

Searching the Medical Literature for Evidence-Based Practice

Pediatrics

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The University of Calgary, located in the heart of Southern Alberta, both acknowledges and pays tribute to the traditional territories of the people of the Treaty 7, which include the Blackfoot Confederacy (including the Siksika, Piikani, Kainai First Nations), the Tsuut'ina First Nation, and the Stoney Nakoda (including the Chiniki, Bearspaw, and Goodstoney First Nations). The city of Calgary is also home to Metis Nation within Alberta (Nose Hill Metis District 5 and Elbow Metis District 6).



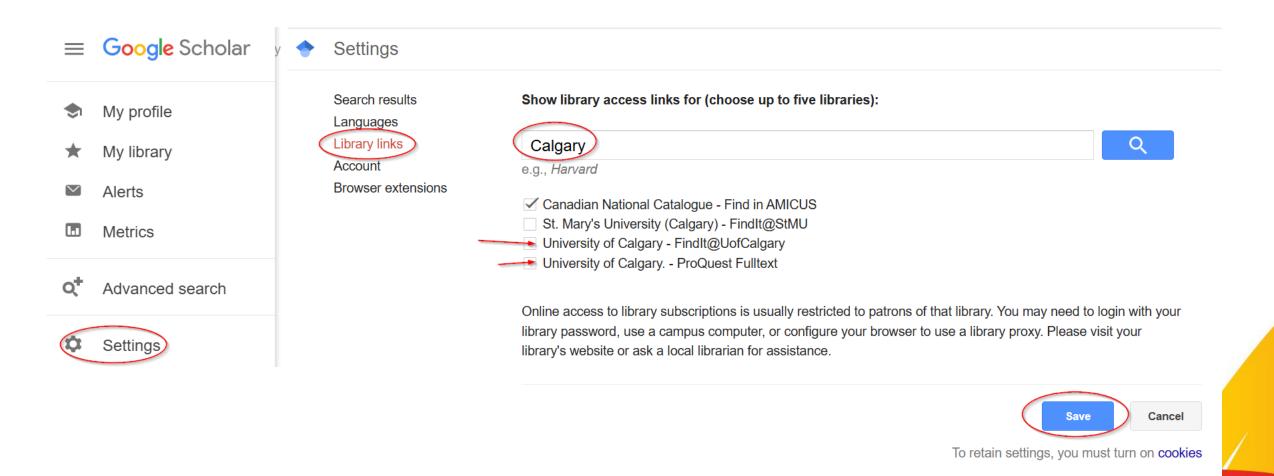
Session Outline



- Google Scholar library links
- Library Website
- Research Guides
- Research Question
- Boolean Operators
- Medical Subject Headings (MeSH) and Keywords
- Field codes and adjacency
- Demonstration

Google Scholar

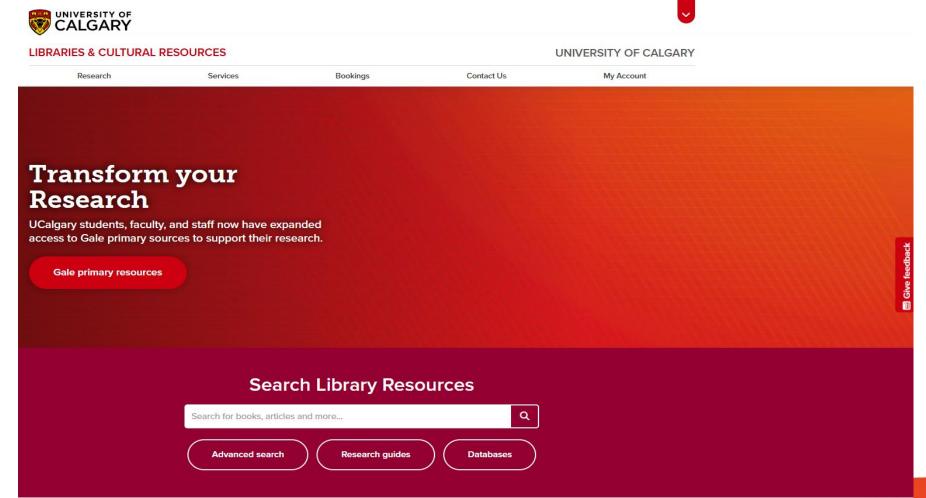








Bookmark: library.ucalgary.ca





Research Guides



- https://libguides.ucalgary.ca/guides/medicine-education
 - Your source for medical information
 - Getting started with an evidence synthesis project
- https://libguides.ucalgary.ca/guides/scholarlycommunication
 - Your source for publishing and presenting
 - Suggestions for handling predatory publishers and conferences

Research Question



- Establish a topic of inquiry
- Re-frame it as an answerable question
 - This is essential, as screening the literature is easier if you can go back to your research question and ask yourself: does this paper address my question, it is merely related, or completely off-topic?
- Topic: unintentional cannabis ingestion in children
- Question: What are the public health strategies for, and the attitudes and beliefs of, caregivers in preventing and addressing unintentional acute pediatric cannabis intoxication?

Boolean Operators (AND, OR, NOT)



- Academic databases process commands.
- We are writing a script (computer science lite) so that it can spit out the results from the command we've given it.
- Some are smart (like Google Scholar and Pubmed) and do some background algorithmic work to anticipate what you're looking for. These are often proprietary algorithm.
- Others, like Medline, use only your strategy as written out.
- Both have benefits and applications where they are most advantageous.

Boolean Operators (AND/OR/NOT)



- Searching for literature is like ordering a pizza
- Ham AND pineapple
- Green OR black olives
- OR-ing terms gives the database flexibility (I'll take any papers with these terms)
- AND-ing narrows what can be retrieved
- Difference between ordering:
 - Vegetarian pizza, any toppings
 - Pizza with pepperoni, olives (black, not green), peppers (green, not red), thin crust

Medical Subject Headings and Keywords



- Terms to discover literature
- Medical Subject Headings (MeSH) are "controlled vocabulary" for biomedical literature
 - Assigned by the National Library of Medicine
 - Context
 - Prior knowledge is not necessary, Medline will suggest MeSH terms
- Keywords are text-based searching
 - Text matching, not necessarily context based
- We search both, as not all papers are indexed with MeSH, and not all papers have readily available abstracts or full text

Food Label Analogy





Supplemented Food Facts Info-aliment supplémenté

Per 1 pack (30 g) pour 1 paquet (30 g)

Calories 120	% Daily Value % valeur quotidienne
Fat / Lipides 5 g	7 %
Saturated / saturés 2.5 g + Trans / trans 0 g	13 %
Carbohydrate / Glucides 12	g
Fibre / Fibres 6 g	21 %
Sugars / Sucres 2 g	2 %
Protein / Protéines 8 g	
Cholesterol / Cholestérol 0	mg
Sodium 130 mg	6 %
Potassium 100 mg	3 %
Calcium 50 mg	4 %
Iron / Fer 2 mg	11 %
*5% or less is a tittle, 15% or mor *5 % ou moins c'est peu, 15 % ou	

Supplemented with / Supplémenté en 1

Caffeine / Caféine 55 mg

1 Includes naturally occurring and supplemental amounts 1 Comprend les quantités naturelles et supplémentées Ingredients: Soy protein isolate, Chicory root fibre Unsweetened chocolate, Vegetable glycerin, Cocoa butter, Dates (dates, rice flour), Almonds, Pumpkin seeds Natural flavours, Tapioca starch, Cocoa powder Soy lecithin, Gluten-free oats, Sunflower oil blend (sunflower oil, mixed tocopherols, rosemary extract), Sea salt, Green tea extract.

Contains: Soy, Almonds. May contain: Peanuts, Other tree nuts, Sesame, Milk, Egg.

Ingrédients: Isolat de protéine de soya, Fibre de racine de chicorée, Chocolat non sucré, Glycérine végétale, Beurre de cacao, Dattes (dattes, farine de riz), Amandes, Graines de citrouille, Arômes naturels, Amidon de tapioca, Poudre de cacao, Lécithine de soya, Avoine sans gluten, Mélange d'huile de tournesol (huile de tournesol, mélange de tocophérols, extrait de romarin), Sel de mer, Extrait de thé vert.

Contient: Soya, Amandes. Peut contenir: Arachides, Autre noix, Sésame, Lait, Oeuf.

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Title: Accidental cannabis ingestion in young children.

MeSH Subject Headings: Humans

Child, Preschool

Female

*Cannabis / po [Poisoning]
*Cannabis / ae [Adverse Effects]

*Accidents, Home

Abstract:

QUESTION: A 3-year-old girl was brought to my office by her **caregiver** because she was not acting like herself. She was excessively sleepy, difficult to rouse, and had poor balance. The **caregiver** reported **cannabis** products in the home in the form of gummies the **caregiver** takes for sleep and anxiety. What symptoms should prompt consideration of **marijuana ingestion** and how should **accidental ingestion** be managed?

ANSWER: Cannabis is one of the most widely used drugs in the world. Many countries are decriminalizing and legalizing marijuana, but its negative impact on pediatric health is growing. Current evidence shows unintentional marijuana ingestion and severe toxicity are steadily increasing. Common symptoms of marijuana ingestion in young children are drowsiness, somnolence, nausea, and vomiting, with children being at high risk for severe symptoms of respiratory depression and seizures. Primary care providers should talk to families about issues surrounding marijuana in the home, including safe storage of products containing cannabis and when to suspect an accidental ingestion. Public health should focus on the packaging and distribution of edibles to prevent easy access and accidental ingestion by young children.

Field Codes and Subject Headings



Database	Controlled Vocabulary	Common Keyword Fieldcodes
OVID Medline	MeSH (Medical Subject Headings) Example: "trauma" maps to: Exp "Wounds and Injuries"/	.tw,kf = title/abstract/author supplied keyword line (recommended) .ti = title only .mp = all fields
		Trauma*.tw,kf

Adjacency



- A way to search for words that appear within a certain amount of words to the other in either order:
- (Child* OR teen* OR adolescen*) adj3 (litera*).tw,kf
 - Child literacy is improved when caregivers read to them at bedtime.
 - Adolescents enjoy media literacy classes.
 - According to a new study, teenagers are more health literate than their grandparents when it comes to nutrition information on food packages.
- Note the use of *
 - This will accommodate suffix variances

Putting it all together



- Question: What are the attitudes, beliefs and perceptions of parents and guardians regarding public health awareness, education and prevention of unintentional acute pediatric cannabis intoxication?
- Identify distinct concepts that meet your inclusion criteria
 - Concept #1 = cannabis
 - Concept #2 = pediatric
 - Concept #3 = unintentional ingestion
 - Concept #4 = caregiver
 - Concept #5 = attitudes

Concept 1 AND	Concept 2 AND	Concept 3 AND	Concept 4 AND	Concept 5
Cannabi*	Child*	Accident*	Parent*	Attitude*
OR	OR	OR	OR	OR
Marijuana	Infant*	Uninten*	Guardian*	Belief*
OR	OR	OR	OR	OR
THC*	Preschool*	Mistaken*	Caregiver*	Perception*
OR	OR	OR	OR	OR
CBD	Youth*	Inadvert*	family	Perceive*
OR	OR		OR	OR
Tetrahydrocannabinol	Adolescen*		families	Awareness
OR	OR			OR
Delta9- tetrahydrocannabinol OR Delta8- tetrahydrocannabinol	Teen*			Educat*
OR	OR			OR
Delta-9 tetrahydrocannabinol OR Delta-8 tetrahydrocannabinol	Pediatric*			Public health
	OR			OR
	Paediatric*			Prevent*



- Live demo
 - https://ezproxy.lib.ucalgary.ca/login?url=https://ovidsp.ovid.com/ovid web.cgi?T=JS&NEWS=N&PAGE=main&SHAREDSEARCHID=6gVsSmEbw wGiNOh7UUU5F7nvtBg9VH38dzpONIyaeGaPcsnxbutZpoBVbF7sJd1jz
- Export results to RIS file to Covidence

Thank you!



• https://library.ucalgary.ca/services/consultation