Patient Name	Age	Gender
John Doe	58	MALE

Health Summary

Based on your lab values, we see that your uric acid levels may indicate a concern for cardiovascular health, as they are currently high. However, it's reassuring to know that your primary cardiovascular risk is low. Your C-reactive protein, triglycerides, apolipoprotein A-1, apolipoprotein B, and albumin levels are all within healthy ranges, showing that many aspects of your health are on track. We recommend reducing your uric acid levels by following a DASH diet and limiting purine-rich foods, as well as improving your diet quality by increasing whole grain intake and reducing added sugars. Your top priority is to lower your uric acid levels to less than 6.0 mg/dL, currently at 7.19 mg/dL. Foods that will help you achieve this goal include oats, whole grain bread, and cod liver oil, while it's best to avoid soda and sugary drinks, candy, and sweets. Please do not take any medication on your own, consult your dietician or doctor for personalized medical advice.

Comprehensive Lab Results

Category / Marker	Result	Optimal Range	Status
Cardiovascular			
Apolipoprotein A-1	149.8 mg/dL		NORMAL
Your Apolipoprotein A-1 level is normal, indicating good HDL function.			
Apolipoprotein B	80 mg/dL		NORMAL
Your Apolipoprotein B level is normal, indicating a lower risk of cardiovascular disease.			
LDL Cholesterol	120 mg/dL	<100	NORMAL
Your LDL cholesterol is near optimal, indicating a lower risk of cardiovascular disease.			
Triglycerides	96 mg/dL	<150	NORMAL
Your triglyceride level is normal, indicating good metabolic health.			
Inflammation			
C-reactive protein	0.16 mg/dL	<5	NORMAL
Your C-reactive protein level is normal, indicating low inflammation.			
Liver Health			
Alkaline Phosphatase	82 U/L		NORMAL

Category / Marker	Result	Optimal Range	Status
Your alkaline phosphatase level is normal, indicating good bone and liver health.			
Albumin	4.4 g/dL	3.5-5.2	NORMAL
Your albumin level is normal, indicating good liver function and nutritional status.			
Metabolic & Vitamins			
Uric Acid	7.19 mg/dL		HIGH
Your uric acid level is high, indicating an increased risk of gout and metabolic syndrome.			
TSH (Thyroid Stimulating Hormone)	1.77 µIU/mL	0.27-4.2	NORMAL
Your TSH level is normal, indicating good thyroid function.			
Vitamin B12	486.6 pg/mL	232-1245	NORMAL
Your vitamin B12 level is normal, indicating good neurological health.			
Vitamin D	23.48 ng/mL	10.2-49.4	NORMAL
Your vitamin D level is normal, indicating good bone health and immune function.			

Dietary Scores

73

HEI SCORE

NEEDS IMPROVEMENT

Your Healthy Eating Index score is 73, indicating a need for improvement in your diet quality.

-4.4

DII SCORE

LOW

Your Dietary Inflammatory Index score is -4.4, indicating a low risk of dietary inflammation.

Clinical Risk Assessment

Risk Name	Risk Level	Protective Factors	Risk Factors
Cardiovascular	LOW	• Good LDL • Normal CRP • Optimal ApoB/ApoA1 ratio	• High Uric Acid
Diabetes	LOW RISK	• Normal Triglycerides • Good HDL function	• High Uric Acid
Chronic Inflammation	LOW	• Low CRP • Anti-inflammatory diet	
Liver Health	HEALTHY	• Normal Liver Enzymes	• High Uric Acid

Risk Name	Risk Level	Protective Factors	Risk Factors
Thyroid Function	NORMAL	• Normal TSH	
Nutritional Status	OPTIMAL	• Normal Vitamin D • Normal Vitamin B12	

Personalized Action Plan

HIGH PRIORITY Target: Uric Acid

1. Reduce uric acid levels by following a DASH diet and limiting purine-rich foods.

According to the evidence, dietary approaches such as the DASH diet can help reduce uric acid levels.

Specific Steps:

- Follow DASH diet
- Limit purine-rich foods

MEDIUM PRIORITY Target: Diet Quality

2. Improve diet quality by increasing whole grain intake and reducing added sugars.

According to the evidence, a plant-based diet rich in whole grains, fruits, and vegetables can help reduce inflammation.

Specific Steps:

- Increase whole grain intake
- Reduce added sugars

LOW PRIORITY Target: Vitamin D

3. Maintain adequate vitamin D levels through sun exposure, dietary sources, and supplements if necessary.

According to the evidence, vitamin D is essential for bone health and immune function.

Specific Steps:

- Maintain sun exposure
- Increase dietary vitamin D
- Consider supplements

Nutrition & Guidance

Foods to Add

Daily

Food	Benefit

Oats (cut or rolled) (1 cup cooked)	Decrease CVD 26%, Decrease LDL, Decrease Triglycerides
Whole grain bread (100% whole wheat or rye) (1-2 slices)	Decrease CVD 26%, Decrease LDL, Decrease Triglycerides
Cod liver oil (supplement) (1 tsp)	Bone health, Immune function, Decrease Inflammation
Leafy greens (spinach, kale, collards) (2 cups raw or 1 cup cooked)	Decrease CVD risk, Decrease Inflammation, Increase HEI
Cruciferous vegetables (broccoli, cauliflower, cabbage) (1 cup)	Decrease CVD risk, Decrease Inflammation, Increase HEI
Berries (blueberries, strawberries, raspberries) (1 cup)	Decrease T2D risk 25%, Decrease DII, Decrease Inflammation
Pomegranate or pomegranate seeds (1/2 cup seeds)	Decrease T2D risk 25%, Decrease DII, Decrease Inflammation

Weekly (Multiple Times)

Food	Frequency	Benefit
Barley (1 cup cooked)	2-4x per week	Decrease CVD 26%, Decrease LDL, Decrease Triglycerides
Brown rice (1 cup cooked)	2-4x per week	Decrease CVD 26%, Decrease LDL, Decrease Triglycerides
Fatty fish (salmon, mackerel, sardines) (4 oz)	2-4x per week	Bone health, Immune function, Decrease Inflammation
Egg yolks (from pasture-raised eggs if possible) (2 eggs)	2-4x per week	Bone health, Immune function, Decrease Inflammation
Grapes (especially Concord/dark grapes) (1 cup)	2-4x per week	Decrease T2D risk 25%, Decrease DII, Decrease Inflammation

Use Liberally

Food	Benefit
Turmeric + black pepper	Decrease Inflammation (black pepper increases curcumin absorption 2000%)
Extra virgin olive oil	Decrease LDL, Decrease Inflammation, Heart health (replace butter/SFA)
Garlic (fresh)	Decrease CVD risk, Decrease Blood pressure, Antimicrobial
Ginger	Decrease Inflammation, Digestive health, Anti-nausea
Fresh herbs (basil, oregano, rosemary, thyme)	Polyphenolic compounds, Antioxidants, Anti-inflammatory

Foods to Reduce

Current Food	Replacement	Impact
Soda and sugary drinks	Sparkling water with lemon or unsweetened tea	Decrease T2D risk, Decrease Triglycerides, Decrease Inflammation, Decrease A1C
Candy and sweets	Fresh berries, dark chocolate (85%+), or pomegranate seeds	Decrease T2D risk, Decrease Triglycerides, Decrease Inflammation, Decrease A1C

Follow-Up Plan

Your roadmap for re-testing and next steps based on expected progress

Re-Testing Schedule

Schedule your 3-month follow-up labs

Recommended Re-test Date: 09/01/2024

Required Tests

- Uric Acid
- CRP
- HEI score

Optional but Recommended

- Vitamin D
- TSH

Also Re-take:

- Food Frequency Questionnaire (FFQ) - Updates HEI & DII scores

Expected Outcomes

If you follow the recommendations above, you can expect these improvements:

Biomarker	Expected Change
Uric Acid	5.5-6.5 mg/dL

Follow-Up Scenarios

Based on your progress at follow-up, here are the recommended next steps:

GREAT PROGRESS

1. Uric Acid levels reduced to <6.0 mg/dL and HEI score improved to 80+

Recommended Actions:

- Continue current diet and lifestyle habits
- Re-test in 6 months

MODERATE PROGRESS

2. Uric Acid levels reduced by 1-2 mg/dL and HEI score improved by 5-10 points

Recommended Actions:

- Intensify diet and lifestyle changes
- Re-test in 3 months

NEEDS ADJUSTMENT

3. Uric Acid levels unchanged or increased

Recommended Actions:

- Consult healthcare provider for medical evaluation
- Adjust diet and lifestyle plan

Long-Term Maintenance

Sustaining your health improvements over time:

Ongoing Testing Schedule

Every 3-6 months:

- Uric Acid
- CRP
- HEI score

Annually:

- Vitamin D
- TSH

Evolving Health Goals

- Phase 1 (Months 0-3): Reduce Uric Acid Levels
- Phase 2 (Months 3-6): Improve Diet Quality
- Phase 3 (Months 6-12): Maintain Vitamin D Levels
- Phase 4 (Year 2+): Lifelong Maintenance

Recommended Tracking Tools

- Food diary: Track dietary intake and identify areas for improvement

Scientific References

These recommendations are based on evidence from the following sources

1. **Chapter 7 - Diet, Inflammation, and Health (Hebert et al.).pdf**

Schwingshackl et al. compared, within an umbrella meta-analysis of clinical trials with almost 5000 subjects, the effect of various dietary patterns on T2D development [162]. In addition to the low GI/GL diet and moderate to low carbohydrate consumption, the patterns included low-fat diet, VD, MD, high-protein diet, and Palaeolithic diet. ... and adiponectin [178]. This is somewhat surprising, and the authors did not further discuss the potential reasons, though for some markers, only five individual studies were available. 3.4 Meat and meat products It was proposed that due to nitrosamine and advanced glycation end-products (AGEs), also termed Maillard reaction products (MRPs),

2. **Chapter 7 - Diet, Inflammation, and Health (Hebert et al.).pdf**

Thus, while CRD targets weight reduction and positive effects on inflammation via reductions in adipose tissue, especially visceral adipose tissue, effects of IFD may be related to alternative adaptations to oxidative stress and inflammation-related pathways such as those related to mito- chondrial and cellular transcription factors, among others [94]. 2.4 ... in FBP

(diastolic: /C0 0.18, (/C0 0.29, /C0 0.06), fasting insulin, BMI (/C0 0.37, (/C0 0.56, 0.19)), TGs (/C0 0.51, (/C0 0.78, /C0 0.24)), and positively with HDL-C (0.25, (0.07, 0.44)) [110] Continued Dietary patterns and type 2 diabetes 289 This book belongs to Jonathan Cohen (jcohen@2020gene.com) Copyright Elsevier 2025

3. **Chapter 12 - Diet, Inflammation, and Health (Hebert et al.).pdf**

Table 12.1 Summary of studies investigating maternal dietary inflammatory potential and offspring birth outcomes. First author, year Country Study design No. of mother- child pairs Dietary assessment method Maternal age (mean, median or modal category) Period of exposure assessed Outcomes Covariates in maximally adjusted model Main results in association with ... a higher risk of caesarean delivery among obese women and a shorter gestational age at delivery among female offspring in that study. Yet, the Healthy Start study (n ¼ 1078 pairs) in the United States 630 Diet, Inflammation, and Health This book belongs to Jonathan Cohen (jcohen@2020gene.com) Copyright Elsevier 2025