Genetic Lifehacks
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Genotype Summary Report: Inflammation

Created for: **SAMPLE**

Article: TNF-alpha

Gene	RS ID	Effect Allele	Your Genotype	Notes About Effect Allele
TNF	rs1800629	A	GG	Increased TNF alpha, increased risk of many chronic inflammatory diseases
TNF	rs361525	A	GG	Increased TNF alpha, increased risk of many chronic inflammatory diseases
TNF	rs1799964	C	CT	Increased TNF alpha, increased risk of many chronic inflammatory diseases
TNF	rs1799724	T	--	Increased TNF alpha, increased risk of many chronic inflammatory diseases
TNFRSF1A	rs1800693	C	CT	Increased risk of multiple sclerosis; increased NF-kB signaling
TNFRSF1A	rs767455	C	CC	Increased risk of inflammatory diseases.
TNFRSF1B	rs1061622	G	GT	Increased risk of psoriasis, lupus
TNF	rs1800610	A	--	Lower TNF; less inflammation but more susceptible to infectious diseases

Article: IL-17

Gene	RS ID	Effect Allele	Your Genotype	Notes About Effect Allele
IL17A	rs2275913	A	GG	Increased risk of autoimmune, periodontal, and bowel disease
IL17A	rs279548	T	--	Somewhat increased IL17A, increased risk of asthma, atopy
IL17F	rs763780	C	TT	Increased risk of rheumatoid arthritis
IL17A	rs8193037	A	GG	Decreased risk of some inflammatory conditions, decreased IL-17A
IL17F	rs3819025	A	GG	Decreased risk of some inflammatory conditions, decreased IL-17A

Article: Inflammation Mood

Gene	RS ID	Effect Allele	Your Genotype	Notes About Effect Allele
TNF	rs1800629	A	GG	Increased TNF-alpha
IL6	rs1800795	C	GG	CC only: Increased risk depression with stress
IL6	rs1800797	A	GG	Increased depression risk (Chinese pop.)
IL6R	rs4129267	C	CC	CC only: Increased risk of anxiety, depression
IL1B	rs16944	G	AA	GG only: Increased IL1B; Increased risk depression
IDO1	rs9657182	C	--	CC only: more likely to have depr. with inflammation
KMO	rs1053230	T	CC	increased 3-OH-kynurenine, decreased risk of bipolar with psychosis (good)
IL6	rs1800796	G	CG	GG only: Increased depression with inflammation

Article: NLRP3

Gene	RS ID	Effect Allele	Your Genotype	Notes About Effect Allele
CIAS1	rs35829419	A	CC	Increased NLRP3 activation
CIAS1	rs1539019	A	CC	AA only: Increased NLRP3
CIAS1	rs10754558	C	CC	Somewhat increased NLRP3 activation
CIAS1	rs3806265	C	CC	Somewhat increased NLRP3 activation
CIAS1	rs10733113	A	GG	Somewhat increased NLRP3 activation
CIAS1	rs12048215	G	GG	Somewhat increased NLRP3 activation
CIAS1	i5007539	G	AA	Carrier of a mutation linked to familial cold urticaria
CIAS1	rs28937896	C	TT	Carrier of a mutation linked to familial cold urticaria
CIAS1	rs121908147	A	--	Carrier of a mutation linked to familial cold urticaria
CIAS1	rs121908150	T	--	Carrier of a mutation linked to familial cold urticaria
CIAS1	rs121908148	G	--	Carrier of a mutation linked to familial cold urticaria

Article: Back Pain

Gene	RS ID	Effect Allele	Your Genotype	Notes About Effect Allele
IL1A	rs1800587	A	GG	Increased inflammation, pain from degenerative disc disease
IL6	rs1800795	C	GG	C/C: less risk of disc degeneration
CILP	rs2073711	A	GG	Decreased risk of disc disease
COL1A1	rs1800012	A	CC	Increased risk of pain from degenerative disc disease
COL2A1	rs2276454	G	GG	Increased risk of pain from degenerative disc disease
COL11A1	rs1676486	A	GG	Increased risk of pain from degenerative disc disease
COL11A1	rs2076311	A	AA	Increased risk of pain from degenerative disc disease
CASP9	rs4645978	C	CT	Increased risk of pain from degenerative disc disease
PARK2	rs926849	C	--	Increased risk of pain from degenerative disc disease

Article: Gingivitis

Gene	RS ID	Effect Allele	Your Genotype	Notes About Effect Allele
TNF	rs1800629	A	GG	Increased risk of inflammatory gum diseases
IL1A	rs1800587	A	GG	Increased risk of inflammatory gum diseases
IL1B	rs1143634	A	GG	Increased risk of inflammatory gum diseases
IL6	rs1800795	C	GG	Increased risk of inflammatory gum diseases
IL8	rs4073	A	AA	Increased risk of inflammatory gum diseases
IL10	rs1800896	C	CC	C/C: higher IL-10, less likely to have gum disease (good)
CCR5	i3003626	D	II	Decreased risk of periodontal disease
IL2	rs2069763	A	CC	3x increased risk of chronic periodontitis

Article: Chronic Inflammation

Gene	RS ID	Effect Allele	Your Genotype	Notes About Effect Allele
TNF	rs1800629	A	GG	Higher TNF levels, increased risk of many chronic inflammatory conditions
TNF	rs361525	A	GG	Higher TNF levels, increased risk of many chronic inflammatory conditions
IL8	rs4073	A	AA	A/A: Increased IL8; increased risk of periodontitis, gastritis, Alzheimers, diabetic nephropathy
IL6	rs1800795	C	GG	C/C: lower risk of gingivitis
IL1B	rs16944	G	AA	G - Typical risk of septic shock; A/A: Increased risk of septic shock
IL1B	rs1143634	A	GG	Increased risk of gingivitis
IL1A	rs1800587	A	GG	Increased IL1A, increased risk of gum disease, tinnitus, acne, hearing loss
IL10	rs1800896	C	CC	CC: higher IL-10 (usually good!)
NLRP3	rs35829419	A	CC	Increased susceptibility to several chronic inflammatory diseases.
HMGB1	rs1045411	T	CT	increased sepsis risk, higher HMGB1 levels in infection;
INFG	rs2430561	A	--	Increased interferon-gamma production, increased inflammatory and sickness behavior
MTHFR	rs1801133	A	AG	Decreased methyl group production, decreased detoxification of mercury and arsenic, possibly decreased melatonin production
GSTM1	rs366631	A	--	AA: GSTM1 null, increased risk of cancer, increased negative effects of smoking
GSTO1	rs4925	A	AA	Decreased detoxification of arsenic; increased risk of PCOS
GSTA1	rs3957357	A	GG	Decreased detoxification, increased risk of depression,
NFE2L2	rs6721961	T	--	Decreased Nrf2, increased risk of male infertility, increased risk of CVD,
AS3MT	rs11191439	C	CT	Arsenic is more harmful
NQO1	rs1800566	A	GG	Increased risk of cancer from benzene and smoking, increased risk of Parkinson's from pesticide exposure
SOD1	rs1041740	T	CT	Increased ROS, increased risk of kidney problems, heart disease
SOD2	rs5746136	T	CC	Increased ROS, increased risk of asthma, PCOS

Article: Mast Cells

Gene	RS ID	Effect Allele	Your Genotype	Notes About Effect Allele
KIT	i5007903	T	AA	KIT D816V mutation (see article for caveats)
KIT	rs121913507	T	--	KIT D816V mutation (see article for caveats)
IL-13	rs1800925	T	CC	Increased risk of systemic mastocytosis, rhinitis, asthma
IL4R	rs1801275	A	AA	better prognosis in systemic mastocytosis
FCER1A	rs2298805	A	GG	Decreased risk of hives, lower IgE response
FCER1A	rs2251746	C	TT	Decreased IgE response
FCER1A	rs2427827	T	CT	Increased IgE, increase sinus problems, allergic reactions
CMA1	rs1800875	T	CC	Decreased IgE, lower risk of a-fib
PTPN22	rs2476601	A	GG	Increased psoriasis, arthritis, T1D, lupus, urticaria risk
IL33	rs1342326	A	CC	Increased risk asthma, hay fever
IL33	rs3939286	T	TT	Increased risk of asthma
IL33	rs928413	G	GG	Increased risk hay fever, asthma
ALDH2	rs671	A	GG	Increases mast cell activation
PTGS2	rs4140564	G	AA	Increased risk osteoarthritis
AOC1	rs10156191	T	CC	Reduced production of DAO, increased risk of migraines due to histamine
AOC1	rs2052129	T	GG	Reduced production of DAO, increased risk of migraines due to histamine
AOC1	rs1049742	T	CC	Reduced production of DAO
AOC1	rs1049793	G	CC	Reduced production of DAO
HNMT	rs1050891	A	AG	Reduced breakdown of histamine compared to G/G
HNMT	rs11558538	T	--	Reduced HNMT activity, reduced breakdown of histamine
HNMT	i3000469	T	CC	Reduced HNMT activity, reduced breakdown of histamine

Article: ME/CFS

Gene	RS ID	Effect Allele	Your Genotype	Notes About Effect Allele
PTPN22	rs2476601	A	GG	increased risk of autoimmune diseases, increased susceptibility to CFS/ME (in patients with infectious disease onset)
CTLA4	rs3087243	G	AA	increased risk of autoimmune conditions, decrease CTLA4 expression; increased risk of CFS/ME (patients with infectious disease onset only)
TNF	rs1799724	T	--	higher TNF-alpha levels, increased susceptibility to CFS/ME
INFG	rs2430561	A	--	higher interferon; decreased risk of ME/CFS
NLRP3	rs35829419	A	CC	Increased susceptibility to fatigue / pain after EBV or other viruses
NLRP3	rs121908147	A	--	mutation linked to autoinflammatory disease in combo with other genes (rare)
TRPM8	rs11563204	A	GG	increased risk of CFS/ME (cold, menthol receptor)
TRPM3	rs6560200	C	TT	CC: common genotype, higher risk of CFS/ME (Naltrexone may work?)
TRPM3	rs1891301	T	CC	TT: higher risk of CFS/ME
CFB	rs4151667	A	TT	AA: increased risk of CFS/ME
CFH	rs1061170	C	TT	CC: increased risk of AMD, higher immune response; TT: increased risk of CFS/ME

Article: Hearing Loss

Gene	RS ID	Effect Allele	Your Genotype	Notes About Effect Allele
EDN1	rs5370	T	GG	Increased risk of sudden sensorineural hearing loss (related to vasoconstriction)
F5	rs6025	T	CC	Factor V Leiden (clot related), increased risk of SSNHL
MTHFR	rs1801133	A	AG	Increased risk of SSNHL (folate-related)
SOD1	rs4998557	A	--	A/A only: increased relative risk of SSNHL
IL1R2	rs4141134	G	AA	Increased risk of SSNHL
UCP2	rs659366	T	CT	Increased risk of SSNHL
IL6	rs1800796	G	CG	Higher IL-6; increased risk of SSHL
HSP70	rs2763979	T	CT	Increased risk of noise-induced hearing loss
CYP1A1	rs1799814	T	GG	Increased CYP1A1 activity, increased risk of SSNHL

Article: Acne

Gene	RS ID	Effect Allele	Your Genotype	Notes About Effect Allele
TYK2	rs33980500	T	--	Decreased severe acne risk
TNF	rs1800629	A	GG	3-fold Increased acne risk
TNF	rs1799724	T	--	Decreased acne risk
CTLA4	rs3087243	G	AA	G/G: higher risk of acne
IL1A	rs1800587	A	GG	Increased acne risk (inflammation)
IL1A	rs17561	A	CC	Increased acne risk (inflammation)
IL6	rs1800796	C	CG	Increased acne risk (inflammation)
RETN	rs3745367	A	GG	Increased acne (sebum)
BCMO1	rs7501331	T	CT	Decreased beta-carotene conversion.
BCMO1	rs12934922	T	AT	decreased beta-carotene conversion
CYP17A1	rs743572	G	AG	Increased risk of acne (hormones)
HSD11B1	rs846910	A	--	A/G: 4-fold increase in acne risk
LCT	rs4988235	G	AG	GG only: Increased acne risk with dairy
TGFB1	rs1159268	A	AG	slight increase in the risk of acne
TGFB1	rs38055	A	AG	slight increase in the risk of acne
WNT10A	rs121908120	A	--	protective against acne

Article: Specialized Pro-Resolving Mediators

Gene	RS ID	Effect Allele	Your Genotype	Notes About Effect Allele
FADS1	rs174546	T	CT	Lower FADS1 enzyme activity, benefit more from direct EPA/DHA intake
FADS2	rs1535	G	AG	Lower FADS1 enzyme activity, benefit more from direct EPA/DHA intake
ALOX5	rs4987105	T	--	Decreased risk of type 2 diabetes, lower levels of C-reactive protein (good)
ELOVL2	rs3734398	C	--	Decreased conversion of EPA to DHA
ALOX5AP	rs17216473	A	--	Increased risk of heart attack (population eating Western / high omega-6 diet)
ALOX12	rs1126667	A	AA	Slightly decreased risk of breast cancer, lower blood pressure (study group eating Western/ high omega-6 diet)
COX2	rs4648310	C	TT	Low DHA/EPA intake associated with a significantly increased risk of prostate cancer, but high DHA/EPA ameliorates the increased risk
COX2	rs5275	G	AA	Increasing intake of EPA/DHA reduces prostate cancer risk by 70%
GPR18	rs3742130	A	GG	SPM receptor; alters risk of IBD
CMKLR1	rs1878022	C	TT	Increased resolvin E1 receptor expression, reduced inflammation in obesity
GPR37	rs149031046	A	--	Protectin D1 receptor mutation; possibly important in autism (rare)

Article: CBD

Gene	RS ID	Effect Allele	Your Genotype	Notes About Effect Allele
TRPV1	rs8065080	C	TT	less TRPV1 activation
TRPV1	rs161364	T	TT	less TRPV1 activation
TRPV1	rs224534	A	AG	A/A: less TRPV1 activation
HTR1A	rs6295	G	CG	G/G: increased HTR1A receptor activity
ADORA2A	rs5751876	T	CT	T/T: increased anxiety
GPR55	rs3749073	A	CC	A/A: reduced receptor function, increased risk of anorexia

Article: Fatigue

Gene	RS ID	Effect Allele	Your Genotype	Notes About Effect Allele
TNF	rs1800629	A	GG	Higher TNF-alpha; Curcumin, apigenin, and naringenin may help.
TNF	rs3093662	G	AA	Higher TNF-alpha; Curcumin, apigenin, and naringenin may help.
IL1B	rs4848306	G	--	GG: more fatigue in chronic disease; Dihydromyricetin, quercetin
IL1B	rs1143643	T	CC	More fatigue in chronic illness; Dihydromyricetin, quercetin
IL6	rs1800795	C	GG	C/C: less fatigue (less IL-6 produced)
INFG	rs2430561	A	--	Increased fatigue risk when interferon-gamma is elevated
NLRP3	rs35829419	A	CC	Significantly increased risk of severe fatigue with inflammation; methylene blue, CBD, EGCG

Article: IL13

Gene	RS ID	Effect Allele	Your Genotype	Notes About Effect Allele
Il13	rs20541	A	GG	higher IgE levels; higher risk of allergies, allergic rhinitis; increased risk of atopic dermatitis with childhood antibiotic use, increased risk of alopecia areata, increased risk of COPD
Il13	rs1800925	T	CC	increase IgE levels; increased risk of asthma; increased risk of periodontitis, increased risk of COPD
Il13	rs1295686	T	CC	increased risk of asthma
Il13	rs848	A	CC	increased risk of asthma, increased risk of alopecia areata

Article: Tinnitus

Gene	RS ID	Effect Allele	Your Genotype	Notes About Effect Allele
NFKB1	rs3774937	C	CT	Faster progression to hearing loss in Meniere's

Gene	RS ID	Effect Allele	Your Genotype	Notes About Effect Allele
NFKB1	rs4648011	G	GT	Faster progression to hearing loss in Meniere's
Inter-gen	rs4947296	C	TT	Increased risk of Meniere's
KCNE1	rs1805127	T	CC	Increased risk of Meniere's
KCNE3	rs2270676	G	AA	Increased risk of Meniere's
IL1A	rs1800587	A	GG	A: lower risk of hearing loss in Meniere's; G/G: (common) Higher risk of sudden hearing loss in Meniere's
ADD1	rs4961	T	GG	Increased risk of tinnitus
IL1A	rs1800587	A	GG	Lower risk of tinnitus

Article: Antibiotic Reactions

Gene	RS ID	Effect Allele	Your Genotype	Notes About Effect Allele
MS4A2	rs569108	G	AA	G/G: increased risk of eczema with childhood antibiotic use
IL13	rs20541	A	GG	increased risk of atopic dermatitis with childhood antibiotic use
HLAB	rs114892859	T	--	increased risk of penicillin allergy and clindamycin adverse reactions
PTPN22	rs2476601	A	GG	slightly increased relative risk of liver injury with augmentin
HLA-DR	rs2395029	G	TT	45 to 80-fold increased risk of drug-induced liver injury with flucloxacillin
HLA-DRB1	rs3135388	A	AG	increased relative risk of liver injury with augmentin
HLAB	rs9263726	A	GG	increased relative risk of reaction to sulfamethoxazole (Bactrim)
HLAA	rs2523822	G	AA	increased relative risk of drug-induced liver disease with augmentin
LGALS3	rs11125	T	--	increased risk of beta-lactam antibiotic allergy
GSTM1	rs366631	A	--	A/A: deletion (null) increased risk of adverse cutaneous reactions to sulphonamides in AIDS

Article: Estrogen and Histamine

Gene	RS ID	Effect Allele	Your Genotype	Notes About Effect Allele
AOC1	rs10156191	T	CC	reduced production of DAO
AOC1	rs2052129	T	GG	reduced production of DAO
AOC1	rs2071514	A	--	possibly higher DAO
HNMT	rs1050891	A	AG	reduced breakdown of histamine compared to G/G
HNMT	rs11558538	T	--	reduced HNMT activity, higher histamine levels
HNMT	rs2071048	T	CC	T/T: increased risk of asthma (and higher histamine), common variant
MTHFR	rs1801133	A	AG	decreased MTHFR function (C677T allele)
ESR1	rs9340799	G	AG	G/G: increased risk of endometriosis, likely higher estrogen receptors
GPER1	rs11544331	T	--	decreased estrogen receptor activation, lower risk of fibroids
AOC1	rs1049742	T	CC	reduced production of DAO
AOC1	rs1049793	G	CC	reduced production of DAO

Article: Cold Sores

Gene	RS ID	Effect Allele	Your Genotype	Notes About Effect Allele
POU5F1	rs885950	C	AC	increased risk of cold sores
C21orf91	rs10446073	G	GG	increased likelihood of cold sores
C21orf91	rs1062202	G	--	increased likelihood of cold sores
VDR	rs2228570	A	--	increased likelihood of cold sores
IL1A	rs1304037	T	--	increased chance of recurrent cold sores
HCP5	rs4360170	G	--	increased risk of cold sores

Article: Lymphedema

Gene	RS ID	Effect Allele	Your Genotype	Notes About Effect Allele
ALOX5	rs4987105	T	--	Lower levels of inflammation and possibly lower lymphedema, decreased risk of type 2 diabetes
LTA4H	rs1978331	G	AA	Lower levels of LTA4H, which catalyzes the final step in the synthesis of leukotriene B4
MMP2	rs1030868	A	AA	Higher risk of secondary lymphoma
MMP2	rs2241145	C	CC	Higher risk of secondary lymphoma
FOXC2	rs34221221	C	CC	Increased gene expression (likely higher risk of secondary lymphedema)
TNF	rs1800629	A	GG	Higher TNF-alpha levels; increased risk of complications with lymphedema
TLR4	rs4986791	T	CC	Increased risk of complications with lymphedema
VEGFR3	rs10464063	T	--	Increased risk of secondary lymphedema (study of cancer patients)