

BIOFIT

BLUEPRINTBOOTCAMP

Nutrigenomics Detoxification and Liver

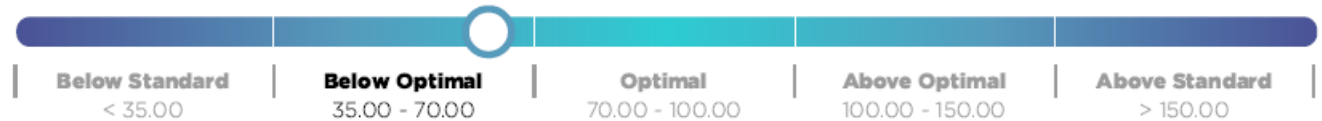
Dr. Ritamarie Loscalzo

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Liver/Gallbladder Labs

LIVER AND GB

Alk Phos 
64.00 IU/L



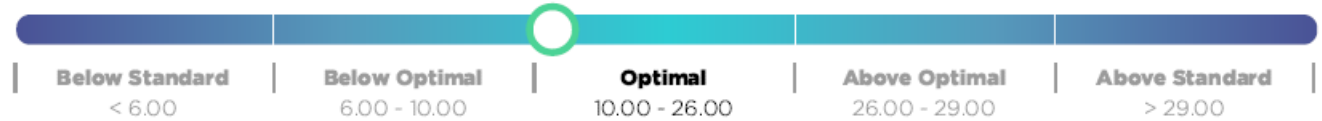
Functional Health Report | ritamarie loscalzo | Lab test Jun 18, 2022 | Quest | optimaldx.com

20

AST
20.00 IU/L



ALT
11.00 IU/L



Bilirubin - Total
0.50 mg/dL



AST : ALT 
1.82 Ratio



Symptoms of Liver Gallbladder Issues

How many alcoholic drinks do you consume per week? 0 = <3 1 = <7 2 = <14 3 = >=14	0	1	2	3
Are you a recovering alcoholic?	0			3
Do you have a history of drug or alcohol abuse? 0 = never 1 = years ago 2 = within last year 3 = within past 3 months	0	1	2	3
Do you have a history of hepatitis? 0 = never 1 = years ago 2 = within last year 3 = within past 3 months	0	1	2	3
Do you have a history of long term use of prescription/recreational drugs? 0 = never 1 = years ago 2 = within last year 3 = within past 3 months	0	1	2	3
Are you sensitive to chemicals?	0	1	2	3
Are you sensitive to tobacco smoke?	0	1	2	3
Are you sensitive when exposed to diesel fumes?	0	1	2	3
Do you ever feel pain under the right side of your rib cage?	0	1	2	3
Do you have hemorrhoids or varicose veins?	0	1	2	3
Do you consume NutraSweet (aspartame)?	0	1	2	3
Are you sensitive to NutraSweet (aspartame)?	0	1	2	3
Do you have chronic fatigue or Fibromyalgia?	0	1	2	3
Do you experience lower bowel gas and/or bloating several hours after eating?	0	1	2	3
Is there a yellowish cast to your eyes?	0	1	2	3
Do you have reddened skin, especially your palms?	0	1	2	3

Genetic Detoxification

<https://drritamarie.com/GeneticDetoxificationReport>

Phase I Detoxification

Gene	RSID	Risk Allele	Genotype	Phenotype	Page #
CYP1A1*2C A4889G	rs1048943	C	TT	-/-	22-26
CYP1A1 C2453A	rs1799814	T	GG	-/-	22-26
CYP1A1	rs2606345	A	AC	+/-	22-26
CYP1A2*1F C164A	rs762551	C	AA	-/-	27-30
CYP1A2*1F	rs2472304	A	AG	+/-	27-30
CYP1B1 L432V	rs1056836	G	GG	+/+	31-34
CYP1B1 N453S	rs1800440	T	TT	+/+	31-34
CYP1B1 R48G	rs10012	C	CG	+/-	31-34
CYP2A6*2 1799T>A	rs1801272	T	AA	-/-	35-37
CYP2C9*2 C430T	rs1799853	T	CC	-/-	38-40
CYP2C9*3 A1075C	rs1057910	C	AA	-/-	38-40
CYP2C19*17	rs12248560	T	TT	+/+	41-43
CYP2D6 100C>T	rs1065852	A	GG	-/-	44-46
CYP2D6 2850C>T	rs16947	G	AG	+/-	44-46
CYP2E1 A46G	rs2480256	A	AA	+/+	47-50
CYP2E1 T8845C	rs8192772	C	CT	+/-	47-50
CYP2E1	rs1329149	T	CT	+/-	47-50
CYP2E1	rs2070676	G	CG	+/-	47-50
CYP2E1	rs6413419	A	GG	-/-	47-50
CYP3A4*1B	rs2740574	C	TT	-/-	51-54

Phase I Detoxification

[Article: CYP1A1](#)

Gene	RS ID	Effect Allele	Your Genotype	Notes About Effect Allele
CYP1A1	rs1048943	C	TT	CYP1A1*2; higher risk of oral cancer & lung cancers in smokers; higher activity in estrogen metabolism
CYP1A1	rs1799814	T	GG	CYP1A1*4; increased activity
CYP1A1	rs2606345	A	AC	Decreased risk of testicular cancer
CYP1A1	rs2472297	T	CC	Associated with increased coffee consumption

[Article: CYP1A2](#)

Gene	RS ID	Effect Allele	Your Genotype	Notes About Effect Allele
CYP1A2	rs762551	C	AA	A/C: intermediate caffeine metabolism; C/C: Slow metabolizer of caffeine
CYP1A2	rs12720461	T	CC	Decreased CYP1A2 enzyme activity
CYP1A2	rs72547517	A	GG	Decreased CYP1A2 enzyme activity
CYP1A2	rs72547515	A	GG	Decreased CYP1A2 enzyme activity

Most Important Detoxification SNPs to Review

✓ Phase 1

- CYP1A1
- CYP1A2
- CYP1B1
- CYP3A4

✓ Phase 2

- MTHFR
- MTRR, MTR
- GSR
- NAT2
- UDG
- SULT1,2
- BHMT
- CBS

✓ General

- NR1I2
- PON1 Q192R
- ADH1B,1C,H22
- ALDH2

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