

Appendix 1: Syntax Utilized for Literature Search

Question/Topic 1: What microbiotas are not transferred to children who are born by C-section?	
PubMed Search Strategy 1	Results
<p>(((((Cesarean Section[MeSH Major Topic]) OR ("Cesarean Section"[Title/Abstract] OR "Cesarean Sections"[Title/Abstract] OR c-section*[Title/Abstract]))) AND ((microbiota[MeSH Terms]) OR ((microbiota*[Title/Abstract] OR microbiome[Title/Abstract] OR microbial[Title/Abstract] OR microbe*[Title/Abstract] OR bacteria[Title/Abstract] OR microflora[Title/Abstract] OR bacteroides[Title/Abstract]))) AND ((((((child*[Title/Abstract]) OR infant*[Title/Abstract]) OR "Infant, Newborn"[Mesh]) OR ((neonate*[Title/Abstract] OR baby[Title/Abstract] OR babies[Title/Abstract])))</p>	70
PubMed Search Strategy 2	Results
<p>(((((("Delivery, Obstetric"[Mesh]) OR ((childbirth[Title/Abstract] OR "mode of delivery"[Title/Abstract] OR "method of delivery"[Title/Abstract] OR "methods of delivery"[Title/Abstract]))) AND ((microbiota[MeSH Terms]) OR ((microbiota*[Title/Abstract] OR microbiome[Title/Abstract] OR microbial[Title/Abstract] OR microbe*[Title/Abstract] OR bacteria[Title/Abstract] OR microflora[Title/Abstract] OR bacteroides[Title/Abstract]))) AND ((((((child*[Title/Abstract]) OR infant*[Title/Abstract]) OR "Infant, Newborn"[Mesh]) OR ((neonate*[Title/Abstract] OR baby[Title/Abstract] OR babies[Title/Abstract]))) NOT ((((((Cesarean Section[MeSH Major Topic]) OR ("Cesarean Section"[Title/Abstract] OR "Cesarean Sections"[Title/Abstract] OR c-section*[Title/Abstract]))) AND ((microbiota[MeSH Terms]) OR ((microbiota*[Title/Abstract] OR microbiome[Title/Abstract] OR microbial[Title/Abstract] OR microbe*[Title/Abstract] OR bacteria[Title/Abstract] OR microflora[Title/Abstract] OR bacteroides[Title/Abstract]))) AND ((((((child*[Title/Abstract]) OR infant*[Title/Abstract]) OR "Infant, Newborn"[Mesh]) OR ((neonate*[Title/Abstract] OR baby[Title/Abstract] OR babies[Title/Abstract])))</p>	100

Question/Topic 2: How are those specific microbiota connected to health (obesity, diabetes, allergies, asthma and other)? How long are those health consequences sustained?

PubMed Search Strategy 1

Results

(((((microbiota[MeSH Terms]) OR ((microbiota*[Title/Abstract] OR microbiome[Title/Abstract] OR microbial[Title/Abstract] OR microbe*[Title/Abstract] OR bacteria[Title/Abstract] OR microflora[Title/Abstract] OR bacteroides[Title/Abstract]))) AND (("Delivery, Obstetric"[Mesh]) OR ((childbirth[Title/Abstract] OR "mode of delivery"[Title/Abstract] OR "method of delivery"[Title/Abstract] OR "methods of delivery"[Title/Abstract]))) AND (((("Patient Outcome Assessment"[Mesh:NoExp]) OR "Treatment Outcome"[Mesh])) AND ((child*[Title/Abstract]) OR infant*[Title/Abstract]))) OR (((((((Diabetes Mellitus[MeSH Terms]) OR diabet*[Title/Abstract]) OR Hypersensitivity[MeSH Terms]) OR allerg*[Title/Abstract]) OR asthma[MeSH Terms]) OR asthma*[Title/Abstract]) OR Obesity[MeSH Terms]) OR obes*[Title/Abstract]))

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Question/Topic 3: Have vaginal microbiota been successfully transferred to babies born by C-section? If not, in what other contexts has microbiota restoration been successful? What mechanisms are typically used? And what factors make for a successful restoration (e.g. timing of restoration, length of time the bacteria remain in place, etc.)?

PubMed Search Strategy 1

Results

((((((restor*[Title/Abstract] OR establish*[Title/Abstract] OR transfer*[Title/Abstract] OR rebuild*[Title/Abstract] OR rebuilt[Title/Abstract]))) OR ((transplant*[Title/Abstract] OR recoloniz*[Title/Abstract]))) AND ((microbiota[MeSH Terms]) OR ((microbiota*[Title/Abstract] OR microbiome[Title/Abstract] OR microbial[Title/Abstract] OR microbe*[Title/Abstract] OR bacteria[Title/Abstract] OR microflora[Title/Abstract] OR bacteroides[Title/Abstract]))) AND (("Delivery, Obstetric"[Mesh]) OR ((childbirth[Title/Abstract] OR "mode of delivery"[Title/Abstract] OR "method of delivery"[Title/Abstract] OR "methods of delivery"[Title/Abstract])))

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[Additional search by different librarian]

PubMed Strategy 1

Results

infant OR infants OR newborn* OR neonat*

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Immunologic Adjuvants OR Immunotherapy OR Immunomodulation OR Immunization OR Microbiota OR Probiotics OR probiotic* OR Prebiotics OR prebiotic* OR Lactobacillus OR bacteroidetes OR bacteria OR Bifidobacterium OR commensal OR Dysbiosis [mh] OR dysbios* [tiab] OR disbios* [tiab] OR dys-symbios* [tiab] OR dysbacterios* [tiab] OR disbacterios* [tiab]

Therapy OR therapeutic use OR ad [sh] OR Dietary Supplements

