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Lampiran 1. Formulir Penilaian Kualitas untuk Desain RCT

Penelitian 1

Reviewer : Andi Sri Wahyuni

Title : Human milk oligosaccharide consumption by probiotic and human-associated bifidobacteria and lactobacilli

Author : Taksawan Thongaram, Jennifer L. Hoeflinger, JoMay Chow and Michael J. Miller

	Yes	No	Unclear	NA
1. Was true randomization used for assignment of participants to treatment groups?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Was allocation to treatment groups concealed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Were treatment groups similar at the baseline?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Were participants blind to treatment assignment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Were those delivering treatment blind to treatment assignment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. Were outcomes assessors blind to treatment assignment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7. Were treatment groups treated identically other than the intervention of interest?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Was follow up complete and if not, were differences between groups in terms of their follow up adequately described and analyzed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Were participants analyzed in the groups to which they were randomized?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Were outcomes measured in the same way for treatment groups?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Were outcomes measured in a reliable way?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Was appropriate statistical analysis used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Was the trial design appropriate, and any deviations from the standard RCT design (individual randomization, parallel groups) accounted for in the conduct and analysis of the trial?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Overall appraisal: Include Exclude Seek further info

Lampiran 2. Formulir Penilaian Kualitas untuk Desain Cohort

Penelitian 2

Reviewer : Andi Sri Wahyuni

Title : Composition and Variation of the Human Milk Microbiota Are Influenced by Maternal and Early-Life Factors

Author : Shirin Moossavi, Shadi Sepehri, Bianca Robertson, Lars Bode, Sue Goruk, Catherine J. Field, Lisa M. Lix, Russell J. de Souza, Allan B. Becker, Piushkumar J. Mandhane, Stuart E. Turvey, Padmaja Subbarao, Theo J. Moraes, Diana L. Lefebvre, Malcolm R. Sears, Ehsan Khafipour and Meghan B. Azad

	Yes	No	Unclear	NA
1. Were the two groups similar and recruited from the same population?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Were the exposures measured similarly to assign people to both exposed and unexposed groups?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Was the exposure measured in a valid and reliable way?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Were confounding factors identified?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. Were strategies to deal with confounding factors stated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. Were the groups/participants free of the outcome at the start of the study (or at the moment of exposure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7. Were the outcomes measured in a valid and reliable way?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Was the follow up time reported and sufficient to be long enough for outcomes to occur?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9. Was follow up complete, and if not, were the reasons to loss to follow up described and explored?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Were strategies to address incomplete follow up utilized?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Was appropriate statistical analysis used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Overall appraisal:	Include <input checked="" type="checkbox"/>	Exclude <input type="checkbox"/>	Seek further info <input type="checkbox"/>	

Lampiran 3. Formulir Penilaian Kualitas untuk Desain RCT

Penelitian 3

Reviewer : Andi Sri Wahyuni

Title : Microbiota Supplementation with Bifidobacterium and Lactobacillus Modifies the Preterm Infant Gut Microbiota and Metabolome: An Observational Study

Author : Cristina Alcon-Giner, Matthew J. Dalby, Shabhonam Caim, Jennifer Ketskemety, Alex Shaw, Kathleen Sim, Melissa A.E. Lawson, Raymond Kiu, Charlotte Leclaire, Lisa Chalklen, Magdalena Kujawska, Suparna Mitra, Fahmina Fardus-Reid, Gustav Belteki, Katherine McColl, Jonathan R. Swann, J. Simon Kroll, Paul Clarke and Lindsay J. Hall

	Yes	No	Unclear	NA
1. Was true randomization used for assignment of participants to treatment groups?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Was allocation to treatment groups concealed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Were treatment groups similar at the baseline?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Were participants blind to treatment assignment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Were those delivering treatment blind to treatment assignment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. Were outcomes assessors blind to treatment assignment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7. Were treatment groups treated identically other than the intervention of interest?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Was follow up complete and if not, were differences between groups in terms of their follow up adequately described and analyzed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Were participants analyzed in the groups to which they were randomized?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Were outcomes measured in the same way for treatment groups?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Were outcomes measured in a reliable way?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12. Was appropriate statistical analysis used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Was the trial design appropriate, and any deviations from the standard RCT design (individual randomization, parallel groups) accounted for in the conduct and analysis of the trial?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Overall appraisal:	Include <input checked="" type="checkbox"/>	Exclude <input type="checkbox"/>	Seek further info <input type="checkbox"/>	

Lampiran 4. Formulir Penilaian Kualitas untuk Desain Cohort

Penelitian 4

Reviewer : Andi Sri Wahyuni

Title : Influence of Sulfonated and diet-derived Human Milk Oligosaccharides on The Infant Microbiome and Immune Markers

Author : Candice Quin, Sara D. Vicaretti, Nina A Mohtarudin, Alexander M. Garner, Deanna M. Vollman, Deanna L. Gibson, and X Wesley F. Zandberg

	Yes	No	Unclear	NA
1. Were the two groups similar and recruited from the same population?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Were the exposures measured similarly to assign people to both exposed and unexposed groups?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Was the exposure measured in a valid and reliable way?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Were confounding factors identified?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Were strategies to deal with confounding factors stated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Were the groups/participants free of the outcome at the start of the study (or at the moment of exposure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7. Were the outcomes measured in a valid and reliable way?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Was the follow up time reported and sufficient to be long enough for outcomes to occur?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Was follow up complete, and if not, were the reasons to loss to follow up described and explored?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Were strategies to address incomplete follow up utilized?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11. Was appropriate statistical analysis used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Overall appraisal:	Include <input checked="" type="checkbox"/>	Exclude <input type="checkbox"/>	Seek further info <input type="checkbox"/>	

Lampiran 5. Formulir Penilaian Kualitas untuk Desain Cohort

Penelitian 5

Reviewer : Andi Sri Wahyuni

Title : Key Genetic Variants Associated with Variation of Milk Oligosaccharides from Diverse Human Populations

Author : Janet E. Williams, Michelle K. McGuire, Courtney L. Meehan, Mark A. McGuire, Sarah L. Brooker, Elizabeth W. Kamau-Mbuthia, Egidioh W. Kamundia, Samwel Mbugua, Sophie E. Moore, Andrew M. Prentice, Gloria E. Otoo, Juan M. Rodríguez, Rossina G. Pareja, James A. Foster, Daniel W. Sellen, Debela G. Kita, Holly L. Neibergs, Brenda M. Murdoch.

	Yes	No	Unclear	NA
1. Were the two groups similar and recruited from the same population?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Were the exposures measured similarly to assign people to both exposed and unexposed groups?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Was the exposure measured in a valid and reliable way?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Were confounding factors identified?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. Were strategies to deal with confounding factors stated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. Were the groups/participants free of the outcome at the start of the study (or at the moment of exposure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7. Were the outcomes measured in a valid and reliable way?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Was the follow up time reported and sufficient to be long enough for outcomes to occur?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9. Was follow up complete, and if not, were the reasons to loss to follow up described and explored?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10. Were strategies to address incomplete follow up utilized?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Was appropriate statistical analysis used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Overall appraisal:	Include <input checked="" type="checkbox"/>	Exclude <input type="checkbox"/>	Seek further info <input type="checkbox"/>	

Lampiran 6. Formulir Penilaian Kualitas untuk Desain RCT

Penelitian 6

Reviewer : Andi Sri Wahyuni

Title : Human Milk Oligosaccharides and Non-Digestible Carbohydrates Reduce Pathogen Adhesion to Intestinal Epithelial Cells by Decoy Effects Or by Attenuating Bacterial Virulence

Author : Chunli Kong, Anne de Jong, Bart J. de Haan, Jan Kok , Paul de Vos.

	Yes	No	Unclear	NA
1. Was true randomization used for assignment of participants to treatment groups?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Was allocation to treatment groups concealed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Were treatment groups similar at the baseline?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Were participants blind to treatment assignment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. Were those delivering treatment blind to treatment assignment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. Were outcomes assessors blind to treatment assignment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7. Were treatment groups treated identically other than the intervention of interest?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Was follow up complete and if not, were differences between groups in terms of their follow up adequately described and analyzed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Were participants analyzed in the groups to which they were randomized?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Were outcomes measured in the same way for treatment groups?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Were outcomes measured in a reliable way?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12. Was appropriate statistical analysis used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Was the trial design appropriate, and any deviations from the standard RCT design (individual randomization, parallel groups) accounted for in the conduct and analysis of the trial?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Overall appraisal: Include Exclude Seek further info

Lampirann 7. Penelusuran Tahap Identifikasi

No.	Database	Kombinasi Kata Kunci	Mekanisme	Tanggal Pencarian	Jumlah Literatur
1.	PubMed	<i>(Human Milk Oligosaccharides OR "Oligosaccharides" OR "Human Milk" OR "Breastfeeding" OR "Breastmilk" OR "lactation" OR "Infants) AND (Immunological Effects OR Immune) NOT (Lipid)</i>	Pada fitur <i>advanced search</i> di database PubMed, masukkan satu persatu kata kunci ke dalam kotak pencarian dengan mengatur pencariannya untuk <i>—all fields</i> l. Setiap kata kunci dimasukkan dengan menambahkan <i>boolean operator</i> yang telah ditentukan. Setelah semua kombinasi tersusun pada <i>query box</i> , selanjutnya menekan kotak <i>search</i> dan literatur yang diinginkan akan muncul sesuai kombinasi kata kunci.	6-14 Januari 2022	19
2.	Science Direct	<i>(Human Milk Oligosaccharides OR "Oligosaccharides" OR "Human Milk" OR "Breastfeedin" OR "Breastmilk" OR "lactatio" OR "Infants) AND (Immunological Effects OR Immune) NOT (Lipid)</i>	Pada menu pencarian di database sicence direct, kombinasi kata kunci yang telah dibuat dengan menggunakan <i>boolean operator</i> , dimasukkan ke dalam kotak pencarian. Kemudian selanjutnya akan muncul hasil	9-21 Januari 2022	3212

			literatur yang sesuai dengan kombinasi kata kunci.		
3.	ProQuest	<i>(HMO OR "Breast Milk") AND (Immunological) NOT (Lactose)</i>	Pada menu pencarian di database ProQuest, kombinasi kata kunci yang telah dibuat dengan menggunakan <i>boolean operator</i> , dimasukkan ke dalam kotak pencarian. Kemudian selanjutnya akan muncul hasil literatur yang sesuai dengan kombinasi kata kunci.	7-13 Januari 2022	115
4.	DOAJ	<i>HMO, ASI, Menyusui, Sistem Imun Kekebalan tubuh, Daya tahan tubuh</i>	Pencarian pada database DOAJ dilakukan dua kali. Pencarian pertama menggunakan kombinasi kata kunci yang berbahasa Inggris, sedangkan pencarian kedua menggunakan kata kunci yang berbahasa Indonesia. Pada fitur pencarian database DOAJ, menuju ke pencarian artikel pada atas kolom pencarian. Kemudian memasukkan kombinasi kata kunci yang telah disusun	10-19 Januari 2022	1011

			<p>menggunakan <i>boolean operator</i>, lalu mengatur pencarian untuk <i>—in all fields</i>l. Selanjutnya, akan muncul hasil pencarian yang sesuai dengan kombinasi kata</p>		
5.	Google Scholar	<p><i>HMO, ASI, Menyusui, Sistem Imun Kekebalan tubuh, Daya tahan tubuh</i></p>	<p>Pencarian pada mesin pencarian <i>google scholar</i> dilakukan dua kali. Pencarian pertama menggunakan kombinasi kata kunci yang berbahasa Inggris, sedangkan pencarian kedua menggunakan kata kunci yang berbahasa Indonesia. Pada kolom pencarian <i>google scholar</i>, dimasukkan kombinasi kata kunci yang telah disusun menggunakan <i>boolean operator</i>. Selanjutnya, akan muncul hasil pencarian yang sesuai dengan kombinasi kata kunci. Penulisan kombinasi untuk database <i>google scholar</i>, menggunakan tanda <i>—</i> untuk mengecualikan kata kunci yang tidak ingin diambil.</p>	13-22 Januari 2022	1027
Total Literatur					5384

Lampiran 8. Penelusuran Tahap *Skrining*

Skrining		Mekanisme	Tanggal Pelaksanaan	Hasil		Keterangan
				Include	Exclude	
Tahap 1	Full Text	Menelusuri masing-masing literatur dengan bantuan aplikasi mendeley.	6-22 Januari 2022	2833	2551	Rincian jumlah artikel yang tidak free full text : 1. Pubmed = 4 2. Science Direct = 1509 3. ProQuest = 32 4. DOAJ = 521 5. Google Scholar = 416 6. Unidentified = 69
	Duplikat	Menggunakan aplikasi mendeley dan melakukan pengecekan secara manual.	25 Januari 2022	2281	552	
	Bahasa	Membuka masing-masing file literatur dan melakukan pengecekan bahasa secara manual. Literatur yang diambil adalah yang menggunakan bahasa Inggris dan Indonesia.	25-28 Januari 2022	2060	221	
	Jenis Artikel	Membuka masing-masing file literatur, lalu melakukan identifikasi terhadap jenis artikel. Artikel yang diambil adalah artikel penelitian.	28-31 Januari 2022	1329	731	Rincian jenis artikel yg dikeluarkan: 1. Skripsi, tesis, disertasi, KTI, laporan = 129 2. Review = 301 3. Prosiding = 87 4. Bacaan = 62 5. Lainnya = 152

Jumlah Literatur Tahap 1				1329	4055	
Tahap 2 (Judul)	Relevansi	Membaca masing-masing judul artikel, lalu melakukan <i>skrining</i> terhadap judul artikel yang relevan (meneliti tentang <i>Human Milk Oligosaccharides</i> dan sistem imun)	1-4 Februari 2022	167	1162	Rincian artikel yang dikeluarkan: 1. Membahas <i>Human Milk Oligosaccharides</i> = 736 2. Selain tentang <i>Human Milk Oligosaccharides</i> = 426
	Indeks Jurnal	Melakukan skrining terhadap artikel yang terindeks oleh <i>Scopus</i> atau <i>ScienceDirect</i> dengan mengecek nama jurnal masing-masing artikel pada situs indeksasi jurnal.	5-8 Februari 2022	90	77	Rincian indeks jurnal 1. <i>Scopus</i> = 32 2. <i>ScienceDirect</i> = 58
Jumlah Literatur Tahap 2				90	1239	
Tahap 3	Kesesuaian Judul dengan Abstrak	Membaca abstrak, lalu melakukan skrining kesesuaian judul dengan isi abstrak dan melihat relevansi tujuan pada abstrak (tujuan penelitian yang melihat efek <i>Human Milk Oligosaccharides</i> terhadap sistem imun pada bayi)	10-15 Februari 2022	32	58	
Literatur Hasil Skrining				32	5384	

Lampiran 9. Penelusuran Tahap *Eligibility*

Eligibility		Penilaian	Tanggal Pelaksanaan	Hasil		Keterangan
				Include	Exclude	
<i>Full Text Assesed</i>	Populasi	populasi ibu menyusui	16 Februari 2022	14	18	Rincian artikel yang terexclude: 1. Populasi hewan = 9 2. Populasi ibu hamil = 9
	Desain Studi	RCT dan studi cohort	16 Februari 2022	13	1	Rincian desain studi artikel yang terinclude: 1. RCT = 3 2. Cohort studies = 5
	Intervensi	Intervensi berupa <i>Human Milk Oligosaccharides</i>	16 Februari 2022	9	4	Rincian desain yang terexclude: 1. Intevensi berupa HMO dengan konsentrasi lain = 1 2. Intervensi berupa HMO dari susu sapi = 3
	Komparator	susu formula atau suplemen probiotik	16 Februari 2022	9	0	
	Hasil	produksi ASI diukur berdasarkan kandungan atau konsentrasi ASI serta manfaat HMO sebagai sistem imun pada bayi	16 Februari 2022	6	3	
<i>Adding</i>	<i>Hand Searching</i>					
				6	26	

Lampiran 10. Dokumentasi Proses Skrining Artikel Tahap Dua

Mendeley Desktop interface showing a list of articles in the Favorites section. The selected article is:

Authors	Title	Year	Published In
Thurl, Stephan; Munzert, Manfred; Ntser, Soehm, Gü...	Systematic review of the concentrations of oligosaccharides in human milk		Nutrients
Walsh, Clodagh; Lane, Jonathan A.; van Sinderen, ...	Human milk oligosaccharides: Shaping the infant gut microbiota and supporting health	2020	Journal of Functional Foods
Qin, Candice; Vicaretti, Sara D.; Mohtarudin, Nina A.; Ga...	Influence of sulfonated and diet-derived human milk oligosaccharides on the infant microbiome and immune ma...	2020	Journal of Biological Chem...
Qi, Hongchao; Xiao, Shuang; Shi, Runyue; Ward, Michael	The Role of Two Human Milk Oligosaccharides, 2'-Fucosylactose and Lacto-N-Hexose, in Infant Nutriti...	2018	Nature
Urashima, T.; Taufika, E.	Oligosaccharides in milk: Their benefits and future utilization	2010	Media Peternakan
Bode, Lars; Jantscher-Krienn, Evelyn	Structure-function relationships of human milk oligosaccharides	2012	Advances in nutrition (Beth...
Austin, Sean; de Castro, Carlos A.; Béret, Thierry H...	Temporal Change of the Content of 10 Oligosaccharides in the Milk of Chinese Urban Mothers	2016	Nutrients
Ma, Lin; McClarrow, Paul; Jan Mohamed, Hamid Jan B.; Liu...	Lactational changes in the human milk oligosaccharide concentration in Chinese and Malaysian mothers' milk	2018	International Dairy Journal
He, Feng J	Effect of longer term modest salt reduction on blood pressure: Cochrane systematic review and meta-analysis...	2013	BMJ
Qin, Candice; Vicaretti, Sara D.; Mohtarudin, Nina A.; Ga...	Influence of sulfonated and diet-derived human milk oligosaccharides on the infant microbiome and immune ma...	2020	Journal of Biological Chem...
Moossavi, Shirin; Sepethi, Shadi; Robertson, Bianca B...	Composition and Variation of the Human Milk Microbiota Are Influenced by Maternal and Early-Life Factors	2019	Cell Host and Microbe
Kong, Chunli; de Jong, Anne; de Haan, Bart J.; Kok, Jan; ...	Human milk oligosaccharides and non-digestible carbohydrates reduce pathogen adhesion to intestinal ep...	2022	Food Research International
Thongaram, Taksawan; Hoeflinger, Jennifer L.; Cho...	Human milk oligosaccharide consumption by probiotic and human-associated bifidobacteria and lactobacilli	2017	Journal of Dairy Science
Alcon-Giner, Cristina; Dalby, Matthew J.; Cam, Shabnon	Microbiota Supplementation with Bifidobacterium and Lactobacillus Modifies the Preterm Infant Gut Microbiota a...	2020	Cell Reports Medicine
Williams, Janet E.; McGuire, Michelle K.; Meehan, Courtn...	Key genetic variants associated with variation of milk oligosaccharides from diverse human populations	2021	Genomics

Details | Notes | Contents

Type: Journal Article

Influence of sulfonated and diet-derived human milk oligosaccharides on the infant microbiome and immune markers

Authors: C. Qin, S. Vicaretti, N. Mohtarudin et al.

View research catalog entry for this paper

Journal: *Journal of Biological Chemistry*

Year: 2020
Volume: 295
Issue: 12
Pages: 4035-4048

Abstract:
Human milk oligosaccharides (HMOs) promote the development of the neonatal intestinal, immune, and nervous systems and has recently received considerable attention. Here we investigated how the maternal diet affects HMO biosynthesis and how any diet-induced HMO alterations influence the infant gut microbiome and immunity. Using capillary electrophoresis and MS-based analyses, we extracted and measured HMOs from breast milk samples and then correlated their levels with results from validated 24-h diet recall surveys and breast milk fatty acids. We found that fruit intake and unsaturated fatty acids in breast milk were positively correlated with an increased absolute abundance of numerous HMOs, including 16 sulfonated HMOs we identified here in humans for the first time. The diet-derived monosaccharide 5-N-glycolylneuraminic acid (Neu5Gc) was unambiguously detected in all samples. To gain insights into the potential impact of Neu5Gc on the infant microbiome, we used a controlled ordination approach and identified correlations between Neu5Gc levels and Bacteroides spp. in infant stool. However, Neu5Gc was not associated with marked changes in infant immune markers, in contrast with sulfonated HMOs, which expression correlated with suppression o...

Tags: Go to Settings to activate Windows.

Mendeley Desktop interface showing a list of articles in the Favorites section. The selected article is:

Authors	Title	Year	Published In
Thurl, Stephan; Munzert, Manfred; Ntser, Soehm, Gü...	Systematic review of the concentrations of oligosaccharides in human milk		Nutrients
Walsh, Clodagh; Lane, Jonathan A.; van Sinderen, ...	Human milk oligosaccharides: Shaping the infant gut microbiota and supporting health	2020	Journal of Functional Foods
Qin, Candice; Vicaretti, Sara D.; Mohtarudin, Nina A.; Ga...	Influence of sulfonated and diet-derived human milk oligosaccharides on the infant microbiome and immune ma...	2020	Journal of Biological Chem...
Qi, Hongchao; Xiao, Shuang; Shi, Runyue; Ward, Michael	The Role of Two Human Milk Oligosaccharides, 2'-Fucosylactose and Lacto-N-Hexose, in Infant Nutriti...	2018	Nature
Urashima, T.; Taufika, E.	Oligosaccharides in milk: Their benefits and future utilization	2010	Media Peternakan
Bode, Lars; Jantscher-Krienn, Evelyn	Structure-function relationships of human milk oligosaccharides	2012	Advances in nutrition (Beth...
Austin, Sean; de Castro, Carlos A.; Béret, Thierry H...	Temporal Change of the Content of 10 Oligosaccharides in the Milk of Chinese Urban Mothers	2016	Nutrients
Ma, Lin; McClarrow, Paul; Jan Mohamed, Hamid Jan B.; Liu...	Lactational changes in the human milk oligosaccharide concentration in Chinese and Malaysian mothers' milk	2018	International Dairy Journal
He, Feng J	Effect of longer term modest salt reduction on blood pressure: Cochrane systematic review and meta-analysis...	2013	BMJ
Qin, Candice; Vicaretti, Sara D.; Mohtarudin, Nina A.; Ga...	Influence of sulfonated and diet-derived human milk oligosaccharides on the infant microbiome and immune ma...	2020	Journal of Biological Chem...
Moossavi, Shirin; Sepethi, Shadi; Robertson, Bianca B...	Composition and Variation of the Human Milk Microbiota Are Influenced by Maternal and Early-Life Factors	2019	Cell Host and Microbe
Kong, Chunli; de Jong, Anne; de Haan, Bart J.; Kok, Jan; ...	Human milk oligosaccharides and non-digestible carbohydrates reduce pathogen adhesion to intestinal ep...	2022	Food Research International
Thongaram, Taksawan; Hoeflinger, Jennifer L.; Cho...	Human milk oligosaccharide consumption by probiotic and human-associated bifidobacteria and lactobacilli	2017	Journal of Dairy Science
Alcon-Giner, Cristina; Dalby, Matthew J.; Cam, Shabnon	Microbiota Supplementation with Bifidobacterium and Lactobacillus Modifies the Preterm Infant Gut Microbiota a...	2020	Cell Reports Medicine
Williams, Janet E.; McGuire, Michelle K.; Meehan, Courtn...	Key genetic variants associated with variation of milk oligosaccharides from diverse human populations	2021	Genomics

Details | Notes | Contents

Type: Journal Article

Composition and Variation of the Human Milk Microbiota Are Influenced by Maternal and Early-L...

Authors: S. Moossavi, S. Sepethi, B. Robertson et al.

View research catalog entry for this paper

Journal: *Cell Host and Microbe*

Year: 2019
Volume: 25
Issue: 2
Pages: 324-335.e4

Abstract:
Breastmilk contains a complex community of bacteria that may help seed the infant gut microbiota. The composition and determinants of milk microbiota are poorly understood. Among 393 mother-infant dyads from the CHLD cohort, we found that milk microbiota at 3-4 months postpartum was dominated by inversely correlated Proteobacteria and Firmicutes, and exhibited discrete compositional patterns. Milk microbiota composition and diversity were associated with maternal factors (BMI, parity, and mode of delivery), breastfeeding practices, and other milk components in a sex-specific manner. Causal modeling identified mode of breastfeeding as a key determinant of milk microbiota composition. Specifically, providing pumped breastmilk was consistently associated with multiple microbiota parameters including enrichment of potential pathogens and depletion of bifidobacteria. Further, these data support the retrograde inoculation hypothesis, whereby the infant oral cavity impacts the milk microbiota. Collectively, these results identify features and determinants of human milk microbiota composition, with potential implications for infant health and development.

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Lampiran 11. Dokumentasi Proses Skrining Artikel Tahap Tiga

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Revised: Feb 1, 2019
Accepted: Feb 12, 2019

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Conflict of interest
YV has participated as a clinical investigator,
and/or advisory board member, and/
or consultant, and/or speaker for Abbott
Nutrition, Biondee, Danone, Nestlé Health
Science, Nestlé Nutrition Institute, Nutricia,
Mead Johnson, and United Pharmaceuticals.
YW and RB is an employee of the Nestlé
Nutrition Institute. The other authors report no
conflict of interest.

ABSTRACT

Human breast milk contains numerous biomolecules. Human milk oligosaccharides (HMOs) are the third most abundant component of breast milk, after lactose and lipids. Amongst the synthesized HMOs, 2'-fucosyllactose (2'-FL) and lacto-N-neotetraose (LNnT) are widely studied and are considered safe for infant nutrition. Several studies have reported the health benefits of HMOs, which include modulation of the intestinal microbiota, anti-adhesive effect against pathogens, modulation of the intestinal epithelial cell response, and development of the immune system. The amount and diversity of HMOs are determined by the genetic background of the mothers (HMO secretors or non-secretors). The non-secretor mothers secrete lower HMOs than secretor mothers. The breastfed infants of secretor mothers gain more health benefit than those of non-secretor mothers. In conclusion, supplementation of infant formula with 2'-FL and LNnT is a promising innovation for infant nutrition.

Keywords: Human milk; Oligosaccharide; 2'-fucosyllactose; Lacto-N-neotetraose; Infant; Breast feeding

INTRODUCTION

According to the recommendations of the World Health Organization, infants must be exclusively breastfed during the first six months of life. Human breast milk provides more than half of the child's nutritional needs during the second year of life [1]. The infants who

Details Notes Contents

Type: Generic

The Role of Two Human Milk Oligosaccharides, 2'-Fucosyllactose and Lacto-N-Neotetraose, in Infant Nutrition

Authors: H. Qi, S. Xiao, R. Shi et al.

Publication: *Nature*

Year: 2018

Volume: 388

Pages: 539-547

Abstract:
eadowSR_Post-streptococcalphritis-or-aredisease? ArchDisChild1976;50:379-81.2.eungD1Y.1aenR1M.DawesDP_Settingupadinalcaud 1953.4fenghasd1Hr.Chatasg1ngS_Post-streptococcalphritis-stlnotarediseaseThailand_ArchDisChild1976;51:484-5.CameronJS,WidRM_Oggc

Tags:

Author Keywords:

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Journal of Functional Foods 72 (2020) 104074

Contents lists available at ScienceDirect

Journal of Functional Foods

journal homepage: www.elsevier.com/locate/jff

Human milk oligosaccharides: Shaping the infant gut microbiota and supporting health

Clodagh Walsh^{a,b,c}, Jonathan A. Lane^b, Douwe van Sinderen^a, Rita M. Hickey^{a,*}

^aTrategic Food Research Centre, Maunpark, Fermoy, P61C996 Co. Cork, Ireland
^bHBI Group, Global Research and Technology Centre, P61 C996 Co. Cork, Ireland
^cAPC Microbiome Institute and School of Microbiology, National University of Ireland, Cork, Ireland

ARTICLE INFO

Keywords:
Human milk oligosaccharides
Prebiotics
Breast milk
Gut health

ABSTRACT

Human milk oligosaccharides (HMO) are complex sugars which are found in breast milk at significant concentrations and with unique structural diversity. These sugars are the fourth most abundant component of human milk after water, lipids, and lactose and yet provide no direct nutritional value to the infant. Recent research has highlighted that HMOs have various functional roles to play in infant development. These sugars act as prebiotics by promoting growth of beneficial intestinal bacteria thereby generating short-chain fatty acids which are critical for gut health. HMOs also directly modulate host-epithelial immune responses and can selectively reduce binding of pathogenic bacteria and viruses to the gut epithelium preventing the emergence of a disease. This review covers current knowledge related to the functional biology of HMOs and their associated impact on infant gut health.

Details Notes Contents

Type: Journal Article

Human milk oligosaccharides: Shaping the infant gut microbiota and supporting health

Authors: C. Walsh, J. Lane, D. van Sinderen et al.

Journal: *Journal of Functional Foods*

Year: 2020

Volume: 72

Issue: July

Pages: 104074

Abstract:
Human milk oligosaccharides (HMO) are complex sugars which are found in breast milk at significant concentrations and with unique structural diversity. These sugars are the fourth most abundant component of human milk after water, lipids, and lactose and yet provide no direct nutritional value to the infant. Recent research has highlighted that HMOs have various functional roles to play in infant development. These sugars act as prebiotics by promoting growth of beneficial intestinal bacteria thereby generating short-chain fatty acids which are critical for gut health. HMOs also directly modulate host-epithelial immune responses and can selectively reduce binding of pathogenic bacteria and viruses to the gut epithelium preventing the emergence of a disease. This review covers current knowledge related to the functional biology of HMOs and their associated impact on infant ...

Tags:

Author Keywords:

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Lampiran 12. Dokumentasi Artikel Jurnal yang Terindeks

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Walsh, Clodagh; Lane, Jonathan A.; van Sinderen, ...	Human milk oligosaccharides: Shaping the infant gut microbiota and supporting health	2020
Quin, Candice; Vicaretti, Sara D.; Mohtarudin, Nina A.; Ga...	Influence of sulfonated and diet-derived human milk oligosaccharides on the infant microbiome and immune markers	2020
Qi, Hongchao; Xiao, Shuang; Shi, Runye; Ward, Michael ...	The Role of Two Human Milk Oligosaccharides, Z-Fucosylactose and Lacto-N-Neotetraose, in Infant Nutrition	2018
Urashima, T.; Taufika, E.	Oligosaccharides in milk: Their benefits and future utilization	2010
Bode, Lars; Jantscher-Kreim, Evelyn	Structure-function relationships of human milk oligosaccharides	2012
Austin, Sean; de Castro, Carlos A.; Béret, Thierry; H...	Temporal Change of the Content of 10 Oligosaccharides in the Milk of Chinese Urban Mothers	2016
Ma, Lyn; McJarow, Paul; Jan Mohamed, Hamid Jan B.; Liu...	Lactational changes in the human milk oligosaccharide concentration in Chinese and Malaysian mothers' milk	2018
He, Feng J	Effect of longer term modest salt reduction on blood pressure: Cochrane systematic review and meta-analysis of randomised trials	2013
Quin, Candice; Vicaretti, Sara D.; Mohtarudin, Nina A.; Ga...	Influence of sulfonated and diet-derived human milk oligosaccharides on the infant microbiome and immune markers	2020
Mossavi, Shirin; Sepethri, Shadi; Robertson, Bianca; B...	Composition and Variation of the Human Milk Microbiota Are Influenced by Maternal and Early-Life Factors	2019
Kong, Chunli; de Jong, Anne; de Haan, Bart J.; Kok, Jan; ...	Human milk oligosaccharides and non-digestible carbohydrates reduce pathogen adhesion to intestinal epithelial cells by decoy effects or by attenuating bacteria	2022
Thongaram, Taksawan; Hoeflinger, Jennifer L.; Cho...	Human milk oligosaccharide consumption by probiotic and human-associated bifidobacteria and lactobacilli	2017
Alcon-Giner, Cristina; Dalby, Matthew J.; Cam, Shabnon...	Microbiota Supplementation with Bifidobacterium and Lactobacillus Modifies the Preterm Infant Gut Microbiota and Metabolome: An Observational Study	2020
Williams, Janet E.; McGuire, Michelle K.; Meehan, Court...	Key genetic variants associated with variation of milk oligosaccharides from diverse human populations	2021

Details Notes Contents

Type: Journal Article

Human milk oligosaccharides and non-digestible carbohydrates reduce pathogen adhesion to intestinal epithelial cells by decoy effects or by attenuating bacteria...

Authors: C. Kong, A. de Jong, B. de Haan et al.

View research catalog entry for this paper

Journal: *Food Research International*

Year: 2022

Volume: 151

Issue: 1

Pages: 110867

Abstract:

This work investigated the effects of different chemical structures of human milk oligosaccharides (HMOs) and non-digestible carbohydrates (NDCs) on pathogen adhesion by serving as decoy receptors. Pre-exposure of pathogens to milk and low degree of methylation (DM) pectin prevented binding to gut epithelial CaCo-2 cells, but effects were dependent on the molecular chemistry, pathogen strain and growth phase. Pre-exposure to 3-fucosylactose increased E. coli W3A321 adhesion (28%, $p < 0.05$), and DM69 pectin increased E. coli E18 (15 fold, $p < 0.05$) and E. coli W3A321 (50%, $p < 0.05$) adhesion. Transcriptomics analysis revealed that DM69 pectin upregulated flagella and cell membrane associated genes. However, the top 10 downregulated genes were associated with lowering of bacteria virulence. DM69 pectin increased pathogen adhesion but bacterial virulence was attenuated illustrating different mechanisms may lower pathogen adhesion. Our study illustrates that both HMOs and NDCs can reduce adhesion or attenuate virulence of pathogens but that these effects are chemistry dependent.

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Filter by Authors

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Agustina, Rina

Alcon-Giner, Cristina

Arora, Kamel

Atthiyah, Alpha Fardah

Austin, Sean

Azad, Meghan B.

Basrowi, Ray Wagu

Becker, Alan B.

Belleki, Gustav

Bhushan, Phani

Bode, Lars

Brooker, Sarah L.

Béret, Thierry

Cam, Shabnonam

Chalklen, Lea

Chen, Yue

1 of 22 documents selected

Type here to search

24°C Berawan 11:59 PM 3/13/2022

Favorites

Authors	Title	Year
Thuri, Staphany Munzer; Manfred; Nlher Boehm, Gi...	Systematic review of the concentrations of oligosaccharides in human milk	
Walsh, Clodagh; Lane, Jonathan A.; van Sinderen, ...	Human milk oligosaccharides: Shaping the infant gut microbiota and supporting health	2020
Quin, Candice; Vicaretti, Sara D.; Mohtarudin, Nina A.; Ga...	Influence of sulfonated and diet-derived human milk oligosaccharides on the infant microbiome and immune markers	2020
Qi, Hongchao; Xiao, Shuang; Shi, Runye; Ward, Michael ...	The Role of Two Human Milk Oligosaccharides, Z-Fucosylactose and Lacto-N-Neotetraose, in Infant Nutrition	2018
Urashima, T.; Taufika, E.	Oligosaccharides in milk: Their benefits and future utilization	2010
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Mossavi, Shirin; Sepethri, Shadi; Robertson, Bianca; B...	Composition and Variation of the Human Milk Microbiota Are Influenced by Maternal and Early-Life Factors	2019
Kong, Chunli; de Jong, Anne; de Haan, Bart J.; Kok, Jan; ...	Human milk oligosaccharides and non-digestible carbohydrates reduce pathogen adhesion to intestinal epithelial cells by decoy effects or by attenuating bacteria	2022
Thongaram, Taksawan; Hoeflinger, Jennifer L.; Cho...	Human milk oligosaccharide consumption by probiotic and human-associated bifidobacteria and lactobacilli	2017
Alcon-Giner, Cristina; Dalby, Matthew J.; Cam, Shabnon...	Microbiota Supplementation with Bifidobacterium and Lactobacillus Modifies the Preterm Infant Gut Microbiota and Metabolome: An Observational Study	2020
Williams, Janet E.; McGuire, Michelle K.; Meehan, Court...	Key genetic variants associated with variation of milk oligosaccharides from diverse human populations	2021

Details Notes Contents

Type: Journal Article

Human milk oligosaccharides: Shaping the infant gut microbiota and supporting health

Authors: C. Walsh, J. Lane, D. van Sinderen et al.

View research catalog entry for this paper

Journal: *Journal of Functional Foods*

Year: 2020

Volume: 72

Issue: July

Pages: 104074

Abstract:

Human milk oligosaccharides (HMO) are complex sugars which are found in breast milk at significant concentrations and with unique structural diversity. These sugars are the fourth most abundant component of human milk after water, lipids, and lactose and yet provide no direct nutritional value to the infant. Recent research has highlighted that HMOs have various functional roles to play in infant development. These sugars act as prebiotics by promoting growth of beneficial intestinal bacteria thereby generating short-chain fatty acids which are critical for gut health. HMOs also directly modulate host-epithelial immune responses and can selectively reduce binding of pathogenic bacteria and viruses to the gut epithelium preventing the emergence of a disease. This review covers current knowledge related to the functional biology of HMOs and their associated impact on infant gut health.

Tags:

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Author Keywords:

Breast milk; Gut health; Human milk oligosaccharides; Prebiotics

Lampiran 13. Dokumentasi *History* Pencarian dan Penelusuran Literatur

History

Search history

Chrome history

Tabs from other devices

Clear browsing data

Turn off Journeys

Friday, March 4, 2022

- 10:28 PM (39) WhatsApp web.whatsapp.com
- 9:31 PM Enhanced Reader dagcmkpagj|hakfhnbmogm|dpkdkiff
- 9:31 PM Systematic review of the concentrations of oligosaccharides in human milk - PubMed pubmed.ncbi.nlm.nih.gov
- 9:30 PM Temporal Change of the Content of 10 Oligosaccharides in the Milk of Chinese Urban Mothers - ... pubmed.ncbi.nlm.nih...
- 9:13 PM Lactational changes in the human milk oligosaccharide concentration in Chinese and Malaysian mot... www.researchga...
- 9:12 PM Temporal Change of the Content of 10 Oligosaccharides in the Milk of Chinese Urban Mothers - ... pubmed.ncbi.nlm.nih...
- 8:58 PM Nature's first functional food www.science.org
- 8:45 PM Maternal fucosyltransferase 2 status affects the gut bifidobacterial communities of breast... microbiologyjournal.biomedpubl...
- 8:25 PM PubMed pubmed.ncbi.nlm.nih.gov

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1:51 PM 4/17/2022

History

Search history

Chrome history

Tabs from other devices

Clear browsing data

Turn off Journeys

5:55 AM Google Terjemahan translate.google.co.id

5:54 AM Linkage-Specific Detection and Metabolism of Human Milk Oligosaccharides in Escherichia coli - ... www.sciencedirect...

5:47 AM Linkage-Specific Detection and Metabolism of Human Milk Oligosaccharides in Escherichia coli - ... www.sciencedirect...

5:46 AM ScienceDirect Search Results - Keywords(HUMAN MILK OLIGOSACCHARIDE) www.sciencedirect.com

5:04 AM Influence of sulfonated and diet-derived human milk oligosaccharides on the infant microbiome and im... reader.elsevier...

5:03 AM Influence of sulfonated and diet-derived human milk oligosaccharides on the infant microbiome and im... reader.elsevier...

5:01 AM Elsevier Enhanced Reader reader.elsevier.com

5:01 AM Elsevier Enhanced Reader reader.elsevier.com

5:01 AM Key genetic variants associated with variation of milk oligosaccharides from diverse human populat... reader.elsevier...

5:01 AM Key genetic variants associated with variation of milk oligosaccharides from diverse human populat... www.sciencedirect...

5:01 AM https://www.sciencedirect.com/sdfe/reader/pii/S0888754321001300/pdf www.sciencedirect.com

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1:55 PM 4/17/2022

History

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Chrome history

Tabs from other devices

Clear browsing data

Turn off Journeys

11:46 PM (39) WhatsApp web.whatsapp.com

11:43 PM Google Terjemahan translate.google.co.id

11:42 PM Elsevier Enhanced Reader reader-elsevier-com.translate.goog

11:42 PM Google Terjemahan translate.google.co.id

11:42 PM Elsevier Enhanced Reader reader.elsevier.com

11:42 PM https://www.sciencedirect.com/sdfe/reader/pii/S0888754321001300/pdf www.sciencedirect.com

11:41 PM Enhanced Reader dagcmkpagj|hakfhnbmogm|dpkdkiff

11:37 PM Logged in brxt.mendeley.com

11:37 PM Sign in id.elsevier.com

11:37 PM Sign in id.elsevier.com

11:37 PM Key genetic variants associated with variation of milk oligosaccharides from diverse human popu... pubmed.ncbi.nlm.nl...

Type here to search

26°C Sebagian cerah

1:56 PM 4/17/2022

History

Search history

Chrome history

History

Monday, March 7, 2022

- 8:20 PM Logged in brxt.mendeley.com
- 8:20 PM id.elsevier.com id.elsevier.com
- 6:30 AM Validation and application of a method for the simultaneous absolute quantification of 16 neutral and acidic ... www.sci...
- 6:30 AM Lactational changes in the human milk oligosaccharide concentration in Chinese and Malaysian mo... www.sciencedire...
- 6:25 AM Validation and application of a method for the simultaneous absolute quantification of 16 neutral and acidic ... www.sci...
- 6:21 AM Human milk oligosaccharides and its acid hydrolysate LNT2 show immunomodulatory effects via TLRs... www.scienced...
- 6:18 AM Human milk oligosaccharides and its acid hydrolysate LNT2 show immunomodulatory effects via TLRs... www.scienced...
- 6:18 AM Human milk oligosaccharides and its acid hydrolysate LNT2 show immunomodulatory effects via TLRs... www.scienced...
- 6:18 AM Human milk oligosaccharides and its acid hydrolysate LNT2 show immunomodulatory effects via TLRs... www.scienced...

History

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- 12:21 AM Intluence of suttonated and diet-derived human mik oligosacchandes on the infant microbiome and ... www.sciencedire...
- 12:21 AM Human milk oligosaccharides: Shaping the infant gut microbiota and supporting health - Scienc... www.sciencedirect...
- 12:19 AM Human milk oligosaccharides, Shaping the infant gut microbiota and supporting health | Elsevier Enh... reader.elsevier...
- 12:18 AM Recent advance in infant nutrition: Human milk oligosaccharides | Elsevier Enhanced Reader reader.elsevier.com
- 12:16 AM Untangling human milk oligosaccharides and infant gut microbiome | Elsevier Enhanced Reader reader.elsevier.com
- 12:16 AM https://www.sciencedirect.com/sdfe/reader/pii/S2589004221015133/pdf www.sciencedirect.com
- 12:14 AM Recent advance in infant nutrition: Human milk oligosaccharides - ScienceDirect www.sciencedirect.com
- 12:14 AM PIN55 - COST-EFFECTIVENESS ANALYSIS OF INFANT FORMULA SUPPLEMENTED WITH HUMAN MILK OLIG... www.sci...
- 12:14 AM Untangling human milk oligosaccharides and infant gut microbiome - ScienceDirect www.sciencedirect.com
- 12:07 AM Enhanced Reader dagcmkpag|hakdfhnbomgrydpdkidiff
- 12:04 AM Logged in brxt.mendeley.com

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- 3:07 PM Regulatory effects of bifidobacteria on the growth of other colonic bacteria - PubMed pubmed.ncbi.nlm.nih.gov
- 3:07 PM Human Milk Oligosaccharides: 2-Fucosylactose (2'-FL) and Lacto-N-Neotetraose (LNnT) in Infant F... www.ncbi.nlm.nih...
- 3:07 PM Maternal fucosyltransferase 2 status affects the gut bifidobacterial communities of breastfed inf... pubmed.ncbi.nlm.ni...
- 2:58 PM Human Milk Oligosaccharides: 2-Fucosylactose (2'-FL) and Lacto-N-Neotetraose (LNnT) in Infant F... www.ncbi.nlm.nih...
- 2:57 PM Compositional Analysis and Metabolism of Human Milk Oligosaccharides in Infants - PubMed pubmed.ncbi.nlm.nih.gov
- 2:26 PM Human Milk Oligosaccharides: 2-Fucosylactose (2'-FL) and Lacto-N-Neotetraose (LNnT) in Infant F... www.ncbi.nlm.nih...
- 2:22 PM Logged in brxt.mendeley.com
- 2:22 PM Sign in id.elsevier.com
- 2:22 PM Sign in id.elsevier.com
- 2:22 PM Human Milk Oligosaccharides: The Journey Ahead www.hindawi.com

This screenshot shows the Chrome History page for Thursday, March 10, 2022. The interface includes a search bar at the top, navigation options for 'List' and 'Journeys', and a sidebar with 'Chrome history', 'Tabs from other devices', 'Clear browsing data', and 'Turn off Journeys'. The main content area displays a list of visited pages:

- 9:50 PM: (39) WhatsApp - web.whatsapp.com
- 9:49 PM: Human Milk Oligosaccharides and Associations With Immune-Mediated Disease and Infection in Child... - www.readcub...
- 9:48 PM: The Role of Human Milk Oligosaccharides and Probiotics on the Neonatal Microbiome and Risk of Nec... - www.ncbi.nlm...
- 9:40 PM: Google Terjemahan - translate.google.co.id
- 6:20 PM: Human Milk Oligosaccharides and Associations With Immune-Mediated Disease and Infection... - dagcmkpagj|hakfdhnbomgmjdpkdkiff
- 6:18 PM: Enhanced Reader - dagcmkpagj|hakfdhnbomgmjdpkdkiff
- 6:17 PM: Kematian Anak Indonesia Tinggi, Capai 29,3 Ribu pada 2019 | Databoks - databoks.katadata.co.id
- 6:17 PM: Human Milk Oligosaccharides and Associations With Immune-Mediated Disease and Infection in Child... - www.readcub...
- 6:17 PM: Nutrients | Free Full-Text | Dynamic Changes in Human Milk Oligosaccharides in Chinese Population: A Syst... - www.mdpi.com

The Windows taskbar at the bottom shows the search bar, system tray with weather (26°C), and the date/time (1:44 PM, 4/17/2022).

This screenshot shows the Chrome History page for March 10, 2022, displaying a list of articles and documents:

- 6:15 PM: Elsevier Enhanced Reader - reader.elsevier.com
- 6:15 PM: Elsevier Enhanced Reader - reader.elsevier.com
- 6:15 PM: Elsevier Enhanced Reader - www.sciencedirect.com
- 6:15 PM: https://www.sciencedirect.com/sdfe/reader/pi/S0888754321001300/pdf - www.sciencedirect.com
- 6:15 PM: Enhanced Reader - dagcmkpagj|hakfdhnbomgmjdpkdkiff
- 6:14 PM: Logged in - brxt.mendeley.com
- 6:14 PM: Microbiota Supplementation with Bifidobacterium and Lactobacillus Modifies the Preterm Infant Out MI... - www.science...
- 6:14 PM: Sign in - id.elsevier.com
- 6:13 PM: Sign in - id.elsevier.com
- 6:13 PM: Key genetic variants associated with variation of milk oligosaccharides from diverse human popula... - www.sciencedrec...
- 6:13 PM: Composition and Variation of the Human Milk Microbiota Are Influenced by Maternal and Early-Life... - www.sciencedrec...

The Windows taskbar at the bottom shows the search bar, system tray with weather (26°C), and the date/time (1:45 PM, 4/17/2022).

This screenshot shows the Chrome History page for March 10, 2022, displaying a list of articles and documents:

- 6:15 PM: Elsevier Enhanced Reader - reader.elsevier.com
- 6:15 PM: Elsevier Enhanced Reader - reader.elsevier.com
- 6:15 PM: Elsevier Enhanced Reader - www.sciencedirect.com
- 6:15 PM: https://www.sciencedirect.com/sdfe/reader/pi/S0888754321001300/pdf - www.sciencedirect.com
- 6:15 PM: Enhanced Reader - dagcmkpagj|hakfdhnbomgmjdpkdkiff
- 6:14 PM: Logged in - brxt.mendeley.com
- 6:14 PM: Microbiota Supplementation with Bifidobacterium and Lactobacillus Modifies the Preterm Infant Gut MI... - www.science...
- 6:14 PM: Sign in - id.elsevier.com
- 6:13 PM: Sign in - id.elsevier.com
- 6:13 PM: Key genetic variants associated with variation of milk oligosaccharides from diverse human popula... - www.sciencedrec...
- 6:13 PM: Composition and Variation of the Human Milk Microbiota Are Influenced by Maternal and Early-Life... - www.sciencedrec...

The Windows taskbar at the bottom shows the search bar, system tray with weather (26°C), and the date/time (1:45 PM, 4/17/2022).

RIWAYAT HIDUP



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Nama : Andi Sri Wahyuni
Tempat/Tgl. Lahir : Lapai, 25 April
1999Agama : Islam
Alamat : Perumahan Garden Tata Residen, Blok A1
Email : andisriwhyni77@gmail.com

B. Riwayat Pendidikan

1. SDN 1 Lapai (2005-2011)
2. SMP Negeti 1 Ngapa (2011-2014)
3. SMA Negeri 8 Makassar (2014-2017)
4. Ilmu Gizi FKM Universitas Hasanuddin (2017-2022)