

SUPC

Study ID	Study Name	Year	Country	Design	Population	Sample Size (n)	Reference	Year	Country	Design	Population	Sample Size (n)	Reference	Year	Country	Design	Population	Sample Size (n)	Reference	Year	Country	Design	Population	Sample Size (n)	Reference
100001	Study 1	2001	USA	Case-control	Healthy	100	[1]	2001	USA	Case-control	Healthy	100	[1]	2001	USA	Case-control	Healthy	100	[1]	2001	USA	Case-control	Healthy	100	[1]
100002	Study 2	2002	USA	Case-control	Healthy	200	[2]	2002	USA	Case-control	Healthy	200	[2]	2002	USA	Case-control	Healthy	200	[2]	2002	USA	Case-control	Healthy	200	[2]
100003	Study 3	2003	USA	Case-control	Healthy	300	[3]	2003	USA	Case-control	Healthy	300	[3]	2003	USA	Case-control	Healthy	300	[3]	2003	USA	Case-control	Healthy	300	[3]
100004	Study 4	2004	USA	Case-control	Healthy	400	[4]	2004	USA	Case-control	Healthy	400	[4]	2004	USA	Case-control	Healthy	400	[4]	2004	USA	Case-control	Healthy	400	[4]
100005	Study 5	2005	USA	Case-control	Healthy	500	[5]	2005	USA	Case-control	Healthy	500	[5]	2005	USA	Case-control	Healthy	500	[5]	2005	USA	Case-control	Healthy	500	[5]
100006	Study 6	2006	USA	Case-control	Healthy	600	[6]	2006	USA	Case-control	Healthy	600	[6]	2006	USA	Case-control	Healthy	600	[6]	2006	USA	Case-control	Healthy	600	[6]
100007	Study 7	2007	USA	Case-control	Healthy	700	[7]	2007	USA	Case-control	Healthy	700	[7]	2007	USA	Case-control	Healthy	700	[7]	2007	USA	Case-control	Healthy	700	[7]
100008	Study 8	2008	USA	Case-control	Healthy	800	[8]	2008	USA	Case-control	Healthy	800	[8]	2008	USA	Case-control	Healthy	800	[8]	2008	USA	Case-control	Healthy	800	[8]
100009	Study 9	2009	USA	Case-control	Healthy	900	[9]	2009	USA	Case-control	Healthy	900	[9]	2009	USA	Case-control	Healthy	900	[9]	2009	USA	Case-control	Healthy	900	[9]
100010	Study 10	2010	USA	Case-control	Healthy	1000	[10]	2010	USA	Case-control	Healthy	1000	[10]	2010	USA	Case-control	Healthy	1000	[10]	2010	USA	Case-control	Healthy	1000	[10]
100011	Study 11	2011	USA	Case-control	Healthy	1100	[11]	2011	USA	Case-control	Healthy	1100	[11]	2011	USA	Case-control	Healthy	1100	[11]	2011	USA	Case-control	Healthy	1100	[11]
100012	Study 12	2012	USA	Case-control	Healthy	1200	[12]	2012	USA	Case-control	Healthy	1200	[12]	2012	USA	Case-control	Healthy	1200	[12]	2012	USA	Case-control	Healthy	1200	[12]
100013	Study 13	2013	USA	Case-control	Healthy	1300	[13]	2013	USA	Case-control	Healthy	1300	[13]	2013	USA	Case-control	Healthy	1300	[13]	2013	USA	Case-control	Healthy	1300	[13]
100014	Study 14	2014	USA	Case-control	Healthy	1400	[14]	2014	USA	Case-control	Healthy	1400	[14]	2014	USA	Case-control	Healthy	1400	[14]	2014	USA	Case-control	Healthy	1400	[14]
100015	Study 15	2015	USA	Case-control	Healthy	1500	[15]	2015	USA	Case-control	Healthy	1500	[15]	2015	USA	Case-control	Healthy	1500	[15]	2015	USA	Case-control	Healthy	1500	[15]
100016	Study 16	2016	USA	Case-control	Healthy	1600	[16]	2016	USA	Case-control	Healthy	1600	[16]	2016	USA	Case-control	Healthy	1600	[16]	2016	USA	Case-control	Healthy	1600	[16]
100017	Study 17	2017	USA	Case-control	Healthy	1700	[17]	2017	USA	Case-control	Healthy	1700	[17]	2017	USA	Case-control	Healthy	1700	[17]	2017	USA	Case-control	Healthy	1700	[17]
100018	Study 18	2018	USA	Case-control	Healthy	1800	[18]	2018	USA	Case-control	Healthy	1800	[18]	2018	USA	Case-control	Healthy	1800	[18]	2018	USA	Case-control	Healthy	1800	[18]
100019	Study 19	2019	USA	Case-control	Healthy	1900	[19]	2019	USA	Case-control	Healthy	1900	[19]	2019	USA	Case-control	Healthy	1900	[19]	2019	USA	Case-control	Healthy	1900	[19]
100020	Study 20	2020	USA	Case-control	Healthy	2000	[20]	2020	USA	Case-control	Healthy	2000	[20]	2020	USA	Case-control	Healthy	2000	[20]	2020	USA	Case-control	Healthy	2000	[20]

SUPC

Author	Year	Journal	Country	Age	Sex	Study Design	Outcome	Mean (SD)	95% CI	OR (95% CI)	P	OR (95% CI)	P	OR (95% CI)	P	OR (95% CI)	P	OR (95% CI)	P	OR (95% CI)	P	OR (95% CI)	P	OR (95% CI)	P	OR (95% CI)	P	OR (95% CI)	P	OR (95% CI)	P	OR (95% CI)	P	OR (95% CI)	P	OR (95% CI)	P	OR (95% CI)	P	OR (95% CI)	P
10001	2018	BMJ	UK	18-65	F	Retrospective	Chronic rhinosinusitis	1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0			
10002	2018	BMJ	UK	18-65	M	Retrospective	Chronic rhinosinusitis	1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0		1.0	

Supplementary Table 1a

SUPC

Accession ID	Accession Name	Accession Type	Accession Date	Accession Location	Accession Status	Accession Description	Accession Size	Accession Type	Accession Date	Accession Location	Accession Status	Accession Description	Accession Size	Accession Type	Accession Date	Accession Location	Accession Status	Accession Description	Accession Size	
000001	000001	000001	000001	000001	000001	000001	000001	000001	000001	000001	000001	000001	000001	000001	000001	000001	000001	000001	000001	000001

Supplementary Table 1.xlsx

SUPC3

Accession	Sample Type	Analysis	IN	EN	Accession	Sample Type	Analysis	IN	EN	Accession	Sample Type	Analysis	IN	EN	Accession	Sample Type	Analysis	IN	EN	Accession	Sample Type	Analysis	IN	EN	Accession	Sample Type	Analysis	IN	EN
S000001	Saliva	Salivary IgA antibody to enteric E. coli	Salivary IgA	Salivary IgA	S000002	Saliva	Salivary IgA antibody to enteric E. coli	Salivary IgA	Salivary IgA	S000003	Saliva	Salivary IgA antibody to enteric E. coli	Salivary IgA	Salivary IgA	S000004	Saliva	Salivary IgA antibody to enteric E. coli	Salivary IgA	Salivary IgA	S000005	Saliva	Salivary IgA antibody to enteric E. coli	Salivary IgA	Salivary IgA	S000006	Saliva	Salivary IgA antibody to enteric E. coli	Salivary IgA	Salivary IgA
S000007	Saliva	Salivary IgA antibody to enteric E. coli	Salivary IgA	Salivary IgA	S000008	Saliva	Salivary IgA antibody to enteric E. coli	Salivary IgA	Salivary IgA	S000009	Saliva	Salivary IgA antibody to enteric E. coli	Salivary IgA	Salivary IgA	S000010	Saliva	Salivary IgA antibody to enteric E. coli	Salivary IgA	Salivary IgA	S000011	Saliva	Salivary IgA antibody to enteric E. coli	Salivary IgA	Salivary IgA	S000012	Saliva	Salivary IgA antibody to enteric E. coli	Salivary IgA	Salivary IgA

Supplementary Table 1-14

SUPC

Accession	Accession Type	Accession Name	Accession ID	Accession Description	Accession Date	Accession Size	Accession Type	Accession Date	Accession Size	Accession Type	Accession Date	Accession Size	Accession Type	Accession Date	Accession Size	Accession Type	Accession Date	Accession Size	Accession Type	Accession Date	Accession Size	Accession Type	Accession Date	Accession Size	Accession Type	Accession Date	Accession Size	Accession Type	Accession Date	Accession Size	Accession Type	Accession Date	Accession Size	Accession Type	Accession Date	Accession Size	
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Study	Population	Year	n	Age	Sex	Ethnicity	Study Design	Outcome Measure	Supplemental Table 1		Supplemental Table 2		Supplemental Table 3		Supplemental Table 4		Supplemental Table 5		Supplemental Table 6											
									CI95% (Lower)	CI95% (Upper)	CI95% (Lower)	CI95% (Upper)	CI95% (Lower)	CI95% (Upper)	CI95% (Lower)	CI95% (Upper)	CI95% (Lower)	CI95% (Upper)	CI95% (Lower)	CI95% (Upper)	CI95% (Lower)	CI95% (Upper)	CI95% (Lower)	CI95% (Upper)						
10001	BMI < 18.5	2010	5000	30-45	M	Caucasian	Prospective Cohort Study	0.15	0.12	0.18	0.10	0.20	0.05	0.10	0.15	0.10	0.05	0.15	0.10	0.05	0.15	0.10	0.05	0.15	0.10	0.05	0.15	0.10	0.05	0.15

SUPC3

Table with multiple columns: SRA Accession Number, SRA ID, SRA Name, SRA Description, SRA Date, SRA Size, SRA Format, SRA Type, SRA Status, SRA Category, SRA Sub-category, SRA Collection, SRA Project, SRA Instrument, SRA Read Length, SRA Read Depth, SRA Read Quality, SRA Read Error Rate, SRA Read Duplication Rate, SRA Read Insertion Deletion Rate, SRA Read Substitution Rate, SRA Read Transversion Rate, SRA Read Transition Rate, SRA Read Transversion:Transition Ratio, SRA Read G+C Content, SRA Read GC Bias, SRA Read GC Bias:GC Content Ratio, SRA Read GC Bias:GC Content Ratio^2, SRA Read GC Bias:GC Content Ratio^3, SRA Read GC Bias:GC Content Ratio^4, SRA Read GC Bias:GC Content Ratio^5, SRA Read GC Bias:GC Content Ratio^6, SRA Read GC Bias:GC Content Ratio^7, SRA Read GC Bias:GC Content Ratio^8, SRA Read GC Bias:GC Content Ratio^9, SRA Read GC Bias:GC Content Ratio^10.

SUPC3

Accession ID	Accession Title	Accession Type	Accession Status	Accession Date	Accession Size	Accession MD5	Accession SHA1	Accession SHA256	Accession SHA512	Accession MD5 (MD5)	Accession SHA1 (SHA1)	Accession SHA256 (SHA256)	Accession SHA512 (SHA512)	Accession MD5 (MD5)	Accession SHA1 (SHA1)	Accession SHA256 (SHA256)	Accession SHA512 (SHA512)	Accession MD5 (MD5)	Accession SHA1 (SHA1)	Accession SHA256 (SHA256)	Accession SHA512 (SHA512)	Accession MD5 (MD5)	Accession SHA1 (SHA1)	Accession SHA256 (SHA256)	Accession SHA512 (SHA512)
... (repeating rows)

Supplementary Table 1.xlsx

SUPG3

Author	Year	Country	Sample Size	Prevalence	OR	95% CI	P-value	Adjustment	Celiac Disease (CD) - OR (95% CI) [P-value]							Non-celiac Gluten Sensitivity (NCGS) - OR (95% CI) [P-value]							Irritable Bowel Syndrome (IBS) - OR (95% CI) [P-value]	Irritable Bowel Syndrome with Diarrhoea (IBS-D) - OR (95% CI) [P-value]	Irritable Bowel Syndrome with Constipation (IBS-C) - OR (95% CI) [P-value]	
									CD	NCGS	IBS	IBS-D	IBS-C	CD	NCGS	IBS	IBS-D	IBS-C								
1	2011	USA	10,000	1.5%	1.5	1.0-2.2	0.03	Age, Sex, Education																		

Supplementary Table 1

SUPC3

Table with columns: Accession number, Accession name, Accession description, and various numerical values across multiple columns.

S103

Accession ID	Accession Name	Accession Type	Accession Date	Accession Time	Accession Location	Accession Pathway	Accession Source	Accession Species	Accession Organism	Accession Strain	Accession Sex	Accession Age	Accession Weight	Accession Height	Accession BMI	Accession Waist	Accession Hip	Accession Blood Pressure	Accession Heart Rate	Accession Glucose	Accession Lipids	Accession Inflammation	Accession Microbiome	Accession Metabolites	Accession Proteomics	Accession Transcriptomics	Accession Genomics	Accession Imaging	Accession Other
...	

Supplementary Table S103

S163

Accession ID	Accession Name	Accession Type	Accession Status	Accession Date	Accession Location	Accession Project	Accession Lead	Accession Contact	Accession Funding	Accession Description	Accession Abstract	Accession Full Text	Accession Full Text PDF	Accession Full Text HTML	Accession Full Text XML	Accession Full Text JSON	Accession Full Text CSV	Accession Full Text TSV	Accession Full Text XLS	Accession Full Text XLSX	Accession Full Text XLSM	Accession Full Text XLSB	Accession Full Text XLSY	Accession Full Text XLSZ	Accession Full Text XLSX	Accession Full Text XLSM	Accession Full Text XLSB	Accession Full Text XLSY	Accession Full Text XLSZ	Accession Full Text XLSX	Accession Full Text XLSM	Accession Full Text XLSB	Accession Full Text XLSY	Accession Full Text XLSZ	Accession Full Text XLSX	Accession Full Text XLSM	Accession Full Text XLSB	Accession Full Text XLSY	Accession Full Text XLSZ
S163	Accession Name	Accession Type	Accession Status	Accession Date	Accession Location	Accession Project	Accession Lead	Accession Contact	Accession Funding	Accession Description	Accession Abstract	Accession Full Text	Accession Full Text PDF	Accession Full Text HTML	Accession Full Text XML	Accession Full Text JSON	Accession Full Text CSV	Accession Full Text TSV	Accession Full Text XLS	Accession Full Text XLSX	Accession Full Text XLSM	Accession Full Text XLSB	Accession Full Text XLSY	Accession Full Text XLSZ	Accession Full Text XLSX	Accession Full Text XLSM	Accession Full Text XLSB	Accession Full Text XLSY	Accession Full Text XLSZ	Accession Full Text XLSX	Accession Full Text XLSM	Accession Full Text XLSB	Accession Full Text XLSY	Accession Full Text XLSZ	Accession Full Text XLSX	Accession Full Text XLSM	Accession Full Text XLSB	Accession Full Text XLSY	Accession Full Text XLSZ

Supplementary Table S163

SUPC3

Accession number	Accession date	Accession type	Accession status	Accession category	Accession description	Accession country	Accession region	Accession continent	Accession population	Accession ethnicity	Accession religion	Accession education	Accession occupation	Accession income	Accession diet	Accession lifestyle	Accession environment	Accession exposure	Accession outcome	Accession measurement	Accession instrument	Accession protocol	Accession version	Accession license	Accession repository	Accession identifier	Accession DOI	Accession URL
...	

SUPC3

Table with multiple columns including Author, Title, Year, Journal, and various identifiers. The table is a comprehensive list of publications, likely related to the Gut journal, and is organized into columns for citation tracking and identification.

Supplementary Table 1.xlsx

SUPC3

Accession	Gene/Protein	Chromosome	Start (kb)	End (kb)	Strand	Transcript Orientation	Gene Ontology	Biological Process	Molecular Function	Cellular Component	Enzyme Commission	UniProt	NCBI	Ensembl	Ensembl	Ensembl	Ensembl	Ensembl	Ensembl	Ensembl	Ensembl	Ensembl	Ensembl	Ensembl	Ensembl	Ensembl	Ensembl	Ensembl	Ensembl	Ensembl	Ensembl	Ensembl	Ensembl	Ensembl	Ensembl	Ensembl	Ensembl	Ensembl	Ensembl	Ensembl
ENST00000270431.4	APOA1	2	101,500	101,700	+	5'-UTR	lipoprotein particle																																	
ENST00000270432.4	APOA1	2	101,500	101,700	+	apoA1	lipoprotein particle																																	
ENST00000270433.4	APOA1	2	101,500	101,700	+	apoA1	lipoprotein particle																																	
ENST00000270434.4	APOA1	2	101,500	101,700	+	apoA1	lipoprotein particle																																	
ENST00000270435.4	APOA1	2	101,500	101,700	+	apoA1	lipoprotein particle																																	
ENST00000270436.4	APOA1	2	101,500	101,700	+	apoA1	lipoprotein particle																																	
ENST00000270437.4	APOA1	2	101,500	101,700	+	apoA1	lipoprotein particle																																	
ENST00000270438.4	APOA1	2	101,500	101,700	+	apoA1	lipoprotein particle																																	
ENST00000270439.4	APOA1	2	101,500	101,700	+	apoA1	lipoprotein particle																																	
ENST00000270440.4	APOA1	2	101,500	101,700	+	apoA1	lipoprotein particle																																	
ENST00000270441.4	APOA1	2	101,500	101,700	+	apoA1	lipoprotein particle																																	
ENST00000270442.4	APOA1	2	101,500	101,700	+	apoA1	lipoprotein particle																																	
ENST00000270443.4	APOA1	2	101,500	101,700	+	apoA1	lipoprotein particle																																	
ENST00000270444.4	APOA1	2	101,500	101,700	+	apoA1	lipoprotein particle																																	
ENST00000270445.4	APOA1	2	101,500	101,700	+	apoA1	lipoprotein particle																																	
ENST00000270446.4	APOA1	2	101,500	101,700	+	apoA1	lipoprotein particle																																	
ENST00000270447.4	APOA1	2	101,500	101,700	+	apoA1	lipoprotein particle																																	
ENST00000270448.4	APOA1	2	101,500	101,700	+	apoA1	lipoprotein particle																																	
ENST00000270449.4	APOA1	2	101,500	101,700	+	apoA1	lipoprotein particle																																	
ENST00000270450.4	APOA1	2	101,500	101,700	+	apoA1	lipoprotein particle																																	
ENST00000270451.4	APOA1	2	101,500	101,700	+	apoA1	lipoprotein particle																																	
ENST00000270452.4	APOA1	2	101,500	101,700	+	apoA1	lipoprotein particle																																	
ENST00000270453.4	APOA1	2	101,500	101,700	+	apoA1	lipoprotein particle																																	
ENST00000270454.4	APOA1	2	101,500	101,700	+	apoA1	lipoprotein particle																																	
ENST00000270455.4	APOA1	2	101,500	101,700	+	apoA1	lipoprotein particle																																	
ENST00000270456.4	APOA1	2	101,500	101,700	+	apoA1	lipoprotein particle																																	
ENST00000270457.4	APOA1	2	101,500	101,700	+	apoA1	lipoprotein particle																																	
ENST00000270458.4	APOA1	2	101,500	101,700	+	apoA1	lipoprotein particle																																	
ENST00000270459.4	APOA1	2	101,500	101,700	+	apoA1	lipoprotein particle																																	
ENST00000270460.4	APOA1	2	101,500	101,700	+	apoA1	lipoprotein particle																																	

Supplementary Table 1-5x

Supp

Author	Year	Article Title	DOI	PMID	Abstract	Full Text (PubMed)	Full Text (PMC)	Full Text (Springer)	Full Text (Wiley)	Full Text (Elsevier)	Full Text (Taylor & Francis)	Full Text (SAGE)	Full Text (Blackwell)	Full Text (Wiley-Blackwell)	Full Text (Wiley InterScience)	Full Text (Wiley Online Library)	Full Text (Wiley Digital Library)	Full Text (Wiley ScienceDirect)	Full Text (Wiley WileyIntergate)	Full Text (Wiley WileyOpen)	Full Text (Wiley WileyBlackwell)	
1. K. J. Kline	2019	Impact of the gut microbiome on mental health: a review	10.1016/j.eurpsy.2019.04.005	31302243	The gut microbiome has emerged as a key player in mental health. This review discusses the current evidence for the role of the gut microbiome in mental health and the potential for probiotics as a treatment for mental health disorders.																	
2. S. C. Clarke	2019	Intestinal mucosal immunity: the role of the gut microbiome	10.1016/j.eurpsy.2019.04.004	31302242	The gut microbiome plays a central role in the development and function of the intestinal immune system. This review discusses the current evidence for the role of the gut microbiome in intestinal immunity and the potential for probiotics as a treatment for intestinal disorders.																	
3. S. C. Clarke	2019	Intestinal mucosal immunity: the role of the gut microbiome	10.1016/j.eurpsy.2019.04.003	31302241	The gut microbiome plays a central role in the development and function of the intestinal immune system. This review discusses the current evidence for the role of the gut microbiome in intestinal immunity and the potential for probiotics as a treatment for intestinal disorders.																	

Supplementary Table 1.xlsx