR aerosol OR fine particles	Asthma	children OR child	
검색식	("Dust"[Mesh] OR "Particulate Matter"[Mesh] OR "Aerosols"[Mesh]) OR (fine dust OR particulate matter OR suspended particulate matter OR atmospheric aerosol particles OR atmospheric particulate matter OR aerosol OR fine particles)	"Asthma"[Mesh] OR asthma	("Child"[Mesh]) OR (children OR child)	



② 선정된 검색어의 유사어 검색 (1)

- 의학 용어 찾기
- 동의어 사전 찾기
- PuMed 검색 결과에서 Keywords
- MeSH에서 동의어 찾기
- 의학사전

http://m.kmle.co.kr/

https://www.nlm.nih.gov/medlineplus/mplusdictionary.html



BabelMeSH

http://babelmesh.nlm.nih.gov

<babelmesh>< 한글 MEDLINE/PubMed 검색></babelmesh>					
BabelMeSH는 우리에게 친숙한 한글을 이용해서 영문	는 문을 검색할 수 있도록 해 줍니다. (" <u>MeSH</u> " 번역은 보건복지부 보건의료정보 표준화 위원회에서 제공한 자료를 사용했습니다)				
한글 의학용어를 입력해 주십시오 :					
수막구균성 뇌수막염					
[찾기] [지우기]	Do you mean?	A			
검색에 포함할 논문의 언어:	You may modify this search by adding or deleting English terms:				
[아랍어 🗖] [중국어 🗖] [프랑스어 🗖] [독일	find				
	• 수막구균성 뇌수막염 = meningococcal encephalomenii Click				
[PICO 도무미] [제안][감사의 글][참고사항]					



② 선정된 검색어의 유사어 검색 (2)

- 선정한 keyword의 유사 용어 검색
- CBT OR cognitive behaviour therapies OR
 Cognition Therapy OR Therapies, Cognition
- 2. self esteem OR Self-Perception
- 3. eating disorders OR Feeding Disorder OR Appetite Disorder



2) 검색식 작성

- 동의어 간에는 OR
- 다른 개념들 간에는 AND
- PubMed의 Advanced 검색 활용
- 유사어 결합 검색식을 최종 검색
- P AND I AND C



① PubMed 검색식

Search	Query	Items found
#8	((fine dust OR particulate matter OR suspended particulate matter OR atmospheric aerosol particles OR atmospheric particulate matter OR aerosol OR fine particles dust) OR ("Dust"[Mesh] OR "Particulate Matter"[Mesh] OR "Aerosols"[Mesh])) AND ((asthma OR "Bronchial Asthma") OR ("asthma"[MeSH Terms])) Filters: Child: birth-18 years	5247
#7	((fine dust OR particulate matter OR suspended particulate matter OR atmospheric aerosol particles OR atmospheric particulate matter OR aerosol OR fine particles dust) OR ("Dust"[Mesh] OR "Particulate Matter"[Mesh] OR "Aerosols"[Mesh])) AND ((asthma OR "Bronchial Asthma") OR ("asthma"[MeSH Terms]))	13574
#6	(asthma OR "Bronchial Asthma") OR ("asthma"[MeSH Terms])	197079
#5	"asthma"[MeSH Terms]	130983
#4	asthma OR "Bronchial Asthma"	197079
#3	(fine dust OR particulate matter OR suspended particulate matter OR atmospheric aerosol particles OR atmospheric particulate matter OR aerosol OR fine particles dust) OR ("Dust"[Mesh] OR "Particulate Matter"[Mesh] OR "Aerosols"[Mesh])	133454
#2	"Dust"[Mesh]) OR "Particulate Matter"[Mesh] OR "Aerosols"[Mesh]	95941
#1	fine dust OR particulate matter OR suspended particulate matter OR atmospheric aerosol particles OR atmospheric particulate matter OR aerosol OR fine particles dust	1,33454



② EBP 검색식 (3)

Search	Query	Items found
#10	((fine dust OR particulate matter OR suspended particulate matter OR atmospheric aerosol particles OR atmospheric particulate matter OR aerosol OR fine particles dust) OR ("Dust"[Mesh] OR "Particulate Matter"[Mesh] OR "Aerosols"[Mesh])) AND ((asthma OR "Bronchial Asthma") OR ("asthma"[MeSH Terms])) AND ((Child OR children OR pediatric) OR ("Child"[Mesh]))	5,058



3. 검색 시작 : 의학도서관

- 1. http://ymlib.yonsei.ac.kr 로 접속
- 2. 홈페이지 로그인ID: 직번password: 생년월일ab! (수정 가능)
- 3. 주메뉴 E-Resources / Databases, 소장정보 , 연구지원, 서비스, 도서관안내, My Library
- 4. 의료원 외부에서 이용하는 경우 홈페이지 로그인 후 이용



1) PubMed

- 미국 국립의학도서관에서 1996년에 서비스 시작된 의학분야 최고의 Database
- medicine, nursing, dentistry, veterinary medicine, health care systems, and preclinical sciences.
- 1947~65년 16,000건, 1966년 이후 3,300만 건 이상의 Citation
- Adds citations everyday
- ▶ E-Journal 원문과 연결
 - 475개 원문 Database와 출판사에서 약 9,989 여종 원문 제공 (2021.9)
- 2010년 4월부터는 NCBI Bookshelf에서 제공하는 Book도 검색 가능



MEDLINE

- 세계적인 생의학•보건 관련 Database로서 전 세계적으로 이용되고 있음
- 미국 등 80여 개 국가에서 출판되는 저널 약 5,274 여 종을 수록 (40여개 언어)
- 40% 이상이 미국에서 출판, 영어 논문이 93%,
 초록 포함 논문이 85%
- 수록된 논문은 NLM의 통제어인 MeSH로 색인되어짐
- PubMed에서 가장 큰 부분을 차지하고 있음



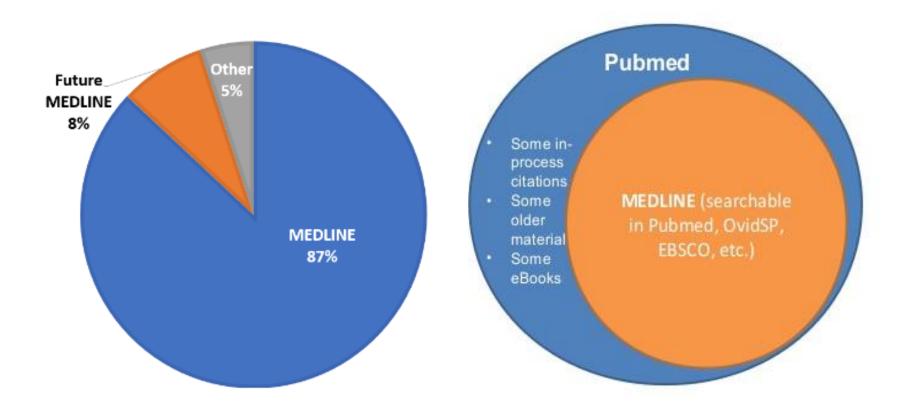
(1) PubMed 와 Medline

• PubMed의 구성

- MEDLINE 86% (2,700만 건의 citation) Started in the 1960s, it now provides more than 27 million references to biomedical and life sciences journal articles back to 1946
- In Process
- OLDMEDLINE Journal citations from 1948 - 1965
- Publisher
- NCBI Bookshelf
- Only PubMed



PubMed record 수



https://www.nlm.nih.gov/bsd/disted/pubmedtutorial/010_070.html

http://mandegar.info/?I=Using+OvidSP+databases++UCL



(2) 우리도서관 PubMed

- 연세대학교 의학도서관 홈페이지에 연결된 PubMed 에서 검색



- ① 우리도서관에서 구독하는 E-J 연결과 다양한 정보 제공
- ② Full text 연결 Link, Print J 소장 정보, 원문복사신청,
- ③ SCIE 등재된 경우 다른 논문 검색 기능,
- ④ JCR impact factor 값 확인



(3) PubMed Searching

Keywords

첫 검색 창에 검색어를 넣어서 검색하는 방법으로 가장 기본적인 방법

Author

Advanced에서 저자명 검색을 선택해서 검색

Journal

Advanced에서 journal을 선택해서 검색

• 주제어

MeSH(Medical Subject Heading) 검색 주제어의 상하 개념을 확인할 수 있고 subheading을 지정하여 검색



① Keywords 검색

1. AND, OR, NOT 검색

- lung AND cancer: lung과 cancer가 모두 포함된 논문 검색
- lung OR cancer: lung이나 cancer 둘 중 하나만 포함되어 있으면 검색
- lung NOT cancer: lung 검색 결과에서 cancer가 포함된 논문은 제외

2. Phrase 검색

단어 구로 검색하기 위해서는 " " 사이에 구를 입력

3. Nesting 검색

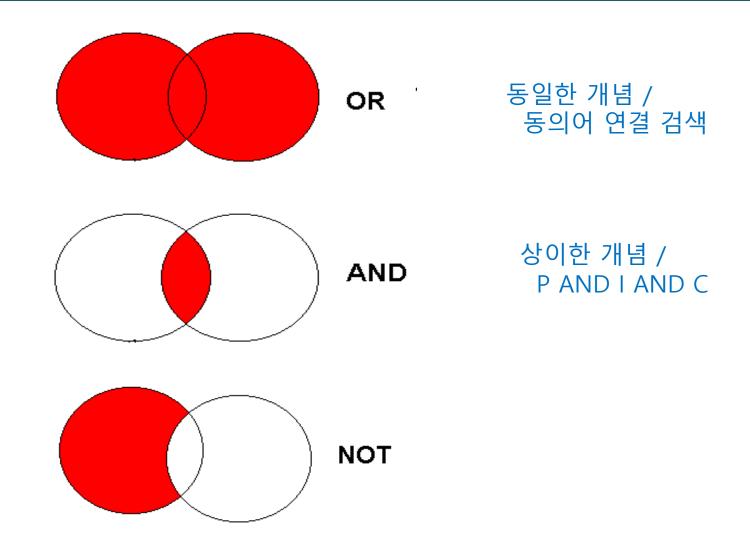
()가 있으면 우선 검색

4. Truncation

절단 검색을 원할 때는 *를 사용하여 검색예: child* (child, children, childhood 등)



Boolean 연산자





검색식 작성

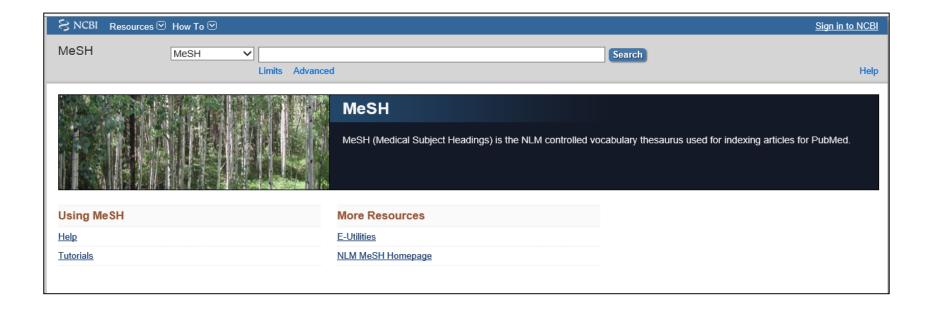
- 동일한 개념간 연산 : OR
- 상이한 개념간 연산 : AND
- 민감도와 특이도의 균형을 맞추는 것이 중요
- 민감도를 높이기 위한 검색 : 제한을 하지 않고 검색해서 많은 검색 결과를 얻기 위한 방법
- 특이도를 높이기 위한 검색: 제한을 최대한으로 해서 정 확한 검색 결과를 얻기 위한 방법





② MeSH 검색

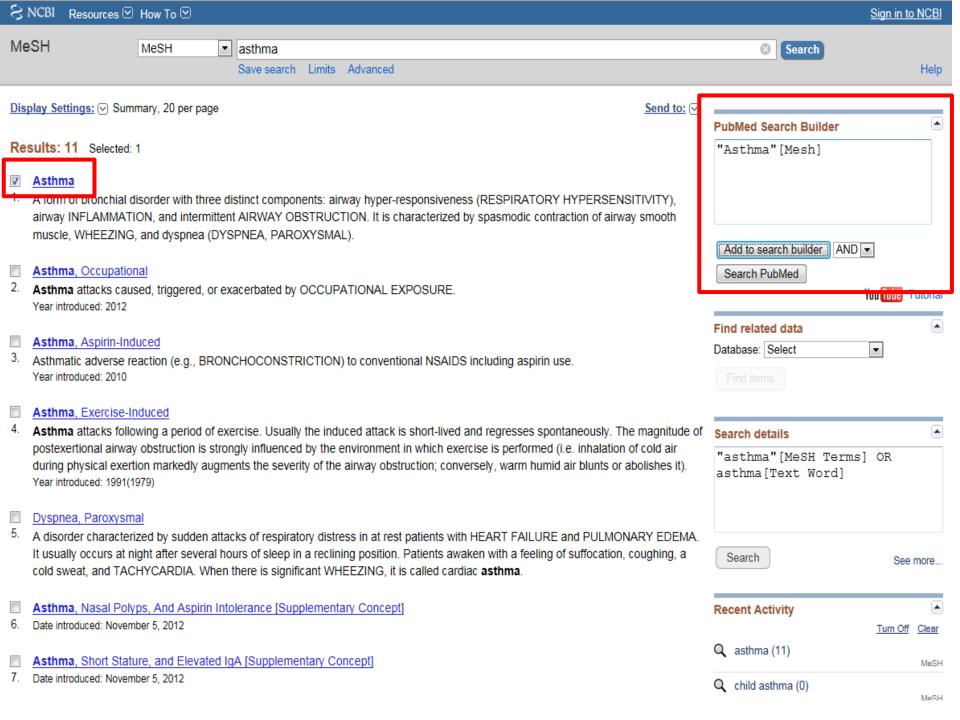
MeSH Database 이용





MeSH Database

- The National Library of Medicine's controlled vocabulary thesaurus (http://www.nlm.nih.gov/mesh)
- 검색어 입력 후 해당 MeSH를 결과로 보여주고, 상세 화면에서 는 subheading과 상하개념의 용어들을 계층구조로 보여줌
- 논문 작성 시 keywords 선정에서 MeSH term 확인 가능
- MeSH on Demand (자동 MeSH 추출)
 http://www.nlm.nih.gov/mesh/MeSHonDemand.html





(4) Filters

- 1. My NCBI FILTERS
- 2. Result by Year
- 3. Text availability
- 4. Article attribute: Associated data
- 5. Article Type: Publication types
- 6. Publication Dates: 1 year, 5 years, 10 years, Custom Range
- 7. Additional filters

Article Type
Species
Language
Sex

Journal : MEDLINE

Age



fine dust X Search

Advanced Create alert Create RSS User Guide

	ARTICLE TYPE	Child: birth-18 years	Adult: 19+ years	^
MY NCBI FILTERS 🖪		Newborn: birth-1 month	Young Adult: 19-24 years	
RESULTS BY YEAR	SPECIES	☐ Infant: birth-23 months	Adult: 19-44 years	
		☐ Infant: 1-23 months	☐ Middle Aged + Aged: 45+ years	
∠ ⁷	LANGUAGE	Preschool Child: 2-5 years	☐ Middle Aged: 45-64 years	
		Child: 6-12 years	Aged: 65+ years	
	SEX	Adolescent: 13-18 years	80 and over: 80+ years	
917	SEX			
				ind d
'EXT AVAILABILITY	SUBJECT			
Abstract				
Free full text	JOURNAL			
Full text				
ARTICLE ATTRIBUTE	AGE			V
Associated data			Cancel Show	
ARTICLE TYPE	transpor	ted mineral dust from mines and tail	ings as well as uncovered trucks leakage	Collectively, the
Books and Documents			tial hotspot for mineral exposure in popula	
Clinical Trial		a mine and its tailings; moreover, that on are urgently needed	t effective prevention measures like road cl	eaning and truck



(5) Advanced Search

- Advanced Search Builder 검색식의 조합 Field 제한검색
 - 1) Add terms to the query box field 선택과 검색어 입력 후 AND, OR, NOT 으로 연결할 추가 검색어가 있다면 검색어 추가 후 선택



2 Query box 입력된 검색어 확인 뒤 Search ~



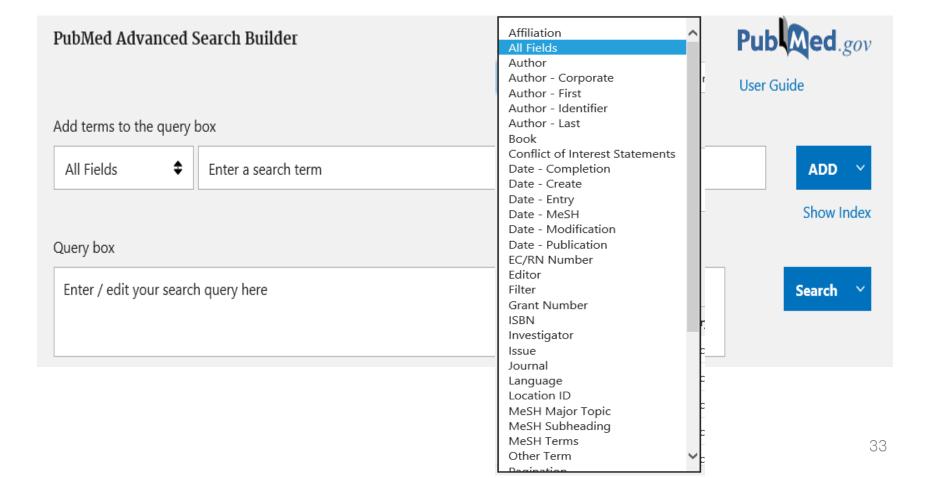


History and Search Details 검색 기록 확인 검색식 저장



1 Search Builder

특정 field로 제한,결합 검색
 keyword 입력 시 index 기능이 있어서 용어 선택 시 도움이 됨





② Search History

- 검색했던 검색 기록 확인 및 저장
- Inactivity 8시간 후 삭제됨
- 검색 질의어에 생성된 번호(#n)로 검색 가능
- My NCBI에 저장하여 활용
- Delete (삭제 기능)
- Details : 정확한 검색식 확인

History and Search Details			<u></u> Download		
Search	Actions	Details	Query	Results	Time
#4	•••	>	Search: fine dust	1,523	03:04:09
#43	•••	>	Search: artificial tooth	5,935	03:03:48
#49	•••	>	Search: artificial tooth Filters: Associated data	17	03:00:34
#48	•••	>	Search: artificial tooth[MeSH Major Topic] Filters: Associated data	0	02:56:27
#47	•••	>	Search: artificial tooth[MeSH Major Topic]	1,312	02:54:40



(6) Documents

1. Similar Articles

관련 문헌으로 재 검색

2. Results by Year

- 검색 결과에서 오른쪽 상단에 Result by Year 그래프
- 검색어의 년도 별 논문 수를 한눈에 파악할 수 있으며, 마우스를 그래프 위에 올리면 년도 별 논문 수를 확인

3. PMC Images Search

검색된 논문이 PMC에 수록되어 있을 때에는 그 논문에 실려있는 이미지를 볼 수 있다. 이미지는 PMC에 등재된 Journal만 가능

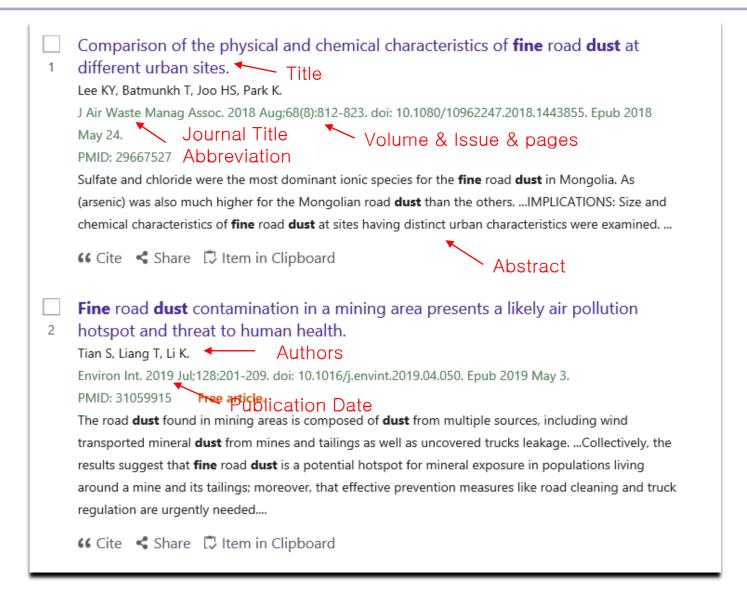
4. Cited by # PubMed Central articles

검색 논문 중 PMC 논문에서 1회 이상 인용된 논문이면 상세검색 결과화면에서 해당 논문을 인용한 논문을 검색 (#: 인용된 횟수)

5. PubMed Identifier (PMID)

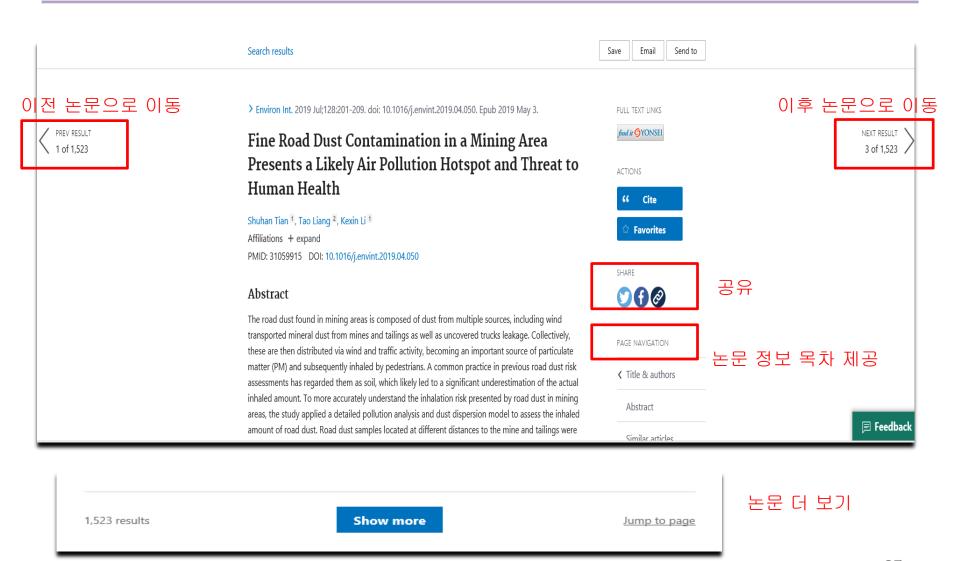


(6-1) Documents





(6-1) Documents





(6-1) Documents

Display Option

- → 검색된 결과 논문을 보는 형식을 지정 가능
 - 1. Format: Summary, Abstract
 - 2. Sort by : 논문 배열 순서 설정

Most Recent, **Best Match**, Publication Date

3. Per Page: 페이지당 보여지는 논문 수 설정



(6-1) Documents

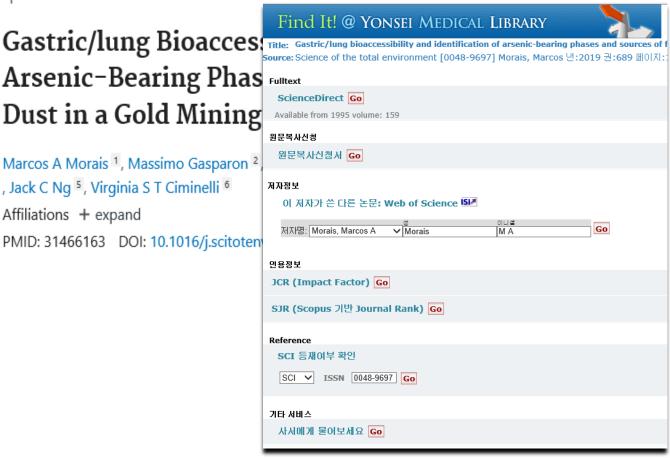
> Sci Total Environ. 2019 Nov 1;689:1244-1254. doi: 10.1016/j.scitotenv.2019.06.394.

Epub 2019 Jun 25.

Arsenic-Bearing Phas Fulltext Dust in a Gold Mining

Marcos A Morais 1, Massimo Gasparon 2 , Jack C Ng 5, Virginia S T Ciminelli 6 Affiliations + expand

PMID: 31466163 DOI: 10.1016/j.scitoten



FULL TEXT LINKS



ACTIONS



☆ Favorites

SHARE



(7) Clipboard -1

- 특정 논문을 선택해서 모은 뒤 Save, Email 전송 가능
- 이 화면에서 Print, Save를 실행
- 500개의 논문까지 저장 가능
 - 단 inactivity 8시간 후 삭제됨
- My NCBI에 저장 가능
- Remove from Clipboard (선택한 논문 삭제)
- Remove all (Clipboard에 있는 논문 모두 삭제)

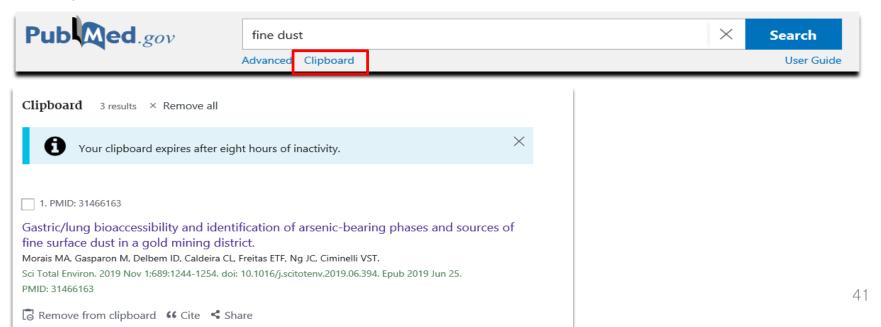


(7) Clipboard -2

1. Clipboard 에 논문 저장



2. Clipboard 로 이동





2) Cochrane Library

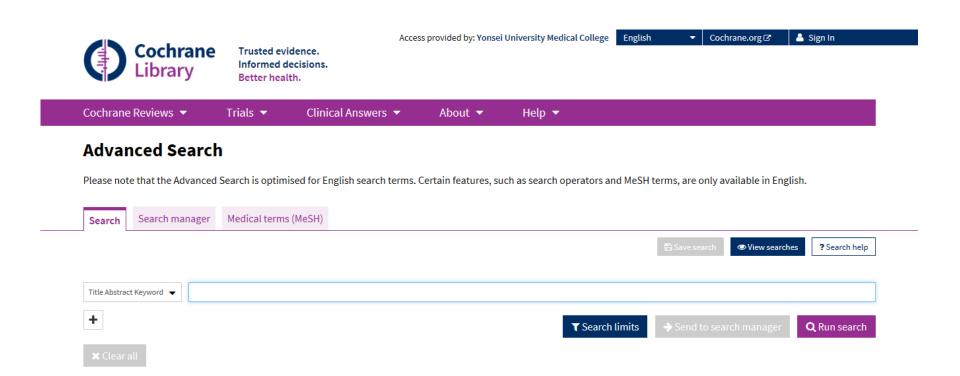
- Systematic Reviews 검색
- 구성
- 1. Cochrane Database of Systematic Reviews (CDSR)

전 세계의 대부분 Randomized Controlled Trials 자료를 취합해서 연구주제에 활용, SR 근거자료로 사용

- 2. Cochrane Central Register of Controlled Trials (CENTRAL)
- 3. Clinical Answers



Advanced Search





(5) Search Manager

Advanced Search

intermittent fasting Last saved on: 12/11/2018 14:22:17

#1

#2

#3

#4

#5

#6

#7

#8

#9

#10

#8 and #9

Please note that the Advanced Search is optimised for English search terms. Certain features, such as search operators and MeSH terms, are only available in English.

Search

Search manager

Medical terms (MeSH)

MeSH descriptor: [Healthy Volunteers] explode all trees

MeSH descriptor: [Adult] explode all trees

MeSH descriptor: [Patients] explode all trees

MeSH descriptor: [Humans] explode all trees

MeSH descriptor: [Obesity] explode all trees

#1 or #2 or #3 or #4 or #5 or #6 or #7

MeSH descriptor: [Diabetes Mellitus] explode all trees

MeSH descriptor: [Metabolic Syndrome] explode all trees

diet" OR "reduced meal frequency" OR "alternate-day fasting" OR "alternate day fasting"



View saved searches

Manually type a search term here or click on the S (Search Wizard) or MeSH button to compose one MeSH ▼ #11 ☐ Highlight orphan lines X Clear all

"intermittent fasting" OR "ramadan diet" OR "ramadan fasting" OR "time-restricted fasting" OR "time-restricted feeding" OR "alternate fasting" OR "periodic

🖺 Save this search 🔻



144

29

N/A

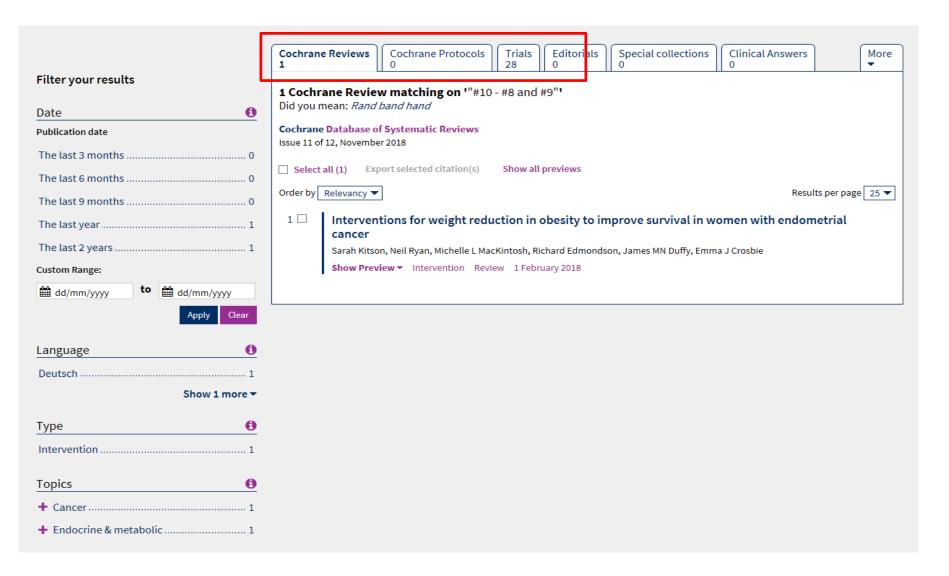
T

T

? Search help



(6) Results



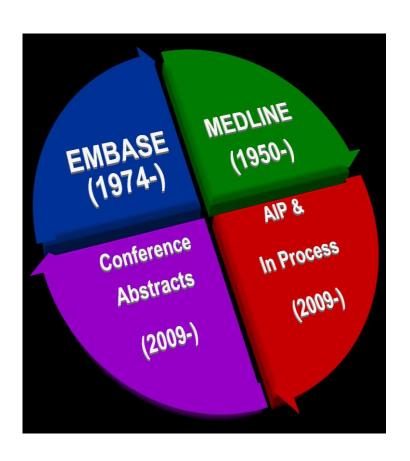


3) Embase

- Pharmacology, Toxicology, Clinical Medicine을 포함한 International biomedical 문헌정보 8,500 종 저널의 Record 수록
- EMBASE(1947년-현재)와 MEDLINE(1966년-현재)의 자료가 통합된 DB
- EMBASE 만의 2,800여종 저널 추가 제공
- 임상 연구의 진행 상황 모니터링 및 약물 안전성, 부작용, 치료법 등의 정보 제공
- Life Science 분야의 Thesaurus Emtree (질병, 약물, 메디컬 장비 등)를 통한 검색 가능
- Evidence Based Medicine(EBM) 정보 제공
- 미국 NLM이 제시한 COSI 모델에서 Core 검색 정보원



(1) EMBASE contents



Fully indexed: 8,500 journals

Unique to EMBASE: 2,800 journals

Over 5,000 records added/day 1,300,000

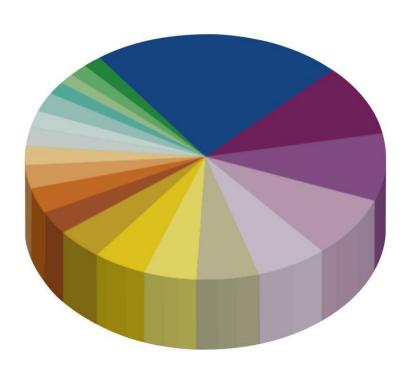
record added/year

EMBASE Classic: Digitally scanned and

re-indexed, 1947-1973



ชฟสเต็จ อใจระหลัง (2) EMBASE Scope & Coverage



Other topics 28% Including public health, basic biomedical science and topic

s included from MEDLINE

- Pharmacology & Toxicology 12%
- General Clinical Medicine 11%
- Genetics, Biochemistry & Molecular Biology 10%
- Neurology & Behavioral Medicine 8%
- Microbiology & Infectious Disease 7%
- Cardiology & Hematology 6%
- Psychiatry & Mental Health 6%
- Oncology 5%
- Healthcare Policy & Management 4%
- Allergy & Immunology 4%
- Pediatrics 4%
- Endocrinology & Metabolism 3%
- Obstetrics & Gynecology 3%
- Biomedical Engineering & Medical Devices 3%
- Anesthesiology & Intensive Care 3%
- Gastroenterology 2%
- Respiratory Medicine 2%
- Nephrology & Urology 2%
- Dermatology 2%



(3) Emtree

- Life Science Thesaurus (A controlled vocabulary for Biomedicine and related Life Sciences)
- 70,000 개 이상의 대표어와 290,000 개 이상의 동의어
- MeSH의 2배 이상 용어 포함 (모든 MeSH 용어 포함)
- Comprehensive Drug & Disease Searching
- Chemical names, trade names, laboratory/research codes, 31,000 개 이상 의 generic drugs 과 chemicals (FDA, EMEA,WHO)
- 78 개 subheadings (64 개 drug subheadings 과 14개 disease subheadings)
- Study type (Randomized Controlled Trial, Systematic Review, Diagnostic Test Accuracy Study 등 포함)에 대한 38개 check tags



1 Advanced Search

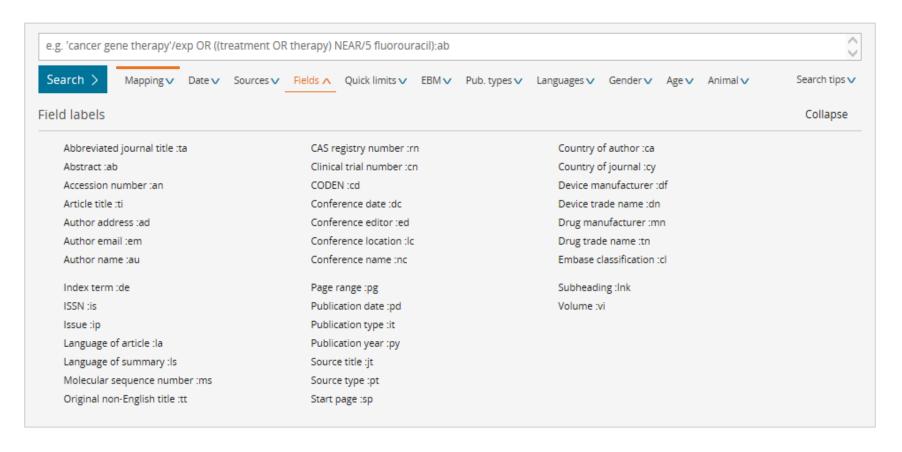
Advanced Search





② Fields

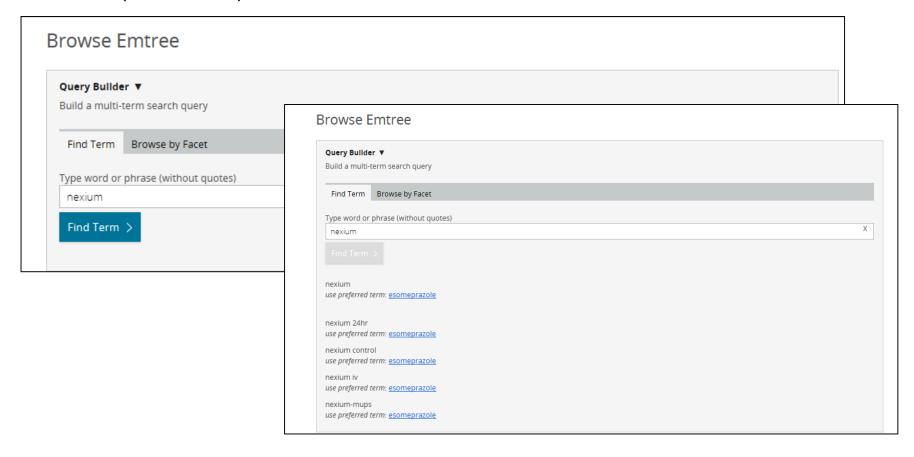
Advanced Search





3 Emtree Search (1)

Keyword 입력 → "Find Term" 클릭 → 입력한 Keyword의 동의어(Black text) 및 Emtree 내에서 matching된 우선어(Blue text) 확인 및 해당되는 우선어 선택





③ Emtree Search (2)

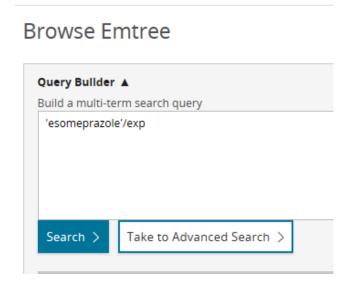
선택한 단어를 포함한 Emtree 계층 구조 확인

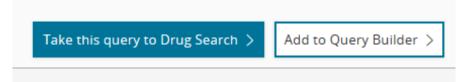
Browse Emtree Query Bullder ▼ Build a multi-term search query Find Term Browse by Facet Type word or phrase (without quotes) esomeprazole Find Term > For term: 'esomeprazole' Extend your search: Explode As major focus Take this query to Drug Search > Add to Query Builder > Emtree chemicals and drugs agents affecting metabolism enzyme inhibitor hydrolase inhibitor adenosine triphosphatase inhibitor proton pump inhibitor esomeprazole 6,481 Records organic compound compounds according to chemical structure heterocyclic compound single heterocyclic rings carbon nitrogen monocycle pyridine derivative esomeprazole 6.481 Records



3 Emtree Search (3)

Query에 입력된 단어 확인 후 검색



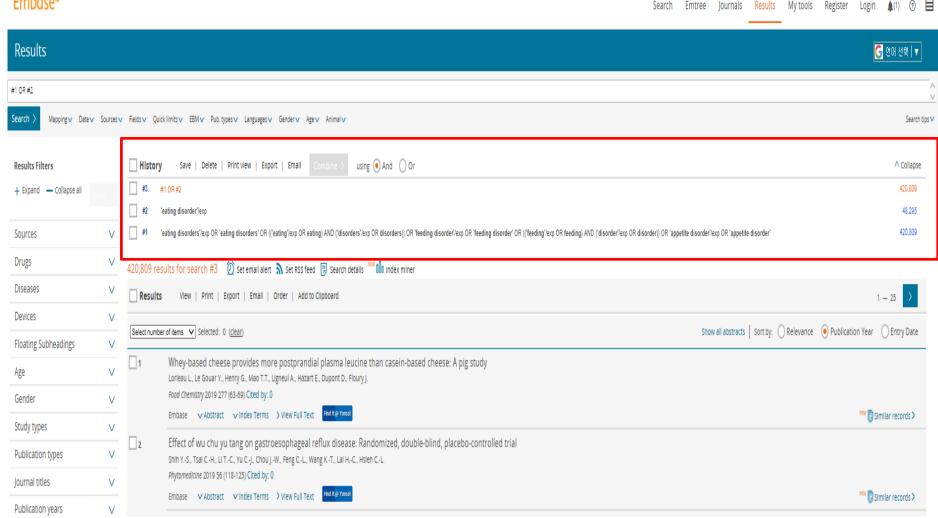


Add to Query Builder 클릭하여 선택한 단어를 Query 에 추가



검색식 예)

Embase[®]





4 Save Results

- 저장하고자 하는 검색 결과 선택 후
 "Add to Clipboard" 클릭
- 2. 메인 메뉴의 Tools→Clipboard 에서 다시 선택하고 "Save" → 다음 로그인 시에도 저장 내역 확인 가능
- 3. 저장한 내용은 Tools → Saved Clipboard 에서 확인



4) Web of Science

- 미국 Thomson Reuter사에서 제공하며, 엄선 평가된 12,800여 종 학술지 논문의 인용정보 검색 및 분석
- 주간단위 update

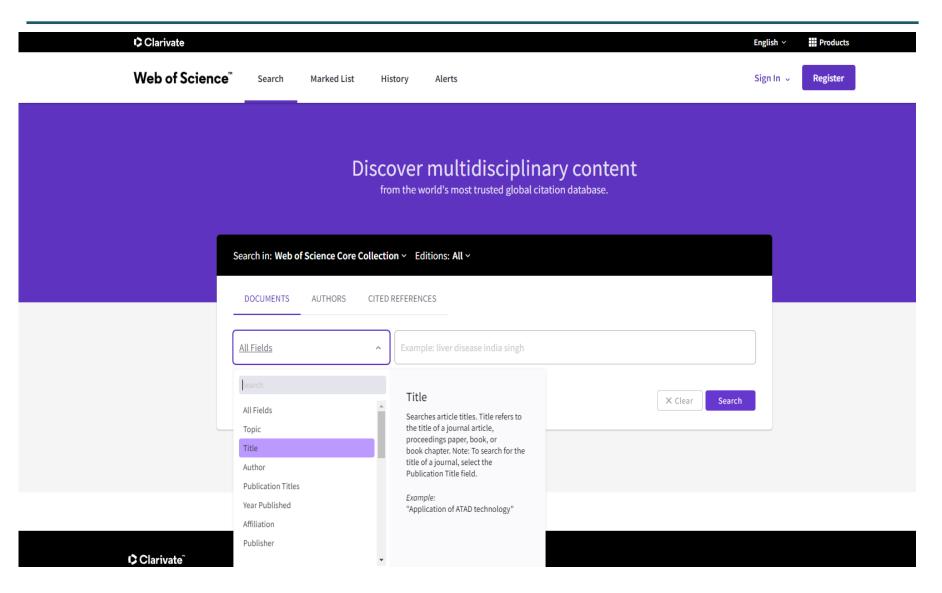


① Web of Science 구성

- SCIE (Science Citation Index Expanded)
 과학기술분야 인용색인, 1980-현재
- SSCI (Social Science Citation Index)
 사회과학분야 인용색인, 2002-현재
- A&HCI (Arts and Humanities Citation Index)
 인문 예술분야 인용색인, 2002-현재
- ESCI (Emerging Science Citation Index) SCI급 후보 학술지 인용색인, 2015-현재



② Searching (1)





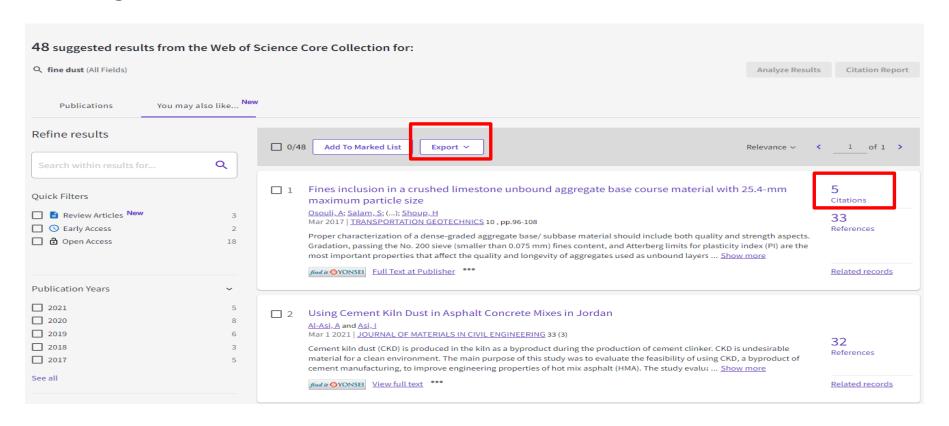
② Searching (2)

검색 필드	설명
Topic	Title + Abstract + Author Keywords + Keywords Plus
Title	논문의 제목
Abstract	초록
Author Keywords	저자 키워드
Keywords Plus	Web of Science 추천 키워드
Affiliation	Web of Science에서 색인한 연구자 소속기관
Address	논문에 기재된 저자의 소속 기관명 검색
Publication Date	논문의 출판 날짜
Index Date	Web of Science에 색인된 날짜
Web of Science Category	Web of Science 연구 분야 카테고리
PubMed ID	PubMed ID
All Fields	모든 검색 필드



3 Documents

- ① 검색결과 논문수 확인
- ② Sort 가능: Relevance, Date, Citation, Usage
- ③ Citation: 해당논문이 인용된 수
- ④ Usage: 해당 논문의 저장하거나 Full Text from Publisher 에 접속한 수





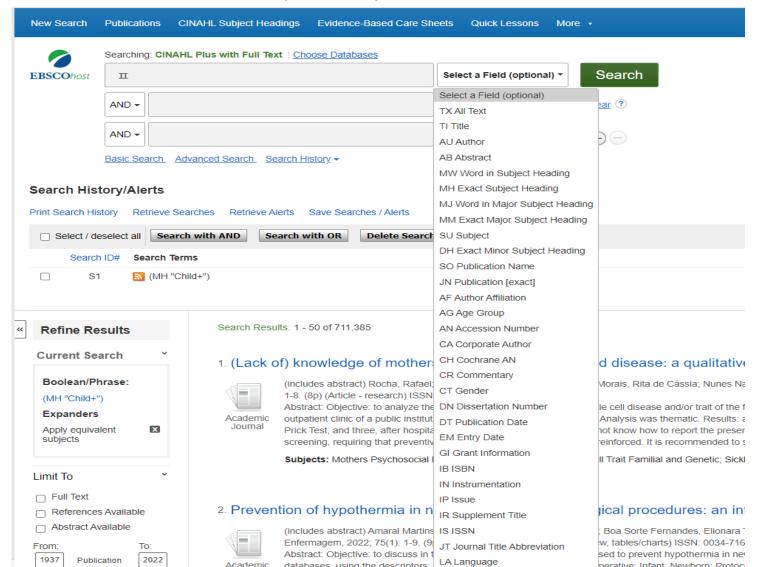
5) CINAHL

- 간호 보건학 관련 학술지 5,500여종, 단행본, 학위논문, 회의록, 업무기준, 교육자료 등에 대한 광범위한 서지정보 제공
- 영문 간호학 저널 및 National League for Nursing, 그리고 American Nurses' Association 의 모든 출판물에 대한 완벽한 coverage 제공
- Data Coverage : 1981년 현재
- 주제: 간호학, 임상간호학, 간호 정보학, 직업 보건 간호학, 영양관리, 식이요법, 의료 기술, 영양, 생의학, 대체/보완의학, 건강 보건 등 40 여 간호/보건 주제분야 제공
- CINAHL에 색인된 약 50%의 저널은 MEDLINE에서 발견되지 않음



1 Advanced Search

• 필드 조합으로 효율적인 검색

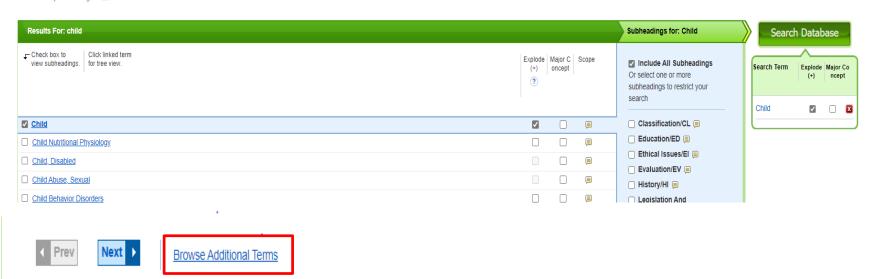






2 CINAHL Subject Headings

New Search	Publications	CINAHL Subject Headings	Evidence-Based Care Sheets	Quick Lessons	More ⋅				
Database: CINAHL Plus with Full Text EBSCOhost Basic Search Advanced Search Search History.									
		gs 🖃 View Tutorials ○ Term Contains	ncy Ranked	Brows	е				





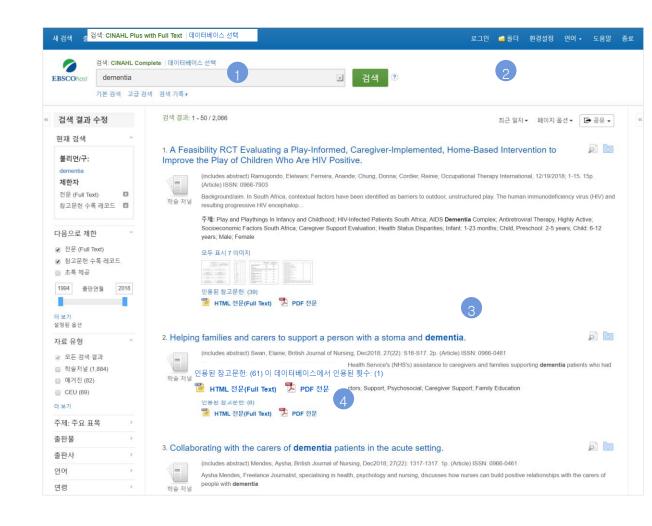
3 Documents -1

결과화면 용어 정리

- 👔 페이지당 50건씩 출력 (조정 가능)
- 🤈 검색 결과 재정렬



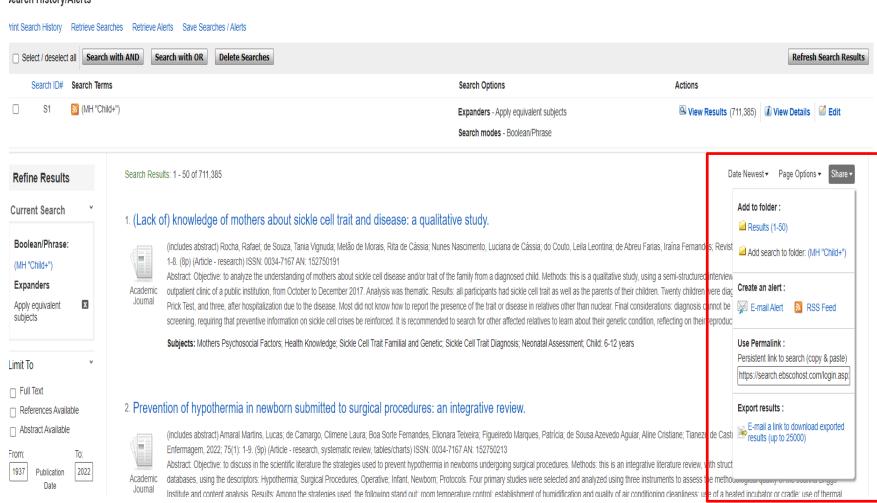
- ③ 기사 상세 정보 가기
 - →기사 제목 클릭
- 4 제공 원문 바로가기
 - →**™**'DF 형식
 - ¹ -ML 형식 제공





3 Documents -2

Search History/Alerts





6) Google Scholar

- 구글 검색: 페이지랭크 알고리즘 웹에 있는 특정 페이지로 들어오는 링크와 그 웹페이지 가 클릭되는 횟수를 반영해 검색 결과의 순위를 결정하는 검색 알고리즘
- 구글 알고리즘 :
 - ① 접속빈도가 잦고 연관성이 높은 링크를 상위에 노출하고 신뢰성이 높으면 가산점을 부여
 - ② 특정 링크의 클릭률이나 특정 링크가 얼마나 많이 링크되었는지를 기록해 '연관성' 점수(페이지랭크)를 부여



① 검색 연산자

- Phrase 검색: " "
- Truncation 검색: *
- Not 검색 : -
- 특정 사이트 내 검색 : site:
 (예 cancer site:ncbi.nlm.nih.gov)
- File type 지정 검색 : filetype:
 (예 therapy filetype:pdf)



② 고급검색

=	Google 학술검색	diabetes				
	학술자료	검색결과 약 2,900,000개 (0.05초)				
	프로필	도움말: 한국어 검색결과만 보기. 학술	×	× 고급 검색		
\$ 1	내 프로필	Classification and diagnosis o intolerance National Diabetes Data Group - Diabe		논문/자료 검색		
*	내 서재	A classification of diabetes and other contemporary knowledge of this hetercinternational workgroup sponsored by		다음 단어 모두 포함	diabetes	
\succeq	알리미	☆ 575 6807회 인용 관련 학술자료		다음 문구 정확하게 포함		
	통계	Role of oxidative stress in dev JW Baynes - Diabetes, 1991 - Am Dia		다음 단어 적어도 하나 포함		
oʻ	고급 검색	Nε-(carboxymethyl) lysine, Nε-(carboxy link pentosidine are formed by sequent reducing sugars and proteins. These c		다음 단어 제외		
^		☆ 99 4658회 인용 관련 학술자료		검색어 위치 설정	◉ 논문/자료 전체에서 검색	
\$	설정	β-cell deficit and increased β- <u>AE Butler</u> , J Janson, S Bonner-Weir, R Type 2 diabetes is characterized by in	, S Bonner-Weir, R	FIG TITIO BU 74.44	○ 논문/자료 제목에서 검색	
		suggest that a decrease in β-cell mass from 124 autopsies: 91 obese cases (E ☆ ワワ 3955회 인용 관련 학술자료		다음 저자의 문서 검색	예: "PJ Hayes" 또는 McCarthy	
		Robust associations of four no analyses of type 1 diabetes		다음 매체에 발표된 문서 검색	예: <i>대한안과학회지</i> 또는 <i>한국물리학회지</i>	
		JA Todd, NM Walker, <u>JD Cooper</u> , DJ S Abstract The Wellcome Trust Case Co association (GWA) scan 1 on seven di disease type 1 diabetes (T1D), shows ☆ ワワ 1302회 인용 관련 학술자료		다음 기간 중 발표된 문서 검색	예: 1996	



③ Google Scholar 설정

1) 라이브러리 링크

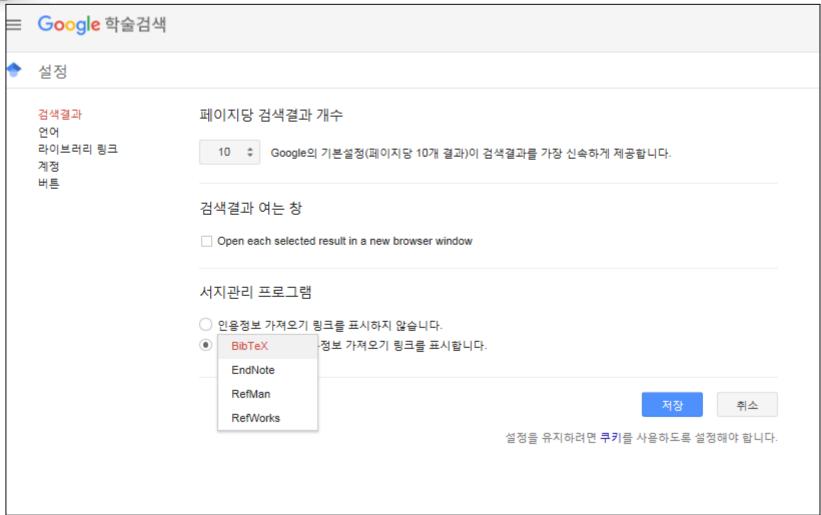
- 소속 도서관을 설정하면 검색 결과에서 도서관 이름의 링크가 보이고, 클릭하면 도서관에서 제공하는 링크 서비스 이용이 가능
- 의료원 외에서 이용해도 원문 이용이 가능

2) 검색결과 - 서지관리 프로그램

EndNote로 지정하면 EndNote 프로그램 Library에 바로 반입 가능

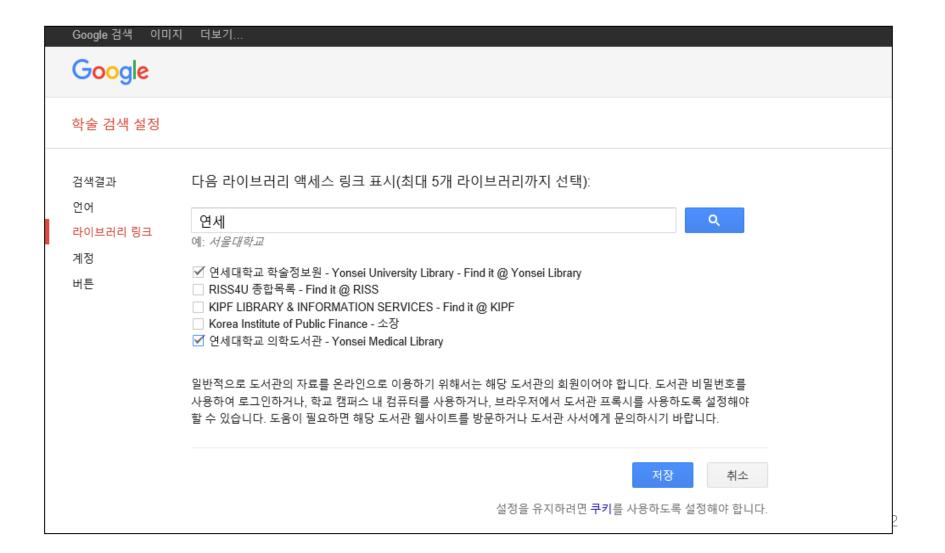


- 1. 검색 결과
- 2. 서지관리 프로그램에서 EndNote로 지정하고 저장





- 1. 학술검색 설정에서 라이브러리 링크 선택
- 2. 검색창에 '연세'를 검색한 뒤, 연세대학교 학술정보원과 연세대학교 의학도서관을 체크





7) 국내 문헌 검색

- 국내 문헌 검색 시 검색어 작성은 국문 OR 영문
- KMBase (한국의학논문데이터베이스) 국내 학술지 검색, 일부 원문 이용도 가능
- KoreaMed (한국의학학술인 편집인)
 "국내 의학학술지평가" 과정을 통과한 국내 의학학술지 267여종에 발표된 논문(약 313,786) 의 영문 서지정보 및 초록 제공
- **RISS** (http://www.riss.kr/index.do) : 학위논문 이용 한국교육학술정보원에서 서비스하는 DB 전국 160여개 대학 소장 단행본 570만건, 학술지 13만건, 학술논문 170만건, 학위논문 60만건



8) 회색문헌 검색하기 - 1

- 1. Institute for Clinical Systems Improvement https://www.icsi.org/
- 2. National Guideline Clearinghouse https://guidelines.gov/
- 3. NTIS: The National Technical Information Service 미국 상무부 국가과학기술종합 관리시스템 www.ntis.gov, 350개 주제분야 (300만 건)
- 4. BLDSC: British Library Document Supply Center 영국 국립도서관, http://www.bl.uk/
- 5. Virginia Handerson International Nursing Library http://www.nursinglibrary.org/vhl/



8) 회색문헌 검색하기 - 2

6. Joanna Briggs Institute

http://joannabriggs.org/

7. OG (Open Grey): System for Information on Grey Literature in Europe 유럽에서 생산되는 모든 회색문헌을 추적하고 수집, 색인하여 원문 제공 정보시스템

http://www.opengrey.eu/

- 8. NTIS: 국가과학기술지식정보서비스 (www.ntis.go.kr) 국가 R&D를 수행하고 있는 17개 부처·청(16개 대표 전문기관)과의 연계를 통해 과제, 인력, 시설·장비, 성과 등 국가가 진행하는 R&D 사업정보를 한 곳 에서 서비스하는, 세계 최초의 국가 R&D 정보 지식 포털
- 9. 한국보건의료연구원 www.neca.re.kr



9) 검색 결과 수집과 제거

- PubMed, Embase, Cochrane 에서 검색 결과를
 각각 수집
- Excel이나 EndNote로 수집하여 정리
- 중복 논문 제거 시 PMID나 Embase ID 를 기준
 으로 제거

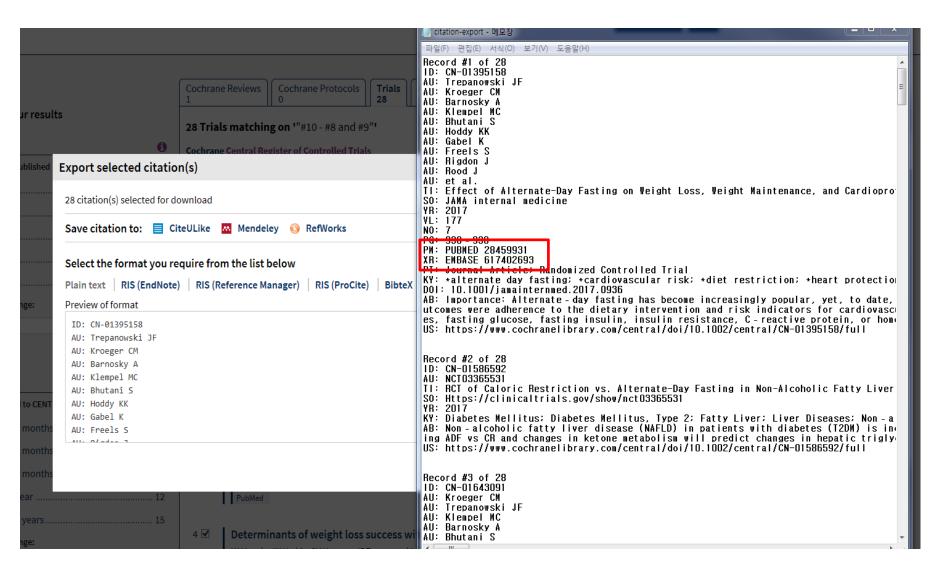


① PubMed 검색 결과

A	В	С	D	E	F	G	Н	I	J K	L	M	N	0	Р	Q	R
Title	URL	Descriptio	Details	ShortDeta	Resource	Type	Identifiers	Identifiers	Db	EntrezUID	Properties					
A 1-year follow-up of a multi-center	/pubmed/	Yu J, Stew	Eat Weigh	Eat Weigh	PubMed	citation	PMID:22290033	PMID	22290033 pubmed	22290033	create date:2	2012/02/01	first au	ıthor:Yu J		
A 10-year follow-up study of comple	/pubmed/	Okamoto	J Eat Diso	J Eat Disor	PubMed	citation	PMID:29177049	FPMID	29177049 pubmed	29177049	create date:2	2017/11/28	first au	ıthor:Okam	noto Y	
A 10-year longitudinal study of body	/pubmed/	Heatherto	J Abnorm	J Abnorm	PubMed	citation	PMID:9103723	PMID	9103723 pubmed	9103723	create date:	1997/02/01	first au	ıthor:Heath	nerton TF	
100 midlife women with eating diso	/pubmed/	Kally Ζ, Cι	J Gen Psy	J Gen Psy	PubMed	citation	PMID:18959227	PMID	18959227 pubmed	18959227	create date:2	2008/10/31	first au	thor:Kally	Z	
[2 sets of monozygotic twins concor	/pubmed/	Schmid-O	Z Psychos	Z Psychos	PubMed	citation	PMID:8560951	PMID	8560951 pubmed	8560951	create date:1	1995/01/01	first au	uthor:Schm	id-Ott G	
A 2-year longitudinal study of eating	/pubmed/	Westerber	Eat Weigh	Eat Weigh	PubMed	citation	PMID:18612254	PMID	18612254 pubmed	18612254	create date:2	2008/07/10	first au	uthor:Weste	erberg J	
[20-year development of a case of a	/pubmed/	Veyrat JG,	Ann Med	Ann Med	PubMed	citation	PMID:3545008	PMID	3545008 pubmed	3545008	create date:1	1986/03/01	first au	ıthor:Veyra	t JG	
A 20-year longitudinal study of body	/pubmed/	Keel PK, B	J Abnorm	J Abnorm	PubMed	citation	PMID:17516772	PMID	17516772 pubmed	17516772	create date:2	2007/05/23	first au	ıthor:Keel F	PK	
The 24-hour LH test in the diagnosis	/pubmed/	Gold MS,	Int J Psych	Int J Psych	PubMed	citation	PMID:7309393	PMID	7309393 pubmed	7309393	create date:	1981/01/01	first au	ıthor:Gold	MS	
4-Year Changes in Sex Hormones, Se	/pubmed/	Sarwer DB	Obes Surg	Obes Surg	PubMed	citation	PMID:29164510	FPMID	29164510 pubmed	29164510	create date:2	2017/11/23	first au	ıthor:Sarwe	er DB	
A 5-year longitudinal study of the re	/pubmed/	Westerber	Eur Eat Di	Eur Eat Di	PubMed	citation	PMID:20443204	PMID	20443204 pubmed	20443204	create date:2	2010/05/06	first au	uthor:Weste	erberg-Jaco	bson J
Aberrant somatosensory perception	/pubmed/	Keizer A, S	Psychiatry	Psychiatry	PubMed	citation	PMID:22648006	PMID	22648006 pubmed	22648006	create date:2	2012/06/01	first au	ıthor:Keizei	r A	
Abnormal eating and dissociative ex	/pubmed/	Valdiserri	Int J Eat D	Int J Eat D	PubMed	citation	PMID:7581416	PMID	7581416 pubmed	7581416	create date:1	1995/09/01	first au	thor:Valdis	serri S	
Abnormal eating attitudes and body	/pubmed/	Miller DK,	J Am Geria	J Am Geria	PubMed	citation	PMID:2022797	PMID	2022797 pubmed	2022797	create date:1	1991/05/01	first au	thor:Miller	· DK	
Abnormal eating attitudes in Mexica	/pubmed/	Arellano J	Eat Weigh	Eat Weigh	PubMed	citation	PMID:19934636	PMID	19934636 pubmed	19934636	create date:2	2009/11/26	first au	ıthor:Arella	no JR	
Abnormal eating behaviors in female	/pubmed/	Lauder TD	Mil Med. 2	Mil Med.	PubMed	citation	PMID:11263032	PMID	11263032 pubmed	11263032	create date:2	2001/03/27	first au	ıthor:Laude	er TD	
Abnormal eating behaviors in milital	/pubmed/	Lauder TD	Med Sci S	Med Sci S	PubMed	citation	PMID:10487367	PMID	10487367 pubmed	10487367	create date:1	1999/09/16	first au	ıthor:Laude	er TD	
Abnormal oral sensory perception in	/pubmed/	Berry EM,	Psychothe	Psychothe	PubMed	citation	PMID:7740098	PMID	7740098 pubmed	7740098	create date:	1995/01/01	first au	thor:Berry	EM	
Abnormal perception of body weigh	/pubmed/	Ohtahara	Acta Psych	Acta Psych	PubMed	citation	PMID:8465671	PMID	8465671 pubmed	8465671	create date:1	1993/03/01	first au	ıthor:Ohtal	nara H	
Abnormalities in weight status, eatir	/pubmed/	Pastore DI	J Adolesc	J Adolesc	PubMed	citation	PMID:9156542	PMID	9156542 pubmed	9156542	create date:	1996/05/01	first au	ıthor:Pasto	re DR	
Abuse, feelings, and health behavior	/pubmed/	Hibbard R	Am J Dis (Am J Dis (PubMed	citation	PMID:3422786	PMID	3422786 pubmed		create date:	1988/03/01	first au	ıthor:Hibba	ard RA	
Academic examination stress increas	/pubmed/	Costarelli	Eat Weigh	Eat Weigh	PubMed	citation	PMID:23086251	PMID	23086251 pubmed	23086251	create date:2	2012/10/23	first au	ıthor:Costa	relli V	
Accept, distract, or reframe? An expl-				_		citation	PMID:25530419	PMID	25530419 pubmed		create date:2	2014/12/23	first au	ıthor:Hartm	nann AS	
Acceptance and psychological change	/pubmed/	Walden K,	Eat Disord	Eat Disord	PubMed	citation	PMID:29161197	PMID	29161197 pubmed		create date:2	2017/11/22	first au	ıthor:Walde	en K	
Acculturation and body image perce	/pubmed/	Ayala GX,	Ethn Heal	Ethn Heal	PubMed	citation	PMID:17132583	PMID	17132583 pubmed	17132583	create date:2	2006/11/30	first au	ıthor:Ayala	GX	
Acculturation and disordered eating							PMID:10800023	PMID	10800023 pubmed		create date:2	2000/05/09	first au	ıthor:Cham	orro R	
ے Acculturation, body image, and eatir							PMID:18952486	PMID	18952486 pubmed		create date:2					
Acculturation's influence on antifat							PMID:17987451	PMID	17987451 pubmed		create date:2					
Acculturative Stress, Self-Esteem, and							PMID:26460935	PMID	26460935 pubmed		create date:2					
Accuracy of self-reported height and				-			PMID:14526347	PMID	14526347 pubmed		create date:2					
Accuracy of self-reported weight and		-					PMID:19618382	PMID	19618382 pubmed		create date:2					



연세대학교의학도서 2 Cochrane Central 검색 결과





③ Embase 검색 결과

A	ВС	D	E	F	G	Н	1	J	K	L	IVI	N	0	Р	Q
Title	Author Na Source	Volume	Issue	First Page	Last Page	Date of F	Abstract	Clinical Trial Number	Medline PMID	DOI	Full Text Lir				
Whey-b	oas Lorieau L., Food Ch	er 277		63	69	30 Mar 2	With a long-term nut			10.1016/j.too	dchen http://dx.dc	i.org/10.10)16/j.food	hem.2018.	.10.097
Effect o	of v Shih YS., Phytome	d 56		118	125	15 Mar 2	Background: The mai	ClinicalTrials.gov (NC		10.1016/j.phy	/med.2 <mark>http://dx.d</mark> c	i.org/10.10)16/j.phym	ed.2018.09	€3.185
Efficien	t p Hu Y., Tiar Journal c	of		421	429	5 Mar 20	1 Our knowledge of ca			10.1016/j.jha	zmat.2 http://dx.dc	i.org/10.10)16/j.jhazn	nat.2018.11	L.034
FCPR16	, a Zhong Q., Progress	i 90		62	75	2 Mar 20	The canonical phosp			10.1016/j.pnp	pbp.20 http://dx.dc	i.org/10.10)16/j.pnpb	p.2018.10.0	017
Bone a	ccr Singhal V. Bone (20	1 120		305	313	1 Mar 20	1 Background: Mechan			10.1016/j.bor	ne.201 http://dx.do	i.org/10.10)16/j.bone	.2018.05.01	LO
Breastf	eec Dalsgaard Sexual ar	nc19		1	8	1 Mar 20	1 Objective: To investig			10.1016/j.srh	c.2018 http://dx.dc	i.org/10.10)16/j.srhc.2	2018.10.003	3
Current	ev Koekkoek Nutrition	(59		56	68	1 Mar 20	1 Fish oil exerts anti-in			10.1016/j.nut	t.2018. http://dx.do	i.org/10.10)16/j.nut.2	018.07.013	
A loop	of Song X., Y The Scien	nc651		1698	1708	15 Feb 20	A loop of catholyte e		30317169	10.1016/j.scit	totenv. http://dx.do	i.org/10.10	016/j.scitot	tenv.2018.1	.0.089
Di(2-et	hyll Zhang Q., The Scien	nc651		885	894	15 Feb 20	Among ubiquitously		30257229	10.1016/j.scit	totenv. http://dx.do	i.org/10.10	016/j.scitot	tenv.2018.0	9.211
1 The inf	lue Cuthbert FScience o	of 651		2420	2423	15 Feb 20): Microplastic (MP) po		30336431	10.1016/j.scit	totenv. http://dx.do	i.org/10.10	016/j.scitot	tenv.2018.1	.0.108
2 Swellin	g b Günter E./ Internatio	or 123		300	307	15 Feb 20	Gel microparticles we			10.1016/j.ijbi	omac http://dx.do	i.org/10.10)16/j.ijbior	mac.2018.1	1.081
B Desven	laf Hellersteir Journal o	of 245		403	411	15 Feb 20	Introduction: Pharma			10.1016/j.jad	.2018.1http://dx.do	i.org/10.10)16/j.jad.20	018.11.065	
4 Establis	shir Tan SW., Science o	of 651		1058	1066	15 Feb 20	Due to rapid industri		30266051	10.1016/j.scit	totenv. http://dx.do	i.org/10.10)16/j.scitot	tenv.2018.0	9.217
5 Exposu	re Samiee F., Science o	of 650		3075	3083	10 Feb 20	Toxic heavy metals re		30373084	10.1016/j.scit	totenv. http://dx.do	i.org/10.10)16/j.scitot	tenv.2018.1	.0.059
6 Hepato	tox Ruan LY., Journal o	of 230		81	94	10 Feb 20	:ETHNOPHARMACOL		30416091	10.1016/j.jep	.2018.1 http://dx.dc	i.org/10.10)16/j.jep.20	018.10.032	
7 Exposu	re Samiee F., The Scien	nc650		3075	3083	10 Feb 20):Toxic heavy metals re		30373084	10.1016/j.scit	totenv. http://dx.do	i.org/10.10)16/j.scitot	tenv.2018.1	.0.059
Stable i	so Le Croizie Science d	of 650		2129	2140	10 Feb 20	Bioaccumulation of to		30290354	10.1016/j.scit	totenv. http://dx.do	i.org/10.10)16/j.scitot	tenv.2018.0	9.330
9 Compo	siti Wang L., (Science o	of 650		835	846	10 Feb 20	The composition and		30308858	10.1016/j.scit	totenv. http://dx.do	i.org/10.10)16/j.scitot	tenv.2018.0	9.028
Potenti	ally Zuliani T., Science o	of 650		958	969	10 Feb 20	Fish from the Sava Ri		30308870	10.1016/j.scit	totenv. http://dx.dc	i.org/10.10)16/j.scitot	tenv.2018.0	9.083
1 Exposu	re Prado A., IScience o	of 650		1250	1260	10 Feb 20	Due to the widesprea		30308813	10.1016/j.scit	totenv. http://dx.dc	i.org/10.10)16/j.scitot	tenv.2018.0	9.102
2 Respon	se Yang C., HScience o	of 650		2614	2623	10 Feb 20	Land-based culturing		30373048	10.1016/j.scit	totenv. http://dx.dc	i.org/10.10)16/j.scitot	tenv.2018.1	.0.023
3 Impacts	s of Wang Z.,) Journal o	of 363		268	276	5 Feb 201	In this work, C. elega		30312923	10.1016/j.jha	zmat.2 http://dx.dc	i.org/10.10)16/j.jhazn	nat.2018.09).020
4 Similari	tie Wilson D.I Appetite	(133		70	76	1 Feb 201	Reinforcement Sensit			10.1016/j.app	oet.201 http://dx.do	i.org/10.10)16/j.appe	t.2018.10.0	23
5 Effectiv	en Osterman Complen	n(42		145	148	1 Feb 201	Eating disorders are			10.1016/j.ctin	n.2018 http://dx.dc	i.org/10.10)16/j.ctim.	2018.11.014	4
6 Heart ra	ate Godfrey K Physiolo	g 199		73	78	1 Feb 201	Autonomic nervous s			10.1016/j.phy	/sbehhttp://dx.do	i.org/10.10)16/j.physl	beh.2018.1	1.009
7 Epidem	iol Shalit N., FAddictive	89		35	43	1 Feb 201	Background: Populati		30245407	10.1016/j.add	dbeh.2 http://dx.dc	i.org/10.10)16/j.addb	eh.2018.09	.020
8 Adipos	ity Carvalho-l Appetite	(133		174	183	1 Feb 201	The Leeds Food Prefe			10.1016/j.app	oet.201 http://dx.dc	i.org/10.10	016/j.appe	t.2018.10.0	34
9 Sex diff	ere Wellman J Appetite	(133		166	173	1 Feb 201	Weight stigma and w			10.1016/j.app	oet.201 http://dx.do	i.org/10.10)16/j.appe	t.2018.10.0	29

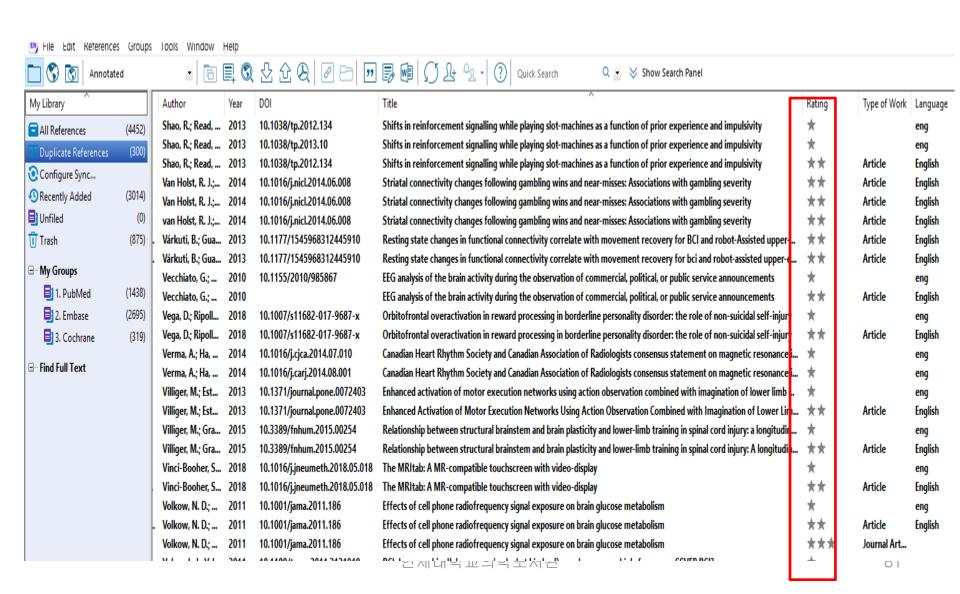


④ 중복 논문 제거

- Database 명으로 구분
- 검색 결과 filtering 시 기준 명확하게 언급
- Filtering 기준에 따른 검색 결과 수 변화 메모
- Embase 검색 결과가 가장 많은 data를 포함
 (Embase, PubMed, Web of Science, CINAHL, Cochrane)
- EndNote 이용 가능
 (중복 제거 매뉴, DOI 값으로 중복 제거)

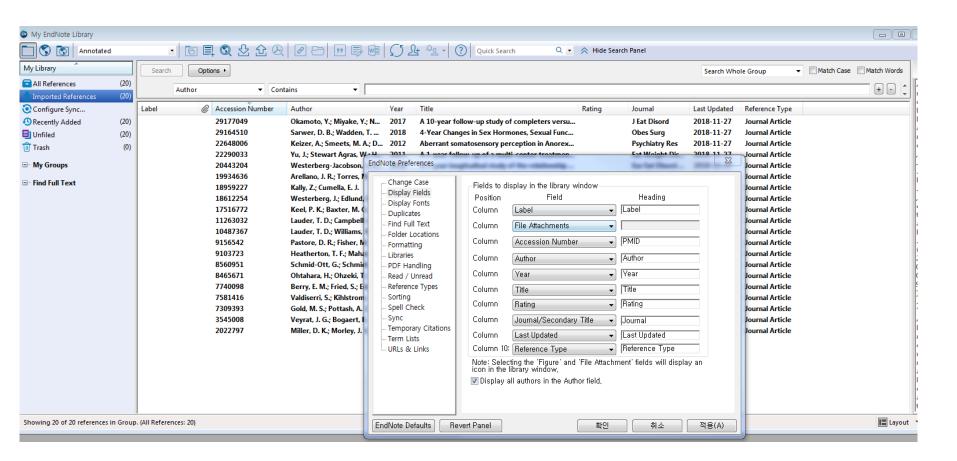


⑤ EndNote 이용





EndNote / Edit / Preferences





10) 검색식과 diagram 작성

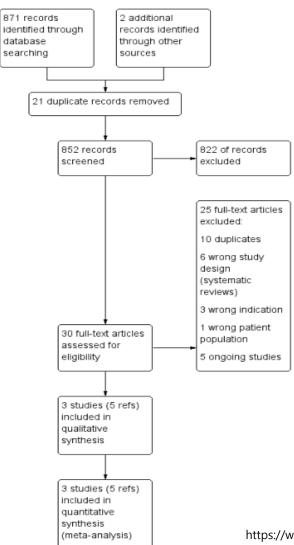
- 검색식은 table로 각각의 DB 검색식을 작성해서 Appendix에 수록
- Diagram을 작성해서 Figure 1으로 수록 (filtering 적용 숫자를 정확히 기입)



① EBP 검색식

Search	Query	Items found
#I()	((CBT OR cognitive behaviour therapies OR Cognition Therapy OR Therapies, Cognition) OR Cognition Therapy[MeSH Terms])) AND ((self esteem OR Self-Perception)) OR "Self Concept"[Mesh]) AND ((eating disorders OR Feeding Disorder OR Appetite Disorder) OR ("Feeding and Eating Disorders"[Mesh])	373
#9	(eating disorders OR Feeding Disorder OR Appetite Disorder) OR ("Feeding and Eating Disorders"[Mesh])	42303
#8	(self esteem OR Self-Perception) OR "Self Concept"[Mesh]	138151
#7	(CBT OR cognitive behaviour therapies OR Cognition Therapy OR Therapies, Cognition) OR Cognition Therapy[MeSH Terms]	94909
#6	"Feeding and Eating Disorders"[Mesh]	27298
#5	eating disorders OR Feeding Disorder OR Appetite Disorder	42303
#4	"Self Concept"[Mesh]	97853
#3	self esteem OR Self-Perception	138151
#2	Cognition Therapy[MeSH Terms]	22898
#1	CBT OR cognitive behaviour therapies OR Cognition Therapy OR Therapies, Cognition	94909

Figure 1 Open in figure viewer Download as PowerPoint



② Figure.1 Study flow diagram

https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD012513.pub2/full

Study flow diagram.

dentification←

Screening

included.

(n =)⊬

From: Page MJ, McKenzie JE, <u>Bossuyt PM</u>, <u>Boutron</u> I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. BMJ 2021;372:n71. doi: 10.1136/bmi.n71. For more information, visit: http://www.prisma-statement.org/



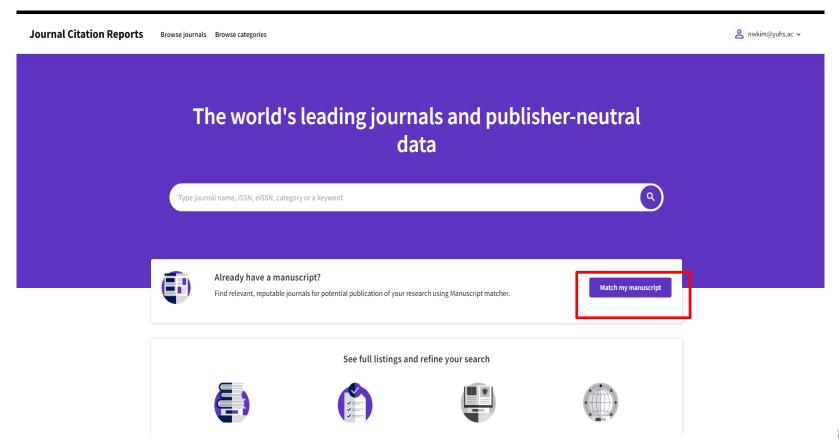
11) 투고 학술지 찾기

- Meta Analysis 논문 형식이 많이 발행되는 학술지를 대상
- 1 Elsevier Journal Finderhttp://journalfinder.elsevier.com/
- ② Springer Journal Suggester https://journalsuggester.springer.com/
- ③ Journal Selection Service (S2Journal for Yonsei University) 논문의 제목과 초록을 입력하면 PubMed 기반으로 유사도가 높은 학술지를 추천
- ④ EndNote Online (https://www.myendnoteweb.com)
 Find the Best Fit Journals for your Manuscript Powered By Web of Science



11) 투고 학술지 찾기

5 JCRMatch my manus





12) Meta Analysis 논문 등록

• PRISMA checklist에 따라 작성

• PROSPERO 에 등록 registration number 생성 → 논문에 표기



PRISMA 2020 Checklist

Section and Topic	Item #	Checklist item	Location where item is reported
TITLE			
Title	1	Identify the report as a systematic review.	
ABSTRACT			
Abstract	2	See the PRISMA 2020 for Abstracts checklist.	
INTRODUCTION	-		
Rationale	3	Describe the rationale for the review in the context of existing knowledge.	
Objectives	4	Provide an explicit statement of the objective(s) or question(s) the review addresses.	
METHODS			
Eligibility criteria	5	Specify the inclusion and exclusion criteria for the review and how studies were grouped for the syntheses.	
Information sources	6	Specify all databases, registers, websites, organisations, reference lists and other sources searched or consulted to identify studies. Specify the date when each source was last searched or consulted.	
Search strategy	7	Present the full search strategies for all databases, registers and websites, including any filters and limits used.	
Selection process	8	Specify the methods used to decide whether a study met the inclusion criteria of the review, including how many reviewers screened each record and each report retrieved, whether they worked independently, and if applicable, details of automation tools used in the process.	
Data collection process	9	Specify the methods used to collect data from reports, including how many reviewers collected data from each report, whether they worked independently, any processes for obtaining or confirming data from study investigators, and if applicable, details of automation tools used in the process.	
Data items	10a	List and define all outcomes for which data were sought. Specify whether all results that were compatible with each outcome domain in each study were sought (e.g. for all measures, time points, analyses), and if not, the methods used to decide which results to collect.	
	10b	List and define all other variables for which data were sought (e.g. participant and intervention characteristics, funding sources). Describe any assumptions made about any missing or unclear information.	
Study risk of bias assessment	11	Specify the methods used to assess risk of bias in the included studies, including details of the tool(s) used, how many reviewers assessed each study and whether they worked independently, and if applicable, details of automation tools used in the process.	
Effect measures	12	Specify for each outcome the effect measure(s) (e.g. risk ratio, mean difference) used in the synthesis or presentation of results.	
Synthesis methods	13a	Describe the processes used to decide which studies were eligible for each synthesis (e.g. tabulating the study intervention characteristics and comparing against the planned groups for each synthesis (item #5)).	
	13b	Describe any methods required to prepare the data for presentation or synthesis, such as handling of missing summary statistics, or data conversions.	
	13c	Describe any methods used to tabulate or visually display results of individual studies and syntheses.	
	13d	Describe any methods used to synthesize results and provide a rationale for the choice(s). If meta-analysis was performed, describe the model(s), method(s) to identify the presence and extent of statistical heterogeneity, and software package(s) used.	
	13e	Describe any methods used to explore possible causes of heterogeneity among study results (e.g. subgroup analysis, meta-regression).	
	13f	Describe any sensitivity analyses conducted to assess robustness of the synthesized results.	
Reporting bias assessment	14	Describe any methods used to assess risk of bias due to missing results in a synthesis (arising from reporting biases).	
Certainty assessment	15	Describe any methods used to assess certainty (or confidence) in the body of evidence for an outcome.	



PRISMA 2020 Checklist

Section and Topic	Item #	Checklist item	Location where item is reported			
RESULTS	-					
Study selection	16a	Describe the results of the search and selection process, from the number of records identified in the search to the number of studies included in the review, ideally using a flow diagram.				
	16b	Cite studies that might appear to meet the inclusion criteria, but which were excluded, and explain why they were excluded.				
Study characteristics	17	Cite each included study and present its characteristics.				
Risk of bias in studies	18	Present assessments of risk of bias for each included study.				
Results of individual studies	19	For all outcomes, present, for each study: (a) summary statistics for each group (where appropriate) and (b) an effect estimate and its precision (e.g. confidence/credible interval), ideally using structured tables or plots.				
Results of	20a	For each synthesis, briefly summarise the characteristics and risk of bias among contributing studies.				
syntheses	20b	Present results of all statistical syntheses conducted. If meta-analysis was done, present for each the summary estimate and its precision (e.g. confidence/credible interval) and measures of statistical heterogeneity. If comparing groups, describe the direction of the effect.				
	20c	Present results of all investigations of possible causes of heterogeneity among study results.				
	20d	Present results of all sensitivity analyses conducted to assess the robustness of the synthesized results.				
Reporting biases	21	Present assessments of risk of bias due to missing results (arising from reporting biases) for each synthesis assessed.				
Certainty of evidence	22	Present assessments of certainty (or confidence) in the body of evidence for each outcome assessed.				
DISCUSSION						
Discussion	23a	Provide a general interpretation of the results in the context of other evidence.				
	23b	Discuss any limitations of the evidence included in the review.				
	23c	Discuss any limitations of the review processes used.				
	23d	Discuss implications of the results for practice, policy, and future research.				
OTHER INFORMA	TION					
Registration and	24a	Provide registration information for the review, including register name and registration number, or state that the review was not registered.				
protocol	24b	Indicate where the review protocol can be accessed, or state that a protocol was not prepared.				
	24c	Describe and explain any amendments to information provided at registration or in the protocol.				
Support	25	Describe sources of financial or non-financial support for the review, and the role of the funders or sponsors in the review.				
Competing interests	26	Declare any competing interests of review authors.				
Availability of data, code and other materials	27	Report which of the following are publicly available and where they can be found: template data collection forms; data extracted from included studies; data used for all analyses; analytic code; any other materials used in the review.				

Table 2 PRISMA 2020 for Abstracts checklist*

Section and topic	Item#	Checklist item					
Title							
Title	1	Identify the report as a systematic review.					
Background							
Objectives	2	Provide an explicit statement of the main objective(s) or question(s) the review addresses.					
Methods							
Eligibility criteria	3	Specify the inclusion and exclusion criteria for the review.					
Information sources	4	Specify the information sources (e.g. databases, registers) used to identify studies and the date when each was last searched.					
Risk of bias	5	Specify the methods used to assess risk of bias in the included studies.					
Synthesis of results	6	Specify the methods used to present and synthesise results.					
Results							
Included studies	7	Give the total number of included studies and participants and summarise relevant characteristics of studies.					
Synthesis of results	8	Present results for main outcomes, preferably indicating the number of included studies and participants for each. If meta-analysis was done, report the summary estimate and confidence/credible interval. If comparing groups, indicate the direction of the effect (i.e. which group is favoured).					
Discussion							
Limitations of evidence	9	Provide a brief summary of the limitations of the evidence included in the review (e.g. study risk of bias, inconsistency and imprecision).					
Interpretation	10	Provide a general interpretation of the results and important implications.					
Other							
Funding	11	Specify the primary source of funding for the review.					
Registration	12	Provide the register name and registration number.					

^{*} This abstract checklist retains the same items as those included in the PRISMA for Abstracts statement published in 2013,⁵⁴ but has been revised to make the wording consistent with the PRISMA 2020 statement and includes a new item



PROSPERO



PROSPERO

International prospective register of systematic reviews



PROSPERO is fast-tracking registration of protocols related to COVID-19

PROSPERO accepts registrations for systematic reviews, **rapid reviews** and umbrella reviews. PROSPERO **does not accept scoping reviews** or **literature scans**. Sibling PROSPERO sites registers systematic reviews of **human studies** and systematic reviews of **animal studies**.

Before registering a new systematic review, check **PROSPERO** and the resources on COVID-END to see whether a similar review already exists. If so, **please do not duplicate without good reason**. Your efforts may be much more useful if switched to a different topic. This will avoid research waste and contribute more effectively to tackling the pandemic.

Shortcut for already registered reviews of human and animal studies relevant to Covid-19, tagged by research area



감사합니다.

김나원 82915, nwkim@yuhs.ac